Asymmetric Impact of Public Expenditure on Inflation in Nigeria: Evidence from A Nonlinear ARDL Approach (1981–2022)

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Abstract

This study examines the Asymmetric impact of public expenditure on inflation in Nigeria between 1981 - 2022. The study used Nonlinear Autoregressive Distributed Lag (NARDL) to investigate the relationship between disaggregated public expenditure and inflation in Nigeria. The result shows that, there is a significant negative correlation between capital expenditure and inflation within the study period. At five percent significance level, 1% rise in capital expenditure resulted in 0.89% drop in the inflation rate. Likewise, one percent rise in recurrent expenditures throughout the course of the study period resulted in 0.09% increase in inflation, it was observed that there is a positive link between recurrent expenditures and inflation. The interest rate and exchange rate, which are the two control variables, affect inflation in both positive and negative ways. A percentage increase in interest rate led to 2.1% drop in inflation, while decrease in interest rates also drop inflation by 2.6% but not significant. Likewise, an increase in exchange rate has led to an increase in inflation by 1.8%, while a percentage decrease in exchange rate led to 18% drop in in inflation during the study period. Considering these findings, recommendations are that, to reduce inflation, the Nigerian government should increase more funds to capital expenditures, carefully manage recurrent expenditure, interest and exchange rate should be stable at moderate level.
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Keywords: Capital and recurrent expenditure, inflation, interest, exchange rate and asymmetric
JEL Classification:

1.0   Introduction

Inflation is one of the most critical macroeconomic challenges faced by Nigerian economy which influencing the cost of living, investment decisions, and overall economic stability. Understanding the drivers of inflation is essential for effective policymaking. Among the key factors that shape inflationary trends are government spending patterns and external price shocks. Capital expenditure, which focuses on long-term infrastructure projects, and recurrent expenditure, which covers operational costs such as salaries and maintenance, are central to the Nigerian government's fiscal policy. These forms of public spending directly influence aggregate demand and supply in the economy. Understanding the main factors that affect inflation, such as macroeconomic variables, government spending, and foreign policies, is crucial for effective inflation management (Isah et al 2025).

One of Nigeria's most enduring and difficult macroeconomic problems is inflation, which threatens economic stability, reduces purchasing power, and makes poverty levels worse. Inflationary pressures nevertheless pose a threat to the nation's economic performance in spite of several governmental initiatives. Existing policy frameworks have not adequately addressed

a number of fiscal and monetary elements that contribute to the complexity of Nigeria's inflationary dynamics.

Nigeria's fiscal policy is characterized by a high proportion of recurrent expenditure compared to capital expenditure, which has been a major source of concern. Although capital expenditure is supposed to increase productive capacity and lower inflationary pressures, it is frequently insufficient or poorly managed, limiting its effectiveness (Olalekan & Adekoya, 2019). Recurrent spending frequently results in short-term increases in aggregate demand without addressing structural inefficiencies, thus exacerbating inflation (Anyanwu & Erhijakpor, 2025).

Through government expenditure, fiscal policy is a key factor in determining inflationary patterns in Nigeria. Aggregate demand and supply dynamics are influenced by capital expenditures, which are intended for long-term investments in infrastructure and development, and recurrent expenditures, which are meant to support government operations. Studies show how these spending categories have distinct effects on inflationary pressures in developing economies Anyanwu & Erhijakpor. (2025).

Interest rates and other macroeconomic variables such as exchange rate, economic growth unemployment are instruments necessary in explaining the impact of public expenditure on nation inflation. According to Mishkin (2024), high interest rates can lower inflation by lowering borrowing and consumption. On the other hand, through the pass-through effects of imported commodities, exchange rates which represent the relative worth of the domestic currency have an impact on inflation. According to research by Adebayo & Oboh (2024), the depreciation of the Nigerian naira has made inflationary pressures worse because of the nation's significant reliance on imports.

