**Title:** REASSESSING THE LINK BETWEEN FISCAL POLICY AND ECONOMIC GROWTH IN NIGERIA

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**Abstract:**
This study examined the link between fiscal policy and economic growth in Nigeria using data from 2001 to 2018. The study adopted real gross domestic product (RGDP) as proxy for economic growth and the dependent variable, while total revenue (TREV), recurrent expenditure (REXP), and capital expenditure (CEXP) were used as proxies for fiscal policy and the independent variables. Time series secondary data for the variables were sourced from annual reports of Central Bank of Nigeria (CBN) Statistical Bulletins and National Bureau of Statistics covering the period 2001 to 2018. The study employed descriptive statistics and multiple regression technique based on the E-views 9.0 software as methods of data analysis. The empirical results showed that total revenue and capital expenditure had insignificant negative effect on real gross domestic product, proxy for economic growth, while recurrent expenditure had a significant positive link with real gross domestic product. On the whole, the findings of this study established that the selected fiscal policy variables had mixed effect on economic growth. This finding is against prior expectation because fiscal policy is expected to play an important role in sustainable economic growth. However, this is not surprising because a high per cent of the nation’s budget is allocated to recurrent expenditure, especially the huge overhead costs of running government business as opposed to the much lower allocation to capital expenditure which should have been the catalyst for growth. Based on the findings, the study recommended that government should review annual budgetary allocations in favour of capital expenditure and cut down on administrative expenses in order to put the economy on a path of steady growth.

**Keywords:** capital; expenditure; output; recurrent; revenue

**Introduction**

Fiscal policy in the literature of public sector accounting and finance is the use of government revenue collection and expenditure to control and influence economic growth. It is the means by which a government adjusts its spending levels and tax rates to monitor and direct economic growth. It is closely related to monetary policy, and the two are used in different combinations to influence economic growth (Agu, Idika, Okwor & Ugwunda, 2014). Fiscal policy plays an important role in ensuring macroeconomic stability, which is a prerequisite for achieving and maintaining economic growth at the macroeconomic level. It can boost the indicators for economic growth, such as employment, investment and productivity through well designed tax regime and public spending policies (IMF, 2015).
Fiscal policy is based on the Keynesian theory which states that government can influence macroeconomic productivity levels by increasing or decreasing tax levels and public spending. This, it is hoped would: curb inflation which is generally considered to be tolerable within the range of 2% to 3%; increase employment; and maintain healthy value of money. It plays a very important role in managing a nation’s economy through planning, budgetary control, debt management and taxation (Iyoha, 2002). Government’s power to raise revenue from taxes and expend through the instrument of budgets affect the disposable income of the individual and corporate members of the country (Abata, Kehinde & Bolarinwa, 2012). In Nigeria, the national budget as an important instrument of fiscal policy has two major components – government expenditure and revenue (supposed mainly from taxation). Traditionally, taxation is the major source of government revenue. But Nigeria’s experience has relegated taxation to second place due to over-dependence on oil revenue. Components of government revenue which ought to be tax revenue and non-tax revenue are instead presented as oil revenue and non-oil revenue in the budget. On the expenditure side, we have recurrent expenditure and capital expenditure; the latter expectedly should be the principal driver of economic growth. Recurrent expenditure is used for maintaining the workforce (salaries and allowances), provide running cost. Capital expenditure which includes government spending on public works and goods, if directed at healthcare and education would boost the productivity of labour; agriculture spending can generate food security, employment and provide raw materials for the industrial sector (with significant implications for national development and growth); while expenditure on roads and communication infrastructure would increase private sector investment and profitability of companies.

So much said about fiscal policy and there is no doubt by now that it can be used to monitor and influence economic growth if the right policies are designed and well implemented. Our response variable (economic growth), is often described as increases in the average rate of output produced per person, usually measured on a per annum basis, and adjusted for inflation (Investopedia, 2019). It is considered as the rate of change in national output or income in a given period. It is the increase of per capita gross domestic product or aggregate income, often measured as the rate of change in real gross domestic product. Economic growth is also viewed as a sustained increase in per capita national output or net national product over a long period of time. It is considered as growth if the rate of increase in total output (goods and services) is greater than the rate of growth of the population. It is the quantitative increase in the monetary value of goods and services produced in the economy within a given year, and can be measured as a percentage change in the real gross domestic product or real gross national product. Growth can be achieved by an efficient use of available resources to increase the production capacity of the economy. This calls for prudence, transparency and accountability on the part of the authorities responsible for the formulation and implementation of fiscal and monetary policies.

