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### Government Expenditure, Inflation and Economic Growth in Nigeria

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## Abstract

This study investigate the impact of government expenditure on inflation and economic growth in Nigeria from 1989 to 2021. Annual time series data obtained from Central Bank of Nigeria statistical bulletin were used for the study. Data gathered were analyzed with Ordinary Least Square (OLS) technique. Empirical result obtained from the study revealed that government expenditure and inflation have positive and significant impact on economic growth in Nigeria. The study recommends that government should increase expenditure on health and transfer and adopt one digit inflation rate to enhance economic growth in Nigeria.

Keywords: Education, Health, Transfer, Inflation, Economic growth

**JEL Classification**: H5, E3, F43

# 1. Introduction

Many debates and controversies have centred on whether or not the increasing government spending can induce inflation and economic growth in an economy. While some scholars are of the view that increasing government expenditure will enhance economic growth and inflation, others are of the view that increase in government spending has the tendency to reduce the performance of an economy both in developing and developed countries. The link between government expenditure and economic growth has attracted considerable interest on the part of economic researchers. On one hand, there is the Keynesian approach which stated that government spending is an important policy tool that can be used to ensure reasonable level of economic activity, correct short-term cyclical fluctuations in aggregate spending, and secure an increase in productive investment, thereby providing a socially optimal direction of growth and development (Omodero, 2019). Another school is of the view that excessive government intervention in economic life affects economic growth in a negative way because government operations are conducted less efficiently, they reduce the overall productivity of the economic system and because of excessive government

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expenditure which usually go with high level of taxation, distorts economic incentives and thereby resulting in sub-optimal economic decision (Barlas, 2020).

Public expenditure according to Samuel and Oruta (2021) refers to the expenses incurred by a government for the maintenance of itself and provision of goods and services to foster economic growth and improve the welfare of the people in the society. Government expenditure can be divided into two major groups namely capital expenditure and recurrent expenditure. Expenditure occurs in an economy for two major reasons (i) to provide the necessary and required facilities needed for the maintenance of law and order and further enhance allocative efficiency in the pressure of externalities and also (ii) to provide all the necessary and required infrastructural facilities that will heighten productivity and encourage economic activities in the long-run (Idris & Baker, 2017). Government expenditures have been on the increase in Nigeria over the years. The total of both capital and recurrent expenditure of the government have increased from about \$\frac{1}{2}\$60.25 billion in 1990 to about ¥3.99 trillion in 2010. This increase in government expenditure has been identified by economists as a way of contracting or expanding a nation's economy (Mulugeta, 2023). Expenditure by government is still regarded as one of the major elements of economic growth in both advanced and developing countries. According to Wagner (1886), government expenditure will continue to be the major source of economic growth and a tool to improve the welfare of most societies in emerging economics (Molefe & Chaga, 2017).

There are two major categories of economic policies that have been widely utilized over a vast period of time for the general purpose of economic stabilization and for the achievement of some essential macroeconomic goals and objectives in specific terms. These policies are fiscal and monetary. Although the two policies are different in terms of their structure and the application of their fundamental instruments, however, they are generally targeted at achieving similar goals and objectives of maintaining economic stability (Onifade *et al*, 2020). Monetary policy is a combination of measures designed to regulate the value, supply and costs of money in an economy in consonance with the expected level of economic activities. In developing countries, monetary policy plays an important role of accelerating development by influencing the cost and availability of credit, controlling of inflation and by maintaining balance of payments equilibrium (Okimoto, 2018). Fiscal policy is the use of taxation, public borrowing and public expenditure by government for the purpose of "stabilization" or "development" (Adeyemi & Awogbade, 2022).

Taxation is an important and useful fiscal instrument for reducing private consumption and transferring idle resources for capital formation by the government (Egiyi, 2022). Fiscal policy is of two types: Expansionary fiscal policy and contractionary fiscal policy. Expansionary fiscal policy can be effected in two ways. The first one is when government increases expenditure on projects in the various sectors of the economy, while the second one is when government lowers tax burdens in order to increase disposable income. The main objective of expansionary fiscal policy is to stimulate private spending and tackle the challenges associated with economic recession in order to boost economic growth (Ewa & Okoi, 2018). Contractionary fiscal policy on the other hand is introduced to effectively regulate and manage the level of aggregate demand in an economy. It is introduced during

inflation which is seen to be posing dangerous threat to economic stability and when the prevailing levels of public expenditure have attained the level of crowding out the private sector efficiency (Ekpo *et al*, 2022).