Over the years, Nigeria's inflation rate has been steadily rising. Inflation, for example, rose from 6.9% in 1982 to 23% in 1991. Additionally, it rose from 11.9% in 1998 to 13.9% in 2009, then to 15.6% in 2021, 18.8% in 2022, and 34.19% in 2024 and beyond. Records also provided evidence that government spending rose steadily over the specified time frame. For example, recurrent expenditures climbed from N5.51 billion in 1982 to N38.24 billion, 461.60 billion in 2000. 3,831.98 in 2015 and 9,145.16 in 2021, while capital expenditures went from N6.42 billion in 1982 to N28.34 billion in 1991. Capital expenditures also rose from N309.02 billion in 1998 to N1152.8 billion in 2009 and then to N2522.50 billion in 2021, according to NBS statistical bulletin record of 2021.

The inflationary environment is further complicated by monetary policy factors like interest rates and exchange rates. In an effort to reduce inflation, high interest rates frequently discourage borrowing and investment, resulting in trade-offs for economic expansion (Mishkin, 2024). Nigeria's heavy reliance on imports and oil exports has caused exchange rate volatility, which has raised inflationary pressures by raising the price of imported goods and services. According to Adebayo & Oboh (2024), inflation is greatly impacted by the naira's ongoing devaluation, especially in an economy that depends heavily on imports like Nigeria.

Similarly, since low output, high product demand, and a limited amount of money in circulation are the primary causes of inflation, spending on private investment will have a significant impact on the nation's inflation rate. By July 27, 2023, benchmark interest rates have risen from 18.5 percent to 18.75 percent due to an increase in the monetary policy rate (MPR) by the CBN Monetary Policy Committee. However, the policy will only worsen the situation for the country and discourage investors from borrowing money to make investments, which will lead to higher unemployment rates and slower GDP growth rates. According to the National Bureau

of Statistics, food items accounted for over 50% of the total inflation rate, or roughly 11.57 percent, between the months of January through 2023, 2024, and 2025 (NBS 2024 and trading economics report).

The combined impacts of fiscal spending, interest rates, and exchange rate variations on inflation in Nigeria are still poorly understood, despite the large body of research on inflation causes. Current research frequently looks at these elements separately, which leaves a significant knowledge vacuum regarding their interactions and combined effects. Policymaker's capacity to put coordinated and successful inflation management plans into practice is hampered by this lack of thorough study.

This study examines the combined and separate effects of interest rates, exchange rates, capital expenditure, and recurring expenditure on inflation in the Nigerian economy in order to close this gap. The objective of the research is to give empirical evidence to support fiscal and monetary policy measures that will support macroeconomic stability in Nigeria by examining their linkages and causal impacts using the non-linear ARDL model.

2.0   Literature Review

2.1   Conceptual Framework.

2.1.1   Inflation

According to Fatukasi (2024), inflation is the slow rise in the average level of prices across the economy, which affects the value of the national currency and must be sustained over time and consistent in order to affect a general price of goods and services in the economy.

Balami (2022), inflation is the continue increase in the general price of goods and services over a period of time, which has a big impact on economic development and growth. A number of variables, including fiscal, monetary, and external ones, affect inflation. Effective policymaking in Nigeria, a developing nation with a complicated economic structure, depends on a grasp of the factors that influence inflation. Interest rates, exchange rates, capital spending, and recurring expenditure have all been found to be crucial factors among these determinants (Akinbobola, 2023; Osuala & Jones, 2024).

2.1.2   Capital and Recurrent Expenditure

The two main categories of government spending are capital and ongoing expenses. Investments in long-term resources like infrastructure, healthcare, and education are referred to as capital expenditures because they have the potential to boost productivity and economic growth.

Higher inflationary tendencies are frequently linked to recurring expenditure, which includes wages, subsidies, and other operating costs. In Nigeria, excessive recurring spending has been connected to demand-pull inflation, especially when it is funded by deficit financing. Recurrent spending raises disposable income, which supports consumption and price increases, according to studies by Akanni & Oseni (2017).

2.1.3   Interest Rates

According to Keynes (1936), the supply and demand for money determine the interest rate, which is a purely monetary phenomenon. People need to be compensated for giving up liquidity or money because they have saved it or wish to hold onto it for a number of reasons, according to him. An interest rate is a reward for giving up liquidity for a set period of time. Interest rates

have a significant impact on borrowing and investment choices, which in turn affect inflation. By discouraging borrowing and consumption, high interest rates usually lower aggregate demand and push inflation lower.

