



FISCAL DEFICIT AND INFLATION IN NIGERIA

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Abstract

This study looked at how fiscal deficits affect inflation in Nigeria between 1981 and 2023. The researcher used data on inflation rate, fiscal deficit as a percentage of GDP, the official exchange rate, and broad money supply from the statistical reports of Nigeria's central bank. The researcher employed a method called Autoregressive Distributed Lag - ARDL Bounds testing as the main technique to analyze the data. The findings revealed that there is a long-term connection between the variables studied. The results also revealed that in both the long and short term, fiscal deficit and exchange rate have a negative but not significant relationship with inflation. In the long term, broad money supply has a negative relationship with inflation, but in the short term, it has a positive but not significant relationship with inflation during the study period. Based on these findings, the study suggested that controlling inflation needs a comprehensive approach that goes beyond just tightening money supply. It also includes investing in infrastructure, improving security, supporting agriculture, and creating policies to reduce reliance on imports.

Keywords: Fiscal Deficits, Inflation Rate, Broad Money Supply, Exchange Rate, ARDL, Nigeria

INTRODUCTION

The connection between fiscal deficit and inflation is a major topic in macroeconomic policy, especially in developing countries. A fiscal deficit occurs when the government spends more money than it collects in income, so it has to get funds by borrowing or printing more money. Inflation, meanwhile, is the persistent rise in the general price level of goods and services over time. There is often a link between long-term fiscal deficits and increasing inflation, showing that government spending can lead to higher prices. This link is stronger in places where the economy

is not very productive, the government doesn't collect enough money, and the central bank is heavily used to finance the budget (Friedman, 1968; Jhingan, 2018; IMF, 2023).

One of the clearest ways that a fiscal deficit leads to inflation in Nigeria is through monetary expansion, which is also called the seigniorage channel. When the government funds its deficit by borrowing from the Central Bank of Nigeria (CBN) using Ways and Means Advances, new money is created. This increases the total amount of money in the system, known as the monetary base. According to monetarist theory, if the money supply grows too fast compared to what the economy can produce, it causes inflation (Friedman, 1968; Friedman & Schwartz, 1970). In Nigeria, the government has often used central bank overdrafts to cover budget shortfalls, which has added a lot of liquidity to the economy. This increase in money leads to more spending without a matching rise in goods and services, which pushes up prices and creates ongoing inflation. Studies revealed that in Nigeria, there is a clear link between how much money is in the system and how high inflation is, supporting this way that fiscal deficits lead to inflation (CBN, 2023; Oyeleke & Ajilore, 2020).

Another way this works is through aggregate demand, which grows when the government spends more money, even if it means running a deficit. This extra spending encourages people to buy more and businesses to invest more. Expansionary fiscal policy raises incomes for households and profits for businesses, which increases the overall demand for goods and services. When this demand grows faster than what the country can produce, it causes demand-pull inflation (Keynes, 1936; Blanchard, 2017). In Nigeria, government spending driven by fiscal deficits often quickly raises aggregate demand. But because of fixed structures, limited supply, and poor infrastructure, the local economy can't keep up with the increased demand. As a result, the extra demand leads to higher prices instead of more goods, which makes inflation worse (Akanbi & Du Toit, 2011; World Bank, 2023).

Fiscal deficits can influence inflation in two main ways: through interest rates and by pushing out private investment. When the government borrows more in the domestic financial system, it increases the demand for loans, which can cause interest rates to go up. Increase in interest rates makes it more costly for businesses and individuals to borrow money, which can slow down private investment. This reduction in investment can lower the country's ability to produce goods and services, leading to slower economic growth. Over time, if supply doesn't keep up with demand, inflation can increase because there's not enough goods available to meet the needs of the population (Mankiw, 2021; Jhingan, 2018). In Nigeria, heavy borrowing by the government to cover budget shortfalls has led to higher interest rates and made it harder for the private sector to get credit. This has limited industrial production and caused shortages of goods, which in turn has made inflation worse. Studies show that when the government dominates the

economy in this way, it can make it harder for the central bank to control inflation effectively, which can lead to ongoing inflation problems (IMF, 2023; CBN, 2023)..

In addition, when the government runs large budget shortfalls, it may borrow more from within the country or take loans from abroad. This can make the local currency weaker because it increases the demand for imported goods and puts more pressure on the currency's value. When the currency loses value, it makes imported products, raw materials, and fuel more expensive in local currency, leading to higher prices for these items and causing inflation (Dornbusch, Fischer, & Startz, 2018; World Bank, 2023). In Nigeria, ongoing budget shortfalls have played a major role in making the exchange rate unstable, especially because of increased demand for imports and the use up of foreign currency reserves. Since Nigeria relies heavily on imports for food, energy, and industrial supplies, when the naira weakens, it has a strong impact on local prices, which makes inflation worse (CBN, 2023; IMF, 2023).

Furthermore, fiscal deficits can also affect inflation by shaping people's expectations about future prices and through a process called the wage-price spiral. When there are ongoing budget shortfalls and growing public debt, people start to expect more money to be printed and prices to rise. These expectations make workers ask for higher wages and businesses raise their prices in advance, which lead to higher inflation in the economy (Friedman, 1968; Blanchard, 2017). In Nigeria, high inflation expectations continue because of ongoing budget problems, unstable currency values, and changes in fuel subsidies. These expectations lead to more frequent wage increases, higher costs for businesses, and more expensive goods, making inflation worse (World Bank, 2023; IMF, 2023). As a result, inflation is still a big problem in Nigeria, reducing people's incomes, making it less attractive for investors, and making poverty worse (CBN, 2023).

In Nigeria, research shows mixed findings about how fiscal deficits and inflation are connected. Some studies say fiscal deficits lead to inflation (Onwioduokit, 1999; Inam, 2015; Anfofum et al., 2015), while others suggest that inflation can make fiscal deficits worse, meaning the cause and effect might go both ways (Medee & Nenbee, 2012). Nigeria's fiscal system, which includes high spending on ongoing expenses, paying off debts, and not collecting enough taxes, has made fiscal deficits worse. Financing deficits through central bank borrowing and domestic debt issuance further expands money supply, which raises inflation (Onwioduokit, 1999; Inam, 2015). Recent changes, like removing subsidies, changing tax rules, and making the currency exchange system more flexible, have changed Nigeria's financial situation. However, inflation is still high. This shows that there's not enough understanding about how fiscal deficits, money supply, and inflation interact in Nigeria's changing economy. Because of this, it's important to look into the association between fiscal deficit and inflation in Nigeria from 1981 to 2023. The rest of

the paper was organized into sections including literature review, materials and methods, results and discussions, conclusion, and recommendations.

LITERATURE REVIEW

Conceptual Clarifications and Philosophy

Fiscal Deficit

According to the Central Bank of Nigeria (2013), fiscal deficit happens when a government spends more than it earns in a single year. It is when the total money spent by the government is more than the total money it receives, without including money borrowed. This gap shows how much the government has to borrow to cover its expenses, and it shows how much it relies on debt. Fiscal deficit is an important sign of how well the government is managing its money and the overall health of the economy (Jhingan, 2018; Musgrave & Musgrave, 2004). To calculate fiscal deficit, you subtract total government revenue from total government spending, without counting borrowed money. This can be shown as: $\text{Fiscal Deficit} = \text{Total Expenditure} - \text{Total Revenue}$. If the result is positive, it means there is a deficit. If it is negative, it means there is a surplus. This measure helps leaders and experts understand if public money is being managed well and if the government's financial plans are working (Mankiw, 2021; IMF, 2023).