One of the pronounced macroeconomic problems confronting Nigeria is inflation. It has redistributes income and wealth in favour of some, and greatly harms others as it has made life of the poor more miserable (Egbuloru & Wobilor, 2016). Inflation is an increase in the volume of money and credit relative to available goods resulting in a substantial and continuing rise in the general price level (Bashir, 2022). Although inflation has negative effect on economic performance when it is high, it is also destructive when it is zero because it will result in stagnation since economy requires a definite minimum level of inflation for economic growth (Toriola et al, 2022). According to neoclassical economists, increase in government expenditure could result in high inflation outcomes given the full employment assumptions, they believed that increased government spending exacerbate an economic contraction by shifting resources from private sector, which they consider productive to the public sector which they consider unproductive. Inflation affects economy positively and negatively. Positive effects of inflation includes reducing the real burden of public and private debt, while negative effects of inflation will be an increase in the opportunity cost of holding money, uncertainty over future inflation which may discourage investment and savings (George-Anokwuru & Ekpeyong, 2020). Two schools of thought arose on the direction of causality between public expenditure and economic growth. One is that public expenditure is a consequence of economic growth as posited by Wagner 1886 and the other is by Keynes 1937 who stated that public expenditure is a tool adopted by the government to reverse economic downturns by borrowing money from the private sector and then returning it to them through various spending programs, hence economic growth is an outcome of public expenditure (Ogar, et al, 2019).

Government expenditure in Nigeria has been on the increase over the years (Ebong *et al*, 2016), despite the increase in government expenditure, the economy is still volatile with challenges such as poor infrastructure, unemployment, poor education system (strike in higher institutions) to mention but a few. Important question to ask is whether the increase in government spending has translated into desired economic growth and prosperity in Nigeria? It is for the discussion above, this study investigates government expenditure, inflation and economic growth in Nigeria. Therefore, this study try to test if government expenditure and inflation have no significant effect on economic growth in Nigeria.

#### 2. Literature Review

### Theoretical Literature

New Public Management (NPM) theory which started in the late 1970 in the United Kingdom and the United States of America before the governments of New Zealand and Australia joined the movement (Gruening, 2001). NPM is a system whereby private sector management and incentive methods are introduced into government organization methods of doing things. In support of this theory, the proponents advocated incorporation on the basis that private sector methods and incentive structures will improve efficiency in government. The theory is practical result of the private idea being better than public (Islam,

2015). However, NPM has been criticized on the ground that it is rarely adopted into government operation (Makinde, 2022).

Public expenditure theory otherwise known as law of increasing state spending was formulated by Adolph Wagner (1835-1917). The theory stated that in an economy, government spending increases as income growth expands. The theory stated further that efficiency and equity should be applied in public spending to avoid chaos. This efficiency has to do with harmonization of government revenue and expenditures in the provision of services to the populace (Babatunde, 2018). Iheanacho (2016) writing in support of this theory stated that in the process of economic development, increase in government spending over time has been associated with economy growth in the country. It is therefore expected that growth in government expenditure should translate to economic growth of a country. Despite government increase spending on infrastructure to alleviate the welfare of the people in order to improve standard of living of the people, ironically this is not the case (Babatunde, 2015).

John Maynard keyne (1883-1946) was the proponent of keynesian theory in 1937 during the Great Depression in a book written by him titled "The general theory of employment, interest and money". To keynes and his followers, they believed that government intervention is needed to stabilize the economy and most importantly during economic recession when there is little or no money to spend. They stated that through government spending, jobs will be created, and when people are employed, the salary earned can be used to purchase goods and services and in the process, economy will pick up (Keji, 2021). Aladejare and Ani (2012) in criticizing keynesian theory stated that the theory failed because lower tax rates have been discovered to enhance economic growth of a nation. Economic growth is affected by two factors namely, direct and indirect factors. Direct factor include natural resources, increase in capital employed, advancement in technology, while indirect factor include savings and investment rates, the efficiency of financial system, fiscal and budgetary policies and efficiency of government (Boldeanu & Constantinescue, 2015). Sequira (2016) submitted that sustainable development is a major top priorities of a country all over the world and that it remains a crucial goal for the attainment of macroeconomic policies of successive political administrators. Government expenditure is an important tool that will drive on economy to a long-term sustainable growth and development (Akanbi, 2014). It is a common belief that government spending will translate to economic growth as it will provide a variety of public infrastructures which can aid an economy in enhancing physical capital, human capital and domestic security (Phiri, 2019). It has also been observed that the larger the government expenditure, the higher the level of economic growth an economy will experience (Akpan, 2005). Increase in productivity will have positive impact on the gross domestic product (GDP) and therefore economic growth (Adeusi et al, 2020). It has been argued that when government spending is zero, there would be little or no economic growth, it is for this reason keynes asserted that government spending is necessary for economic growth.

