# EFFECT OF FISCAL DEFICIT ON INFLATION AND SELECTED MACROECONOMIC FUNDAMENTALS OF NIGERIA: 1981-2020

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**Abstract**

*This study examined the impact of fiscal policy on inflation in Nigeria, using Auto regressive distributed lag model (ARDL), for a period of 1981-2020. Secondary data were used in the study. The variables that were utilized include inflation rate (INF), as the dependent variable; and a set of independent variables; government deficit financing (GDF), interest rate (INT), exchange rate (EXR) and gross domestic product (GDP). Stationarity test was carried out using Augmented Dickey-Fuller Test (ADF). The result showed a mix of integration of order 1(0) and 1(1) which lends credence to the adoption of ARDL model. The cointegration test revealed the presence of long run relationship. As such, the result of the long-run ARDL cointegration revealed that GDF exert positive impact on INF. Specifically, a percent increase in government deficit (GDF) will lead to an increase of about 2.77 percent in the rate of inflation. The EXR, and INT also exert positive impact on INF in the long-run. Only GDP was found to exert negative impact on INF. In line with this finding, the study concluded that, fiscal deficit does not create inflation, but inflation causes the fiscal deficit, making it a one-way causation from inflation to the budget deficit. The study recommended that government should strike appropriate balance between recurrent expenditure and capital expenditure, that is, Fiscal deficit should not be geared towards recurrent expenditure to the detriment of capital expenditure which has the capacity to stimulate employment and reduce inflation.*

***Key words:*** *Fiscal deficit, inflation, interest rate, exchange rate, economic growth*

## INTRODUCTION

Fiscal policy is the revenue and expenditure measures used by the government to facilitate economic development achieving macroeconomic objectives. It is critical for maintaining economic growth and achieving macroeconomic stability. The fiscal deficit is implied when government expenditure is more than government revenue. Fiscal deficit in advanced nations such as the United States offers motivation for a re-evaluation of the impact of fiscal deficits on economic activity (Islam & Wetzel, 1991). However, fiscal deficits have been blamed for most of the economic issues that have plagued less developed nations like Nigeria since the 1980s, such

as over indebtedness and debt crises; excessive inflation; poor investment performance and growth (Onwioduokit, 1999).

In Nigeria, the income surplus has not been sufficient to match development spending. Thus, Nigeria's fiscal strategy is still characterized by deficit budgeting. Obviously, foreign grants alone will not be sufficient to pay the deficit, foreign and domestic loans will be required. As a result, the total loan value has been increasing, and the debt service burden has been increasing year after year. Since the 1980s, the persistence of fiscal deficits in developing countries, which are mostly financed by government borrowing from the banking system, has been blamed for many of the economic crises that have plagued them, including debt overhang and subsequent debt crises, high inflation, poor investment performance, and slow growth (Onwiduokit, 1999).

Large deficits can sometimes have a negative impact on a country's economic growth. From 1970, deficits have accrued during periods of economic boom and bust in Nigeria, and the nation's fiscal structure has not remained static. Various schools of thought have voiced their views on how the budget deficit impacts the economy's performance. According to Keynesian theory, a budget deficit has a negative impact on macroeconomic variables such as interest rates, currency rates, and inflation. Excessive borrowing can also cause private investment to be crowded out, as well as inflation and currency rate volatility.

Despite the Nigerian government's efforts to devise policy measures targeted at reducing the budget deficit, the country's economy continues to suffer from it, with negative consequences on important macroeconomic indicators such as interest rates, currency rates, and inflation. It is clear that borrowing from foreign financial institutions and central banks to finance a significant amount

of deficits contributes to liquidity and inflation crises in most developing countries, such as Nigeria, Ghana, and India.

In Nigeria, inflation has become a threat to the economy, especially to workers, as their standard of living continues to deteriorate. Nigeria's inflationary trajectory is inextricably connected to the long-term rise in oil prices. As the price of petrol skyrocketed, so did the price of transportation, food, building materials, rentals, and other products and services. The progressive increase in the price of petrol to ₦97.00 per litre in 2012, ₦145 per litre in mid-2016, and now ₦165 per litre by the year 2021 added to the inflation. As a result, the cost of products and services has risen dramatically. Nonetheless, the period's transition to high inflation rates resulted in significant real cost and income losses, while the economy's overall performance deteriorated as a result of widening fiscal deficits and declining oil revenues, as well as the 2015 recession, which was exacerbated by poor macroeconomic management and political uncertainty.

