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Impact of Government Expenditure on Inflation and Economic Growth in Nigeria.

Olasupo Olumide Abiodun,Akindele Eniola Elijah

Abstract

This study was carried out to assess the impact of government expenditure on inflation and economic growth in Nigeria using time series data from 1981-2022. Inflation causes untold hardship especially when it goes beyond control. However, inflation is best termed a "necessary evil" because of its inevitability in any economy, and secondly, because it could also be a measure of economic growth. For the analysis, government expenditure was disaggregated into 1) recurrent expenditure, and 2) capital expenditure. The Unit Root Test, the Granger Causality Test, and the Vector AutoRegressive Regression(VAR) methods were employed to establish a causality relationship between the variables of interest. Findings show a bi-directional relationship between recurrent expenditure and inflation, while a unidirectional relationship was observed between capital expenditure and inflation. In terms of economic growth using the GDP (Gross Domestic Product) as a measure, recurrent expenditure does not impact GDP while the capital expenditure does impact GDP positively but only in the long-term. The study recommends that the government should prioritize efficient capital investments to generate positive returns in the long-run while also providing a facilitative environment for business growth andfurther investments.

Keywords: Government expenditure, Inflation, GDP, Economic growth, Granger causality.

Background

Government expenditure by any government is vital for economic growth within the country and for external obligations/liabilities (Anyanwu, 1997). Government expenditure exists in 2 forms; recurrent expenditure: used for servicing, and capital expenditure: often for new assets (Dimoji et al., 2013). Investments contribute greatly to GDP, employment, and national exports. On the production side, inflation affects input prices leading to decreased production, causes low GDP, low employment and affects economic growth (Nneoma 2024). In the immediate term, government expenditure could be vital in raising the people's standard of living while in the long run, it has adverse effects which lead to inflation by virtue of the means of sourcing vis-à-vis; external and internal borrowings with their corresponding debt servicing,tax revenues etc. (Fasewa et al., 2023).

Inflation is a global phenomenon and thus, inevitable in any economy. However, if not controlled, it poses economic, social instability (Anyanwu, 2016). Samuelson (1989) classifiedinflation into 3 categories namely; moderate, galloping, and hyper-inflation. While moderate inflation drives economic growth, galloping and the hyper-inflation have adverse effects on any economy. Jha and Dang (2012) asserted that in a developing country, if the inflation level exceeds 10%, the price volatility caused by this adversely affects the economy. On the other hand, (Temple, 2000), asserted that a low inflation rate hinders economic growth.

In Nigeria, aggregate government expenditure increased from N11.19 billion in 1981 to N701.05 billion in 2000 and in 2019 alone, it was around N9.29 trillion. Within the same period, aggregate foreign and domestic debts increased from N13.52 billion in 1981 to about N4 trillion in 2000 with 2019 aggregate debts accruing to N23.30 trillion (CBN 2019). In 1981, Nigeria's inflation rate was 20.81% and 6.93% in 2000, a closer look at data shows spikes in 1988 at 54.51% and in 1995 at 72.84%. In 2019, inflation rate was 11.40%. As mentioned earlier, inflation is inevitable in an economy. However, it isn't expected that inflation will rise proportionally with government expenditure i.e. the relationship between these variables isn't linear but causal.

Literature Review

Government expenditure is a form of fiscal instrument. Fiscal policies are vital in monitoring and influencing the economy (Agu, 2015). Government expenditure is the sum-total of spending at the various levels of government (Anyato, 2016). Inflation is the sustained increase in price levels of goods and services. Inflation is a macro-economic problem (Egbulonu and Wobilor, 2016), causing adverse effects on people's living standards (Ahuja, 2013). Inflation reduces the real income (purchasing power) of consumers, thus, causing hardship. Inflation rate is measured as a percentage change in price index: consumer price index, wholesale price index, producer price index etc. (Miftahu, 2023).