### Empirical Review

Robert (1995) assessed the effects of inflation on economic growth for 100 countries from 1960-1990. Result obtained from the regression analysis showed that inflation has negative

but significant impact on economic growth. It was stated further in the study that, high long term rate of inflation brings about a reduction in economic growth which can have adverse effect on standard of living of the economy as such, strong level of price stability was recommended. Omoke (2010) also examined the relationship between inflation and economic growth in Nigeria from 1970 to 2005 using co-integration and granger causality test. Consumer price index (CPI) was used as proxy for inflation while gross domestic product (GDP) was used as proxy for economic growth. Empirical finding revealed that the causality that runs from inflation to economic growth is an indication of relationship showing that inflation indeed has an impact on economic growth in Nigeria for the period of the study. In a study by Okafor and Eiya (2011) to ascertain the growth in government expenditure and determine the factors responsible for the growth in Nigeria from 1999 to 2008. Secondary data sourced from CBN Statistical bulletin were used for the study, while Ordinary Least Square (OLS) regression technique was used to ascertain the determinants of Nigerian government expenditure growth. The results from the study showed that inflation has a negative relationship with total government expenditure (TGEX), population has positive relationship with TGEX; public debt has a significant positive relationship with TGEX; and tax revenue has significant positive relationship with TGEX. Which shows that the four variables are the major determinants of growth in government expenditure.

Ezeabasilli et al (2012) in their study of fiscal deficit on inflation in developing countries, a case of Nigeria using annual time series data from 1970 to 2006. The study adopted modelling approach which made use of co-integration and structural analysis. The study revealed that there was positive but no significant relationship between inflation and fiscal deficit in Nigeria during the period of the study. Furthermore, Kasidi and Nwakanemela (2013) investigated how inflation impact on economic growth in Tanzania from 1990 to 2011 using time series data. Correlation coefficient and co-integration technique were used to establish the relationship between inflation and gross domestic product (GDP) and coefficient of elasticity were applied to measure the degree of responsiveness of change in GDP to changes in general price levels. From the empirical result obtained, it was revealed that inflation has a negative impact on economic growth in Tanzania for the period of the study. In another study carried out by Attari and Javed (2013) in Pakistan between 1980 and 2010 on inflation, economic growth and government expenditure using time series and econometric tools like Augmented Dickey Fuller (ADF), unit root test, Auto-regressive Distributed Lag (ARDL), Johansen co-integration and Granger causality test to investigate the relationship. From the result, it was revealed that long-term relationship exist between rate of inflation, economic growth and government expenditure for the period of the study.

Ukwueze (2015) studied causal relationship between government spending and inflation in Nigeria from 1970 to 2010. Results from the causality test showed that a uni-directional causality exist from negative government expenditure changes i.e low or contractionary government spending to positive inflation changes (high inflation) in the Vector Autoregression (VAR) model. Implication of the study is that inflationary pressure in Nigeria is as a result of low or contractionary public spending. Ekpo (1999) analyzed the contribution of government expenditure to the economic growth of Nigeria from 1960-1992. Results revealed that public expenditures on education and health have positive and significant

effect on economic growth of Nigeria. The study therefore recommends that government must continue to create enabling environment as its contribution to the economic growth process in Nigeria. Baldacci et al (2008) explore the channels of linking social spending, human capital and growth and compare the effects of alternative economic policy intervention using panel data from 118 developing countries from 1971-2000. Results from the study established a significant and positive impact of public capital expenditure on the economic growth of some developing economies within a disaggregated framework.