The two main parts of a fiscal deficit are how much the government spends and how much money it brings in through taxes and other sources. When these two parts don't match for a long time, it causes a fiscal imbalance (Jhingan, 2018; Todaro & Smith, 2020). This happens because of different reasons like not having enough tax money, spending too much on public services, going through economic slowdowns, or dealing with sudden crises like pandemics or natural disasters. Sometimes, governments choose to spend more or lower taxes to boost the economy and job creation, even if this makes the fiscal deficit bigger in the short term (Blanchard, 2017; Mankiw, 2021). To cover the fiscal deficit, governments usually borrow money from within the country, from outside, or through the central bank. Borrowing within the country means selling government bonds or bills. Borrowing from abroad includes taking loans from international organizations or other countries. The central bank can also help by creating more money, but this might cause inflation if done too much (IMF, 2023; CBN, 2023). How much impact the fiscal deficit has depends on how big it is, how long it lasts, and how the borrowed money is used. If the money is used for good projects like building roads or schools, it can help grow the economy, create jobs, and develop infrastructure. But if the deficit is too big and lasts too long, it can lead to higher public debt, more inflation, less private investment, and make the overall economy less stable (Blanchard, 2017; Todaro & Smith, 2020).

In countries like Nigeria, which are still developing, fiscal deficits often happen because taxes are collected from a small group of people, the country depends a lot on income from things that can change a lot in price (volatile commodity), and there are high costs for regular government spending. In Nigeria, persistent fiscal deficits have caused public debt to rise and the cost of paying back that debt to go up. This takes away money that could be used for capital projects and social development (CBN, 2023; Oyinlola & Akinnibosun, 2013). So, fiscal deficit is really important for showing how well a country manages its money and its economy. A little deficit can help the economy grow, but a large and long-lasting deficit can hurt the economy's stability. Therefore, it's important to collect enough taxes, spend money wisely, and have a plan for managing debt that works over the long term (IMF, 2023; Mankiw, 2021).

Inflation

Inflation refers to a sustained increase in the general price level of goods and services in an economy over a period of time, leading to a continuous decline in the purchasing power of money (George-Anokwuru & Inimino, 2025). In an inflation period, each unit of money will not be able to command more goods and services as before. Thus, inflation reflects a persistent rise in prices rather than a temporary or one-time price increase (Mankiw, 2021; Jhingan, 2018). To measure inflation, economists use price indexes such as the Consumer Price Index (CPI), Wholesale Price Index (WPI), and Producer Price Index (PPI). The CPI is the most commonly used one because it shows how the prices of everyday items bought by households change over time. The inflation rate is found by looking at the percentage change in these indexes, usually calculated each month or every year (IMF, 2023; Blanchard, 2017).

Inflation can be classified into different types based on its speed and intensity. There's creeping or mild inflation, where prices go up slowly and steadily. Then there's walking or moderate inflation, which means prices increase a bit faster. Running inflation happens when prices go up quickly, and hyperinflation is when prices rise extremely fast and out of control. The effects of inflation on the economy get worse as the rate of price increases gets higher (Jhingan, 2018; Todaro & Smith, 2020). The reasons behind inflation can be grouped into three main types: demand-pull, cost-push, and structural. Demand-pull inflation happens when people and businesses want to buy more than what are available pushing prices up. Cost-push inflation occurs when the cost of making goods goes up, like higher wages, more expensive raw materials, or increased energy prices. Structural inflation is often found in developing countries and comes from issues like poor infrastructure, weak supply chains, and unfair markets (Mankiw, 2021; Blanchard, 2017).

Inflation can have both good and bad effects on the economy. When inflation is moderate, it can push businesses to produce more, make people more willing to invest, and help lower unemployment by making them expect higher profits. But when inflation is high and lasts a long time, it takes away people's buying power, lowers their real income, makes people less likely to save money, creates more uncertainty, and can make income gaps bigger. It can also distort resource allocation and weaken economic stability (Todaro & Smith, 2020; Jhingan, 2018). To control inflation, governments and central banks use different kinds of policies. Monetary policy involves regulating money supply and credit using instruments such as interest rates, open market operations, and reserve requirements. Fiscal policy focuses on government spending and taxation to reduce excess demand. Structural policies aim to improve production capacity, enhance infrastructure, and remove supply bottlenecks. Effective coordination of these policies helps stabilize prices (IMF, 2023; CBN, 2023).

In developing countries such as Nigeria, inflation is often caused by factors such as a falling currency value, heavy reliance on imports, rising energy costs, government budget shortfalls, and problems with producing enough goods. Continuous inflation in Nigeria has lowered people's ability to buy things, raised poverty levels, and made the economy less certain. The Central Bank of Nigeria (CBN) has used different monetary policies to control prices and help the economy grow (CBN, 2023; Akinbobola, 2012). In short, inflation is a major economic issue that affects how income is shared, what people choose to invest in, and how the economy grows. While a little inflation might help the economy expand, high and ongoing inflation can seriously harm economic stability. So, keeping prices steady remains a key goal of economic policies in both developed and developing countries (Mankiw, 2021; IMF, 2023).

Theoretical Framework

Keynesian Theory

The Keynesian theory, created by John Maynard Keynes (1936), explained that fluctuations in economic activity are primarily driven by changes in aggregate demand, which includes consumption, investment, government spending, and net exports. Keynes argued that during periods of economic downturn, the private sector doesn't spend enough to keep everyone employed and the economy stable, which leads to recessions and high unemployment. To fix this, he suggested the government should actively step in by using fiscal policy, like increasing spending on public projects and lowering taxes, to raise overall spending and bring the economy back to a healthy balance (Keynes, 1936; Blanchard, 2017; Mankiw, 2021). In Nigeria, the Keynesian approach is used by the government to boost the economy through policies that increase spending, such as big public construction projects, social programmes, and regular

government spending. These actions are meant to increase overall spending, create jobs, and support economic growth despite challenges like long-term issues and short-term economic dips (CBN, 2023; IMF, 2023).

A main idea in Keynesian economics is that using government budget deficits can help stabilize the economy, especially when the economy is going through a recession. Keynes believed that governments should spend more money than they collect in taxes, by borrowing money, to help when private businesses and people spend less. This spending is supposed to add money to the economy, help make more goods and services, and create more jobs (Keynes, 1936; Jhingan, 2018; Mankiw, 2021). In Nigeria, the government has had budget deficits for a long time. This is because the government spends a lot of money, collects less in taxes, gets income from oil that can change a lot, and has to pay a lot to service its existing debts. Although using budget deficits is meant to help the economy recover and grow, long-term deficits have made public debt higher and put pressure on the economy's overall stability. Still, the Nigerian government keeps using budget deficits as a tool to boost economic activity, following the ideas of Keynesian economics (Oyinlola & Adedeji, 2019; IMF, 2023; BudgIT, 2022).

Keynesian theory says that when the government spends too much and creates large fiscal deficits, it can cause inflation, especially if the money is created by the central bank or borrowed heavily from within the country. When the government spends more, it increases the total demand for goods and services in the economy. If this demand is higher than what the economy can produce, it leads to inflation, where prices of goods and services go up overall (Blanchard, 2017; Jhingan, 2018). In Nigeria, the government often covers its fiscal deficits by borrowing from the Central Bank or taking loans from domestic sources, which increases the amount of money in the economy. This extra money, along with problems like poor infrastructure, reliance on imports, insecurity, and weak manufacturing, makes inflation more likely. Because of this, Nigeria has had ongoing inflation that is usually higher than the Central Bank's target, showing a clear connection between large fiscal deficits and rising inflation (CBN, 2023; World Bank, 2023; Oyeleke & Ajilore, 2020).

The Keynesian multiplier effect shows how an initial rise in government spending can lead to a much bigger increase in the country's overall income. This happens because the money spent is used for things like goods and services, which then lead to more spending by people and businesses. This process makes the effect of government spending on the economy even stronger (Keynes, 1936; Mankiw, 2021). However, how strong this effect is depends on several factors, such as how well the country's institutions work, how much it can produce, and how much people spend on goods made within the country. In Nigeria, this multiplier effect is greatly reduced because of heavy reliance on imports, corruption, inefficient use of public money, poor

infrastructure, and problems with how policies are implemented. As a result, most of the extra government spending ends up increasing imports and causing prices to rise, instead of boosting local production. These issues make the growth from government spending less effective while making inflation more likely (Akanbi & Du Toit, 2011; Oyinlola & Adedeji, 2019; Oyeleke & Ajilore, 2020).