2.1.4 Exchange Rate

According to Ahuja (2022), the exchange rate is the price at which one country's currency can be exchanged for another. It is the value of one country's currency in relation to another country or economic zone. Another important factor influencing inflation, particularly in import-dependent economies like Nigeria, is the exchange rate. Currency depreciation raises the cost of imported goods and services, which causes cost-push inflation. A number of studies, including Mordi & Adebiyi (2017), have found a positive correlation between exchange rate volatility and inflation in Nigeria. This relationship is made worse by the country's reliance on imported consumer goods and raw materials, making exchange rate management an essential tool for controlling inflation.

2.2 Theoretical Review

The theoretical framework offers the groundwork for comprehending how interest rates, exchange rates, inflation, capital expenditures, and recurring expenditures relate to one another in Nigeria. In order to explain the dynamics of these variables, this study makes use of important economic theories and models.

2.2.1 Keynesian Theory of Inflation

Keynes (1936), the Keynesian hypothesis says that inflation emerges when aggregate demand exceeds aggregate supply in the economy. Government expenditures, including capital and recurring spending, directly influence aggregate demand. According to this theory, Capital expenditure can increase aggregate demand in the short term by stimulating investments in infrastructure and public goods, potentially leading to demand-pull inflation. By raising disposable income and consumption levels, recurring expenses like wages and subsidies also fuel demand-pull inflation. This framework helps explain the short-term inflationary pressures arising from fiscal policy measures, especially in economies like Nigeria, where fiscal dominance is prevalent.

2.2.2 Monetary Theory of Inflation

The relationship between the money supply and inflation is a key component of Milton Friedman's monetary theory. Interest rate changes have a direct effect on the money supply and aggregate demand: By discouraging borrowing and spending, higher interest rates reduce aggregate demand, which in turn reduces inflation. Conversely, low interest rates may increase credit availability and consumption, which could lead to inflation.

In Nigeria, the monetary transmission mechanism is often weak due to structural inefficiencies, but this theory remains relevant in analyzing how interest rate changes influence inflation.

2.2.3 Theoretical Framework

The theoretical framework for this study is centered upon the Keynesian theory which said that, inflation emerges when aggregate demand exceeds aggregate supply in the economy. Government expenditures, including capital and recurring spending, directly influence aggregate demand.

2.3   Empirical Review.

The study by Chukwuemeka Nwamuo (2022) examines the relationship between Nigeria's inflation rate and public spending using an empirical analysis. The research embraced the data was analyzed using the co-integration method and the ARDL bounds testing strategy. The study's primary goals were addressed by using the Autoregressive Distributed Lag (ARDL) model and the Error Correction Model (ECM). The Central Bank of Nigeria statistical bulletin provided the time series data, which covered the years 1981–2021. One period lag of CAP has a negative and negligible effect on the inflation rate, according to the predicted short run coefficient finding. According to the long-term results, recurrent spending significantly and favorably affects the inflation rate, but capital expenditures have no effect at all.

Khan and Yasin (2022) carried out a study on long-run relationship amongst broad debt servicing, inflation, government expenditure in Pakistan. The paper adopted nonlinear ARDL models. The findings showed a negative relationship between public expenditure and inflation. They attempted to explain that most of public expenditure is non-development and inflation is due to adverse supply stock (cost push inflation) in Pakistan.

Olayungbo (2023). investigated the asymmetric causal link between Nigerian inflation and government spending between 1970 and 2010.The study's data were gathered from. The asymmetry causality test demonstrated that under the Vector Auto-regression (VAR) model, there is a unidirectional causal relationship between positive inflation changes (high inflation) and negative government expenditure changes (low or contractionary government spending). The study's conclusions suggested that Nigeria's inflationary pressure is state-dependent, meaning that low or contractionary government spending is the root cause of high inflation.

Using time series data from 1981 to 2016, Onuchuku & Adoghor (2023) investigated the connection between fiscal spending and monetary inflation in Nigeria. Using an ex post facto research methodology, the study used the Least Squares (LS) technique for estimate, and line graphs, correlation analysis, and the normality test for preliminary analysis. The sources of the study's data were CBN and NBS. The study's conclusions demonstrated that while government capital expenditures significantly impacted Nigeria's monetary inflation, the money supply significantly did the opposite.