Several studies have been conducted in the past to examine the relationship between fiscal policy and economic growth both in developed and developing economies. But there is still controversy in empirical literature on the effect of fiscal policy on economic growth. It was for this reason that Ali and Ahmad (2010) stated that the efficacy of fiscal policy in improving economic conditions in the long term is a controversial issue that needs further investigations. Also, a meta-analysis of past empirical studies on the nexus between fiscal policy and economic growth revealed that 41 studies (29% of sample) indicated negative link between fiscal policy and economic growth;
17% of sampled studies established positive link; and 54% indicated no link or inconclusive relationship (Appah, 2010). Though, the reason he adduced for the varied findings of past empirical studies is the variables adopted as proxy for fiscal policy in different studies. The controversy identified in the findings of past empirical studies indicates a research gap that needs to be bridged. This study therefore examined the link between fiscal policy and economic growth in Nigeria as a contribution to fill that gap. The study used time series secondary data covering 2001 to 2018 for this investigation. The study adopted real gross domestic product (RGDP) as proxy for economic growth and the dependent variable; while total revenue (TREV), recurrent expenditure (REXP) and capital expenditure (CEXP) were adopted as proxies for fiscal policy, and the explanatory variables. The specific objectives of the study were to determine the effect of the adopted fiscal policy variables on real gross domestic product. These objectives informed the research questions addressed as well as the hypotheses tested in this study. The significance of this study lays on the fact that government revenue and government spending are the drivers of growth in the economy. Government can increase spending or reduce taxes to pull the economy out of depression; or do the reverse to slow down a boom in the economy. It is hoped that the findings of this study would be of immense benefit to the agencies of government responsible for the formulation, administration and implementation of fiscal policy, business elites, investors, scholars and the general public.

This rest of the paper is structured as follows: Section two covers the review of related empirical literature; while section three covers the methodology adopted for the study. The results of data analysis and discussion of findings are presented in section four, and section five is devoted to the conclusion and recommendations of the study.

Review Related Empirical Literature

This section presents the review of related empirical literature to provide the justification and need for this study on the fiscal policy and economic growth nexus in Nigeria. The review covering a good number of past empirical studies conducted in the past to examine the relationship between fiscal policy and economic growth both in developed and developing countries are reported in this subsection. For instance, Al-Masaeed and Tsaregorodtsev (2018) examined the impact of fiscal policy on economic growth in Jordan using secondary data collected from the Ministry of Finance and the Department of Finance of the Central Bank for the period of 1990 to 2010. The study adopted gross domestic product (GDP) as proxy for economic growth and the dependent variables. While fiscal policy components such as government expenditure, government revenue, public debt, exports and inflation were used as the explanatory variables. They employed descriptive statistics, ADF unit root test, Engel and Garner co-integration test and multiple regression analysis based on the least squares technique for the analysis of data. Concerning the variables of interest to this study, they found that government expenditure and government revenue had significant positive impact on GDP in Jordan. The study recommended among others that government increase and direct revenues to investment expenditure in order to boost economic growth.