Keynesian theory suggests that governments should spend more during economic downturns and save more when the economy is doing well. But in Nigeria, it's been hard to follow this approach because of political issues, unstable income from oil, poor management of public funds, and deep-rooted economic problems. Because of this, the country still has high budget shortfalls even when oil prices are good, which makes inflation and economic problems worse (IMF, 2023; BudgIT, 2022; World Bank, 2023). This shows that while the idea of using budget deficits to stabilize the economy makes sense in theory, its effectiveness in Nigeria depends on if there is improved fiscal discipline, better ways to collect taxes, smart public investments, and changes in the economy that can increase production and control inflation.

The Keynesian theory offers a strong way to understand how government budget shortfalls can help boost the economy. But in Nigeria, continuous use of budget shortfalls, along with problems in producing enough goods and services and an increase in money supply, has made these budget shortfalls a big cause of rising prices. So, to have a stable economy, it's important to use a balanced approach that mixes Keynesian ideas with careful management of government spending and important changes to the economy's structure.

The Monetarist Theory

The Monetarist theory, which is most closely linked to Milton Friedman, highlights how the amount of money in an economy plays a key role in shaping economic activity and price levels. Monetarists believe that when the amount of money in circulation changes, it has a clear and direct effect on inflation and the overall level of income. At the heart of this theory is the equation of exchange, $MV = PY$. In this equation, M stands for the money supply, V is how fast money moves through the economy, P is the average price of goods and services, and Y represents the actual amount of goods and services produced. According to this theory, inflation happens mainly because there is too much money in the economy compared to the amount of goods and services being produced (Friedman, 1968; Friedman & Schwartz, 1970; Mankiw, 2021). In Nigeria, this theory is especially important because the money supply has been growing quickly due to government borrowing, spending more than it earns, and loose money policies. The constant increase in broad money (M2) is closely linked to ongoing inflation, showing that monetary factors have a major impact on how inflation works in Nigeria (CBN, 2023; World Bank, 2023).

Monetarists usually believe that fiscal deficits cause inflation when they are funded by increasing the money supply, especially when governments use central bank financing. From a monetarist perspective, fiscal policy doesn't have much long-term effect on real economic factors, but expanding money through deficit spending mainly influences prices. So, ongoing fiscal deficits that raise the money supply eventually lead to higher inflation instead of lasting economic growth (Friedman, 1968; Brunner & Meltzer, 1972). In Nigeria, fiscal deficits are often covered by the Central Bank of Nigeria (CBN) through overdrafts called Ways and Means Advances, and by borrowing from within the country. This way of funding deficits raises both reserve money and the broader money supply, which supports the monetarist idea that fiscal deficits in Nigeria contribute to inflation by increasing the money base (CBN, 2023; IMF, 2023).

The monetarist transmission mechanism explains that when a government covers its budget shortfalls by increasing the money supply, it boosts overall spending in the economy. If the economy can't produce enough goods and services to match this increased spending because of things like poor infrastructure, limited industries, and other structural problems prices will go up, causing inflation. Monetarists believe that in countries where the economy isn't growing fast enough, this price rise is more serious (Friedman & Schwartz, 1970; Jhingan, 2018). In Nigeria, factors like weak infrastructure, security issues, low industrial growth, reliance on imports, and problems with foreign exchange prevent the economy from expanding enough. As a result, extra money from government spending mostly causes prices to rise instead of boosting production. This helps explain why Nigeria has recorded high inflation rates, even after the central bank has tried to control money supply (CBN, 2023; World Bank, 2023).

Monetarist theory suggests that keeping money supply growth under strict control is the best way to maintain stable prices. Friedman argued that money supply should increase at a steady rate that matches long-term economic growth to avoid inflation. From a monetarist perspective, using too much discretion in monetary policy can lead to instability and uncertainty, which can make inflation worse (Friedman, 1968; Mankiw, 2021). In Nigeria, the Central Bank of Nigeria uses tools like the Monetary Policy Rate (MPR), Open Market Operations (OMO), Cash Reserve Ratio (CRR), and liquidity ratio to manage the money supply. But these tools are often less effective because of large-scale deficit monetization, which adds too much money into the system and reduces the ability to control it. This problem shows how monetarists criticize the dominance of fiscal policy in Nigeria's economic management (CBN, 2023; IMF, 2023).

From a monetarist point of view, Nigeria's ongoing inflation issue needs strict control over money, careful management of government spending, and less use of central bank money to cover budget shortfalls. Monetarists believe that to control inflation, there needs to be teamwork between fiscal and monetary policies, especially focusing on lowering government budget gaps

and keeping the growth of money supply in check. Not doing this could make people expect more inflation and harm the country's overall economic stability (Friedman, 1968; Brunner & Meltzer, 1972; IMF, 2023). The Nigerian situation backs up the monetarist idea that inflation is mostly caused by too much money being created because of large budget gaps. So, to control inflation in Nigeria, it's important to improve how much tax revenue is collected, reduce reliance on central bank money for deficits, manage public spending better, and enhance the independence of the central bank.

In inference, Monetarist Theory offers a strong explanation for the ongoing inflation in Nigeria. It shows how the increase in money supply, which is mainly caused by the government borrowing from the central bank and taking loans at home to cover its spending, leads to higher inflation. This shows that Nigeria needs to follow strict budget rules and have trustworthy money policies to keep prices stable in the long run.

Review of Empirical Literature

Several scholars have looked into how fiscal deficit relates to inflation. For example, Onwioduokit (1999) investigated the connection between inflation and fiscal deficit in Nigeria spanning 1970 to 1994 using a Granger-causality test. The outcome revealed that while fiscal deficit can cause inflation, there is no back-and-forth relationship between the two. However, when looking at inflation and fiscal deficit adjusted for GDP, there was some feedback. The research also built a simple dynamic model to understand inflation in Nigeria. This model showed that it takes about two years for fiscal deficit to affect inflation. The conclusion was that policymakers should focus more on where the fiscal deficit comes from and how well the economy can handle extra money rather than just the size of the deficit.

Oladipo and Akinbobola (2011) also looked into the relationship between budget deficit and inflation in Nigeria using the Granger Causality method. Their results showed that budget deficit causes inflation in one direction only. They also found that budget deficit affects inflation both directly and through changes in the exchange rate in Nigeria.

Anayochukwu (2012) used an ARDL model and Granger-causality test to look at the connection between inflation and fiscal deficits in Nigeria from 1970 to 2009. The Granger-causality test showed that fiscal deficit as a % of GDP causes inflation, but there was no feedback loop. The ARDL results confirmed a strong negative link between increases in fiscal deficit and inflation.

In South Africa, Khumalo (2013) explored the association between inflation and budget deficit from 1980 to 2012 using the Vector Auto Regression (VAR) model and Granger causality. The findings showed a clear positive relationship between the two, with causality going both ways.

Similarly, Imegi (2014) looked at the link between budget deficit and inflation in Nigeria from 1998 to 2009 using correlation methods. The results showed a positive connection between budget deficit and inflation rate in Nigeria.

In Uganda, Lawanga and Mawejje (2014) tried to understand how budget deficit affects important economic factors. They used data from 1999 to 2011 and applied VECM, pair-wise Granger causality analysis, and variance decomposition. The results found one-way causality from inflation to budget deficit and from budget deficit to interest rates on loans. They also pointed out that budget deficit affects money supply indirectly through interest rates.

Adeleke and AbdulSalam (2016) used the ordinary least squares method to study how budget deficit affects inflationary pressure in Nigeria from 1983 to 2014. Their findings showed a strong relationship between the budget deficit and inflation, as well as between money supply and inflation.

Hamza, Bhatti, and Kiran (2019) employed an Autoregressive Distributed Lag method to find out how budget deficit affects inflation in Pakistan from 1985 to 2017. Their results showed that budgetary shortfalls, GDP growth, as well as money supply all have a positive effect on inflation. Meanwhile, unemployment and the official exchange rate have a negative effect on inflation.