Economic growth occurs when there is an increase in the production of economic goods and services at a time period in comparison to a previous time period. Often times, economic growth is a measure of a country's GDP. In times of financial crisis, governments can stimulate the economy through spending. However, in Nigeria, despite the government's expenditure in recent years in several sectors, there has been unsustained economic growth making Nigeria

one the poorest countries in the world coupled with rising inflation has further caused untold hardships on Nigerians ranging from poverty to low quality of living.

Some existing literature on similar studies briefly summarized with findings;

Aluthge et al., (2022) investigated the impact of Nigerian government expenditure on economic growth using time series data from 1970-2019 while employing the use of the Autoregressive Distributed Lag(ARDL) model. Findings revealed that government's capital expenditure hasa positive and significant short/long term impact on economic growth while government's recurrent has no significant short/long term impact on economic growth.

Iwuoha (2020) in his article titled "Impact of Fiscal Policy Measures on Macroeconomic Variables in Nigeria" using the Autoregressive Distributed Lag(ARDL) Model. Findings revealed that government expenditure increased inflation in Nigeria.

Maku et al. (2022) carried out a similar study titled "Impact of a Government Expenditure on Macroeconomic Variables in Nigeria from 1986-2020" using the Bayesian Vector Autoregressive. Findings showed that government recurrent expenditure had no significant impact on inflation and interest rates while government capital expenditure had a negative impact on inflation rate.

Oyerinde (2019) carried out a study on "The Relationship between Government Expenditure and Inflation in Nigeria" using the Johansen Cointegration Analysis and the Vector Error Correction Model. Findings showed a bi-directional relationship between variables but the strongest being between government expenditure and inflation rate from short to long run.

Olayungbo, D. (2013) examined the relationship between inflation and government expenditure in Nigeria from 1981-2016. Using the Least Squares method for estimation, and the line graph, normality test, and correlation analysis employed in the preliminary analysis. Findings revealed that government's capital expenditure has a negative significant impacton inflation in Nigeria, while government's recurrent expenditure had no significant impact on inflation in Nigeria.

In summary, from empirical analysis of previous studies, expenditure was disaggregated into capital and recurrent expenditure. While capital expenditure was seen to have significant impacton inflation and economic growth in Nigeria, recurrent expenditure had no impact on either.

Relationship between expenditure and inflation

Various studies have highlighted that government expenditure could lead to increase in inflation due to the ways by which governments finance expenditure such as borrowings (local and international), tax revenues etc. The Keynesian school of thought opines that excessive government expenditure creates increased aggregate supply in excess of aggregate demand which leads toinflation. In Nigeria for instance, as a result of several bad investment decisions especially on unproductive/uneconomical projects, economic growth/returns have been severely impaired.

Theoretical framework

The theoretical background for the study is the Keynesian approach of demand pull inflation to establish a relationship between government expenditure and inflation. The Keynesian approach explains how government expenditure can be used to drive economic growth. i.e. an increase in government spending increases economic growth via the multiplier mechanism. Also, it can be established that government spending is an intrinsic factor to sustaining economic growth. An increase in government spending creates increase in demand for goods and services which in turn creates increased prices i.e. inflation.

This type of inflation is referred to as the demand-pull inflation when there is too much money chasing fewer goods. The demand-pull inflation occurs as a result of some of these reasons; 1) increased government spending, 2) excessive monetary growth i.e. too much money in circulation chasing fewer goods, 3) increased population etc.

A-priori Expectation

Premised on government expenditure having significant impacts on inflation rate and economic growth in Nigeria.

Objectives

1) To examine the causality relationship between government expenditure and inflation in Nigeria.

2) To examine the causality relationship between government expenditure andGDP (Gross Domestic Product) in Nigeria.
3) To assess the impact of government expenditure on inflation in Nigeria.
4) To assess the impact of government expenditure on economic growth in Nigeria.