The study by Cooray (2009) on government expenditure, governance and economic growth using neoclassical production function to incorporate two dimensions of the government-the size and the quality dimension. Size is measured by government expenditure and quality by governance using cross section of 71 economics. Results obtained from the study revealed that both size and quality of the government are important for economic growth. Taiwo and Abayomi (2011) carried out a study on government expenditure on economic growth in Nigeria from 1970-2008, the study applied Ordinary Least Square (OLS) technique to estimate the effect of government expenditure on economic growth. Durbin Watson, unit root were incorporated into the study to establish long-run relationship between public expenditure and economic growth. Empirical findings showed positive and significant relationship between government expenditure and economic growth in Nigeria. Segun and Adelowokan (2015) in measuring the impact of public expenditure on economic growth in Nigeria from 1970-2008. Using time series data and applying various econometric techniques such as Augmented Dickey Fuller (ADF) unit root, Johansen co-integration as well as Ordinary Least Square (OLS), the study discover that public expenditure has a positive and significant impact on economic growth in Nigeria. Jibir and Aluthge (2019) empirically investigated determinants of government expenditure in Nigeria from 1970-2017. Time series data were analyzed using Auto-regressive Distributed Lag (ARDL) model. Findings from the study revealed that oil revenue, GDP, population, trade openess, oil prices, taxation and inflation are important determinants of the size of Nigeria's government expenditure. Uremadu et al (2019) study the relationship between government expenditure and economic growth in Nigeria from 1999-2016 in a disaggregated government current expenditure, and result from the study showed that government expenditures in national assembly, pensions and gratuities had insignificant effect on economic growth, but total government expenditures on administration and public debt servicing had a positive and significant effect on economic growth. It was also revealed from the study that government expenditure on transfer had insignificant effect on economic growth. The research by Aluthge et al (2021) examined impact of government expenditure on economic growth in Nigeria from 1970-2019 using time series data. The study employed Auto-regressive Distributed Lag (ARDL) model, unit root test and co-integration analysis. Findings from the study supports that capital expenditure of government in Nigeria has positive and significant impact on economic growth in Nigeria both in the short-run and in the long-run. Okpabi et al (2021) investigated how government expenditure affects economic growth in Nigeria from 1984-2015 by relating keynesian and Endogenous growth model to Nigeria's situation. Johasen co-integration and Error Correction Model (ECM) model were employed. Empirical result obtained from the study revealed that public expenditure (recurrent and capital) has positive and significant impact on economic growth in Nigeria.

As many studies have empirically revealed positive effect of government spending on economic growth, many other studies have revealed negative relationship between government spending and economic growth. Huang (2006) investigated Wagner's law in China and Taiwan from 1979-2002 using annual time series data. To estimate long-run relationship between government expenditure and output Bounds Test based on Unrestricted Error Correction Model estimation was employed. Results from the study showed that there was no long-run relationship between government expenditure and output in China and Taiwan. It was further revealed from Toda and Yamamoto's 1995 Granger causality test that Wagner's law does not hold for China and Taiwan during the study period. In another study, Ighodaro and Okiakhi (2010) used time series data for the period 1961 to 2007 and applied co-integration Test and Granger Causality test to examine government expenditure disaggregated into general administration and community and social services on economic growth in Nigeria. The results revealed negative impact of government expenditure on economic growth. In a similar study conducted by Abu and Abdullahi (2010) in Nigeria from 1970 to 2008 on government expenditure and economic growth in a disaggregated analysis. The paper employed co-integration and error correction methods to analyze the relationship between government expenditure and economic growth. Findings from the study showed that government total capital expenditure (TCAP), total recurrent expenditure (TREC) and government expenditure on education (EDUC) have negative effect on economic growth. Furthermore, Egunjobi (2013) examines the pattern of public expenditure in Nigeria using error correlation model and granger causality test from 1977 to 2008. Findings from the study supported that government spending and public consumption have negative significant impact on economic growth in Nigeria. Ndiaye (2018) researched on public spending and growth in the countries of community of West African states using three out of the ten countries namely Burkina Faso, Guinea and Ghana from 1990 to 2015. Auto-regressive Distributed Lag (ARDL) was estimated for each of the countries which have co-integration relationships and for those whose co-integration does not exist, Vector Auto-regression (VAR) was made. Results from the study showed that total spending in most of the countries in ECOWAS has negative impact on the economic growth both in the short-term as in the long-term. Onifade et al (2020) in an empirical investigation of impact of government expenditure on economic growth in Nigeria from 1981 to 2017 employing Pearson's Auto-regressive Distributed Lag (ARDL). It was established from the study that recurrent expenditures had significant negative effect, while capital expenditure had positive but insignificant effect on economic growth in Nigeria.