Eche and Pam (2022) investigated the influence of fiscal policy on inflation in Nigeria between 1981 and 2020. The researchers applied the technique of called an Auto regressive Distributed Lag model. Findings from their investigation revealed that fiscal deficit, interest rate, and exchange rate all have a positive connection with inflation in Nigeria in the long run. Surprisingly, gross domestic product had a negative effect on inflation in Nigeria.

Likewise, Garba (2023) used the same analytical technique to check the asymmetry effect between budget deficit and inflation in Nigeria from 1986 to 2020. The results showed that in the long term, an increase in budget deficit leads to higher inflation. This means that a rise in budget deficit causes inflation in Nigeria. The study also found that budget deficit increases money supply and creates inflationary pressure in the country.

Babalola and Oyeyemi (2023) used Granger Causality technique to study the direction of causality between budget deficit and inflation rate in Nigeria. They found that there is a one-way link from inflation rate to budget deficit. And, that inflation directly and indirectly affects budget deficit through changes in exchange rate and balance of trade in Nigeria.

Agu and Oshim (2024) used the OLS multiple regression method to examine how different sources of deficit budget financing impact inflation in Nigeria from 2011 to 2020. They found that external debt and treasury bills have a significant effect on inflation. Ways and means advances also had a positive and significant effect on inflation. This suggests that among the factors studied, ways and means advances are the main factor influencing inflation in Nigeria.

Summary of the Literature Reviewed/ Gap

Although many studies have looked at how Nigeria's fiscal deficit affects inflation, there are still big gaps in what's known. One issue is that some older studies used data that were not up to the year 2023 (Onwioduokit, 1999; Medee & Nenbee, 2012; Inam, 2015; Anfofum et al., 2015). But Nigeria has gone through major changes in its economy recently, such as removing fuel subsidies, changing the exchange rate system, and expanding government spending after the pandemic. These changes have changed the way fiscal deficit and inflation relate to each other. Not having up-to-date data makes previous findings less useful for today's economic decisions. Another problem is that many studies didn't include important factors like money supply and exchange rate, which are known to affect inflation in Nigeria. Missing these variables makes the models less accurate and reduces the strength of the results. Also, the existing research shows mixed results about the connection between fiscal deficit and inflation. Some studies say fiscal deficit leads to inflation (Anayochukwu, 2012; Onwioduokit, 1999), while others suggest the opposite (Babalola & Oyeyemi, 2023; Lawanga & Mawejje, 2014). This disagreement makes it hard for policymakers to make decisions. Most studies used simple statistical methods that can't show how fiscal deficits might affect inflation in different ways, especially during times when the government is either spending a lot or cutting back. This research fixes these problems by using the latest data from 1981 to 2023, adding important economic factors, using more advanced statistical tools, and checking both short-term and long-term effects. This gives a clearer and more useful picture of how fiscal deficit and inflation are connected in Nigeria.

Stylized Facts on Fiscal Operations and Inflation in Nigeria

Fiscal deficits and inflation remain two of the most persistent macroeconomic challenges confronting developing economies, particularly Nigeria. They have fluctuated over the years. For example, in 1981, 1986, 1990, 2000, 2005, and 2010, the total fiscal operations were ₦3.90 billion, ₦8.25 billion, ₦22.12 billion, ₦103.78 billion, ₦161.40 billion, and ₦1,105.40 billion respectively. In 2011, the Federal Government's overall fiscal operations caused a deficit of ₦1,158.5 billion, which in percentage was 3.3 of the country's GDP, compared to a deficit of ₦1,105.4 billion, or 3.7 per cent of GDP, in 2010. This deficit was not beyond the target set by the WAMZ primary convergence criteria, which was 4.0%, and it was better than the previous two years. Most of the budget deficit was covered by domestic sources (CBN, 2011). In 2013, the Federal Government's overall fiscal operations led to a deficit of ₦1,153.5 billion, or 1.4% of GDP, compared to a deficit of ₦975.7 billion, or 1.3% of GDP, in 2012. Most of the budget deficit was covered by domestic

sources, with bond sales making up ₦768.2 billion, which was 66.6% of the total domestic funding (CBN, 2013).

In 2014, the Federal Government's overall fiscal operations led to a smaller deficit of ₦835.7 billion, or 0.9% of GDP, compared to ₦1,153.5 billion, or 1.4% of GDP, in 2013. Most of this deficit was covered by money from inside the country, with the issuance of government bonds accounting for ₦624.2 billion, which in percentage was 74.7 of the total (CBN, 2014). In 2015, the Central Government had a deficit of ₦1,557.8 billion, or 1.6% of GDP, which is higher than the ₦835.7 billion, or 0.9% of GDP, in 2014. This deficit was mainly covered by domestic sources, with the banking system contributing ₦834.1 billion, or 53.5% of the total (CBN, 2015).

In 2016, the Federal Government's overall fiscal balance resulted in a deficit of ₦2,193.3 billion, or 2.1% of GDP, compared to ₦1,557.8 billion, or 1.6% of GDP in 2015. Most of this deficit was covered by internal sources, with additional funds, comprising drawdowns from special accounts, making up ₦1,662.6 billion, or 75.8% of the total financing (CBN, 2016). In 2017, the Federal Government's overall fiscal balance led to a deficit of ₦2,273.9 billion, or 2.0% of GDP, which is slightly less than the ₦2,675.0 billion, or 2.6% of GDP, in 2016. This deficit was not above the reviewed WAMZ primary convergence criterion of 3.0% of GDP. It was funded by 31.8% from outside sources and 68.2% from internal sources (CBN, 2017).

In 2018, the Central Government of Nigeria had a fiscal deficit of ₦3,628.1 billion, which is 2.8% of the country's GDP. This is slightly less than the 3.2% deficit recorded in 2017. The government used both foreign and local funds to cover this deficit, with 70.4% coming from local sources and 29.6% from abroad (CBN, 2018). In 2019, the government faced an estimated fiscal deficit of ₦4,603.5 billion, or 3.2% of GDP, which is a bit higher than the 2018 deficit of ₦3,628.1 billion. This deficit was above the limits set by the Fiscal Responsibility Act and the WAMZ convergence criteria. The shortfall was entirely funded through local sources (CBN, 2019). In 2020, the Federal Government recorded a fiscal deficit of ₦6,598.96 billion, which is 4.33% of GDP. This exceeded the budgeted target of 3.30%. The main reason for this was the effects of the COVID-19 pandemic on both the global and Nigerian economies, which led to a revised budget and lower revenue than expected (CBN, 2020 and Vanguard News Paper of July 1, 2021). In 2021, the deficit was estimated at ₦6,436.19 billion (CBN, 2021). In 2022, the deficit increased to ₦7,030.22 billion, mainly covered by domestic borrowings, including advances from the Central Bank of Nigeria (CBN, 2022). In 2023, the government recorded a fiscal deficit of ₦12.9 trillion, which is 5.6% of GDP (CBN, 2023).

This large deficit shows the need for the government to improve tax collection and other revenue sources. In 2024, the general fiscal balance of the Central Government give rise to an assessed deficit of ₦13.1 trillion (CBN, 2024). In addition, the steady rise in prices for goods and

services in Nigeria is a big problem for inhabitants of the country. In fact, Nigeria has been dealing with high inflation for a long time. Since 1980, the country has experienced high and sometimes sudden increases in inflation. For example, according to data from the Central Bank of Nigeria's reports, the inflation rates in 1980, 1981, 1982, 1983, 1984, and 1985 were 9.90, 20.90, 7.70, 23.20, 39.60, and 5.50 percent respectively (George-Anokwuru and Inimino, 2024). The inflation rate went down a bit in 1986, reaching 5.40%. In 1987, when the programme called Structural Adjustment began in Nigeria, inflation rose again to 10.20%. In 1988 and 1989, the rates were 38.20 and 40.90%. It then dropped to 7.50% in 1990. In 1991, 1992, 1993, and 1994, the inflation rates were in the percentages of 13.00, 44.50, 57.20, and 57.00 respectively (George-Anokwuru and Inimino, 2024).

