# THE EFFECT OF MACROECONOMIC STABILIZATION POLICIES ON INFLATION IN NIGERIA

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**A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF ECONOMICS, FACULTY OF SOCIAL SCIENCES, UNIVERSITY OF BENIN, BENIN CITY, IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF BACHELOR OF SCIENCE (B.Sc) DEGREE IN ECONOMICS, UNIVERSITY OF BENIN, BENIN CITY.**

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## CERTIFICATION

This is to certify that, this work titled **"Effect of Macroeconomic Stabilization Policies on Inflation in Nigeria"** was carried out by **Onwuegbuchulam Ihechiluru Victor** with matriculation number **SSC2105606** for the award of Bachelor of Science (B.Sc) Degree in the Department of Economics, Faculty of social science, University of Benin, Benin City, under the supervision of the following persons.

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## DEDICATION

This project is dedicated to God Almighty for his loving-kindness, favour, grace, mercy, knowledge, protection and guidance throughout my academic journey in the University of Benin. It is also lovingly dedicated to my dear parents, Mr. Azubuko Onwuegbuchulam and Mrs. Evelyn Onwuegbuchulam, whose unwavering support, encouragement, and prayers have sustained me throughout this programme. I deeply appreciate you both.

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**ABSTRACT**

*This study investigates the impact of macroeconomic stabilization policies on inflation in Nigeria, with particular emphasis on the combined roles of monetary and fiscal policy measures in promoting price stability. Nigeria's inflationary pressures; largely influenced by structural challenges, exchange rate fluctuations, fiscal imbalances, and rapid growth in money supply, have prompted repeated policy responses from both the government and the Central Bank of Nigeria (CBN). The study adopts a quantitative research design and utilizes annual time-series data obtained from the CBN, National Bureau of Statistics (NBS), and the World Bank. The Autoregressive Distributed Lag (ARDL) model is employed to assess the short-run and long-run effects of key stabilization policy variables, including money supply, GDP, exchange rate, government expenditure, oil price on inflation. The findings indicate that monetary policy variables, especially money supply and interest rate, exert significant long-run influence on inflation, while fiscal policy indicators show mixed but relevant effects depending on the policy environment. The study concludes that although stabilization policies have contributed to reducing inflationary pressures, their overall effectiveness is still hindered by structural weaknesses and inadequate coordination between fiscal and monetary authorities. It therefore recommends enhanced policy synergy, improved transparency in policy execution, and structural reforms aimed at strengthening the capacity of stabilization policies to achieve sustained price stability in Nigeria.*

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background to the Study

Nigeria, one of the largest economies in Africa, has faced significant economic challenges over the years, particularly with regard to inflation. Inflation is one of the major economic problems facing many countries, especially developing ones like Nigeria. It affects the cost of living, reduces the value of money, and can slow down economic growth (Mankiw, 2022).

Inflation remained relatively moderate in the 1960s but began to increase significantly during the oil boom of the 1970s, when large inflows of petroleum revenue fueled government spending, expanding the money supply and triggering demand-pull inflation (CBN, 1993). Historical evidence demonstrates a consistent pattern in which periods of oil-driven fiscal expansion and rapid money-supply growth have coincided with major inflationary surges in Nigeria's economy. Patterns from earlier oil-boom cycles show these dynamics: during the 1973–1981 oil boom, Nigeria experienced an unprecedented rise in public revenue which funded large-scale government spending on imports, wages, and public projects, resulting in sustained price increases and macroeconomic instability; the World Bank specifically attributes the inflationary pressures of this era to rapid fiscal injections financed by soaring oil receipts (World Bank, 1987 "Nigeria: Structural Adjustment Programme Review"). These episodes collectively show that whenever oil revenue spikes lead to aggressive fiscal spending often accommodated by expansive monetary policy, the result is heightened liquidity growth and corresponding

inflationary pressures, reinforcing the fiscal-monetary link in Nigeria's inflationary history (IMF Nigeria Article IV)

Also, during the 2008 oil-price boom, government revenue from crude oil exports rose sharply, enabling substantial increases in fiscal expenditure that fueled excess liquidity in the banking system. This fiscal expansion paralleled an extraordinary rise in broad money supply (M2), which increased by 37.4% in the first half of 2008 and by about 62.2% year-on-year as at March 2008 according to Central Bank of Nigeria (CBN) records (CBN, 2008 Economic Report; CBN MPC Communiqué, 2008). The liquidity surge was followed by a pronounced jump in consumer prices, as headline inflation climbed from 6.6% at end-2007 to roughly 15.1% by December 2008, illustrating a strong demand-pull inflationary effect from the expansionary fiscal-monetary environment (CBN, 2008 Statistical Bulletin).

