# Innovations

# Fiscal policy as a Panacea for sustainable economic growth in Nigeria: an empirical analysis

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#### **Abstract**

Nigeria in recent times, has experienced an increase in government expenditure which has not translated into economic growth. Most notable is the increase from 8.92 Trillion Naira in 2019 to 10.81 Trillion Naira in 2020. This increase did not result in greater economic growth, as significant macroeconomic indices such as GDP reported negative growth of -1.97 per cent in 2020, unemployment grew to 33.3% in 2020, and inflation was 11.40% in 2019 and rose to 13.25 per cent in 2020. This has sparked heated debate among Nigerian officials and experts. The study investigated the impact of fiscal policy as a panacea for sustained economic growth in Nigeria using the Ordinary Least Square Method and the Granger Causality Test. The study found that government expenditure on education, health, agriculture, and government revenue assumes a positive and statistically significant at 5%. The study also discovered that government expenditure on road and construction indicates a negative relationship with economic growth GDP). This implies that an increase in government expenditure on roads and construction will influencethe GDP growth rate negatively. The likely reason might be the fund allocated for the purpose of road and construction is not judiciously used and they cannot have a positive transmission effect on economic growth. The study also found that government expenditure on education indicates, and government revenue indicates a bi-directional causality with GDP. Government expenditure on health and agriculture indicates uni-directional causality with GDP while government expenditure on road and construction shows no causality with GDP. To stimulate economic growth, government spending on health, education, and agriculture must be increased as components of productive spending. What Nigeria requires is a fiscal policy norm that commits the government to a specific level of fiscal and budgetary management.

Keywords: 1. Economic Growth, 2. Fiscal Policy, 3. Gross Domestic Product, 4. Government Expenditure, 5. Panacea, 6.Sustainable

# Introduction

Fiscal policy is unquestionably important for any government, as the country iscurrently, characterised by major economic imbalances caused by the global pandemic crisis, fiscal policy can be an important weapon in the act of government, offering the chance of economic recovery if effectively utilized. This can help a country achieve its set macroeconomic goals, such as full employment, price stability, high and sustainable economic growth, and a stable balance of payments. Given the sensitivity of macroeconomic variables to fluctuations in the economy, this has been a policy priority of every economy, developed or developing. (Voda et al., 2022). These aims are not automatically realized; they require policy guidance, which constitutes the purposes of economic policy. According to Basit et al., (2022), the need for government action in stabilizing the economy at critical periods is recognized, particularly when practically all economic sectors are affected, as they are now in Nigeria. (Otache, 2020).

Researchers such as Adegboye, (2015); Basit et al., (2022); Nuru and Gereziher, (2021); Oye, (2018); Tendengu et al., (2022); Voda et al., (2022)have carried out extensive studies on the influence of fiscal policy on the economy in the literature. According to the existing research, fiscal policy can influence economic growth via both macroeconomic and microeconomic channels (Tendengu et al., 2022). Fiscal sustainability, according to King, (1993), and Otache, (2020)is the cornerstone of macroeconomic stability. This is also crucial for economic growth since a country with a significant deficit is more likely to face macroeconomic instability, which may inhibit private investment. The researchers demonstrate in this study that revenue and government spending can have an impact on firms at the macroeconomic level and translate it to the living standard of an ordinary man.

Researchers such as (Hauptmeier et al., 2007; Heitger, 2001; Jinjarak et al., 2021; Mazzanti et al., 2020; Zulfigar, 2018) support the classical view that an increase in government expenditure and a decrease in tax would increase demand for money. Assuming that the Reserve Bank controls the money supply, this would raise interest rates and crowd out capital accumulation. (Private investment would decline). A decline in private investment could have several negative consequences on output (offsetting the Keynesian multiple effects) and impede economic growth, as they argued. While other researchers such as (Alim et al., 2021; Begiraj et al., 2021; Ibrahim, 2019; Mughal et al., 2021; Olaoye et al., 2020; Ullah et al., 2021) went contrary to their argument by supporting contractionary government spending.