Balami, et al (2016) used econometric models to investigate how Nigerian inflation was affected by monetary and fiscal policy between 1971 and 2015. The analysis was conducted using an OLS approach. The results demonstrate that while capital expenditure has a negative effect on inflation, excessive government spending, especially recurrent expenditure, greatly increases inflationary pressures. Research on the long- and short-term effects of fiscal and monetary policies on Nigeria's economic growth was conducted by Musa & Asare (2023).

Olayungbo (2023) conducted a study on government spending and inflation in Nigeria from 1970 to 2010; the asymmetry causality test revealed that there is one-directional causality from negative government spending changes to positive inflation changes in the VAR model. This suggests that an inflationary pressure in Nigeria is state dependent, meaning that low/contractionary government spending causes high inflation. The analysis was conducted using a Vector Error Correction Mechanism (VECM) technique, and the results showed that monetary policy has a greater impact on economic growth while fiscal policy has a smaller effect, particularly when inflation declines.

3.0   Methodology

In this study, the Keynesian approach to inflation was supported by demand pull theory. The idea states that when total demand surpasses total supply at full employment levels of output, demand-pull inflation takes place. Keynes used the inflationary gap which arises when total demand surpasses output at full employment to explain inflation. This suggests that any small increase in aggregate demand above available output will undoubtedly result in a price increase after an economy has achieved full employment. Short-term stability can be achieved through public spending, but it must be managed carefully because excessive spending can result in inflation and insufficient spending can induce unemployment.

Keynesian theory states that public expenditure can stimulate economic growth by increasing aggregate demand through multiplier effects; an increase in government consumption is expected to lead to an increase in investment, employment, and profitability. As a result, government spending raises aggregate demand, which, according to the expenditure multiplier, raises output. Thus, a key component of the study model is the Keynesian theory of inflation. The conceptual representation of the model is as follows:

$$INFL = f\left(CEXP,\ REXP,\ INTR,\ EXCH\right) \tag{1}$$

where CEXP stands for capital expenditure (N billion) and INFL stands for inflation rate (consumer price index). EXCH is the official exchange rate (₦/US$), INTR is the interest rate (annual interest rate), and REXP is recurrent spending (₦ billion). The model's econometric representation is as follows:

$$INFL = \alpha_0 + \alpha_1 \ln CEXP + \alpha_2 REXP + \alpha_3 \ln INTR + \alpha_4 \ln EXCH + \mu_i \tag{2}$$

Thus, when all other variables are held constant, α0 is the regression model's constant and α1 is the model's logarithmic coefficient of capital expenditure. α2 represents the model's coefficient of log of official recurrent spending, α3 the model's coefficient of official interest rate, α4 the model's coefficient of official exchange rate, and μ the error term (which accounts for external influences) while all other variables are held constant.

3.1   Model Specification Using NARDL:

This study builds on the work of Khan and Yasin (2022) in Pakistan, who used nonlinear ARDL models constructed by Shin et al. (2014). The NARDL model captures both short-term and long-term asymmetries in the relationship between the independent and dependent variables. It enables the detection of any asymmetric effects by decomposing explanatory factors into positive and negative changes. Interest rates, currency rates, capital expenditures, and recurring expenditures are the independent factors in this study, whereas inflation is the dependent variable

There model is specifying as follows:

$$INF_t = \beta_0 + \beta_1 CAP_t + \beta_2 REC_t + \beta_3 DBTS_t + \mu_t \tag{3}$$

Where; INF = Inflation rate, CAP = Capital expenditures, REC= Recurrent expenditures, DBTS= Debt servicing, β1 to β3, = Coefficients of all independent variables, β0 = Intercept or autonomous parameter estimates for the variables.

This model was adapted and modified in order to accommodate our variables as follows:

$$INFL = \beta_0 + \beta_1 CEXP_t + \beta_2 REXP_t + \beta_3 INTR_t + \beta_4 EXCH + \mu_t \qquad (4)$$

Where,

(INFL): Inflation rate, (CEXP) Capital Expenditure, (REXP) Recurrent Expenditure, (INTR) Interest rate, (EXCH) Exchange rate. B0 is the constant or intercept parameter estimate, B1 to B4 are the coefficient of the independent variables, Ut is the error terms.