Available evidence shows that inflation in Nigeria reached its highest level in 1995. That year, the inflation rate was 72.80%. The rate then dropped to 29.30% in 1996. The high inflation rates in 1995 and 1996 were because of problems in the Nigerian banking sector during those years (Gbosi, 2015; George-Anokwuru and Inimino, 2024). In 1997, the rate was 8.50%, and in 1998, it was 10.00%. There was a big drop in inflation in 1999 and 2000, with rates of 6.60 and 6.90%. The strict monetary and fiscal policies used by the government during that time may have helped cause this drop. However, the continued high inflation rate is still a problem. In 2001, 2002, 2003, 2004, and 2005, the inflation rates were in percentages of 18.90, 12.90, 14.00, 15.00, and 17.90 respectively. The rate dropped a lot in 2006 and 2007, with inflation at 8.20 and 5.40 percent. In 2008, 2009, 2010, 2011, and 2012, inflation went up again to 11.60, 12.50, 13.70, 10.80, and 12.20 percent. In 2013, 2014, 2015, 2016, and 2017, the rates were 8.50, 8.10, 9.01, 15.70, and 16.50 percent. In 2018, 2019, and 2020, inflation was 12.10, 11.4, and 13.25 percent respectively. In 2021, 2022, and 2023, the inflation rate went up sharply in the percentages of 16.95, 18.85, and 24.16 correspondingly (CBN, Various Issues).

Inflation is bad because it hurts people who earn a fixed income the most. This is because, during inflation, money loses a lot of its value, which means their real income goes down. Another problem with inflation is that it changes how income is shared. When inflation happens, people who borrow money often end up gaining at the expense of those who lend. Inflation also moves money from private businesses to the government. Since taxes depend on income, people end up paying more taxes during inflation. Another issue is that inflation reduces savings. People usually save more when interest rates are high, but when savings returns are low, they save less. Inflation also causes people to spend carelessly, gamble, and waste money. This makes it more tempting to take risks than to work hard. It disrupts stable economic relationships. Also, rising prices have made many people in Nigeria turn to illegal ways to get money, which has caused crime rates to go up (George-Anokwuru & Inimino, 2024).

MATERIALS AND METHODS

An ex-post facto research design was employed in this study. This study gathered existing data on inflation rate, fiscal deficit as a percentage of GDP, official exchange rate, and broad money supply from 1981 to 2023. To analyze the data, the study used econometrics methods including the Augmented Dickey Fuller (ADF) unit root test and the Autoregressive Distributed Lag (ARDL) Bounds testing approach. The study also created an econometric model to show how fiscal deficits relate to inflation in Nigeria. Based on the idea that fiscal deficits and inflation are connected, the study linked these variables as discussed in previous research. The model used in this study is explained below.

$$INF = F(FDT, EXR, M2) \quad (1)$$

The log-linear form;

$$INF_t = \dot{\alpha}_0 + \dot{\alpha}_1 FDT_t + \dot{\alpha}_2 \ln EXR_t + \dot{\alpha}_3 \ln M2_t + \tilde{\omega}_t \quad (2)$$

Where: INF is Inflation Rate, FDT is Fiscal Deficits, EXR is Official Exchange Rate, M2 is Broad Money Supply, Ln is natural Logarithm, $\tilde{\omega}$ is Error Term, $\dot{\alpha}_1$, $\dot{\alpha}_2$, and $\dot{\alpha}_3$ are the slope parameters and $\dot{\alpha}_0$ is the constant parameter. On the apriori: $\dot{\alpha}_1, \dot{\alpha}_2, \dot{\alpha}_3 > 0$.

Techniques of Data Analysis

This investigation employed the techniques of Augmented Dickey Fuller test (ADF) and the Autoregressive Distributed Lag (ARDL) approach. The ADF test was utilized to check if the data is stationary, meaning it does not change over time in a manner that influences the outcomes. The general formula for the ADF test is:

$$\Delta y_t = \alpha_0 + \alpha_1 y_{t-1} + \sum \alpha_i \Delta y_i + \delta_t + U_t \quad (3)$$

Where: y represents a time series, t is a linear time trend, Δ denotes the first difference operator, α_0 is a constant, n is the optimum number of lags in the explanatory variables and U is random error term. To examine both short-term and long-term associations between fiscal deficit and inflation, the Autoregressive Distributed Lag – ARDL technique was used. This approach helps mitigate problems such as autocorrelation and endogeneity, providing unbiased and efficient results. The ARDL model used in this investigation is presented thusly:

$$\begin{aligned} \Delta INF_{t,j} = & C_0 + C_1 INF_{t-1,j} + C_2 FDT_{t-1,j} + C_3 EXR_{t-1,j} + C_4 M2_{t-1,j} + \sum_{i=1}^{n1} \dot{\alpha}_{1i,j} \Delta INF_{t-1,j} \\ & + \sum_{i=0}^{n2} \dot{\alpha}_{2i,j} \Delta FDT_{t-1,j} + \sum_{i=0}^{n3} \dot{\alpha}_{3i,j} \Delta EXR_{t-1,j} + \sum_{i=0}^{n4} \dot{\alpha}_{4i,j} \Delta M2_{t-1,j} + \lambda ECM_{t-1} + \mu_t \\ & - - - - - (4) \end{aligned}$$

Where; change operator takes the symbol Δ , white noise or error term is μ_t , optimal lag length is n , short run dynamics of the model are $\alpha_1, \alpha_2, \alpha_3, \alpha_4$ and long run elasticities are c_1, c_2, c_3, c_4 and error term is μ_t . Error correction term obtained from the co-integration model is ECM_{t-1} . The error coefficients (λ_1) demonstrate how fast the co-integration model amends any unevenness from the preceding period or the speed at which it corrects to get back to the long term stability. The coefficient of ECM is anticipated to be negative and statistically noteworthy. A negative and noteworthy ECMt-1 coefficient suggests that any short-term movement between the outcome and explanatory variables will ultimately return to the elongated term association.

RESULTS AND DISCUSION

Appraising the trends of exchange rate, budget deficits, inflation rate and broad money supply in Nigeria from 1981 to 2023