The study tries to explore the claim that increased government spending leads to increased economic growth. Is this genuinely the case in Nigeria? For example, government spending increased from 8.92 TrillionNaira in 2019 to 10.81 Trillion Naira in 2020. (National Bureau of Statistics, 2020). This increase did not translate into a rise in growth, as major macroeconomic indicators such as GDP which was 2.2 per cent in 2019 recorded negative growth of -1.97 per cent in 2020, unemployment was 33.3 per cent in 2020, inflation was 11.40 per cent in 2019 and rose to 13.25 per cent in 2020 have a negative effect on the economy. This has caused a serious problem in Nigeria, and it is against the above background that this study set out to investigate the causal relationship between fiscal policy and economic growth in Nigeria has become imperative.

This study also identified from the empirical studies such as (Basit et al., 2022; Mazzanti et al., 2020; Nuru & Gereziher, 2021; Rasool, 2018; Tendengu et al., 2022; Voda et al., 2022) focused on government expenditure both recurrent and capital expenditure together. This study, therefore, find it critical to look at the most critical sector of the economy in Nigeria such as government expenditure on education, health, agriculture, and construction to ascertain the causal relationship on economic growth. The study also included government revenue as a variable for the study. The broad objective of this study is to investigate the impact of fiscal policy as a panacea for sustainable economic growth in Nigeria from 1981 to 2021. Specifically, to examine the impact of government expenditure on economic growth in Nigeria, and to ascertain the causal relationship between government expenditure and economic growth in Nigeria

#### Literature Review

This section focuses on the review of previous studies by scholars in this area. This is necessary in order to relevant economic theories that underly this study. More so, it is through the various empirical studies reviewed that the gaps in literature can be filled.

# The Concept of Fiscal Policy

Fiscal policy has generally been associated with the use of taxation and government spending to regulate the volume of economic activity. Fiscal policy refers to the government's deliberate actions of spending money and levying taxes to impact macroeconomic variables in a desired direction. Long-term economic growth, significant job creation, and low inflation are all part of this. As a result, fiscal policy is aimed at stabilizing the economy. Increased government spending or lower taxes tend to assist the economy recover from depression, but decreased expenditure or higher taxes tend to slow the economy down during a boom. (Tendengu et al., 2022). The use of government spending, taxation, and borrowing to influence economic activity patterns, as well as the level and growth of aggregate demand, production, and employment, is known as fiscal policy. Fiscal policy is the government's control of the economy through manipulation of its revenue and spending capacity to achieve certain macroeconomic objectives (goals), such as economic growth. (Voda et al., 2022).

Fiscal policy, according to Zulfiqar (2018), is the process through which the government manages the economy by manipulating its income and expenditure to achieve certain macroeconomic goals. The Central Bank of Nigeria (2020) defines fiscal policy as the use of government expenditure and revenue collection through taxation, as well as the level of government spending, to influence the economy. In finance, fiscal policy is the use of government income collection (taxation) and spending (spending) to influence the economy. The two basic fiscal policy instruments are government taxes and spending. Fiscal policy, according to Rasool (2018), is the use of government spending, taxation, and borrowing to impact the level and growth of aggregate demand, production, and job creation. Government spending decisions influence macroeconomic conditions. These policies impact tax rates, interest rates, and government spending to regulate the economy. Fiscal policy is the process through which a government alters its spending levels to monitor and influence the economy of a country. (Jinjarak et al., 2021).