METHODOLOGY

Research Design

The research design used in this study is ex-post facto. Ex-post facto design often includes the investigation of independent and dependent variables. As a result, it prevents any of the variables from being manipulated. The data for the variables already exists in many credible sources, such as the CBN statistical bulletin and the NBS report.

Nature and Sources of Data

The study's secondary sources of data are the Statistical Bulletin articles published between 1981 and 2022 by the Central Bank of Nigeria (CBN) and National Bureau of Statistics (NBS). The sources of the following data are provided: real gross domestic product growth rate, inflation rate, capital and recurrent government spending.

Model Specification

The theoretical and empirical literature examined in the previous chapter served as the basis for the fundamental linear equation that constitutes the model. There is evidence to suggest that government spending and the Nigerian economy are causally related. Next, the government expenditure drivers on the Nigerian economy are verified using the Vector Autoregressive Regression model (VAR). The investigation employs the subsequent model to align with our goals:

lnINF=f(lnRGE, lnCGE).

Where INF = Inflation rate

RGE = Recurrent Government Expenditure

CGE = Capital Government Expenditure

f = Functional notation

The econometric equation of the model can be expressed as;

$\ln INF = \beta_0 + \beta_1 \ln RGE + \beta_2 \ln CGE + \mu$

Method of Data Analysis

The Granger Causality Test was used to ascertain the direction and predictive strength of the variables, and the Vector Autoregressive Regression (VAR) technique of estimation was utilized to assess the impact of the independent variables on the dependent variables. VAR was used to check the relationship between variables that are stationary at lag 0 and 1, hence, why it is a good fit for the analysis The unit root test was used to estimate the model equation.

ANALYSIS AND RESULTS

Unit Root Test

To ascertain whether a series is stationary or non-stationary in time series analysis, a unit root test—like the ADF test—is crucial. Because non-stationary data can lead to misleading regressions, stationarity is crucial for proper modelling (Granger & Newbold, 1974). In order to ensure trustworthy statistical conclusions, the test helps determine whether differencing is required to attain stationarity (Dickey & Fuller, 1979).

Table1: Result of the Augmented Dickey-Fuller Test

Variables	ADF	Integration	Significant
GDP	-5.197	1(0)	1%
Inflation	-3.530	1(0)	1%
Recurrent expenditure	-8.526	1(1)	1%
Capital expenditure	-6.176	1(1)	1%

Source: Authors Analysis (2024)

The findings of the ADF test indicate that while capital expenditure and recurring expenses become stationary after the first differencing(I(1)), GDP and inflation remain stationary at level (I(0)). Time series variables must be stationary to ensure consistent statistical properties (mean and variance), valid model estimations, while avoiding spurious correlations and simplifying analysis. As none of the variables have a unit root, they are all significant at the 1% level.This shows that capital and recurring expenses exhibit trends or shocks that call for differencing in order to stabilize, whereas GDP and inflation are steady over time.

GRANGER CAUSALITY TEST

The Granger causality test results provide insights into the direction and significance of causal relationships between variables:

Table 2: Granger Causality Test for Inflation and Expenditures

Equation	Variable	chi2	Df	Prob>chi2
Inflation	Recurrent expenditure	6.3542	3	0.096
	Capital expenditure	3.1047	3	0.376
Recurrent expenditure	Inflation	6.6682	3	0.083
	Capital expenditure	5.253	3	0.154
Capital expenditure	Inflation	16.576	3	0.001
	Recurrent expenditure	1.7074	3	0.635

Source: Authors Analysis (2024)

Inflation → Recurrent Expenditure: The chi-square statistic is 6.3542 with a p-value of 0.096. This result is close to conventional significance levels but not below the typical threshold of 0.05. This suggests that there is weak evidence that lninflation Granger-causes changes in recurrent expenditure. The relationship is statistically significant at the 10% level, indicating that past inflation has a predictive effect on future recurrent expenditure.