The impact of fiscal deficits on macroeconomic aggregates is determined by the methods of financing (Inflation tax or bond financed deficit). Money creation to finance deficits frequently results in inflation, but domestic borrowing invariably results in a credit squeeze via increased interest rates or credit allocation (Easterly & Robello, 1994; Sowa, 1994). It is worth noting that Nigeria has depended heavily on inflation taxes (about 70%) and non-banking holdings of government bonds (15-20%). Others contend that fiscal deficits have a negative relationship with gross domestic output and thus negatively affect output growth (Diamond & Ogundare, 1982), while others argue that deficits have a positive relationship with gross domestic output and thus negatively affect output growth (Diamond & Ogundare 1982). (Egwaikhide, 1992; Soludo, 1998).

Nigeria's economic development, fiscal framework, and political system all contributed to the country's economic growth. Previous related researches have focused on characterizing the

consequences of alternate sources of revenue and the composition of deficit expenditure rather than examining whether the fiscal imbalance causes inflation. Based on the aforementioned, the research sought to determine the impact of Nigeria's budget deficit on inflation and its influence on economic growth.

## THEORETICAL FRAMEWORK

Three major schools of thoughts can be applied to the theoretical argument of fiscal deficit. The three schools of thought are Ricardian, Neoclassical, and Keynesian. Each of these schools of thought has opposing viewpoints on the budget deficit. Furthermore, the Keynesian perspective varies from the neoclassical paradigm on two key grounds. To begin with, it allows for the prospect of certain economic resources being idle. Second, it assumes the presence of a large number of myopic, liquid-constrained people.

In the most basic and naive Keynesian model, a one-dollar ($1) increase in the budget deficit leads production to grow by the inverse of the marginal inclination to save. According to the classic IS-LM monetary economics study, this increase in production enhances the demand for money. Interest rates must rise and private investment must decline if the money supply is fixed (that is, the deficit is covered by bonds). As a result, output is reduced, partially offsetting the Keynesian multiplier effect.

Moving beyond Keynesian reasoning, Ricardo believed that fiscal deficits had a neutral influence on growth. The sole purpose of a budget deficit, according to Ricardian theory, is to postpone taxes. In every given time, the deficit is precisely equal to the present value of future taxation necessary to pay off the debt increase caused by the deficit. To put it another way, government

expenditure must be paid for now or later, and the present value of spending must match the present value of tax and non-tax receipts. In a Ricardian perspective, the idea of a fiscal deficit is meaningless.

The notion of deficit financing was shown to be crucial with the introduction of Keynesian economics. However, some prominent theories, such as the neo-classical theory, claim that a budget deficit is harmful to the economy. In-line with this, Nelson and Singh (1994) used cross section regression to examine the deficit-growth relationship for 70 developing countries in order to capture the relationship empirically. Nelson and Singh (1994) investigated the growing public-sector economic-decline hypothesis by framing the model around prominent ideas in the growth and development literature. They discovered that, although being negative, the deficit coefficient was small, implying that there was no link between growth rate and public investment. Other factors were significant and had a positive relationship with growth, although revenue and inflation showed a negative relationship; on this point, the study will be based on Keynesian theory.

However, Keynesian inflation theory maintained that demand-pull inflation is caused by an increase in aggregate demand. When the entire demand for goods and services exceeds the aggregate supply and provision of products and services in the economy, demand pull inflation occurs. Consumption, investment, and government spending all contribute to aggregate demand in this sense. Policies that reduce each component of total demand are successful in reducing demand pressure and, in turn, inflation. This entails cutting government spending, raising taxes, and limiting the amount of money in circulation (Totonchi, 2011). As such, Nigeria, whose economy can barely produce enough output to meet demand and is heavily reliant on foreign aid, may face higher inflationary pressures as a result of excess demand, and when taxes are raised,

producers may become more involved in rent-seeking economic activities rather than investing in the real economy, which can address the problem of low productivity and unemployment.