All these definitions agree that fiscal policy is one of the regulatory strategies used by the government to attain its economic growth objectives. Fiscal policy is a Keynesian economic branch, and its logical examination demonstrates that it is a sure means to stabilize the economy. The goal of modern fiscal policy is to increase economic efficiency and stability. In today's economy, the government is involved in every facet of economic activity. The government uses two key instruments or tools to influence private economic activity; taxes and expenditures are not restricted to these two; they may also involve public debt and public work, among other things. Fiscal policy is without a doubt one of the most essential strategies employed by governments to promote macroeconomic stability in most developing countries' economies. (Ibrahim, 2019; Mazzanti et al., 2020; Nuru&Gereziher, 2021).

In their article, (Ogbonna & Appah, 2016), the unit root of variables tests demonstrate that the model examined the irrelevance of projected monetary policy for short-run deviations of domestic output from its natural level. As a result, only the unexpected components of external price fluctuations in the level of external economic activity cause the deviation of domestic output from natural, and it has been demonstrated that monetary tightening, once anticipated in an economy, has little effect on real domestic output in the short run. Furthermore, in his study "Tax Revenue Generation and Nigeria Economic Development," Okafor (2012) investigated the monetary and fiscal policy implications of Nigeria's full employment level. On the other hand, all fiscal variables significantly reduced unemployment in Nigeria. Except for one, monetary policy interventions in Nigeria were significantly more effective in reducing the degree of unemployment generation. Idris and Bakar (2017) confirm in their study, 'The Relationship between Fiscal Policy and Economic Growth in Nigeria,' that the growth of financial aggregates in real terms has a positive impact on the economic growth of developing countries, regardless of the level of economic development attained.

#### **Theoretical Literature**

The Endogenous growth theory and the Keynesian theory serve as the theoretical foundation for this investigation. As a result, we begin with the Endogenous growth theory: The endogenous growth theory provides the cornerstone for this study. Endogenous growth theory claims that internal economic measures such as tax policy can stimulate the level and rate of increase in per capita output. Endogenous variables, rather than external forces, are the primary drivers of economic growth, according to the endogenous growth hypothesis. (KSE, 2020). Long-run economic growth, according to the endogenous growth hypothesis, is primarily driven by policy decisions that have major implications for openness, competition, change, and innovation. (Thach, 2020).

Economic growth is generated from within a system as a direct outcome of the system's internal workings, according to the endogenous growth theory. According to the hypothesis, developing a country's human capital will lead to economic growth through the development of new types of technology and efficient and effective means of production that are not hampered by taxation. Endogenous growth theorists argue that when contrasted to pre-industrialized countries, the productivity and economies of today's industrialized countries demonstrate that growth was produced and sustained from within the economy. The theoretical growth literature has mostly attempted to endogenize the long-run growth rate of production since the mid-1980s. As is widely known, if the fiscal policy affects the incentives to save or invest in new capital, the equilibrium capital-output ratio, and hence the level of the production path, but not its slope, changes in the neoclassical growth model. (With transitional effects on growth as the economy moves onto its new path). (Thach, 2020).

Fiscal policy (tax policy) can alter both the level of the output path and the steady-state growth rate, which is a novel feature of (Sala-i-Martin, 1990)'s public-policy endogenous growth models. Endogenous growth theory, pioneered by Romer (1986), Barro (1990), and others, identifies ways by which policy variables can affect not only output levels but also steady-state growth rates. Barro (1990) was a pioneer in attempting to endogenize the relationship between growth and budgetary policies. (Apostol et al., 2022; Arjun et al., 2020). All distinguish four categories of public finance: productive versus non-productive spending and distortionary versus non-distortionary taxation. If taxation affects investment decisions and consequently output/growth, it is distortive. This is particularly true in the case of direct income and profit taxation. Taxes such as consumption taxes are deemed non-distortionary until households face an endogenous option between labour or leisure.