## 3. Methodology

In this study, *ex-post facto* research design was adopted as the study made use of published data on both the dependent and independent variables. Secondary data were used to investigate how government spending impacts on inflation and economic growth in Nigeria. Annual time series data extracted from Central Bank of Nigeria statistical bulletin for a period of thirty two(32) years from 1989 to 2021 were used to examine how government expenditure affects inflation and economic growth in Nigeria. Data as regards government

spending were obtained from quantitative variables like government expenditure on education, government expenditure on health, government expenditure on economic services and government expenditure on transfers, while data in respect of the growth of economy was obtained from gross domestic product (GDP). Data were analyzed using empirical analysis. Empirical analysis was done using multiple regression analysis since the model is a multiple regression model. In this study, Ordinary Least Square (OLS) technique econometric views was used to analyze the impact of government spending on inflation and economic growth in Nigeria.

This is the mathematics expression to express the functional relationship between the dependent and independent variables. The functional relationship used for this study is specified below:

The model expressed in linear econometric form is specified below:

$$GDP = \beta_0 + \beta_1 TGEXPe + \beta_2 TGEXPh + \beta_3 TGEXPes + \beta_4 TGEXPt + \beta_5 INF + \mu \dots 2$$

Where GDP is gross domestic product which is a proxy for economic growth, TGEXPe indicate total government expenditure on education, TGEXPh refers total government expenditure on health, TGEXPes entails total government expenditure on economic services, TGEXPt stands for total government expenditure on transfer, INF is inflation rate,  $\beta_0$  is the intercept,  $\beta_i$  (i=0,1,2,3,4,5) are the partial regression coefficients, and  $\mu$  stochastic or random term which is introduced to take care of the economic growth problems that are not included in the model of this research work. The apriori theoretical expectations about the signs of the estimates of the model parameters are  $\beta_i$  (i=0,2,3,4) >0;  $\beta_1 <$ 0;  $\beta_5 <$ ;  $\mu=0$ .

#### 4. Result

The data obtained from the Central Bank of Nigeria Statistical Bulletin, the parameters specified were estimated through the use of the Ordinary Least Square (OLS) method. The results in Table 4.1 below were obtained.

Table 1: Regression Analysis Results

Variables	Coefficient	Std. Error	T-stat.	P-value			
Intercept (β <sub>0</sub> )	-269399.3	470676.7	-0.572366	0.5718			
$TGEXP_e$	-20.83442	13.14995	-1.584373	0.1248			
$TGEXP_h$	129.0653	19.77600	6.526362	0.0000			
TGEXP <sub>es</sub>	3.164310	1.879904	1.683230	0.1039			
$TGEXP_t$	10.13994	2.386648	4.248613	0.0002			
INF	-261.6261	14505.17	-0.018037	0.9857			
R-Square = 0.989743 Adjusted R-Square = 0.987844							

F-statistic = 521.0844 Prob (F-statistic) = 0.000000 Durbin-Watson Stat = 2.234624

Source: Author's Computation

The result in Table 1 shows that the coefficient of the intercept  $\beta 0$  is -269,399.3. This represents the autonomous value of GDP. It shows the average value of GDP when the specified components of government expenditure and inflation are equal to zero. This indicates negative growth in the economy in the absence of government expenditure on

education, on health, on economic services, on transfers and inflation rate. Thus, the intercept is not in conformity with the a priori expectations. The coefficient of total government expenditure on education is -20.83442. This implies that a unit increase in the total government expenditure on education causes a 20.83442 units decrease in the gross domestic product (GDP) and this implies a negative relationship between total government expenditure on education and GDP. Thus, the coefficient of total government expenditure on education is in conformity with the a priori expectation. This is in conformity with the study carried out by Abu and Abdullahi (2010) in Nigeria which indicated a negative relationship between government expenditure on education and economic growth.