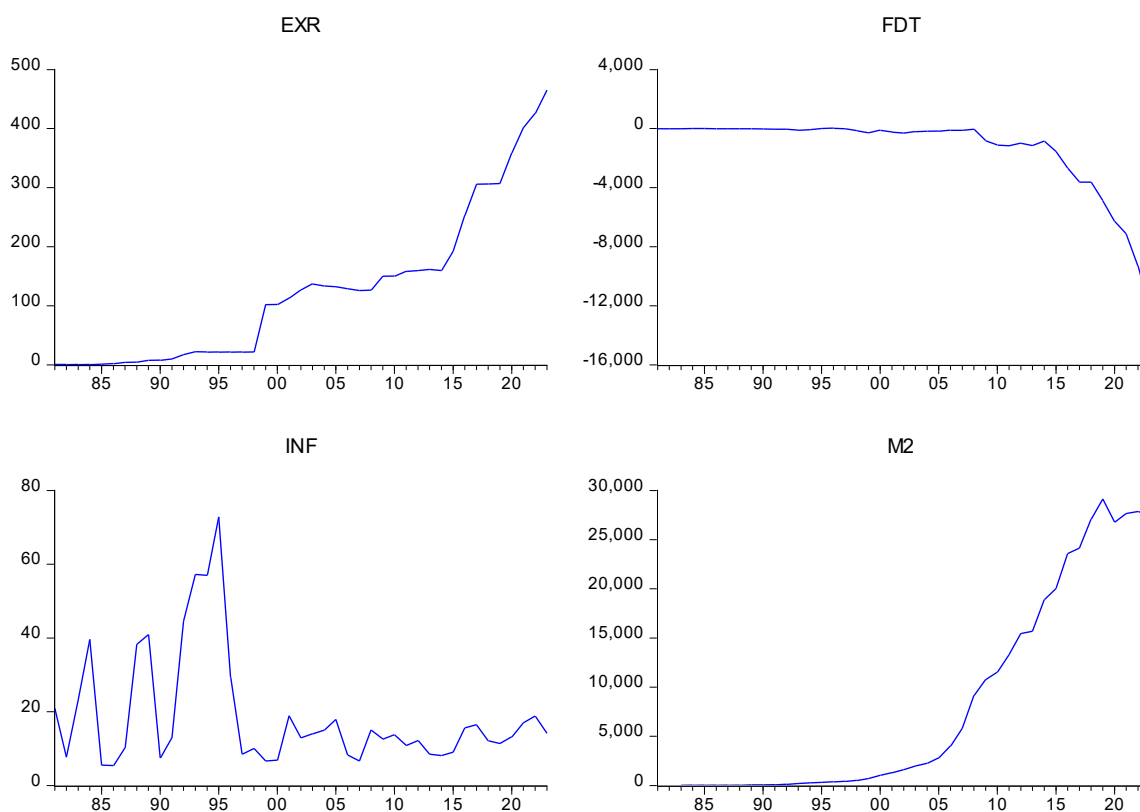


Figure 1: The trends of exchange rate, budget deficits, inflation rate and

The four broad money supply in Nigeria from 1981 to 2023 rate (EXR), fiscal deficit (FDT), inflation (INF), and broad money supply (M2) over the period 1981–2023. Taken together, the figures provide a stylized depiction of macroeconomic dynamics, highlighting both trend behaviour and episodic volatility across key policy variables. While EXR and M2 display strong trending behaviour, INF is characterized by episodic spikes followed by stabilization, and

FDT shows a marked structural deterioration in the later years. The graphical evidence suggests the presence of non-stationarity in some series and potential structural breaks, which are important considerations for subsequent econometric modeling.

The exchange rate and money supply show clear long-term trends, while inflation has had sudden jumps followed by periods of stability. The fiscal deficit has worsened a lot in recent years. The charts suggest that some of these data series are not stable over time and may have had major changes in their patterns, which is important for future analysis using economic models. The exchange rate has generally been going up, meaning the local currency has been losing value over time. This trend was slow from the 1980s up to the mid-1990s, but it started to speed up after that. There were especially sharp increases after 2015. This pattern may be linked to problems in the foreign exchange market, such as trade imbalances, lower export earnings, or capital flow reversals. The way the exchange rate has risen in a non-linear way suggests that there may have been changes in policies or shifts in economic conditions that influenced how the currency behaved over time.

The fiscal deficit stayed fairly small during the 1980s and 1990s, moving only slightly around a nearly balanced level. But starting in the early 2000s, it began to get worse, and after 2015, it went down sharply to very negative levels by the end of the time period studied. This shows a big loss of control over government spending, which could be because of higher government costs, lower income from taxes, or spending more when the economy is struggling. The big drop after 2015 also shows a major shift in the way the economy is working, which has big effects on how stable the government's finances and the overall economy are.

Inflation was very unstable in the early years, with many sudden increases, especially in the mid-1990s. These changes show that the economy wasn't very stable, which might have been caused by problems with exchange rates, too much money being printed, or issues on the supply side. Starting in the late 1990s, inflation undergoes a structural moderation, stabilizing within a relatively narrow range. This transition suggests improvements in monetary policy effectiveness, institutional frameworks, or overall macroeconomic management. The post-2000 period is thus characterized by relatively low and stable inflation despite significant movements in other macroeconomic variables.

The broad money supply (M2) has been increasing steadily throughout the time period studied, with especially fast growth starting in the mid-2000s. The 2010s saw even faster growth in the amount of money in the financial system, showing more liquidity. This growth might be because of deeper financial systems, easier money policies, or more government spending financed by creating money. However, there was not much inflation during this time, which makes people wonder about how well money growth leads to inflation.

A joint consideration of the four series reveals a complex and evolving macroeconomic relationship. In the earlier time period, there was a lot of inflation ups and downs, but the exchange rate, government spending, and money supply were more stable, suggesting that inflationary episodes were driven by idiosyncratic or structural factors.. On the other hand, the post-2000 period is characterized by rapid exchange rate depreciation, sustained monetary expansion, and worsening fiscal balances, yet without a commensurate increase in inflation. This apparent decoupling challenges conventional macroeconomic theory, which predicts a positive connection between inflation, money supply growth, and exchange rate depreciation.

The graphical evidence points to several important econometric considerations. First, there are strong trends in exchange rates and money supply, which means the data might not be stable over time. This suggests we need to check for unit roots and look into possible long-term connections between the variables. Second, the apparent structural break around the mid-2010s implies that parameter stability may not hold over the full sample period. Third, the weak and time-varying connection between inflation and its traditional determinants underscores the need for dynamic modeling frameworks such as Autoregressive Distributed Lag (ARDL) model to adequately capture the complexity and potential time-varying nature of the connection. Overall, the figures highlight the complexity of macroeconomic interactions and caution against relying on simple static relationships in empirical analysis.

Table 1: Augmented Dickey-Fuller (ADF) Unit Root Test

Variables	Level form		First difference		Order of integration
	ADF Statistics	5% Critical Value	ADF Statistics	5% Critical Value	
INF	-3.143430	-2.933158	-	-	I(0)
FDT	11.33772	-2.933158	-7.277358	-2.936942	1(1)
EXR	3.071535	-2.933158	-4.408356	-2.935001	1(1)
M2	1.747181	-2.933158	-5.331108	-3.523623	1(1)

Note: INF, FDT, EXR and M2 as earlier defined

The ADF test results for each series in Table 2 show that at the 5% significance level, INF is stationary at its original level 1(0) because its ADF statistic is higher than the 5% critical value. On the other hand, FDT, EXR, and M2 become stationary after one difference, which means they are 1(1). Since the variables are integrated of order 1(0) and 1(1), it meets the requirement to use an ARDL model to check for long-run relationships.

Table 2: ARDL Bounds Test for Co-integration

Model		F-Statistic = 4.578014
INF= F(FDT, EXR, M2)		K = 3
Critical Values	Lower Bound	Upper Bound
5%	2.79	3.67

The ARDL bounds test for co-integration shows there is a long-term connection between the variables (INF, FDT, EXR, and M2). This is because the F-statistic, which is around 4.6, is higher than the upper critical value at the 5% significance level. This result means we can reject the idea that there is no long-term relationship between these variables at the 5% level. As a result, the study was able to determine both the long-run and short-run effects of the variables.

Table 3: Estimated ARDL Long Run Coefficients. Dependent Variable: INF ARDL (2, 0, 0, 2)

Regressors	Coefficient	t-Statistic	P-Value
FDT	-0.002483	-1.412421	0.1672
LOG(EXR)	-1.565253	-0.263488	0.7938
LOG(M2)	-2.054239	-0.469339	0.6419

The assessed ARDL long term coefficients in Table 3 show that in the elongated period, fiscal deficits, exchange rate and broad money supply have negative and insignificant association with inflation rate in Nigeria. Interestingly, this result does not align with economic theory.

Table 4: Error Correction Representation for the Selected ARDL Model ARDL (2, 0, 0, 2)

Regressors	Coefficients	t-Statistic	P-Value
FDT	-0.001547	-1.481179	0.1480
LOG(EXR)	-0.974834	-0.264972	0.7927
LOG(M2)	38.85296	1.298797	0.2030
ECM (-1)	-0.572220	-4.159119	0.0002

R² = 0.545200	D-W stat. = 1.940479
Akaike info criterion = 7.938011; Schwarz criterion = 8.272366;	
F-statistic = 5.651329 Prob(F-statistic) = 0.000239	

Table 4 displays the results of the short-term dynamic coefficients that are linked to the long-term associations found in the ECM equation. In the model, the Error Correction Term has the correct sign, which is negative, and it is statistically significant. This means the model adjusts

towards long-term equilibrium over time. In other words, it shows how the model moves from short-term balance to long-term balance. This suggests that any differences from the short-term inflation rate eventually return to the long-term equilibrium. The Durbin Watson value of 1.940479, shows that there is no problem of autocorrelation in the model. Additionally, the dynamic connections between the variables, as shown by the ECM, reveal that the model's ability to describe the data measured by R-squared is around 0.55. This means the model fits the data well. It indicates that during the time period studied, about 55 percent of the changes in the inflation rate can be explained by the variables included in the model, while the remaining 45 percent is explained by other factors not included in the model, and these are captured as the error term.