# **Keynesian Theory**

In the Keynesian Theory of activist macroeconomic policy, the role of fiscal policy in accomplishing macroeconomic goals is thoroughly examined. Demand management measures, according to the Keynesian viewpoint, can and should be used to improve macroeconomic performance. An aggressive macroeconomic policy comprises setting monetary and fiscal variables at the levels judged essential to achieve the government's goals at any given time. According to Keynesian economics, the private sector is inherently unstable. The aggregate demand components fluctuate frequently and significantly (Freitas, 2021). The broad aims of Keynesian macroeconomic policy are full employment, a stable price level, the absence of large deviations in output from its equilibrium time path, an acceptable rate of economic growth, an equitable distribution of income, and a balance of payment equilibrium.

However, opinions differ on the priority given to these goals. In fact, there is even more debate over how to achieve such goals. The monetarist and classical schools, which believe that the private sector is inherently stable, have been increasingly skeptical of Keynesian activist policy. They do not deny that random disruptions exist in the private sector, but they do not feel that they are significant or that quantitative adjustments worsen them. Because the private sector responds sufficiently to such disruptions through relative price changes, an active stabilization policy is not necessary. (Bonizzi& Kaltenbrunner, 2020).

Furthermore, if implemented, it (stabilization policy) has the potential to amplify rather than reduce swings in output and employment. Nonetheless, stabilization policy requires policymakers to be able to set viable goals, have a good understanding of how instrumental variables work, and successfully control the instrumental variables. According to Keynesian theory, limiting economic expenditure reduces aggregate demand while also stabilizing prices. Recent scientists, on the other hand, have influenced the evolution of fiscal policy and economic growth by contributing to the theoretical questions covered in this study. (Fiebiger & Lavoie, 2020; Lavoie, 2020).

# **Empirical Literature**

Scholars have shown an appreciable level of interest trying to unravel the interaction between fiscal policy and economic growth in recent times. (Tendengu, Kapingura, and Tsegaye (2022) evaluated the impact of fiscal policy on South African economic growth. The autoregressive distributed lag (ARDL) approach was used as an analytical methodology in the study. The empirical findings show that fiscal policy instruments (public sector spending, public consumption expenditures, and taxation) have a positive association with economic growth. According to the findings, the government should differentiate between productive and unproductive spending and increase spending on productive industries. These findings imply that if more resources are transferred from government consumption to investment spending, South Africa's economy will likely perform better. (Basit, Hameed, Saboor, and Athar (2022) investigated the impact of factor output in shedding light on the effectiveness of fiscal policy on economic growth in Pakistan. The Autoregressive Distributed Lag (ARDL) model was used to analyze the results of the study. The study's empirical findings demonstrated that government spending, gross fixed capital formation, and indirect and direct taxation all had a considerable positive impact on Pakistan's economic growth. It has been proposed that an expansionary fiscal policy is particularly beneficial in boosting economic growth in Pakistan. on other words, boosting government spending while decreasing taxation on the economy. Tilahun Mengistu, (2022)explore whether fiscal policy in Ethiopia fosters economic growth. The Autoregressive Distributed Lag (ARDL) method was used in the investigation. According to the analysis, unproductive spending and nondistortionary tax revenue are neutral to growth, as predicted by economic theory. Furthermore, productive expenditure has a beneficial influence on growth, whereas distortionary taxes have a negative effect on growth. The findings provide the proper signal to Ethiopian policymakers in developing expenditure and tax policies to eliminate wasteful spending while increasing public investment. Nuru and Gereziher, (2021)explored the asymmetric impacts of fiscal policy, or government expenditure, on economic growth in the short and long run. The Nonlinear autoregressive distributive lag model is used to investigate the asymmetric impacts of government spending on economic growth in the short and long run. The empirical data show that the negative change effect of government expenditure on economic growth is bigger than the positive change effect of government spending. In both the short and long run, a real effective exchange rate is demonstrated to have a positive and considerable effect on economic growth. In both the short and long run, the inflation rate has a negative and considerable impact on economic growth. According to the report, the government should raise its spending to assure a positive impact on economic growth. Mugableh, (2019)investigated the equilibrium correlations and dynamic causality studies between Jordan's economic growth and fiscal policy tools. Autoregressive distributed lag and vector error correction models were used in the investigation. The analysis found evidence of co-integration and causal linkages between economic growth and fiscal policy instruments. General government spending has a long-run positive impact on economic growth, meaning that spending on the government improves economic growth. Furthermore, total tax rates have a long-run negative influence on economic growth, meaning that lowering taxes increases growth. The report recommends that Jordan's authorities pursue an expansionary fiscal policy to stimulate economic growth in both the long and short run. This study uses four key government expenditure from different sectors of the economy such as government expenditure on education, health, agriculture, and government expenditure on road and construction, and government revenue to enhance (or improve) the robustness of the model and, by extending the scope of the study, thereby giving an insight into the current state of fiscal policy on economic growth (GDP) in Nigeria. These expenditures were identified in the caused of review of empirical literature as previous studies only used government expenditure accumulatively to capture fiscal policy in their studies.