The coefficient of total government expenditure on health is 129.0653. This implies that a unit increase in total government expenditure on health causes 129.0653 units increase in the gross domestic product. This indicates a positive relationship between total government expenditure on health and gross domestic product. Thus, the coefficient of total government expenditure on health is in conformity with the a priori expectation. This is in conformity with the study carried out by Ekpo (1999) in Nigeria which indicated positive and significant relationship between government expenditure on health and economic growth. The coefficient of total government expenditure on economic services is 3.164310. This implies that a unit increase in total government expenditure on economic services leads to 3.164310 units increase in the gross domestic product. Which indicates a positive relationship between total government expenditure on economic services and gross domestic product. Thus, the coefficient of total government expenditure on economic services is in conformity with the a priori expectation. This is not in conformity with the study carried out by Uremadu et al (2019) which indicated an insignificant relationship between government expenditure on transfers and economic growth.

The coefficient of total government expenditure on transfers is 10.13994. This implies that a unit increase in total government expenditure on transfers increases gross domestic product by 10.13994 units. This implies a positive relationship between total government expenditure on transfers and gross domestic product. Thus, the coefficient of total government expenditure on transfers is in conformity with the a priori expectation. This is in conformity with the study carried out by Nworji et al (2012) in Nigeria which indicated a positive relationship between government expenditure on transfers and economic growth. The coefficient of inflation is -261.6261 which implies that a unit increase in inflation leads to 261.6261 units decrease in gross domestic product. This indicates a negative relationship between the inflation rate and gross domestic product. Thus, the coefficient of inflation rate is in conformity with the a priori expectation. This is in conformity with the study of Robert (1995) where a negative relationship was discovered between inflation and economic growth for 100 countries from 1960-1990 and also the study carried out by Kasidi and Nwakanemela (2013) in the case of Tanzania in which a negative relationship was discovered between inflation and economic growth. However, this result is not in conformity with the study carried out by Ezeabasili et al (2012) in Nigeria between 1970-2006 where a positive but no significant relationship exists between inflation and economic growth.

In analyzing the statistical significance and testing the Hypothesis, the P-value associated with the t-statistic for total government expenditure on education is 0.1248 which is greater than the 5% (0.05) significance level. Based on the decision rule, the null hypothesis (Ho) which states that government expenditure on education has no significant effect on the growth of the Nigerian economy is accepted. Indicating that the negative contribution of government expenditure is not statistically significant. From this decision, the first specific research question is answered and the first research objective which was to determine the effect government expenditure on education has on the economic growth of Nigeria is achieved. The P-value associated with the t-statistic for total government expenditure on health is 0.0000 which is less than the 5% (0.05) significance level. Based on the decision rule, the null hypothesis (H0) which says that government expenditure on health has no significant impact on the economic growth of Nigeria is rejected. This indicates that the positive contribution of government expenditure on health is statistically significant. From this conclusion, the second specific research question is answered and the second specific research objective which is to determine how government expenditure on health had influenced the growth of Nigeria is achieved.

Table 2: Partial Effects

Coefficient/Effect (β <sub>i</sub> )	t-stat	P-value	Greater or Less Than	Conclusion
			0.05 Significance Level	
$\beta_1 = -20.83442$	1.5743	0.1248	Greater	Not significant
$\beta_2 = 129.0653$	6.5263	0.0000	Less	Significant
$\beta_3 = 3.164310$	1.6832	0.1039	Greater	Not significant
$\beta_4 = 10.13994$	4.2486	0.0002	Less	Significant
$\beta_5 = -261.6261$	0.0180	0.9857	Greater	Not significant
F-statistic	521.084			
P-Value	0.0000			
R-squared	0.9897			
Explained variation	98.9%			
Unexplained variation	1.1%			
Adjusted R-squared	0.9878			
Explained variation	98.8%			
Unexplained variation	1.2%			
Durbin-Watson statistic	2.2346			
$d_{\mathrm{u}}$	1.683			
$d_{\rm L}$	0.876			