## EMPIRICAL LITERATURE REVIEW

Khieu (2014) examined budget deficit, money growth and inflation in Vietnam. Using monthly data from January 1995 to December 2012 and an SVAR model with five endogenous variables, inflation, money growth, budget deficit growth, real GDP growth, and interest rate, the study experimentally investigates the relationship between budget deficit, money supply, and inflation. Because monthly data on real GDP and the budget deficit were unavailable, he interpolated those variables using Chow and Lin's (1971) annualized technique from yearly data. Overall, he finds that money growth has a positive impact on inflation, but budget deficit increase has no effect on money growth or inflation. Furthermore, the budget deficit is unaffected by shocks to other variables. The estimation findings also indicate that the State Bank of Vietnam tightened monetary policy by limiting money growth in reaction to positive inflation shocks, but the response was rather delayed, taking three months for the monetary authority to completely respond to such shocks. Finally, while interest rates were not an effective tool for combating inflation, inflation had a considerable and favourable impact on them.

Oyeleke and Adebisi (2014) using yearly time series data from 1980 to 2010, assessed if Ghana's budget deficit is sustainable using Ordinary Least Squares (OLS), Engle-Granger, and Error Correction Model techniques to see if the economy has met the condition for participation in the planned West African Monetary Zone (WAMZ). According to the study, government revenue and spending, as well as the budget deficit, have a long-run weak connection, indicating sustainability.

Furthermore, the analysis showed that only 29% of the imbalance between government revenue and spending produced in the economy was rectified annually following economic shocks, implying that the country may not be eligible for WAMZ membership.

Ndashau (2012) utilized Granger causality approaches reinforced by vector error correction model (VECM) to examine the existence of a causation impact from inflation to budget deficits scaled by the money base in Tanzania. The impact of budget deficits on inflation, on the other hand, was not statistically significant. Lin and Chu (2013), on the other hand, use a dynamic panel quantile regression (DPQR) model based on the autoregressive distributive lag (ARDL) regime to investigate the extent to which fiscal deficits are inflationary in 91 countries from 1960 to 2006. Fiscal deficits are only inflationary in high-inflation nations, according to the study's findings.

Greg and Okoiarikpo (2015) utilized the Chow endogenous break test, unit root, and co-integration tests to analyse the influence of fiscal deficits on macroeconomic performance in Nigeria from 1980 to 2013. The findings of the Chow test study show that the impact of budget deficit on growth differs between the two regimes. The analysis reveals that during the military regime, the budget deficit had a considerable growth impact, but during the democratic system, it had no meaningful influence on economic growth. The study's findings, on the other hand, show that the interest rate had no significant growth influence throughout both regimes, but gross fixed capital creation had a considerable growth impact during both regimes.

Also, Bakare, Adesanya, and Bolarinwa (2014) using yearly time-series data, experimentally analysed the long-term link between Nigeria's budget deficit, money supply, and inflation from 1975 to 2012. The variables in the model are stationary at levels, according to the Augmented Dickey-Fuller (ADF) stationary test. However, the study used the Johansen co-integration test to look for a long-term link between the variables, which revealed that there are at least three co-

integrating vectors. In addition, the Error Correction Model's predicted coefficient suggests that around 132 percent of short-run errors are fixed in the long run. As a consequence, the overall result between inflation rate and money supply growth, as well as the growth ratio of the budget deficit to GDP and the growth ratio of foreign debt to GDP, shows that the stated model is statistically significant at the 5% level.

## RESEARCH GAP

Though, quite a number of studies have been conducted on the impact of fiscal deficit, inflation on economic growth both in Nigeria, African and the rest of the world. However, these study failed to reach any consensus at to the direction of causation. Incidentally, these studies are time deficient looking at the time lag. There is need for current study to be done, in view of the macroeconomic imbalances, particularly inflation and the chronic budget deficit currently prevailing in country's economy. This current trend in inflationary pressure as well as the high budget deficit has neutralized the potency of the existing thinking and hence, new study needs to be undertaking so as to ascertain the degree of impact and thus, bring forth new contributions.