Ahmed (2011) investigated the role of fiscal policy in enhancing economic growth using annual time series data from 1982 to 2010 in Pakistan. The study adopted fiscal deficit, government expenditure and government revenue as proxies for fiscal policy (the independent variables), while GDP proxy for economic growth was the dependent variable. Data was analysed using multiple
regression technique and it was established that non-tax revenue and development (capital) expenditure had significant positive influence on economic growth; tax revenue exerted significant negative impact on growth; and recurrent expenditure had no impact on GDP. Based on this finding, the study recommended that government should focus on improving non-tax revenue; cut down on recurrent expenditure; and increase budget provisions on capital expenditure to speed up economic growth. Also, Ali and Ahmad (2010) examined the effect of fiscal policy on economic growth in Pakistan using data from 1972 to 2008. Annual time series data were collected from Economic Survey of Pakistan (Government Statistic Bulletin). Methods of data employed include ADF and Philip-Peron unit root test, Autoregressive Distributed Lag Model (ARDL), and Two-Stage Least Squares (2SLS) instrumental variable technique. The results revealed a short run and long run relationship between fiscal policy and economic growth. While all fiscal policy variables are important factors affecting economic growth, fiscal deficit exerted a significant negative impact on economic growth. The study therefore recommended that the Government of Pakistan should reduce her budget deficit, curtail non-productive expenditure, and place more attention on public sector development plan to fast track economic growth.

Benos (2009) examined the impact of fiscal policy on economic growth in 14 EU countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Sweden, and UK) using secondary data from 1980 to 2006. The study employed descriptive statistics and OLS econometric panel data analysis technique for data analysis. The findings revealed that; public expenditures on infrastructure and property rights protection had positive effect on economic growth; while government expenditures on human capital enhancement activities and social protection had no effect on economic growth. The study further revealed that government spending on education, defence and social protection enhanced economic growth when the coefficient heterogeneity across countries along with non-linearities are considered and government expenditure disaggregated. Similarly, Brasoveanu and Brasoveanu (2007) examined the link between fiscal policy and economic growth in Romania using annual data from 1990 to 2007. Selected fiscal policy variables (explanatory) were regressed against economic growth represented by GDP (the response variable). Data collected for the study were analysed using descriptive statistics and multiple regression analysis based on the OLS technique. The results revealed a negative link between fiscal policy and economic growth.

Ubesie (2016) investigated the effect of fiscal policy on economic growth in Nigeria using time series secondary data for the period 1985 to 2015 obtained from CBN Statistical Bulletin. The study employed descriptive statistics and OLS multiple regression technique for data analysis. The results revealed that government expenditure had significant positive relationship with economic growth. However, capital expenditure is much lower than recurrent expenditure leading to poor growth in the economy. In another study, Babalola (2015) examined the impact of fiscal policy on economic development in Nigeria using annual time series data from 1981 to 2013. The study adopted recurrent expenditure, capital expenditure and tax revenue to proxy fiscal policy, while real per capita income was used as proxy for economic development. Data analysis techniques include Pair-wise correlation, co-integration test and Error Correction Model. The results showed that: recurrent expenditure had positive impact on economic development in the short and long run; capital expenditure had positive effect on economic development only in the short run; while tax revenue had an inverse effect on economic development in both the short and long run.
Osinowo (2015) examined the effect of fiscal policy on sectorial output in Nigeria using secondary time series data obtained from the CBN for the period 1970 to 2013. The study assumed that fiscal policy can impact sectorial output growth which in the long run can influence the overall growth in the economy. The study therefore evaluated each sector output (agriculture, mining, among others) as a function of government expenditure. The researcher employed Autoregressive Distributed Lag (ARDL) and Error Correction Model (ECM) as the statistical tools for data analysis. The results showed that total government spending had positive influence on all the sector outputs except agriculture. Also, Onwe (2014) investigated the impact of fiscal policy on economic growth in Nigeria using secondary data from 1980 to 2010. The study adopted RGDP as proxy for economic growth (the response variable) and government expenditure on administration, economic services, social community services, and transfers as components of fiscal policy (the explanatory variables). Data for the study was obtained from the Statistical Bulletin of the CBN. Techniques of data analysis include descriptive statistics, unit root test, co-integration test and Lag Linear /Lagged Models. The results revealed mixed findings; that is, fiscal policy components had non-positive impact as well as positive impact on economic growth.