Source: Author's Computation

Also, the P-value associated with the t-statistic for total government expenditure on economic services is 0.1039 which is greater than the 5% (0.05) significance level. Based on the decision rule, the null hypothesis (H0) which shows that government expenditure on economic services has no significant impact on the growth of the Nigerian economy is accepted. Which implies that the positive contribution of government expenditure on economic services is not statistically significant. Thus, the third specific research question is answered and the third specific research objective which is to determine the impact of

government expenditure on economic services on the economic growth of Nigeria is achieved. The P-value associated with the t-statistic for total government expenditure on transfers is 0.0002 which is less than the 5% (0.05) significance level. Based on the decision rule, the null hypothesis (H0) which says that government expenditure on transfers has no significant effect on the economic growth of Nigeria is rejected. This implies that the positive contribution of government expenditure on transfers is statistically significant and this indicates that the fourth specific research objective is achieved, and the fourth specific research question is also answered. The P-value associated with the t-statistic for inflation rate is 0.9857 which is greater than the 5% (0.05) significance level. Thus, the null hypothesis (H0) which says that inflation has no significant effect on the economic growth of Nigeria is accepted. This implies that the negative contribution of inflation rate is not statistically significant. The fifth specific research objective is achieved and the fifth specific research question is answered. The P-value associated with the F-statistic is 0.000000 which is less than the 5% (0.05) significance level. Based on the decision rule, the null hypothesis (H<sub>0</sub>) which says that the components of government expenditure and inflation do not significantly affect economic growth in Nigeria is rejected indicating that the independent variables have an overall significant effect on the growth of the Nigerian economy. Thus, the main research objective which is to determine how government expenditure and inflation has affected the economic growth of the Nigerian economy is achieved and also, the main research question is answered.

Given the explanatory power, the  $R^2$  0.989743 implies that 98.9% of the total variations in the gross domestic product (GDP) are explained by the variations in the total government expenditure on education, health, economic services, transfers and the inflation rate. The remaining 1.1% can be explained by the stochastic term  $\mu$ . The adjusted  $R^2$ , which is the  $R^2$  after the adjustment for the degree of freedom, is 0.987844. This implies that 98.8% of the variations in the gross domestic product (GDP) can be explained by total government expenditure on education, health, economic services and transfers and inflation rate. The remaining 1.2% can be explained by the stochastic term  $\mu$ . Thus, the contributions of the components of economic growth and inflation rate in the economy are strong in explaining the variations in gross domestic product (GDP). The Durbin-Watson statistic is 2.234624, the degree of freedom = n-K=33-6=27,  $d_u$  = 1.683,  $d_L$  = 0.876. Based on the decision rule, 0.876<2.234624<4. Thus, we reject the null hypothesis which states that there is no negative correlation.

#### 5. Conclusion and Recommendations

This study examined the impacts of the components of government expenditure and inflation on economic growth in Nigeria from the period of 1989-2021. The gross domestic product (GDP) is used as a proxy for economic growth. Government expenditure on education, government expenditure on health, government expenditure on economic services and government expenditure on transfers are used as proxies for government expenditure and inflation rate is used as a proxy for inflation. This study findings that government expenditure on education indicates a negative contribution. Government expenditure on health, government expenditure on economic services, and government expenditure on transfers show positive contributions and inflation rate shows a negative

contribution. The negative growth that arises when there is no spending in the economy by the government and no inflation rate indicates that government expenditure on education, health, economic services, transfers and inflation are necessity for positive growth in the economy. Although government expenditure on health, government expenditure on economic services and government expenditure on transfers show positive contributions, only government expenditure on health and transfers have significant effects. It can be concluded that in order for positive growth to occur in an economy, government needs to spend on certain sectors of the economy and some level of inflation have to exist. Although government expenditure on economic services has a positive effects on the growth of the economy, its contributions are not statistically significant. The variations in the components of government expenditure and inflation rate explain a high proportion of the variations in the growth of the economy.

Based on the conclusion, this study therefore recommends that government should increase the expenditure on health and transfers in order to bring about significant positive contributions on the growth of the economy. Government should adopt policies that will induce one-digit inflation rates in order to reduce the negative effect of inflation on the growth of the economy. Fiscal discipline should be incorporated into government spending in Nigeria by not using borrowed fund to finance recurrent expenditure as this will not enhance economic growth. In order to induce positive growth in the economy, government should spend on education, health, economic services and transfers. Government should also ensure that the amount allocated to various sectors of the economy should be directed towards improving those sectors in order to induce economic growth.

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