## MODEL SPECIFICATION

The model for this study is stated as

INF = f(GDF, EXR, INT, GDP)……. (1)

Where;

INF = inflation rate

GDF = Government deficit Financing

EXR= Exchange rate

INT = Interest Rate

GDP = Gross domestic product, proxy for economic growth

The static form of the model is given in equation 2:

$INFt = \beta_0 + \beta_1 GDF_t + \beta_2 EXR_t + \beta_3 INT_t + \beta_4 GDP_t$ ……..…… (2)

The stochastic form of the model is given in equation 3:

$INFt = \beta_0 + \beta_1 GDF_t + \beta_2 EXR_t + \beta_3 INT_t + \beta_4 GDP_t + U_t$…… (3)

The log of both sides of equation 3 is then calculated in accordance with the assumption of variable linearity. Many economic time series data display a strong trend, thus, taking the natural logarithm of a series efficiently linearizes the exponential trend. Logarithmic transformations of variables are particularly common in econometrics.

$InINFt = \beta_0 + \beta_1 InGDF_t + \beta_2 InEXR_t + \beta_3 InINT_t + \beta_4 InGDP_t + U_t$……..……..(4)

The stationarity of the used variables must be checked before moving on to the cointegration test. The ADF unit root test was used to determine the order of integration of the variables. Following the stationarity test, the long-run correlations between the variables were examined using Pesaran *et al.* (2001)'s Autoregressive Distributed Lag (ARDL) bounds testing technique to cointegration. This strategy is used because it performs better in small samples than other methods. It can also be utilized regardless of the sequence in which the regressors are integrated. According to Haug (2002), the ARDL bounds testing approach is more suitable and provides better results for small sample sizes and the short and long-run parameters are estimated simultaneously, and the procedure consists of estimating an unrestricted error correction model with the following generic form in which each variable comes in turn as a dependent variable. The unrestricted error correction model is used for equation 5.

The ARDL representation of the fiscal deficit and inflation relationship can be constructed as:

$$\Delta INFt = \lambda 0 + \lambda 1GDFt\text{-}1 + \lambda 2EXRt\text{-}1 + \lambda 3INTt\ \text{-}1 + \lambda 4GDPt\text{-}1 + \lambda 5\Delta GDFti + \lambda 6\Delta EXRt\text{-}i + \lambda 7\Delta INTt\text{-}i + \lambda 8\Delta GDPt\text{-}i + \eta ECMt\text{-}1 + ut \quad \ldots\ldots\ldots\

**Table 1: Unit Root Test**

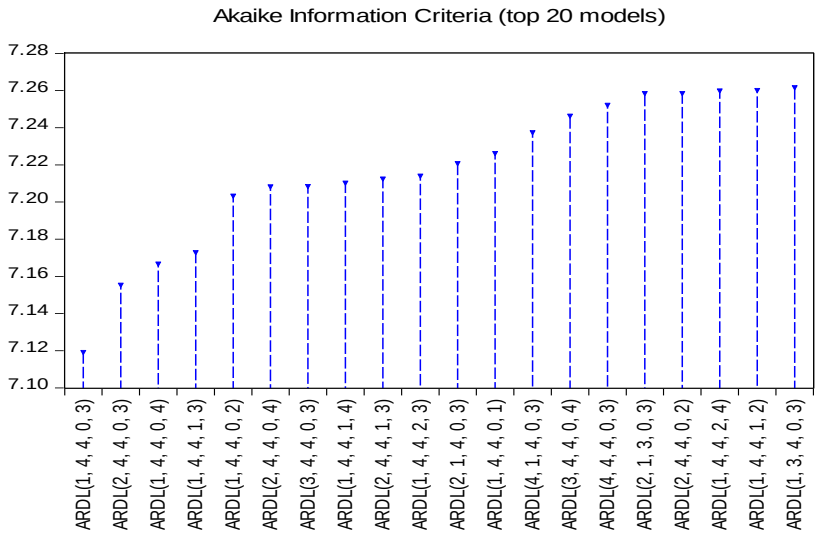
| Variables | ADF Statistic | Critical Value (5%) | Order of Integration | Prob | Remark |
|---|---|---|---|---|---|
| **INF** | -5.56263 | -2.95142 | 1(1) | 0.0001 | Stationary |
| **GDF** | -6.43891 | -2.95142 | 1(1) | 0.0000 | Stationary |
| **EXR** | -4.34762 | -2.95142 | 1(1) | 0.0000 | Stationary |
| **INT** | -6.72826 | -2.92215 | 1(0) | 0.0000 | Stationary |
| **GDP** | -3.56401 | -2.95142 | 1(1) | 0.0000 | Stationary |