Decomposing the Variables (Asymmetry):

To take into consideration the asymmetric impacts, each explanatory variable is divided into positive (increases) and negative (decreases) changes. This makes it possible for the model to account for the different impacts that changes in capital expenditure, recurring spending, interest rates, or currency rates may have on inflation.

Equation 4 is re-parameterizing this model in an asymmetric NARDL form inspired by Shin et al (2014) in equation 5.

$$\Delta lnINFL_t = \alpha_0 + \alpha_1 lnINFL_{t-1} + \alpha_2 lnCEXP^{+ve}_{t\ t-1} + \alpha_3 lnCEXP^{-ve}_{t\ t-1} + \alpha_4 lnREXP^{+ve}_{t\ t-1} + \alpha_5 lnREXP^{-ve}_{t\ t-1} + \alpha_6 lnINTR^{+ve}_{t\ t-1} + \alpha_7 lnINTR^{-ve}_{t\ t-1} + \alpha_8 lnEXCH^{+ve}_{t\ t-1} + \alpha_9 lnEXCH^{-ve}_{t\ t-1} + \sum_{i=1}^{p}\beta_1 \Delta lnINFL_{t-i} + \sum_{j=0}^{p}\beta_2 \Delta lnCEXP^{+ve}_{t\ t-i} + \sum_{j=0}^{p}\beta_3 \Delta lnCEXP^{-ve}_{t\ t-i} + \sum_{j=0}^{p}\beta_4 \Delta lnnREXP^{+ve}_{t\ t-i} + \sum_{j=0}^{p}\beta_5 \Delta lnREXP^{-ve}_{t\ t-i} + \sum_{j=0}^{p}\beta_6 \Delta lnINTR^{+ve}_{t\ t-i} + \sum_{j=0}^{p}\beta_7 \Delta lnINTR^{-ve}_{t\ t-i} + \sum_{j=0}^{p}\beta_8 \Delta lnEXCH^{+ve}_{t\ t-i} + \sum_{j=0}^{p}\beta_9 \Delta lnEXCH^{-ve}_{t\ t-i} + ECT_{t-1} + \varepsilon_t \qquad (5)$$

This NARDL model formulation allows for the investigation of the asymmetric short- and long-term effects of capital expenditure, recurring spending, interest rate, and exchange rate on Nigerian inflation. A more sophisticated understanding of the inflationary dynamics in the Nigerian economy is made possible by including any variations in the effects of increases versus declines in these factors on inflation. The positive coefficients ($\alpha1$ to $\alpha9$) in equation 3.5 indicate that the independent variables have a positive (increasing) impact on the dependent variable, while negative coefficients indicate the impact of a decline in the corresponding explanatory factors.

The information used in this research was gathered from multiple sources. Data on capital investment, ongoing spending, and inflation (INF) as determined by the consumer price index (CPI) are generated using the World Development Indicators (WDI). Why interest rate and exchange rate statistics are produced using the CBN Annual Bulletin.

4.0 Results and Discussion

4.1 Descriptive statistics

By summarizing the distribution, dispersion, and central tendency of raw data, descriptive statistics provide insightful information. Key economic and spending variables in Nigeria, including the inflation rate (INFL), capital expenditures (CEXP), recurring expenditures (REXP), interest rate (INTR), and exchange rate (EXCH), are presented in this paper along with a thorough interpretation of a descriptive statistical analysis.

Table 1: Summary or Descriptive Statistics

	INFL	CEXP	REXP	INTR	EXCH
Mean	90.454	4101.608	1901.598	12.898	123.180
Median	43.100	318.227	638.050	12.750	115.255
Maximum	471.800	39763.30	9145.200	26.000	471.000
Minimum	0.490	4.082	4.750	6.000	0.610
Std. Dev.	115.491	8352.285	2489.142	3.799	134.394
Skewness	1.629	2.855	1.384	0.861	1.197
Kurtosis	5.066	10.999	3.992	4.945	3.509
Jarque-Bera	26.062	169.046	15.149	11.823	10.484
Probability	0.000	0.120	0.110	0.212	0.315
Sum	3799.080	172267.5	79867.11	541.750	5173.573
Sum Sq. Dev.	546867.7	2.860	2.540	591.851	740536.4
Observations	42	42	42	42	42

Source: Author computation from E-views 9 Output, 2025

The descriptive statistics above make it clear that all of the variables have positive mean values, with interest rates having the lowest mean values (12.898) and capital and recurrent expenditures having the highest mean values (4101.608 & 1901.598). Additionally, since a single outlier can significantly overestimate the range of data, the standard deviation of each variable provides a more thorough and precise assessment of dispersion.