Agu, Idike, Okwor and Ugwunta (2014) examined the effect of fiscal policy components on economic growth in Nigeria based on time series data from 1961 to 2010 collected from CBN Statistical Bulletin. They employed descriptive statistics, unit root test and multiple regression based on OLS for the analysis of data. The results revealed evidence of positive correlation between government expenditure and economic services as well as economic growth. They concluded that an increase in budget allocations to economic services will boost economic stability in Nigeria. Kareem, Afolabi, Raheem and Bashir (2013) examined the effect of fiscal and monetary policies on economic growth in Nigeria using data spanning 1999 to 2008. Secondary data for the study variables were collected from the CBN. The variables of interest to this study are government recurrent expenditure and government capital expenditure (proxy for fiscal policy); and RGDP, proxy for economic growth in their second model. The study employed descriptive statistics, multiple regression and correlation analysis as the statistical tools for data analysis. The results for model 2 showed that government recurrent expenditure had significant positive relationship with economic growth, while government capital expenditure had an insignificant negative effect on economic growth.

Ogbole, Amadi and Essi (2011) examined the impact of fiscal policy on economic growth in Nigeria using data from 1970 to 2006. The study adopted GDP as proxy for economic growth (the dependent variable) and government expenditure as proxy for fiscal policy, the dependent variable. Secondary data obtained from the Statistical Bulletin of the CBN were analysed using ADF unit root test, Johansen co-integration and Granger causality test. The results showed the existence of a causal relationship between government expenditure and GDP, leading to the study conclusion that fiscal policy to some extent caused economic growth. Based on their finding the study recommended among others that government should increase capital and investment expenditure above consumption spending. In a similar study, Appah (2010) investigated the effect of fiscal policy on economic growth in Nigeria using secondary data collected from the CBN for the period 1991 to 2005. The study adopted GDP proxy for economic growth, while tax revenue, public debt, recurrent expenditure and capital expenditure represented fiscal policy. He employed the OLS multiple regression technique based on the window SPSS computer software for the analysis of
data. The results revealed that government recurrent expenditure and government capital expenditure had significant positive impact on GDP. The study recommended the application of fiscal transparency and accountability in governance as well as the avoidance of unnecessary borrowing, minimization of leakages in public finances and inconsistencies in policies.

Gap in Literature

The review of previous studies as reported in the foregoing paragraphs shows that there is still some controversy in past empirical literature on the effect of fiscal policy on economic growth. This controversy in empirical literature is indicative of the existence of a research gap, which this study is meant fill.

METHODOLOGY

This section covers the methodology adopted for the study, which is ex post facto research design since the study relies on already existing time series secondary data. This makes it impossible for the researcher to manipulate the data used in the study. Other sub themes covered in this section include the source of data, variables of the study, model specification and methods of data analysis.

Source of data

Time series secondary data for the study variables covering the period 2001 to 2018 were collected from various annual reports from the Central Bank of Nigeria (CBN) Statistical Bulletins and National Bureau of Statistics. These sources were considered the most reliable data sources for this type of study. The period covered by the study is 18 years, which was considered long enough for the researcher draw meaningful conclusions.

Variables of the study

The aim of this study was to examine the link between fiscal policy and economic growth in Nigeria using secondary data for the period from 2001 to 2018. The study adopted real gross domestic product (RGDP) as proxy for economic growth and the dependent variable; while total revenue (TREV), recurrent expenditure (REXP) and capital expenditure (CEXP) were adopted as proxies for fiscal policy, and the explanatory variables.

Real gross domestic product (RGDP)

RGDP is used to proxy economic growth which is viewed as an increase in per capita real national output or net national product over a long period of time. It is considered as growth if the rate of increase in total output (goods and services) is greater than the rate of growth of the population. It is the quantitative increase in the monetary value of goods and services produced in the economy within a given year, and can be measured as a percentage change in the real gross domestic product or real gross national product.

Total revenue (TREV)

Total revenue accruing to government is earned from tax and non-tax sources. Non-tax revenue covers government income from all others sources including revenue from the oil and gas sector. Notably revenue from crude oil export constitutes a major source of total government revenue in
Nigeria. Government revenue and government spending are important fiscal policy tools to drive economic growth.