*Source: Authors computation using Eviews 10, 2021*

Moreover, further evidence of stationarity was also revealed from the result of p-value which is less than 5% for all the variables. It can be inferred from the result that unit root exists for most of the variables (INF, GDF, EXR and GDP) at their levels. Only INT was found to be stationary at level 1(0), while other variables become stationary only in the first difference 1(1). As such, the ARDL bound test and ARDL co-integration tests was used for detecting long run relationship between fiscal deficit and inflation.

**Model Selection Criterion:**

In this study, the model selection criterion is employed to establish the optimal lag time for the best outcomes. The model ARDL (1, 4, 4, 0, 3) was chosen as the best fit model using the Akaike information criteria. This signifies that the variables in this model will have the lags indicated in the model for producing the f-statistic limits test.




*Source: Authors computation using Eviews 10, 2021*

**Figure 1: Lag Selection Criterion**

**Bounds Test for Cointegration:**

The bounds test for cointegration is used to test for long run relationship between variables. There is cointegration in variables in a case where the calculated f-statistic is greater than the upper bounds critical value by Pesaran*et al*. (2001).

**Table 2: Bounds Test**

**Dependent Variable: INF**

| | | **F-statistic**= 6.348116<br>**K= 4** |
|---|---|---|
| **Critical Values** | **Lower Bound 1(0)** | **Upper Bound 1(1)** |
| 10% | 2.2 | 3.09 |
| 5% | 2.56 | 3.49 |
| 2.5% | 2.88 | 3.87 |
| 1% | 3.29 | 4.37 |

*Source: Authors computation using Eviews 10, 2021*

It can be observed that the f-statistic of 6.348116 was both greater than the upper bound value of 3.49 with a degree of freedom, K= 4. This implies that, in this model, there exist long run relationships between the dependent and independent variables. Based on this, the long run and short run error correction models can be estimated.

**Table 3: ARDL Long-Run Estimates**

**Dependent Variable: INF**

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| Log(GDP) | -11.25673 | 11.71959 | -1.619348 | 0.1428 |
| Log(INT) | 1.579752 | 0.631710 | 2.436344 | 0.0235 |
| Log(GDF) | 2.774095 | 1.026230 | 2.747096 | 0.0113 |
| Log(EXR) | 0.286562 | 0.054477 | 2.502952 | 0.0121 |
| C | 162.1791 | 119.6463 | 1.258256 | 0.1641 |

*Source: Authors computation using Eviews 10, 2021*

The coefficient of Log (GDP) is -11.25673, implying that in the long term, there is a negative link between GDP and inflation. This suggests that a one-naira rise in GDP will result in an 11.26 percent drop in inflation. As a result, this may be readily explained by noting a circumstance in which greater output leads to a decrease in inflation rate due to increased availability of such commodities. This, however, has not been the case in Nigeria because, despite its gradually growing economy, it has little to show for its reduction in inflation due to sharp practices by government agencies and individuals, such as hoarding of produce and incessant importation, which stems from neglect of the real sector's major parts. This relationship however, is not statistically significant judging from its small t-statistic of -1.62 which is lower than the table value of 2.042, as well as the p-value of 0.14.