Interestingly, the fiscal deficit and exchange rate do not have a clear or strong connection with inflation in Nigeria. The results show that if there is an increase in fiscal deficits or a drop in the exchange rate, it doesn't really lead to higher inflation. This matches the findings of previous studies, like Anayochukwu (2012), who used the Autoregressive Distributed Lag (ARDL) model and Granger-causality test to look at the link between inflation and fiscal deficits in Nigeria from 1970 to 2009. They also found a negative relationship between fiscal deficit growth (as a percentage of GDP) and inflation. However, the broad money supply has a positive, but not significant, relationship with inflation. This means that a percentage increase in broad money supply will lead to higher inflation. But it's important to note that inflation in Nigeria isn't just caused by money supply alone. It's the result of many different factors working together, including structural, external, and policy-related issues that keep prices rising. High energy prices, unreliable electricity, and costly transportation all make it more expensive for businesses to run, and these extra costs are passed on to customers. Also, widespread insecurity - manifested in insurgency, banditry, and farmer/herder conflicts has significantly disrupted agricultural production, reduced food supply, and intensified food inflation, which constitutes a substantial component of Nigeria's consumer price index.

Furthermore, structural deficiencies such as poor infrastructure, inefficient logistics systems, and supply chain bottlenecks amplify distribution costs and limit market efficiency, thereby sustaining price increases. Nigeria's reliance on importing goods makes it more vulnerable to changes in global prices and supply problems, which quickly affect the country. Policy decisions like ending fuel subsidies or putting trade limits can make inflation worse by raising costs for businesses or reducing the amount of goods available. Also, when people expect prices to go up, they might stock up on goods or raise prices early, which can lead to more price rises. Climate issues like flooding and dry weather hurt farming, making inflation worse on the supply side. Plus, fast-growing populations without enough jobs or production capacity create

more demand than supply, pushing prices up. To control inflation well, the government needs to do more than just raise interest rates. It should invest in better roads and other infrastructure, improve security, help farmers, and find ways to reduce how much they rely on imports.

Post Estimation Diagnostic Tests Results

Diagnostic tests were conducted in this study to see if the model's estimates can be relied upon for making policy predictions or recommendations. The study included specific tests such as the Wald test to check restrictions on coefficients, the Breusch-Godfrey Serial Correlation LM Test, and a normality test as part of the analysis after estimating the model. The results from these tests are carefully displayed in Table 5, Table 6, and Figure 2.

Wald Test

The Wald test is used to check if the coefficients of the cause variables in the ECM model are all important together. The F-statistic in Table 5 was used to determine this.

Table 5: Wald Test Result

Wald Test:			
Equation: Untitled			
Test Statistic	Value	Df	Probability
F-statistic	1005258.	(4, 33)	0.0000
Chi-square	4021032.	4	0.0000

The results in Table 5 show that the F-statistic is around 1005 and the probability value is 0.0000, which is lower than 0.05 at the usual 5 percent significance level. This means all the predictor variables included in the model together play a significant role in explaining the inflation rate in Nigeria during the time covered by the study.

Test for Serial Correlation

Table 6: Breusch-Godfrey Test for Serial Correlation

F-statistic	0.281718	Prob. F(2,31)	0.7564
Obs*R-squared	0.731887	Prob. Chi-Square(2)	0.6935

The results shown in Table 6 indicate that the error correction model does not have a serial autocorrelation issue. This is because the chi-square value and the associated probability of the chi-square statistic are both above 0.05.

Normality Test Result

The Jarque-Bera statistic was used to check if the error term in the inflation rate model follows a normal distribution at the 5 percent significance level.

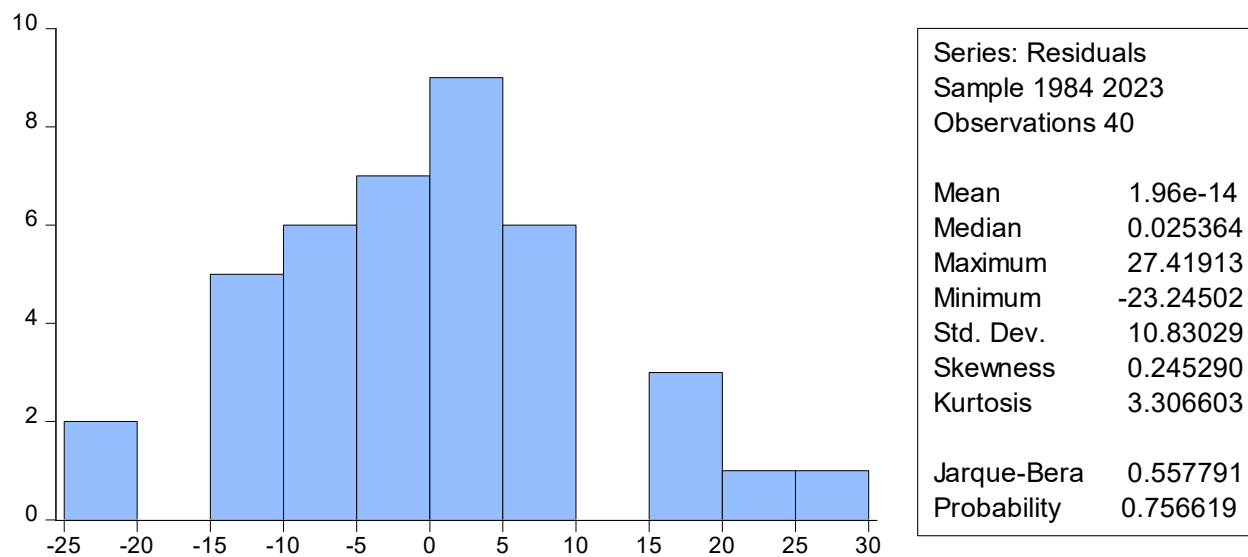


Figure 2: Normality Test Result

The result in Figure 2 shows that the error term is normally distributed at the usual significance level, which is 5%. This is because the probability value, or p-value, for the Jarque-Bera statistic is about 0.757, which is higher than the standard 0.05 level. This means the assumption that the residuals in the ECM model are normally distributed is supported by the Jarque-Bera test.

CONCLUSION AND RECOMMENDATIONS

This study looked at how fiscal deficits affect inflation in Nigeria between 1981 and 2023. The research used data on inflation rate, fiscal deficit as a percentage of GDP, official exchange rate, and broad money supply from the Nigeria's central bank statistical reports. The main analytical method applied was the Autoregressive Distributed Lag (ARDL) Bounds testing approach. The findings showed there is a long-term association between the variables studied.

The results also showed that in both the long and the short terms, fiscal deficit and exchange rate have a negative but not significant link with inflation. Broad money supply had a negative relationship with inflation in the long run, but in the short run, it showed a positive but not significant connection with inflation during the time period studied. The negative link between fiscal deficit, exchange rate, and inflation in Nigeria suggests some unexpected policy lessons. It means that higher government deficits or a weaker currency might actually lead to lower inflation. This goes against what is usually expected in macroeconomic theory, so it needs to be carefully understood in the context of Nigeria's specific situation. First, the negative link between fiscal deficit and inflation suggests that higher government spending doesn't always lead to higher inflation. This could happen if the money is used for productive investments, like building infrastructure, improving agriculture, or developing industries. These kinds of investments can increase the overall supply of goods and services, which can help reduce prices. The message here is that fiscal policy should not just focus on reducing deficits. Instead, the government should pay more attention to how and where it spends money. They should prioritize long-term investments over short-term spending to make sure that any deficits help the economy grow and increase supply, rather than just causing inflation. Second, the negative relationship between exchange rate and inflation means that a weaker currency might actually lead to lower inflation, which is the opposite of what is usually expected. Normally, when a country's currency weakens, it makes imports more expensive, which should increase inflation. But in Nigeria, this wasn't the case. This finding challenges typical economic theories and shows that the relationship between exchange rates and inflation can be different in specific countries, depending on their economic structure and other factors. In Nigeria, this might happen when the currency loses value at the same time as the central bank tightens money supply, the government pushes policies to replace imports, or overall spending in the economy goes down. It could also mean that changes in the exchange rate aren't properly affecting local prices because of fixed structures in the economy or government interference. The key takeaway is that managing the exchange rate should go hand in hand with boosting local production. Instead of focusing too much on keeping the currency stable, leaders should support local industries to cut down on reliance on imports and reduce how much external prices affect domestic ones. Also, this negative link might point to bigger problems in the economy, like unused production capacity, weak consumer demand, or inefficient policies. For example, if the government runs larger budget deficits during tough economic times, it might not boost demand enough to cause inflation, even with more spending. Similarly, if the currency weakens in a period of low demand, prices might not rise. This shows that when making plans to stabilize the economy, leaders need to think about the whole economic picture and make sure that the finance and monetary policies work together. Based on these findings, the study suggests