Recurrent expenditure (REXP)

Recurrent expenditure is also referred to as government consumption spending. The annual budget spells out the direction of the expected expenditure as it contains details of the proposed expenditure for each year, though the actual expenditure may differ from the budgeted amounts, due for example, to extra-budgetary expenditure or allocations during the course of the fiscal year. Recurrent expenditure is used in the payment of wages and allowances to workers as well as meeting the cost of running government business.

Capital expenditure (CEXP)

Capital expenditure refers to the amount spent in the acquisition of fixed (productive) assets (which useful life extends beyond the fiscal year), as well as expenditure incurred in the improvement of existing fixed assets such as land, buildings, roads, machines and equipment including intangible assets. Also expenditure in research and development falls within this component of government expenditure.

Model specification

The functional relationship of the dependent variable and the explanatory variables are expressed in the following model which is an adaptation of a model that has been widely used by previous researchers such as (Babalola, 2015; Osinowo, 2015; Agu et al, 2014 & Onwe, 2014).

\[ RGDP = \beta_0 + \beta_1 TREV + \beta_2 REXP + \beta_3 CEXP + \mu \]  

Equation 1

Where:
- \( RGDP \) = Real Gross Domestic Product
- \( TREV \) = Total revenue (explanatory variable 1)
- \( REXP \) = Recurrent expenditure (explanatory variable 2)
- \( CEXP \) = Capital expenditure Ratio (explanatory variable 3)
- \( \beta_0 \) = intercept or constant
- \( \beta_1, \beta_2, \beta_3 \) = coefficients of the explanatory variables or factor sensitivities
- A priori expectations: \( \beta_0, \beta_1, \beta_2, \beta_3 \neq 0 \)
- \( \mu \) = the error term

Methods of data analysis

The study employed descriptive statistics and multiple regression technique based on the E-views computer software as methods of data analysis for predicting the link between the selected fiscal policy variables (TREV, REXP and CEXP) and economic growth proxy by real gross domestic product (RGDP) based on the model specified above. The multiple regression technique possesses the unique property of best linear unbiased estimator including efficiency and consistency when compared with other estimating techniques.
The statistics tested for in the regression equation included the coefficient of determination ($R^2$), the probability of F-statistics, and the Durbin-Watson statistics. The coefficient of determination ($R^2$) measures the explanatory power of the independent variables on the dependent variable. The probability of F-statistics test for the overall statistical significance of the regression model, which was used to generalize the hypotheses. While the Durbin-Watson statistics was used to test for autocorrelation in the regression equation. The coefficients of the explanatory variables indicate the extent to which the independent variables individually influence the dependent variable.

**Data Analysis and Discussion of Findings**

Annual data obtained for the study, the results of data analysis and the discussion of the findings including the test of hypotheses are presented in this section.

**Annual data for study variables**

The annual data collected for study variables from 2001 to 2018 are presented in Table 1 below. RGDP, TREV, REXP and CEXP are indicated in billions of Nigerian (Naira) currency.

**Descriptive statistics**

The descriptive statistics of the study variables, generated from the E-views 9.0 computer software are presented in Table 2 below. From Table 2, the mean figures of RGDP, TREV, REXP and CEXP are 43626.26, 6101.33, 2220.92 and 862.63 respectively. In the order the variables are presented, the minimum figures are 6713.57, 1731.84, 461.60 and 239.45 respectively, while the maximum figures are 94487.93, 11116.90, 3950.00 and 2428.00, with standard deviation of 35234.10, 2994.35, 1224.16 and 597.63 respectively.

**Regression results/Discussion of findings**

From the multiple regression results in Table 3 below, the regression equation could be stated as:

$$ \text{RGDP} = -12962.93 - 2.457885 \text{TREV} + 33.44808 \text{REXP} - 3.129773 \text{CEXP} + 9969.495 $$