In the long term, interest rate (INT) has a positive relationship with inflation, as indicated by its coefficient of 1.579752, which means that a percentage rise in interest rate provides a positive change in inflation rate of around 1.58 percent. The significance of the p-value 0.0235, which is

below the 5% level of significance, further supports this. This relationship holds true in reality, as it is expected that in a country like Nigeria, where institutions and structures are underdeveloped in all spheres, a continuous rise in interest rates will lead to an increase in inflation due to the inaccessibility of funds by the larger art of the intending enterprising individuals. This, together with the expanding population, will certainly result in a shortfall of output, raising inflationary pressure in the long term.

The Government deficit financing (GDF) coefficient is 2.774095, implying a positive association with inflation. This means that a 1% rise in the government fiscal deficit will result in a 2.77 percent increase in the rate of inflation. This means that, in the long run, the revenue-to-expenditure disparity may expand to the point where inflationary pressures are exerted on the economy. When an economy has a large deficit, such as Nigeria's, the government of such a nation, which has a poor revenue base structure, is forced to borrow. Borrowing becomes onerous in this instance in the long term since the borrowed money are primarily spent on ineffective initiatives. Following the classical view of fiscal principles, repaying the loans will fall to the population in the long term, disturbing the private sector equilibrium and, as a result, limiting investment capital, which leads to inflation due to lower production. The importance of the coefficient, as evidenced by the significance of its p-value of 0.0113, further supports this association.

The exchange rate coefficient (EXR) is 0.286562, implying a long-term positive association between exchange rate and inflation rate. Inflation will rise by 0.29 percent for every unit increase in the exchange rate. This is supported by current events in Nigeria, where the naira continues to lose value in respect to the dollar, causing the naira exchange rate to rise, making exports cheaper and imports more expensive. Nigeria being a net importer of both capital and consumer products,

affecting the price of imported items and, as a result, the overall price level. The significance of the coefficient, which has a p-value of 0.0121, further supports the applicability of this connection to Nigeria's present morass.

**Table 4: ARDL Short-Run Estimates**

**Dependent Variable: DINF**

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| D(LogGDP) | 116.8331 | 39.51064 | 3.106613 | 0.0026 |
| D(LogGDP(-2)) | -102.1102 | 41.25904 | -2.551107 | 0.0120 |
| D(LogGDP(-3)) | 93.512285 | 31.52164 | 2.567153 | 0.0101 |
| D(INT) | -1.347728 | 0.137785 | -8.111003 | 0.0000 |
| D(INT(-3)) | -0.211524 | 0.088405 | -3.676449 | 0.0012 |
| D(EXR) | 0.115685 | 0.070104 | 2.910178 | 0.0161 |
| D(EXR(-2)) | 0.331957 | 0.092175 | 3.230614 | 0.0013 |
| Ecm(-1) | -0.894102 | 0.160231 | -6.294371 | 0.0000 |
| $R^2$ =0.883251, Adj. $R^2$ =0.822190, Durbin-Watson stat = 1.690912 | | | | |

*Source: Authors computation using Eviews 10, 2021*

Table 4 shows that current period GDP has a positively signed coefficient, indicating that current period GDP and inflation have a positive association. Given the coefficient of 116.8331, a billion naira rise in GDP will result in an increase in inflation of 116.8%. This is exemplified by the Nigerian situation, in which there is a type of inflationary expansion in which the rise in output is not matched by the economy's capacity. However, because it has a negative coefficient, this trend changes at the two-period lag of GDP. This might imply that after a year of experiencing inflationary growth, government initiatives would be implemented to rectify the system, resulting

in higher production and reduced inflation. However, once the connection turns positive again in the third lag of GDP, the control mechanisms become ineffective.

Furthermore, both the current period interest rates and the interest rates from the previous three years had negative coefficients of -1.347728 and -0.211524, implying that they both had negative relationships with inflation in the short run, with a percent increase in the current year's interest rate resulting in a 1.35 percent reduction in inflation, and a percent increase in the previous three year's interest rate resulting in a 0.21 percent reduction in inflation. The magnitude of the coefficients indicates that interest rates lose part of their impact on inflationary rate over time. Thus, if the government decides to impose a different interest rate for a sector that it believes is causing excessive inflationary pressure on the economy, higher interest rates may lead to lower inflation rates.