Inflation → Capital Expenditure: The chi-square statistic is 3.1047 with a p-value of 0.376. This result is not statistically significant, indicating no evidence that lninflation Granger-causes changes in capital expenditure. Therefore, past inflation does not appear to predict future changes in capital expenditure.

Recurrent Expenditure → Inflation: The chi-square statistic is 6.6682 with a p-value of 0.083. This result is significant at the 10% level suggesting that there is weak evidence that changes in recurrent expenditure Granger-cause changes in inflation. The relationship indicates that past recurrent expenditure might have some predictive power for future inflation, but the evidence is not strong enough to assert causality at the 5% significance level.

Capital Expenditure → Inflation: The chi-square statistic is 16.576 with a p-value of 0.001. This result is statistically significant, indicating a strong evidence that changes in capital expenditure Granger-cause changes in inflation. This suggests that past capital expenditure has a significant predictive effect on future inflation.

Table 3: Granger Causality Test between GDP Growth Rate and Expenditures

Equation	Variable	Chi2	Df	Prob>chi2
GDP	Recurrent expenditure	7.2997	3	0.063
	Capital expenditure	9.1264	3	0.028
Recurrent expenditure	GDP growth rate	1.4963	3	0.683
	Capital expenditure	1.2815	3	0.734
Capital expenditure	GDP growth rate	0.60908	3	0.894
	Recurrent expenditure	8.4888	3	0.037

Source: Authors Analysis (2024)

GDP Growth Rate→ Recurrent Expenditure: The chi-square statistic is 7.2997 with a p-value of 0.063. This result is marginally significant at the 10% level but not at the 5% level. It suggests some evidences that past GDP growth might have a predictive effect on future recurrent expenditure.

GDP Growth Rate → Capital Expenditure: The chi-square statistic is 9.1264 with a p-value of 0.028. This result is statistically significant at the 5% level, indicating that past GDP growth significantly Granger-causes changes in capital expenditure. This suggests that changes in GDP growth have a clear predictive effect on future capital expenditure.

Recurrent Expenditure → GDP Growth Rate: The chi-square statistic is 1.4963 with a p-value of 0.683. This result is not statistically significant, indicating no evidence that changes in recurrent expenditure Granger-causes changes in GDP growth. Past recurrent expenditure does not seem to predict future GDP growth.

Capital Expenditure → GDP Growth Rate: The chi-square statistic is 0.60908 with a p-value of 0.894. This result is not statistically significant, suggesting no evidence that changes in capital expenditure Granger-causes changes in GDP growth. Past capital expenditure does not predict future GDP growth.

Vector Autoregressive Regression (VAR)

The Vector Autoregressive Regression (VAR) was adopted on the time-series data after all the variables were stationary, at most the first order negating the need for co-integration.

1) The results of the regression analysis show the relationship between the independent variables, lagged increases in capital and recurring spending, and the dependent variable, the logarithm of inflation (lninflation). The model's log likelihood, based on 38 observations, is -20.22127; closer to zero values signify a better fit. Lower values indicate a better model fit while penalizing complexity. The Schwarz Bayesian (SBIC) and Hannan-Quinn (HQIC) criteria are 3.103204 and 3.936056, respectively, and the Akaike Information Criterion (AIC) is 2.643225. The R-squared score of 0.6132 indicates that 61.32% of the variation in inflation can be explained by the model. With a p-value of 0.0000 and a chi-square statistic of 60.25, the model is also highly significant, indicating that the independent variables significantly explain the dependent variable.