The economic crisis of the early 1980s, marked by collapsing oil prices, rising fiscal deficits, and import shortages, further worsened inflation, leading to the adoption of the Structural Adjustment Programme (SAP) in 1986, Nigeria's first major coordinated macroeconomic stabilization effort; SAP introduced tight monetary policy, exchange-rate deregulation, and austerity measures intended to restore macroeconomic balance, but it also generated cost-push inflation as the naira depreciated sharply and subsidies were reduced (World Bank, 1994). Empirical studies published in reputable outlets such as the *CBN Journal of Applied Statistics*, the *International Journal of Economics and Finance*, and *African Development Review* show that increases in money supply, fiscal deficits, and exchange-rate depreciation exert significant long-run pressures on inflation in

Nigeria (Bassey & Akpan, 2015; Maku & Alimi, 2018). International institutions such as the IMF and World Bank have also emphasized that structural weaknesses — including heavy dependence on imports, insecurity affecting agricultural output, persistent fiscal deficits, and volatility in the oil sector, continue to undermine macroeconomic stability and heighten inflationary vulnerability (IMF, 2023; World Bank, 2024).

Although various stabilization policies have been deployed — including adjustments to the Monetary Policy Rate (MPR), Open Market Operations (OMO), Cash Reserve Ratio (CRR), and selective credit controls, inflation has consistently remained above the CBN's targeted single-digit band, indicating limited policy effectiveness (CBN, 2024). Historical records from the Central Bank of Nigeria show that by 1994, inflation soared to 57 percent as recorded by the Central Bank of Nigeria, driven by monetary expansion, fiscal indiscipline, and severe foreign-exchange bottlenecks (CBN, 1995). Price stability has proven difficult to achieve, raising concerns about the effectiveness of existing macroeconomic stabilization policies. More recently, bold reforms such as fuel subsidy removal and exchange-rate unification, though aimed at restoring long-term macroeconomic balance, have contributed to short-term inflationary spikes due to increased energy costs and heightened exchange-rate pass-through (World Bank, 2024). It has remained one of the most persistent macroeconomic challenges in Nigeria, despite several decades of policy interventions designed to maintain price stability.

Given the crucial role of stable prices in promoting economic growth, attracting investment, and improving living standards, there is an urgent need to carefully examine how the various

stabilization policies implemented over the years have influenced inflation outcomes in Nigeria, and whether they have been adequate in addressing the underlying structural and macroeconomic drivers of inflation. These developments have renewed the debate on the effectiveness of macroeconomic stabilization policies in achieving price stability in Nigeria.

Understanding the effect of macroeconomic stabilization policies on inflation rate in Nigeria is important for laying the foundation of effective and efficient macroeconomic policies that will maintain a healthy inflation rate leading further to economic growth and sustainable development.

**1.2 Statement of the Problem**

The most important macroeconomic problem facing many countries of the world is the problem of price stability. In pursuit of this goal of price stability, both the Central Bank and Federal Government of Nigeria has turned to use of a combination of fiscal and monetary policies. Despite various efforts by the Nigerian government to tackle inflation through fiscal and monetary policies, the issue remains significant.

Nigeria has had a long history of dealing with high and often unpredictable inflation, prices for essential items such as food, fuel, and transportation continue to rise, making life increasingly difficult for many Nigerians. This is evident in the inflation trend overtime, from 2000 to 2025, inflation in Nigeria has been a steady and damaging force, almost always in double digits, and it has steadily reduced what money can buy for ordinary people. It started at 6.9% in 2000, and rose to 15.7% in 2016 and 16.5% in 2017. After that, it kept rising: 18.8% in 2022, 24.7% in 2023, and a peak of 33.2% in 2024 after fuel subsidy removal and naira devaluation. Food

inflation has hit Nigerian families hardest, as more than 60% of low-income budgets go to food. From 2000 to 2015, it averaged 12.8%, and reached a high of 40.9% in June 2024. A 50 kg bag of rice cost ₦3,500 in 2000; today it costs ₦78,000, an increase of over 2,130%.

The Central Bank of Nigeria (CBN) has repeatedly adjusted the Monetary Policy Rate (MPR) in response to rising inflationary pressures, starting from 14.0% in 2000 and peaking at 27.50% by mid-2024. Despite these interventions, headline inflation remained volatile and persistently high, averaging 12.9% between 2000 and 2024. On the other hand, Nigeria's battle against persistent inflation has also been significantly complicated by the expansionary nature of government spending, which has often undermined monetary policy efforts to achieve price stability over the period 2000 to 2024. Federal government expenditure rose steadily from ₦701.1 billion in 2000 to ₦1.8 trillion in 2005, ₦5.3 trillion in 2015, ₦10.6 trillion in 2020, and further to ₦16.0 trillion by August 2024, representing an average annual growth rate of over 15%. This rapid increase was driven by recurrent expenditures (salaries, pensions, and overheads), which consistently accounted for more than 70% of total spending, alongside rising capital outlays for infrastructure, security, and social programmes. Budget deficits remained a recurring feature, averaging 3.5% of GDP annually, with peaks of 5.4% in 2016 and 4.4% in the first half of 2024, financed largely through domestic borrowing and Central Bank advances.