In the short term, the exchange rate has positive associations with inflation in the present period and at two lags. From the model parameters, a naira rise in the current period's exchange rate and the previous two years' exchange rate will result in 0.12 and 0.33 percent increases in inflation, respectively. This is definitely the situation in Nigeria, where the exchange rate rises along with inflation.

The error correction term ECM (-1) has a desirable negative coefficient and is statistically significant. It is a measure of the pace of adjustment towards long run equilibrium. The coefficient of determination of -0.894102 indicates that in the event of a system disturbance, the system adjusts at a rate of 89.4 percent. Meanwhile, the coefficient of determination suggests that the variables in the model explained around 89 percent of variations in inflation in the short run.

**Table 5: Diagnostic Tests**

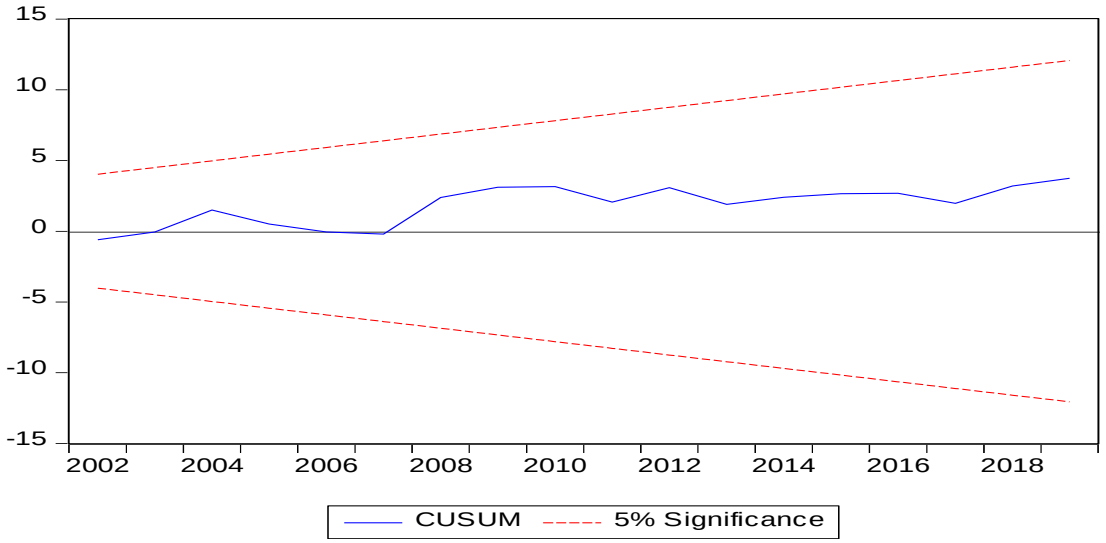
| Test Statistics | P-value |
|---|---|
| Serial Correlation: F-statistic(2, 16) | 0.2300 |
| Heteroskedasticity: F-statistic(16, 18) | 0.2613 |
| Normality: Jarque-Bera | 0.561067 |
| Specification Error: F-statistic(1, 7) | 0.0623 |

*Source: Authors computation using Eviews 10, 2021*

The probability value of the serial correlation test using the Breusch-Godfrey Serial Correlation LM Test is 0.2300, indicating that the null hypothesis that there is no serial correlation in the residuals is accepted at the 5% level of significance. The Breusch-Pagan-Godfrey heteroskedasticity test has a probability value of 0.2613, implying that the null hypothesis of no heteroskedasticity is accepted at the 5% level of significance. The Jarque-Bera normality test has a probability value of 0.561067, indicating that the null hypothesis that the residuals follow a normal distribution pattern is accepted, whereas the misspecification test using the Ramsey RESET test has a probability value of 0.0623, indicating that the model is free of any misspecification errors.