#### **Research Method**

This section describes the research approach that is thought to be appropriate for fulfilling the study's aims. The type and sources of data used in this paper, as well as the research methodology, model formulation, and analytical technique, are all discussed. The study made use of annual time series data and adopt the factorial experimental research design which allows the researcher to examine the effect of two or more independent variables simultaneously on the dependent variable and strengthen the external validity of the study. To examine the impact of fiscal policy on economic growth in Nigeria, the study used the ordinary least square (OLS) approach based on the outcome of the unit root test, where all variables achieved integration at level, and the Granger causality test as an analytical methodology. The purpose of OLS is to "fit' a function to data as closely as possible. It accomplishes this by minimizing the sum of squared errors in the data. The secondary data covering the period of 1981 to 2021 from the Central Bank of Nigeria (CBN) Statistical Bulletin (2021) and the world development indicators (2021) was used.

# **Model Specification**

The endogenous growth theory is the underlying theory that underpins this research. Endogenous growth theory proposes stimulating the level and rate of increase of per capita output by internal economic measures such as tax policy. According to the endogenous growth theory, the primary driver of economic growth is endogenous forces rather than external causes. Endogenous growth theory, which Romer pioneered, asserts that economic growth is generated from within a system as a direct result of the system's internal workings. (1986, Sala-i-Martin, 1990). The study's mathematical model is as follows:

(1)

GDP = f (GEXPE, GEXPH, GEXPA, GEXPRC, GOREV)

Where:

GDP = Gross Domestic Products

GEXPE = Government Expenditure on Education

**GEXPH** = Government Expenditure on Health

GEXPA = Government Expenditure on Agriculture

GEXPRE = Government Expenditure on Road &Construction

GOREV = Government Revenue

The Econometric Model used for estimate is expressed as:

GDP =  $\beta_0 + \beta_1$  GEXPE +  $\beta_2$  GEXPH +  $\beta_3$  GEXPA +  $\beta_4$  GEXPRC +  $\beta_5$  GOREV+ $\mu_t$  (2)

 $\beta_0$  = the parameter which represents the intercept

 $\beta_1$  -  $\beta_5$  = the coefficient of each of the independent variables in the model

 $\mu_t$ = Error or Random disturbance term.

Aprior expectation of the model, the expected signs of the coefficients of the explanatory variables are:  $\beta_1 > 0, \beta_2 > 0, \beta_3 > 0, \beta_4 > 0, \beta_5 > 0.$ 

#### **Results and Discussion**

This section presents and analyses all the empirical results of this study in the Tables below:

# **Unit Root Test**

To avoid erroneous regression, the time features of the data are examined. The Augmented Dickey-Fuller method is used to investigate the variable integration orders. (ADF). The results in Table 1 show that all variables attained stationarity at the 5% critical value level.