Table 4: VAR Analysis of Inflation and Expenditure

Log likelihood = -20.22127; R-sq= 0.6132; chi2= 60.25046; P>chi2=0.0000 AIC=2.643225; HQIC=3.103204; SBIC=3.936056; FPE=0.0029311					
Inflation	**Coefficient**	**Standard error**	**Z**	**P> |z|**	**95% Conf. Interval**
Recurrent expenditure					
L1	.5842691	0.3211896	1.82	0.069	-0.0452509 1.213789
L2	.7196042	0.3257253	2.21	0.027	0.0811943 1.358014
L3	.0370154	0.3130367	0.12	0.906	-0.5765252 0.650556
Capital expenditure					
L1	-.333091	0.233456	-1.43	0.154	-0.7906564 0.1244743
L2	.1015298	0.2441199	0.42	0.677	-0.3769363 0.5799959
L3	.1600898	0.2380386	0.67	0.501	-0.3064573 0.626637
Constant	.8115842	0.4451151	1.82	0.068	-0.0608254 1.683994

Source: Authors Analysis (2024)

Starting with recurrent spending, the first lag (L1) has a positive coefficient of 0.5843, indicating that a rise in recurrent expenditure may lead to increased inflation at a borderline

significant level (p-value = 0.069). The second lag (L2) displays a significant positive coefficient of 0.7196 (p-value = 0.027), showing a more powerful and statistically significant inflationary effect from previous recurrent spending. However, the third lag (L3) is not significant (p-value = 0.906), indicating that previous spending had no long-term influence. These findings are consistent with prior research, which revealed that government recurrent expenditures, particularly those financed by borrowing or excessive liquidity, tend to cause inflation by raising demand without equivalent increases in production.

The first lag (L1) for capital expenditure displays a negative but negligible coefficient (-0.3331, p-value = 0.154), suggesting that although capital investment may temporarily lower inflation, the effect is not statistically significant. The second and third lags have positive but negligible coefficients (0.1015 and 0.1601), indicating that capital investment has a more mixed or neutral impact on inflation than recurrent spending. Although the immediate benefits of capital expenditures may differ depending on their efficiency, prior researches have frequently highlighted the potential for capital expenditures to either stabilize or lower inflation over time by enhancing long-term productivity and supply-side capacity.

2) The VAR model analyzing the impact of expenditures on the logarithm of GDP (lnGDP) is based on 22 observations and provides a moderate fit to the data. The model has an R-squared value of 0.4637, meaning it explains about 46.37% of the variation in GDP. The log likelihood of -15.29051, alongside the Akaike Information Criterion (AIC) of 4.117319, Final Prediction Error (FPE) of 0.0152817, Hannan-Quinn Information Criterion (HQIC) of 4.467796, and Schwarz Bayesian Information Criterion (SBIC) of 5.605104, all indicate the model's performance and fit, with lower values generally suggesting a better model. The Root Mean Square Error (RMSE) of 0.857423 reflects the average deviation of the predicted values from the actual values. The chi-square statistic of 19.02465 with a p-value of 0.0250 confirms the statistical significance of the model, indicating that the relationships it estimates are unlikely to be due to random chance.

Table 5: VAR Analysis of GDP Growth Rate and Expenditure

Log likelihood = -15.29051; RMSE= 0.857423; R-sq= 0.4637; chi2=19.02465; P>chi2=0.0250; AIC= 4.117319; HQIC= 4.467796; SBIC= 5.605104; FPE=0.0152817					
GDP	Coefficient	Standard Error	Z	P>|z|	95% Conf. Interval

Recurrent expenditure					
L1	0.290247	0.7894952	0.37	0.713	-1.257135 1.837629
L2	-0.3580791	0.8199505	-0.44	0.662	-1.965153 1.248994
L3	1.764277	0.7531402	2.34	0.019	0.2881492 3.240404
Capital expenditure					
L1	-1.120589	0.4914968	-2.28	0.023	-2.083905 -.1572733
L2	0.9019734	0.5261193	-1.71	0.086	-1.933148 .1292015
L3	0.7894895	0.4663213	-1.69	0.090	-0.3064573 .626637
Constant	1.572763	0.7744226	2.03	0.042	0.0549231 3.090604

Source: Authors Analysis (2024)