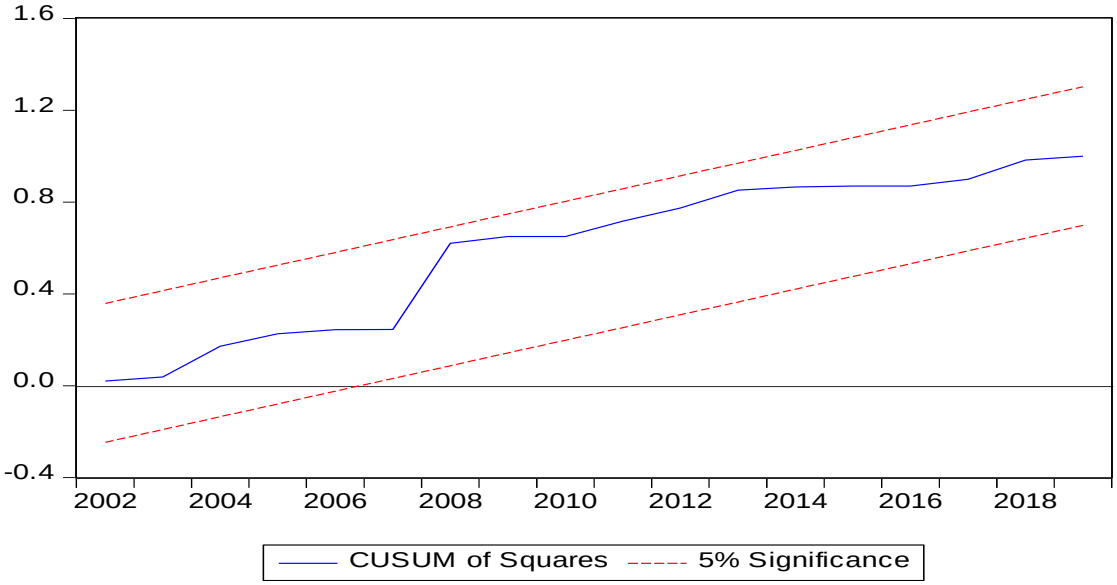
**Stability Test:**

The graphs in figures 2 and 3 showed the result of stability test conducted using the CUSUM and CUSUM sum square tests.




*Source: Authors computation using Eviews 10, 2021*

**Figure 2: CUSUM Test for Stability**




*Source: Authors computation using Eviews 10, 2021*

**Figure 3: CUSUM Sum of Square Test for Stability**

Since the trend lines in figures 2 and 3 do not exceed the upper and lower 5 percent boundaries, then it is concluded that the system is stable over time. By these, it is evident that the model is free from all-time series problems, the obtained estimates can be relied upon for decision making.

## CONCLUSION AND RECOMMENDATIONS

The fiscal deficit does not create inflation, but inflation causes the fiscal deficit, making it a one-way causation from inflation to the budget deficit. Meanwhile, GDP and inflation, as well as the fiscal deficit and GDP, are independent of one another. As a result, GDP and inflation have a long-term positive relationship, with an increase in GDP leading to an increase in inflation via non-economic spending by individuals and the government, while an increase in inflation also increases GDP through increased productivity and output, resulting in a circular flow. Meanwhile, the fiscal deficit (GDF) reduces GDP in the long run and has no impact on inflation determination, as seen by its absence in short-run estimates.

The study also found that the positive GDP feedback takes up to three years to kick in, but the impact of the fiscal deficit on GDP is instantaneous. Meanwhile, inflation has an immediate negative impact on GDP, but after a one-year lag, it is adjusted and has a positive influence.

Inflation from the previous year has a favourable impact on current inflation rates, demonstrating a ratchet effect in which once prices increase, they continue to climb. While current GDP and GDP from the previous year have an inverse relationship with inflation, GDP from the previous two and three years has a positive impact on inflation rates. As a result, the researchers advised that the government should always seek to strike a proportionate balance between recurrent and capital spending, i.e., the fiscal deficit should not be directed toward recurrent spending at the expense of capital spending, which has the potential to promote employment.

For successful control of Nigeria's inflation rate, the government should reduce budget deficits and finance them through public borrowing. This is because increasing fiscal deficits expands the money supply, which has a long-term negative impact on economic growth. The government should prioritize its projects rights, be more dedicated to budget implementation, and pay more attention to growth-oriented capital investment. This may be accomplished through careful preparation and the availability of data.

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