Table 1: Result of Unit Root Test Based on Augmented Dickey-Fuller (ADF)

Variable	ADF	1% critical value (**)	5% critical value (*)	Order of integration
GDP	-5.113633	-3.621023	-2.943427	I (0)
GEXPE	-4.907214	-3.626784	-2.945842	I (0)
GEXPH	-6.382251	-3.632900	-2.948404	I (0)
GEXPA	-7.121287	-3.632900	-2.948404	I (0)
GEXPRC	-4.132959	-3.699871	-2.976263	I (0)
GOREV	-6.429527	-3.626784	-2.945842	I (0)

Source: Authors' computation using (E-Views 9)

# The Ordinary Lease Square (OLS) Technique Result

To examine the impact of government expenditure on economic growth in Nigeria. The Double log function is the lead model that serves as the foundation for this investigation, as seen in Table 2. Some relevant statistical and econometric criteria indicate this; for example, the coefficient of multiple determination  $R^2$  for the double log model is the highest, indicating that the independent variables' explanatory power is more robust in the double log form than in the other forms specified. Second, and of particular importance, are the Akaike Information Criterion (AIC) and the Schwarz Information Criterion (SIC). (SIC). These two factors are powerful in selecting a functional form in econometric literature (Gujarati, 2003). As a result, these are frequently accomplished by selecting the functional form with the lowest AIC and SIC value. The regression results for the four models show that the AIC and SIC statistics for the double log model have the lowest values when compared to the other functional forms. As a result, the double log function is chosen as the lead model for the interpretation based on the criteria In this regard, the coefficient of determination R2 is 0.61, meaning that explanatory variables in the model jointly explain nearly 61% of the variation in GDP. The Fstatistic demonstrates that the overall relationship in the model is substantial, as seen by the F-test statistic's statistical significance. The Durbin-Watson Statistics prove that there is no serial correlation in the estimated model's residuals. The regression results shown above yield some intriguing outcomes. First, at 5%, the coefficient of government spending on education, health, agriculture, and government revenue is positive and statistically significant. This means that a percentage increase in government spending on education, health, agriculture, and government revenue will result in an increase in GDP. (GDP). As a result, the outcome matches the a priori predictions. The coefficient of government spending on roads and construction shows a negative association with GDP growth). This indicates that an increase in government spending on roads and construction will have an impact on the rate of GDP growth. The most likely reason is that funds provided for road and construction are not spent wisely, and they cannot have a good transmission effect on economic growth. This result does not meet the a priori expectations. Table 2 displays the OLS result.

Table 2: OLS Results of Macroeconomic variables influencing economic growth.

Four functional	Double log function	Linear function	Semilog functional form	Exponential
forms	(Lead model)	form		functional form
Variables	Coefficient	Coefficient	Coefficient	Coefficient
С	1.030577	4.954110	-3.275876	-1.030577
GEXPE	1.392206	0.040340	3.281931	1.392206
GEXPH	0.828127	-0.157580	-2.703283	-0.828127
GEXPA	0.884184	-0.086057	-2.448473	-0.884184
GEXPRC	-0.482836	0.083455	1.005780	0.482836
GOREV	0.015927	0.052017	1.617910	-0.015927
The $R^2$	0.62	0.34	0.38	0.22
Adjusted R <sup>2</sup>	0.50	0.21	0.27	0.19
F-Test	1.78	1.10	0.54	1.78
Prob. (F-Start)	0.15	0.38	0.74	0.15
DW	0.3	1.8	1.6	1.4
AIC	3.2	6.5	6.6	3.3
SIC	3.2	6.7	6.8	3.5

Source: Authors' computation using (E-Views 9)

# **Granger Causality Test**

To ascertain the causal relationship between government expenditure and economic growth in Nigeria. Decision rule: reject  $H_0$  if Probability value is lower than 0.05 and accept  $H_0$  if otherwise. From the Table, the result of the granger causality shows that government expenditure on education indicates, and government revenue indicatesa bi-directional causality with GDP. Government expenditure on health and agricultureindicates uni-directional causality with GDP while government expenditure on road and construction shows no causality with GDP Based on this result, we conclude that there is a causal relationship between fiscal policy and economic growth (GDP) in Nigeria.