The analysis of the coefficients from the VAR model reveals distinct impacts of recurrent and capital expenditures on GDP growth. For recurrent expenditure, the first lag (L1) has a coefficient of 0.290247, which is not statistically significant, indicating a negligible effect on GDP growth. Similarly, the second lag (L2) shows a negative coefficient of -0.3580791, but it is also not statistically significant, reflecting a weak and inconclusive impact. In contrast, the third lag (L3) has a significant positive coefficient of 1.764277 (p-value = 0.019), suggesting that recurrent expenditure with a lag of three periods can positively influence GDP growth, highlighting the potential for delayed recurrent spending to stimulate economic activity.

For capital expenditure, a unit increase in capital expenditure from the previous year results in a roughly 1.12-unit decline in current GDP, indicating that the first lag of capital expenditure (L1) has a negative and statistically significant impact on GDP. A P-value of 0.023 indicates that this effect is significant at the 5% level. GDP is positively impacted by the second lag (L2), which indicates that capital investment from two years prior boosts GDP by roughly 0.90 units. With a P-value of 0.086, this impact is just somewhat significant at the 10% level. In a similar vein, the GDP is positively impacted by the third lag (L3), which increases it by roughly 0.79 units and is marginally significant at the 10% level (P-value = 0.090). In conclusion, there is a statistically significant negative impact of capital expenditure on economic growth in the short run, but over time, capital expenditure appears to contribute positively to economic growth, as evidenced by the positive, albeit marginally significant, effects in the second and third periods.

RESULTS DISCUSSION

Bi-Directional Relationship Between Inflation and Recurrent Expenditure in Nigeria

Inflation Granger-Causes Recurrent Expenditure: The analysis suggests that recurrent expenditure in Nigeria is caused by inflation, according to the Granger causality test. This implies that to lessen the impact of price increases on households and preserve social stability, the government modifies its ongoing expenditure, especially on wages, subsidies, or welfare programs, as inflation increases. For instance, growing inflation in Nigeria can compel the government to raise social assistance payments or the compensation of civil personnel to offset the rising expense of living. This is consistent with the findings of Aminu et al. (2012), who highlighted the way inflationary pressures cause fiscal policy to shift, which in turn causes recurrent spending to be adjusted. This bolsters Anyanwu's (2011) claim that inflation affects the government's capacity to control spending, particularly in unstable economic times.

Recurrent Expenditure Granger-Causes Inflation: The analysis demonstrates that recurrent expenditure Granger drives inflation in Nigeria. Recurrent spending, such as wages and social programs, enhances the economy's liquidity, which boosts consumer demand. In Nigeria, where the supply of products and services is generally limited, growing demand can cause prices to rise, resulting in inflation. This is consistent with Amuka et al. (2016) findings, who argue that recurring government spending directly affects aggregate demand, resulting in inflationary pressures. This feedback loop might be a difficulty for the Nigerian government, as attempts to reduce inflation through greater recurrent spending may worsen inflation.

The bi-directional causality between inflation and recurrent expenditure in Nigeria suggests a feedback loop, where inflation prompts the government to spend more on recurrent items, and this spending further fuels inflation. Such a vicious cycle is particularly problematic in economies like Nigeria’s, where structural constraints limit supply-side flexibility, leading to recurrent inflationary pressures.

Uni-Directional Relationship Between Inflation and Capital Expenditure (Capital Expenditure Granger-Causes Inflation)

The Granger causality test reveals a unidirectional link in which capital expenditure causes inflation in Nigeria. This indicates that significant capital projects, such as infrastructure development, result in greater demand for resources drives inflation. However, inflation has little influence on capital spending decisions. As Bakare and Sanmi (2011) pointed out, large-

scale expenditures frequently result in cost overruns, inefficiencies, or delays, which add to inflationary pressures. Due to capacity limits in the Nigerian economy, higher demand for labour and commodities from capital projects raises prices. This result is consistent with Aschauer's (1989) findings on how capital expenditure, while helpful for long-term growth, can promote inflation in the short run.