This indicates that the constant or intercept is -12962.93, meaning that if all the independent variables (total revenue, recurrent expenditure, and capital expenditure) are held constant, the dependent variable, RGDP (proxy for economic growth would decrease by 12962.93 units in an annual basis. This implies that without the intervention of the fiscal policy measures the economy of Nigeria would be growing at a declining rate. REXP has positive coefficients of 33.45 with significant probability values of 0.0000. While TREV and CEXP have negative coefficient of -2.46 and -3.13 respectively, with insignificant (greater than 5% level of significance) probability values of 0.1072 and 0.1084 respectively. The results as it where in Table 3 showed that REXP has significant positive relationship with RGDP, while TREV and CEXP have insignificant negative link with RGDP. This result, while contradicting the findings of Ahmed (2011) a study based in Pakistan, agrees with the results of (Babalola, 2015; Agu et al, 2014 & Kareem et al, 2013).
Table 1: Annual Values of the Study Variables

<table>
<thead>
<tr>
<th>Year</th>
<th>RGDP (Nb)</th>
<th>TREV (Nb)</th>
<th>REXP (Nb)</th>
<th>CEXP (Nb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>6,713.57</td>
<td>1,906.16</td>
<td>461.60</td>
<td>239.45</td>
</tr>
<tr>
<td>2002</td>
<td>6,895.20</td>
<td>2,231.60</td>
<td>579.30</td>
<td>438.70</td>
</tr>
<tr>
<td>2003</td>
<td>7,795.76</td>
<td>1,731.84</td>
<td>696.80</td>
<td>321.38</td>
</tr>
<tr>
<td>2004</td>
<td>9,913.52</td>
<td>2,575.10</td>
<td>984.30</td>
<td>241.69</td>
</tr>
<tr>
<td>2005</td>
<td>11,411.07</td>
<td>3,920.50</td>
<td>1,110.64</td>
<td>351.25</td>
</tr>
<tr>
<td>2006</td>
<td>14,610.88</td>
<td>5,547.50</td>
<td>1,321.23</td>
<td>519.47</td>
</tr>
<tr>
<td>2007</td>
<td>18,564.59</td>
<td>5,965.10</td>
<td>1,390.10</td>
<td>552.39</td>
</tr>
<tr>
<td>2008</td>
<td>20,657.32</td>
<td>5,727.50</td>
<td>1,589.27</td>
<td>759.28</td>
</tr>
<tr>
<td>2009</td>
<td>24,296.33</td>
<td>7,866.59</td>
<td>2,117.30</td>
<td>960.89</td>
</tr>
<tr>
<td>2010</td>
<td>24,794.24</td>
<td>4,844.59</td>
<td>2,127.97</td>
<td>1,152.80</td>
</tr>
<tr>
<td>2011</td>
<td>54,612.26</td>
<td>7,303.67</td>
<td>3,109.44</td>
<td>883.87</td>
</tr>
<tr>
<td>2012</td>
<td>62,980.40</td>
<td>11,116.90</td>
<td>3,314.51</td>
<td>918.55</td>
</tr>
<tr>
<td>2013</td>
<td>71,713.94</td>
<td>10,654.75</td>
<td>3,325.16</td>
<td>874.70</td>
</tr>
<tr>
<td>2014</td>
<td>80,092.56</td>
<td>9,759.79</td>
<td>3,214.95</td>
<td>1,108.39</td>
</tr>
<tr>
<td>2015</td>
<td>89,043.62</td>
<td>10,068.85</td>
<td>3,426.94</td>
<td>783.12</td>
</tr>
<tr>
<td>2016</td>
<td>94,144.96</td>
<td>6,912.50</td>
<td>3,831.98</td>
<td>818.35</td>
</tr>
<tr>
<td>2017</td>
<td>92,544.50</td>
<td>5,085.00</td>
<td>3,425.00</td>
<td>2,175.00</td>
</tr>
<tr>
<td>2018</td>
<td>94,487.93</td>
<td>6,606.00</td>
<td>3,950.00</td>
<td>2,428.00</td>
</tr>
</tbody>
</table>