The null hypothesis cannot be rejected since the residual is normal, according to the probability values of the Jarque–Bera statistics (26.062,169.046,15.149,11.823, and 10.484 correspondingly) for the majority of the variables. Lastly, each variable is described using its minimum and maximum values, which correspond to the lowest and greatest values in each series.

Table 2: Bound Cointegration Test

NARDL Bound Test			
F-Statistic	I(0)	I(1)	**Significance**
12.1175***	1.95	3.06	10%
	2.22	3.39	5%
	2.79	4.7	1%

Source: Author computation from E-views 9 Output, 2025

The long and short run estimations of the NARDL equations can be examined because table 4's significant F-statistic (12.1175) is larger than the upper bound of I(1)3.39 and I(0)2.22 at the 5% level, indicating that the variables are co-integrated.

Table 3: NARDL Estimation

PANEL A LONG-RUN			
Variable	Coefficient	t-Statistic	Prob.
LCEXP_POS	-0.885	-2.372683	0.0766
LCEXP_NEG	0.101	0.256174	0.8105
LREXP_POS	0.099	0.145409	0.8914
LREXP_NEG	-1.988	-0.314373	0.7690
LINTR_POS	-2.074	-2.222767	0.0903
LINTR_NEG	-2.671	-1.285657	0.2679

LEXCH_POS	1.807	1.994106	0.1169
LEXCH_NEG	-17.541	-4.001035	0.0161
C	-0.069	-0.091095	0.9318

Source: Author computation from E-views 9 Output, 2025

The coefficients that show the effects of both positive and negative changes in the various forms of expenditure on Nigeria's inflation (INFL) are shown by the Long-Run Asymmetric model. According to the estimations in Table 4 (Panel A), at the 5% level of significance, a 1% increase in capital expenditure will result in a 0.89% drop in Nigerian inflation. A higher level of output will result from higher capital expenditures. On the other hand, a 1% drop in capital expenditure will result in a little higher inflation rate of 0.10 percent. Similar to how a 1% rise in recurrent spending will raise inflation by 0.09%, a 1% decrease in recurrent spending will also lower inflation in Nigeria by 1.9%, albeit this difference is not statistically significant.

This outcome is consistent with the research that Anyanwu & Erhijakpor (2010) conducted. Long-term inflation is reduced by both positive and negative interest rate increases, with declines of 2.07% and 2.67%, respectively. At the five percent level, the positive change is statistically significant, but the negative change is not. This implies that while a slower interest rate has a detrimental impact on the cost of goods and services in Nigeria, a higher interest rate discourages borrowing and consumption. The Monetary Theory of Inflation is consistent with this. In a similar vein, a 1% change in exchange rates results in a 1.81% increase in the inflation coefficient; this explains why, throughout the research period, a 1% change in exchange rates causes a 17.50% drop in inflation in Nigeria.

These results are in line with earlier studies showing that currency depreciation raises the price of imported goods and services, resulting in cost-push inflation (Mordi & Adebiyi 2017), (Balami, 2006).

Additionally, a positive shock to capital spending has a short-term negative effect on inflation. As demonstrated by the fact that a negative shock to capital expenditure has a positive influence on inflation, negative shocks to capital expenditure have a major impact on the nation's short-term economy. Our results corroborated those of Adebayo & Oboh (2020), who argue that although capital expenditures may eventually boost productive capacity and lessen inflationary pressures, their immediate effects may differ depending on the financing methods employed. Interest rates and recurring expenses have a positive and negative impact on short-term inflation.

Because the error correction term is statistically significant, negative, and less than one, it indicates that, given any shock in the model, the rate of adjustment from short-run to long-run equilibrium is roughly 80%. The rate at which the naira was worth US dollars had a significant impact on the short-term inflation rate.