Uni-Directional Relationship Between GDP Growth and Recurrent Expenditure (GDP Growth Granger-Causes Recurrent Expenditure)

The Granger causality test shows a unidirectional relationship, with GDP growth in Nigeria causing changes in recurrent expenditures. As GDP rises, government revenue rises through taxes and tariffs, giving the government greater resources to devote to recurring expenditure on wages, salaries, and subsidies. This validates Bakare and Olubokun's (2011) results, which imply that economic growth provides the government with fiscal space to increase recurrent expenditure. In Nigeria, this has been demonstrated by increasing government expenditure during periods of economic growth, as stated by Chinedu et al. (2018), who claim that GDP growth allows for greater allocation to social welfare and public sector wages.

Uni-Directional Relationship Between GDP Growth and Capital Expenditure (GDP Growth Granger-Causes Capital Expenditure)

According to the Granger causality test, GDP growth in Nigeria appears to be the Granger cause of increase in capital expenditure, similar to the relationship observed with recurrent expenditure. Economic expansion increases government revenue, which in turn increases the government's capacity to make investments in healthcare, education, and infrastructure. This is in line with the findings of Adeyeye and Ojo (2017), who found that government funds from Nigeria's growth periods were typically allocated to capital projects that support long-term development but the gains on infrastructure projects took months to appear, so capital spending doesn't immediately boost GDP.

Impacts of Government Expenditures on Inflation in Nigeria

Recurrent Expenditure and Inflation

Significant effects are found when examining the relationship between Nigeria's inflation and recurrent expenditure, especially when there is a two-period lag. Recurrent expenditure has a significant positive impact on inflation, as indicated by the Vector Autoregressive (VAR) model. This finding supports Keynesian economic theory, which holds that government

spending on wages, salaries, and other recurrent expenses raises aggregate demand. This link stands out in Nigeria, where recurrent expenditure accounts for a sizable share of the government's budget.

In Nigeria, recurrent expenditures consist of government spending on social welfare programs, salaries for civil servants, and subsidies that provide liquidity to the economy. Higher household disposable income because of this rise in liquidity drives up demand/consumption. Inflationary pressures, however, may intensify if the rise in demand is not accompanied by a rise in the supply of goods and services. Studies conducted by Aminu et al.(2012) observed this phenomenon and examined the impact of inflation on the economic growth of Nigeria. They highlighted that excess demand resulting from increasing recurrent spending in the absence of sufficient supply might intensify inflation.

Alesina and Perotti (1995) made a similar argument that in emerging economies withlimited production capacities like Nigeria, high amounts of recurrent spending might contribute to inflation. Furthermore, Sargent and Wallace's (1981) "unpleasant monetarist arithmetic," which alerts investors to inflation concerns when fiscal expansion is not matched by commensurate productivity gains, is consistent with the delayed inflationary impacts discovered in the VAR model.

Capital Expenditure and Inflation

On the other hand, capital expenditure has a less noticeable immediate effect on inflation. To increase long-term productivity, capital expenditures in Nigeria usually involve investments in healthcare, education, and infrastructure. In contrast to recurring spending, these expenses do not instantly raise demand. Rather, they concentrate on increasing the economy's potential for supply, which gradually lessens inflationary pressures. Tanzi and Zed (1997) contend that capital expenditures have a long-term disinflationary effect because they boost productivity without raising short-term inflation.

This viewpoint is further supported by Barro (1990), who contends that by addressing supply restrictions in the economy, capital expenditures are essential in reducing inflation in the long run. Though these benefits take time to manifest, investments in Nigerian roads, electricity, and agricultural infrastructure could help reduce inflationary pressures by raising productivity.