Source: CBN Statistical Bulletins and National Bureau of Statistics

Table 2: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>RGDP</th>
<th>TREV</th>
<th>REXP</th>
<th>CEXP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>43626.26</td>
<td>6101.33</td>
<td>2220.91</td>
<td>862.6267</td>
</tr>
<tr>
<td>Median</td>
<td>24545.29</td>
<td>5846.30</td>
<td>2122.63</td>
<td>800.7350</td>
</tr>
<tr>
<td>Maximum</td>
<td>94487.93</td>
<td>11116.90</td>
<td>3950.00</td>
<td>2428.00</td>
</tr>
<tr>
<td>Minimum</td>
<td>6713.57</td>
<td>1731.84</td>
<td>461.60</td>
<td>239.45</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>35234.10</td>
<td>2994.34</td>
<td>1224.15</td>
<td>597.6298</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.369043</td>
<td>0.151546</td>
<td>-0.034192</td>
<td>1.478745</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>1.417417</td>
<td>1.999916</td>
<td>1.436601</td>
<td>4.633985</td>
</tr>
<tr>
<td>Probability</td>
<td>0.318701</td>
<td>0.663974</td>
<td>0.399183</td>
<td>0.013825</td>
</tr>
<tr>
<td>Sum</td>
<td>785272.6</td>
<td>109823.9</td>
<td>39976.49</td>
<td>15527.28</td>
</tr>
<tr>
<td>Observations</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: E-views 9.0 output

Whereas all the explanatory variables have insignificant negative relationship with the response variable as indicated by the probability values (except REXP which has a positive significant link with RGDP as indicated by its probability value at 5% level). The coefficient of determination $R^2$ value at 0.93 shows that 93% of changes in the response variable are explained by the combined effect of changes in the explanatory variables; and the value of the Adjusted $R^2$ shows at 92%
confidence level that the regression model adopted as the basis of the analysis is a proper and good fit.

Table 3: Multiple Regression Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-12962.93</td>
<td>5888.459</td>
<td>-2.201414</td>
<td>0.0450</td>
</tr>
<tr>
<td>TREV</td>
<td>-2.457885</td>
<td>1.539717</td>
<td>-1.596322</td>
<td>0.1072</td>
</tr>
<tr>
<td>REXP</td>
<td>33.44808</td>
<td>5.133141</td>
<td>6.516105</td>
<td>0.0000</td>
</tr>
<tr>
<td>CEXP</td>
<td>-3.129773</td>
<td>6.928979</td>
<td>-0.451693</td>
<td>0.1084</td>
</tr>
</tbody>
</table>

R-squared | 0.934068 | Mean dependent var | 43626.26 |
Adjusted R-squared | 0.919939 | S.D. dependent var | 35234.10 |
S.E. of regression | 9969.495 | Akaike info criterion | 21.44558 |
F-statistic | 66.11288 | Schwarz criterion | 21.64344 |
Prob(F-statistic) | 0.000000 | Durbin-Watson stat | 1.896234 |

Also, the Durbin-Watson statistics value of 1.9, which is approximately equal to the 2.0 benchmark, indicates that there was no autocorrelation among the explanatory variables. Therefore, with the coefficient of determination, R² value at 0.93 and the probability of the F-statistic value of 0.0000 it was established in this study that fiscal policy influenced economic growth in Nigeria.

Testing of hypotheses

RGDP and TREV

Hypothesis: Total revenue (TREV) has no significant influence on real gross domestic product (RGDP) proxy for economic growth. The results in Table 3 show that the coefficient of TREV is -2.46 with a prob. of 0.1072. This means that the null hypothesis is accepted as the results show that TREV has insignificant negative influence on RGDP at 5% level. A unit increase in TREV will result in 2.46 units drop in RGDP. The economic implication being that there are leakages in government revenue, and this calls for closer monitoring and proper fiscal control of government revenue.

RGDP and REXP

Hypothesis: Recurrent expenditure (REXP) has no significant impact on real gross domestic product (RGDP) proxy for economic growth. The coefficient of REXP in Table 3 is 33.45 at 5% significant level (with a prob. of 0.0000). The null hypothesis therefore was rejected as REXP has
a significant positive relationship with RGDP. A unit increase in REXP would bring about 33.45 units increase in RGDP, implying that through increase in government recurrent spending individuals in government and their dependents have more disposable income rightly or wrongly and this is reinvested in the economy. This result agrees the findings of (Babalola, 2015; Agu et al, 2014; Kareem et al, 2013; and Appah, 2010).