Table 4: Diagnostic Test

Robustness Check			
Panel A			
Diagnostic	**F-stat**	**Df**	**Probability**
R^2	0.9957	-	
R^2 Adjusted	0.9948	-	
DW	1.5630	-	
F-Stat	1076.471***	-	0.0000

Walt Test	1913.146	(4,4)	0.0000
Panel B			
Linearity (RESET)	2.0592	1, 3	0.2468
Serial Correlation	4.0021	3,7	0.1393
Heteroscedasticity	1.1808	1,35	0.4943
JB-Normality	4.1935	-	0.1229

Source: Author computation from Eviews9. Note: * **, **and* Denotes 1%,5% and 10% significance level respectively.

Based on the model's R-square, Table 5 Panel A shows that the explanatory variables can account for 99% of the dependent variable's proportion. After adjustment, the Durbin Watson statistics show that there is no first order serial correlation in the model. since the values of the model fall between 1.5 and 2.5. Additionally, the independent factors have a combined significant impact on the dependent variable (INFL) since the F-statistics probability is less than 5%, or 0.0000<0.05.

According to Panel B's Breusch-Godfrey LM test, the model does not contain serial correlation, which is consistent with Table 5's diagnostic test results. The data in the model was regularly distributed, as shown by the Jarque Bera test results. According to ARCH, the model shows no signs of heteroskedasticity. The Ramsey RESET test clearly shows that the model has been tasted correctly. Tests of cumulative sum (CUSUM) and cumulative sum of squares (CUSUMSQ) were conducted to assess model stability over the research periods. It is suggested that for a model to be deemed stable over the sampled period, its residuals line should fall inside the straight lines of the critical limits at 5% significance.
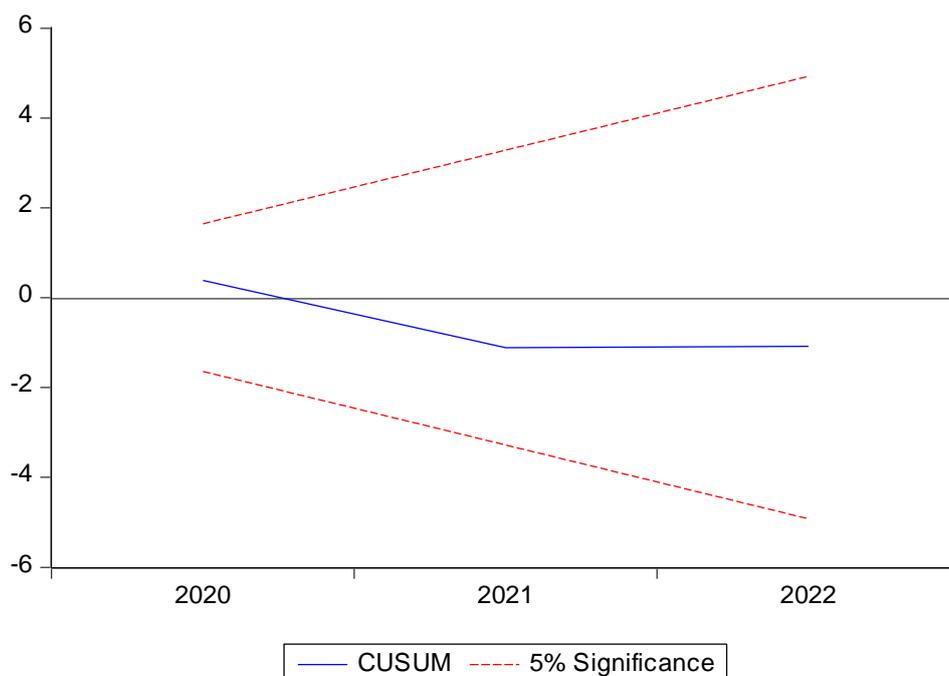