that controlling inflation needs a full approach that goes beyond just tightening money supply. It also includes investing in infrastructure, improving security, supporting agriculture, and creating policies that help reduce the need for imports. Moreover, it is clear that this paper doesn't cover everything about the topic. So, future research should look at a longer time period and examine how fiscal deficit affects unemployment and poverty in Nigeria.

REFERENCES

- Adeleke, A. O. & AbdulSalam, I. A. (2016). The Impact of Budget Deficit on the Nigerian Economic Growth, 1983 – 2014. *Journal of Economics and Sustainable Development*, 7(14), 1-11.
- Agu, P. C. & Oshim, J. C. (2024). Effect Of Deficit Budget Financing Sources on Inflation Rate in Nigeria. *International Journal of Business and Management Review*, 12(1), 116-131.
- Akanbi, O. A., & Du Toit, C. B. (2011). Macroeconomic determinants of inflation in Nigeria: A structural analysis. *International Journal of Trade and Global Markets*, 4(1), 25–38.
- Akinbobola, T. O. (2012). The dynamics of money supply, exchange rate and inflation in Nigeria. *Journal of Applied Finance and Banking*, 2(4), 117–141.
- Anayochukwu, O. B. (2012). Fiscal Deficits and Inflation in Nigeria: The Causality Approach. *International Journal of Scientific & Technology Research*, 1(8), 6-12.
- Anfofum, A. A., Gambo, J. S., & Abdullahi, U. (2015). Fiscal deficit and inflation in Nigeria: An empirical analysis. *International Journal of Economics and Financial Issues*, 5(3), 748–756.
- Babalola, A. F. & Oyeyemi, A. (2023). Budget Deficit and Inflation in Nigeria: A Causal Relationship. *International Journal of Management, Social Sciences, Peace and Conflict Studies (IJMSSPCS)*, 6(2), 129- 142.
- Blanchard, O. (2017). *Macroeconomics* (7th ed.). Pearson Education.
- Brunner, K., & Meltzer, A. H. (1972). Money, debt, and economic activity. *Journal of Political Economy*, 80(5), 951–977.
- BudgIT. (2022). *Federal government of Nigeria budget implementation report*. BudgIT Nigeria.
- Central Bank of Nigeria (CBN) Annual Economic Report (2011).
- Central Bank of Nigeria (CBN) Annual Economic Report (2013).
- Central Bank of Nigeria (CBN) Annual Economic Report (2014).
- Central Bank of Nigeria (CBN) Annual Economic Report (2015).
- Central Bank of Nigeria (CBN) Annual Economic Report (2016).
- Central Bank of Nigeria (CBN) Annual Economic Report (2017).
- Central Bank of Nigeria (CBN) Annual Economic Report (2018).
- Central Bank of Nigeria (CBN) Annual Economic Report (2019).
- Central Bank of Nigeria (CBN) Annual Economic Report (2020).
- Central Bank of Nigeria (CBN) Annual Economic Report (2021).
- Central Bank of Nigeria (CBN) Annual Economic Report (2022).
- Central Bank of Nigeria (CBN) Annual Economic Report (2024).
- Central Bank of Nigeria (CBN). (2023). *Statistical bulletin*. CBN.
- Dornbusch, R., Fischer, S., & Startz, R. (2018). *Macroeconomics* (13th ed.). McGraw-Hill Education.
- Eche, N. A. & Pam, B. J. (2022). Effect of Fiscal Deficit on Inflation and Selected Macroeconomic Fundamentals of Nigeria: 1981-2020. *Journal of Contemporary Issues in Accounting (JO CIA)*, 3(1), 176-197.
- Friedman, M. (1968). The role of monetary policy. *American Economic Review*, 58(1), 1–17.

- Friedman, M., & Schwartz, A. J. (1970). *Monetary statistics of the United States: Estimates, sources, methods*. National Bureau of Economic Research.
- Garba, A. M. (2023). The Asymmetry Effect of Budget Deficit and Inflation in Nigeria. *Journal of Global Economics and Business*, 4(13), 97-110.
- George-Anokwuru, C. C. & Inimino, E. E. (2024). Inflation and Income Inequality in Nigeria. *International Journal of Economics, Commerce and Management United Kingdom*, 13(2), 64-80.
- Hamza, M., Bhatti, M. A., & Kiran, K. (2019). Impact of Budget Deficit on Inflation: A Case Study of Pakistan. *IRASD Journal of Economics*, 1(1), 42–58.
- Imegi, J. C. (2014). Budget Deficits and Inflationary Dynamics in Nigeria. *International Journal of Business and Economic Development*, 2(1), 70-77.
- Inam, U. S. (2015). Fiscal deficit and inflation dynamics in Nigeria: An empirical investigation. *Journal of Economics and Sustainable Development*, 6(7), 1–9.
- International Monetary Fund (IMF). (2023). *Nigeria: Article IV consultation report*. IMF.
- Jhingan, M. L. (2018). *Macroeconomic theory* (13th ed.). Vrinda Publications.
- Keynes, J. M. (1936). *The general theory of employment, interest and money*. Macmillan.
- Khumalo, J. (2013). Budget deficit-inflation Nexus in South Africa: Var analysis. *Mediterranean Journal of Social Sciences*, 4(14), 725-734.
- Lawanga, M. M. & Mawejje, J. (2014). Macroeconomic effects of budget deficits in Uganda: A VAR-VECM Approach. *Advances in Management & Applied Economics*, 4(6), 81-108.
- Mankiw, N. G. (2021). *Principles of macroeconomics* (9th ed.). Cengage Learning.
- Medee, P. N., & Nenbee, S. G. (2012). Fiscal deficit and inflation in Nigeria: An empirical investigation. *European Journal of Business and Management*, 4(17), 105–120.
- Oladipo, S. O. & Akinbobola, T. O. (2011). Budget Deficit and Inflation in Nigeria: A Causal Relationship. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*, 2 (1), 1-8.
- Onwioduokit, E. A. (1999). Fiscal Deficits and Inflation Dynamics in Nigeria: An Empirical Investigation of Causal Relationships. *Central Bank of Nigeria Economic & Financial Review*, 37(2), 1-16.
- Oyeleke, O. J., & Ajilore, O. T. (2020). Public expenditure and inflation nexus in Nigeria. *CBN Journal of Applied Statistics*, 11(1), 89–112.
- Oyinlola, M. A., & Adedeji, A. A. (2019). Fiscal deficits and inflation dynamics in Nigeria. *Journal of Economic Policy and Research*, 14(2), 45–63.
- Oyinlola, M. A., & Akinnibosun, M. K. (2013). Public expenditure and economic growth in Nigeria: Evidence from autoregressive distributed lag bounds testing approach. *Journal of Economic and Sustainable Development*, 4(2), 64–76.
- Todaro, M. P., & Smith, S. C. (2020). *Economic development* (13th ed.). Pearson Education.
- World Bank. (2023). *Nigeria development update: Seizing the opportunity*. World Bank.