**Table 3: Granger Causality Result** 

Null Hypothesis	Obs	F-Stat	Prob	Decision	Type of Causality
GEXPE does not Granger Cause GDP	36	0.18430	0.0326	Reject $H_0$	Bi-directional causality
GDP does not Granger Cause GEXPE		0.15089	0.0006	Reject $H_0$	Bi-directional causality
GEXPH does not Granger Cause GDP	36	0.28667	0.0027	Reject $H_0$	Uni-directional causality
GDP does not Granger Cause GEXPH		0.29742	0.7448	Accept $H_0$	Uni-directional causality
GEXPA does not Granger Cause GDP	36	0.06483	0.0374	Reject $H_0$	Uni-directional causality
GDP does not Granger Cause GEXPA		0.02469	0.0756	Accept $H_0$	Uni-directional causality
GEXPRC does not Granger Cause GDP	36	0.22941	0.7963	Accept $H_0$	No causality
GDP does not Granger Cause GEXPRC		0.06917	0.0633	Accept $H_0$	No causality
GOREV does not Granger Cause GDP	36	0.01590	0.0042	Reject $H_0$	Bi-directional causality
GDP does not Granger Cause GOREV		1.10512	0.0339	Reject $H_0$	Bi-directional causality

Source: Authors' computation using (E-Views 9)

#### **Conclusion and Recommendations**

The study set out to evaluate the impact of fiscal policy on economic growth in Nigeria from 1981 to 2021. Specifically, to examine the impact of government expenditure on education and health on economic growth in Nigeria; determine the contribution of government expenditure agriculture and security on economic growth in Nigeria; and ascertain the causal relationship between all the variables in the model and economic growth in Nigeria. The study made use of annual time series data and adopt the factorial experimental research design which allows the researcher to examine the effect of two or more independent variables simultaneously on the dependent variable and strengthen the external validity of the study. The study employed the OLS method and the granger causality test as analytical technique to evaluate the impact of fiscal policy on economic growth in Nigeria.

The study discovered that the coefficient of government expenditure on education, on health, on agricultureand government revenue assumes a positive and statistically significant at 5%. This implies that a percentage rise in government expenditure on education, on health, on agricultureand government revenue will cause an increase in gross domestic product (GDP). The coefficient of government expenditure on road and construction indicates a negative relationship with economic growth GDP). This implies that an increase in government expenditure on road and construction will cause an affect in GDP growth rate. The likely reason might be the fund allocated for the purpose of road and construction is not judiciously use and it cannot have a positive transmission effect on economic growth. The study also found that government expenditure on education indicates, and government revenue indicate a bi-directional causality with GDP. Government expenditure on health and agriculture indicates uni-directional causality with GDP while government expenditure on road and construction shows no causality with GDP

## Recommendations

The following policy recommendations were made based on the study's findings:

Improving government spending on health, education, and agriculture as components of productive spending is necessary to increase economic growth. What Nigeria requires is a fiscal policy norm that commits the government to a specific level of fiscal and budgetary management.

Emphasis should be on the development of basic infrastructure (example. Road & construction). Government needs to critically reexamine its expenditure on road and construction. This is because infrastructures are very critical to the development of every nation.

# **Contribution to Knowledge**

This study contributed to knowledge by establinshing four critical sectors of the economy that government allocate its expenditure to in Nigeria, namely the education, health, agriculture, and road and constructions. These sectors were carefully selected because the education and health have to do with the human capital investment of every nation. Agriculture was considered due its critical role on Nigeria economy and the focuse on diversification of its economy. Road and constructions are very essential to the growth and development of every nation.

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#### **Conflict of Interest**

The authors state no conflict of interest exists.

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