**GDP and CEXP**

Hypothesis: Capital expenditure (CEXP) has no significant effect on real gross domestic product (RGDP) proxy for economic growth. The coefficient of CEXP in Table 3 is -3.13 at 11% significant level (with a prob. of 0.1084). This means that an acceptance of the null hypothesis; CEXP has a negative insignificant effect on RGDP. Here, it was found that a unit increase in CEXP would bring about 3.13 units decrease in RGDP only at 89% level of confidence. This calls government attention to increase budgetary allocation on capital expenditure on annual basis. However, this result agrees with the findings of (Agu et al, 2014 & Kareem et al, 2013).

The overall implication of these findings is for government to ensure that the annual budgets are reviewed to increased allocations to capital expenditure. Capital expenditure on healthcare and education would boost the productivity of labour; agriculture spending can generate food security, employment and provide raw materials for the industrial sector (with significant implications for national development and growth); while expenditure on roads and communication infrastructure would increase private sector investment and profitability of companies. There is also the need to inculcate the discipline to operate balanced budgets year to year.

**CONCLUSION AND RECOMMENDATIONS**

The conclusion and recommendations based on the study findings are presented in this section of the paper.

**Conclusion**

This study examined the link between fiscal policy and economic growth in Nigeria using data from 2001 to 2018. The study adopted real gross domestic product (RGDP) as proxy for economic growth and the dependent variable, while total revenue (TREV), recurrent expenditure (REXP), and capital expenditure (CEXP) were used as proxies for fiscal policy and the independent variables. Time series secondary data for the variables were sourced from annual reports of Central Bank of Nigeria (CBN) Statistical Bulletins and National Bureau of Statistics covering the period 2001 to 2018. The study employed descriptive statistics and multiple regression technique based on the E-views 9.0 software as methods of data analysis.

The empirical results showed that total revenue and capital expenditure had insignificant negative effect on real gross domestic product, proxy for economic growth (at 11% level), while recurrent expenditure had a significant positive link with real gross domestic product (at 5% level). The results of this study are supported by the study findings of Babalola (2015), Agu et al, (2014) and Kareem et al (2013). However, this result contradicts the study findings of Ahmed (2011) whose
study was based in Pakistan. This contradiction is attributable to the difference in the study backgrounds.

On the whole, the findings of this study established that the selected fiscal policy variables had mixed effect on economic growth. This finding is against prior expectation because fiscal policy is expected to play an important role in sustainable economic growth. However, this is not surprising because a high per cent of the nation’s budget is allocated to recurrent expenditure, especially the huge overhead costs of running government business as opposed to the much lower allocation to capital expenditure which should have been the catalyst for growth. Again, it is necessary to point out here that capital expenditure on healthcare and education would boost the productivity of labour; on agriculture would generate food security, employment and provide raw materials for the industrial sector (with significant implications for national development and growth); while capital expenditure on roads and communication infrastructure would increase private sector investment and profitability of companies. It is hoped that the findings of this study would be of immense benefit to the agencies of government responsible for the formulation, administration and implementation of fiscal policy, business elites, investors, scholars and the general public.

**Recommendation**

Based on the findings of this study the following recommendations are made:

1. Government should review the annual budgetary allocations in favour of capital expenditure and cut down on administrative expenses in order to put the economy on a path of steady growth. A higher proportion of overall government expenditure should be made for capital and public investment in order to create more jobs to improve the quality of life and the attainment of sustainable development.

2. Government should place more emphasis on the real sector. In other words, government should refocus and redirect government spending towards the productive sector so as to enhance real gross domestic product growth. Measures should be taken to minimize, if not completely eradicating the diversion of public funds to private pockets and embezzlement through higher budgetary provision to recurrent expenditure.

3. More budgetary provision be made for capital expenditure for healthcare and education to boost the productivity of labour; for agriculture to generate food security, employment and provide raw materials for the industrial sector as catalyst for national development and growth; while appropriation for public works such as roads and communication infrastructure be increased to boost private sector investment and profitability of companies.

**References**