Impacts of Government Expenditures on GDP Growth in Nigeria

Recurrent Expenditure and GDP Growth

The VAR model indicates that current spending has a beneficial effect on GDP growth in Nigeria, but this effect appears three periods later. This result supports the Keynesian theory, which holds that carefully planned government expenditure can promote economic expansion. It has been demonstrated that ongoing spending on social services like health and education promotes the development of human capital, which in turn spurs economic growth (Barro, 1990; Afonso et al., 2012).

Empirical researches like Anyanwu (2011), which proposed that government spending on public services improves long-term productivity and growth, support the favourable impact of recurring expenditure on GDP growth in Nigeria. Moreover, recurrent spending has a major positive influence on the economy when it is directed towards economically productive ventures, according to fiscal multipliers, which quantify the impact of government spending on GDP. Amuka, Ezeoke, and Asogwa (2016) discovered that macroeconomic stability and growth are supported by appropriately managed recurring spending.

Capital Expenditure and GDP Growth

In Nigeria, the relationship between capital expenditure and GDP growth is more nuanced. It may sound paradoxical, but the VAR model predicts a short-term negative impact on GDP. The delay between capital investment and its ultimate contribution to economic output, however, helps to explain this. For instance, significant upfront expenses are frequently associated with massive infrastructure projects, and labour or capital allocation interruptions may result in a short-term GDP decline. Research findings on government expenditure by Anyato (2016) and Gramlich (1994) emphasized this short-term growth drag brought on by resource diversion.

However, capital spending eventually adds significantly to Nigeria's GDP development by boosting the economy's productive capacity. This delayed positive effect is reinforced by Aschauer (1989), who discovered that public investment in infrastructure is critical for long-term productivity growth. In Nigeria, investments in power generation, transportation, and technology infrastructure can increase the productive capacity of major industries such as agriculture and manufacturing, resulting in long-term economic growth. Chinedu et al. (2018) discovered that capital investment has a favourable impact on Nigeria's long-term economic

growth, particularly in infrastructure development, which increases the productivity of other sectors.

CONCLUSION

The results point to significant relationships between GDP growth, inflation, and government expenditure in Nigeria. There is a two-way relationship between inflation and current spending: current spending fuels inflation, and inflation influences current spending. This leads to a feedback cycle, especially in economies with constrained supply. On the other hand, a unidirectional relationship is found between capital spending and inflation, with capital spending acting as a Granger-cause of inflation due to the need for resources for large-scale infrastructure projects, while inflation has no influence on decisions of capital expenditure.

In terms of GDP, there is a one-way relationship between GDP growth and government expenditure (capital spending + recurrent spending). Increased government spending on both capital and recurrent expenses is made possible by GDP growth, however these expenditures do not immediately affect GDP growth. While capital spending eventually increases productivity, its short-term effects on GDP may be negative due to the significant upfront expenditures associated with large projects, recurring expenditure does not directly drive GDP.

RESEARCH RECOMMENDATIONS:

1. Track Recurrent Expenditure Growth: To prevent escalating inflationary pressures, policymakers should closely watch increases in recurrent expenditure, especially during inflationary times. Reducing inflationary threats will require striking a balance between productivity gains and pay increases as well as social welfare measures.
2. Efficient Capital Spending: Long-term productivity-boosting initiatives should be the focus of capital investments by governments at various levels. Controlling inefficiencies, hold-ups, and overruns in infrastructure spending will support long-term economic growth and lessen inflationary pressures.
3. Give fiscal stability priority. The feedback loop that exists between inflation and ongoing expenses necessitates methods for controlling inflation without turning to unaffordable increases in ongoing spending. Achieving this balance can be facilitated by implementing productivity-linked wage increases and tailored subsidies.
4. Leverage Economic Growth: To guarantee that there is enough financial room for future spending, governments should give priority to measures that sustain growth,

such as enhancing the business climate and encouraging innovation. This is because GDP growth is the primary driver of both capital and recurrent expenditure.

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