Figure 1: CUSUM

The straight lines in the plot of the cumulative sum of the recursive residual for the graph above indicate critical boundaries at the 5% significance level, which need to fall between the upper

and lower bounds. Additionally, at the 5% significance level, the straight line in the CUSUM of a square graph must lie between the top and lower critical bounds.
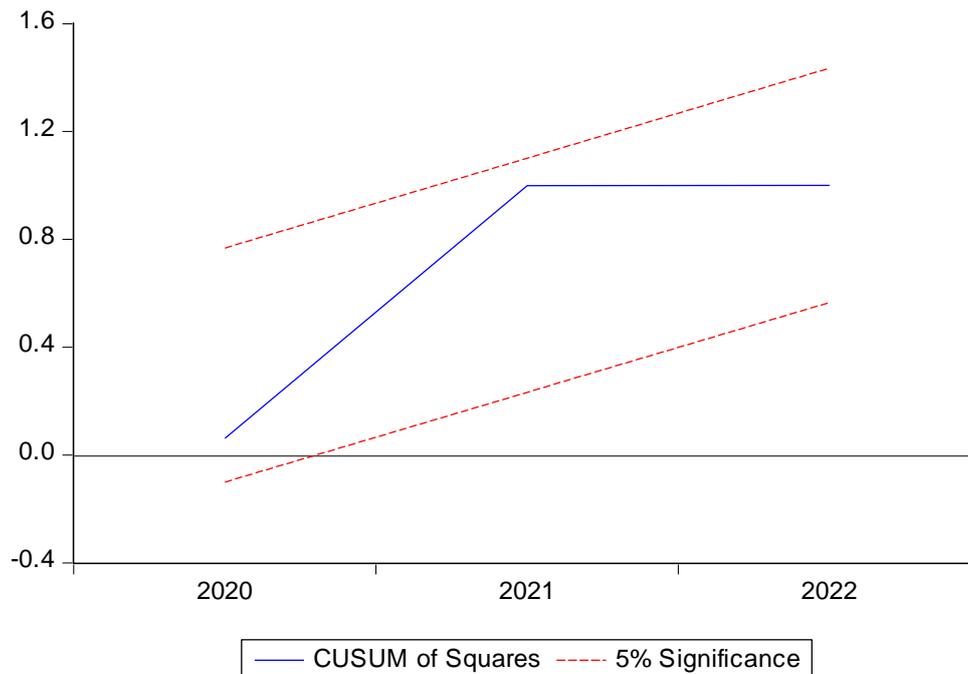

Figure 2

Source: Author's computation using EViews9

4.0   Discussion of Findings

Findings from the study shows that increase in government capital expenditure and interest rate both have a negative and significant impact with inflation, whereas decrease in government recurrent expenditure, interest rate and exchange rate has a negative but non-significant relationship with inflation. The NARDL results show that the overall model accounts for almost 99.57% of the changes in the dependent variable (given the R^2 value of 0.9957). This implies that the variables have a considerable impact on inflation. Furthermore, the results show that capital expenditures play a vital role in lowering inflationary pressure on nation economy than recurrent expenditures.

5.0   Conclusion and Recommendation

The study looked at how government spending affected Nigeria's inflation rate from 1981 and 2022.According to the projected short run coefficient finding, the inflation rate is significantly and negatively impacted by 1% increase in CEXP which has led to (0.17) decrease in inflation, why 1% decrease in CEXP has led to (0.09) decrease in inflation. According to the Long-Run Asymmetric finding, at the 5% level of significance, 1% increase in capital expenditure has cause Nigerian inflation to decline by 0.89%. Higher capital expenditures will translate into higher output levels. However, 1% decrease in capital expenditure has led to 0.10 percent increase in inflation. A 1% reduction in recurrent spending will also lower inflation in Nigeria by 1.9%, much like 1% increase in recurrent spending which raises inflation by 0.09%. The long-term result indicated that capital expenditure (CEXP) had an impact on the inflation rate, while recurrent expenditure (REXP) had a positive and negligible impact on inflation rate. The error correction model (ECM) indicates that the speed of adjustments back to equilibrium in

the estimated model is correctly sign and significant, with a speed of adjustment of 3.7 percent for correcting disequilibrium from the previous year to equilibrium in the current year.

According to the study's findings, Nigeria's fiscal and monetary policies should be managed in a balanced manner. To improve the transmission mechanisms of monetary policy and lessen the economy's reliance on imports, policymakers should think about structural reforms. Effective use of capital expenditure, careful management of recurring expenditure, and stability in interest and exchange rates are all necessary to reduce inflation.

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