The sustained growth in public expenditure contributed directly to liquidity expansion, with broad money supply (M2) increasing from ₦1.2 trillion in 2000 to ₦4.9 trillion in 2010, ₦19.1 trillion in 2019, and ₦107.7 trillion by October 2024. This fuelled demand-pull inflationary

pressures, particularly when combined with supply-side constraints. This prolonged inability of monetary policy to anchor inflation expectations, despite repeated tightening cycles, reveals significant gaps in policy transmission, coordination with fiscal authorities, and structural reforms.

There is therefore a pressing need to critically examine the effectiveness of macroeconomic stabilization tools in controlling inflation in Nigeria, in order to identify limitations and propose evidence-based strategies that can enhance policy coherence and deliver lasting price stability.

### 1.3 Research Questions

1. Does government expenditure affect inflation in Nigeria?

2. Does money supply influence inflation in the country?

### 1.4 Objectives of the Study

The main objective of this study is to examine the effect of macroeconomic stabilization policies on inflation in Nigeria. Specifically, the study seeks to:

1. analyse the impact of government expenditure on inflation in Nigeria.

2. assess the role of the money supply in controlling inflation in Nigeria.

### 1.5 Research Hypotheses

H0: Government expenditure has no significant impact on inflation in Nigeria.

H1: Money supply has no significant impact on inflation in Nigeria.

## 1.6 Significance of the Study

This study is important in several ways. Firstly, because inflation affects everyone – from individuals to businesses and the government. By understanding how stabilization policies impact inflation, better decisions can be made to improve the economy.

Also, Policymakers, especially those at the Central Bank of Nigeria and the Ministry of Finance, can use the findings of this study to adjust their strategies. Also, the study will be useful to students, researchers, and the general public who want to understand how economic policies affect inflation.

Lastly, it contributes to existing works on stabilization policies and inflation in a developing like Nigeria.

## 1.7 Scope of the Study

This study focuses on the effect of macroeconomic stabilization policies on inflation in Nigeria. It covers a period spanning from 1994-2024, it will look at fiscal and monetary policies within this time frame and how they have influenced inflation rates. This timeframe is chosen because it covers significant economic events and policy changes that are relevant for understanding the dynamics of inflation and macroeconomic policies. The study will specifically examine the effect of key fiscal and monetary policy variables on the Consumer Price Index which is the most common measure of inflation.

# CHAPTER TWO:

# LITERATURE REVIEW

## 2.1 Conceptual Literature Review

### 2.1.1 Macroeconomic Stabilization Policies

Macroeconomic stabilization policies are intentional actions taken by governments or monetary authorities to manage economic fluctuations and promote stability in key indicators like inflation, unemployment, and economic growth. It encompasses fiscal policy (government spending and taxation) and monetary policy (control of money supply, interest rates, and credit). According to Keynes (1936), stabilization policies are essential to mitigate business cycle fluctuations. In the Nigerian context, the Central Bank of Nigeria (CBN) implements monetary policies through tools like the Monetary Policy Rate (MPR), Cash Reserve Ratio (CRR), and Open Market Operations (OMO), while the Federal Ministry of Finance oversees fiscal measures such as budget deficits and public expenditure.

These policies target price stability, defined by the CBN as maintaining inflation below 9% annually, as outlined in its Core Mandate (CBN, 2007). Stabilization is crucial in Nigeria due to its oil-dependent economy, which exposes it to external shocks like oil price volatility.

These policies can be broadly divided into two categories: **Monetary policy and Fiscal policy**, each using specific tools to achieve their objectives.

## Monetary Policy

Monetary policy refers to the actions taken by a country's central monetary authority to manage the money supply and interest rates. This management aims to control inflation, stabilize the currency, and promote economic growth. In Nigeria, the Central Bank of Nigeria (CBN) is responsible for implementing monetary policy through various tools, including the monetary policy rate (MPR), open market operations (OMO), reserve requirements, and exchange rate management. For instance, increasing the MPR can reduce the money supply, discourage spending, and help lower inflationary pressures. Conversely, adopting an expansionary monetary policy, such as lowering interest rates, can stimulate economic activity, although it carries the risk of higher inflation.

It refers to the actions and strategies undertaken by a central bank or the apex regulatory institution in an economy to regulate the money supply, interest rates, and credit availability in an economy to achieve macroeconomic objectives such as price stability, full employment, and sustainable growth (Mishkin, 2019). In the context of inflation control, monetary policy operates through transmission mechanisms (interest rates → investment → aggregate demand → price level) to curb inflationary pressures (Bernanke & Mishkin, 1997).

### Instruments of Monetary Policy

1. Monetary Policy Rate (MPR)

The MPR is the benchmark interest rate in Nigeria. It is the rate at which the CBN lends money to Deposit Money Banks (DMBs), often referred to as the nominal anchor for monetary policy.

How it works: By adjusting the MPR, the CBN signals its monetary policy stance.

Increasing the MPR makes borrowing more expensive for DMBs, which typically leads them to raise their own lending rates. This dampens credit expansion, reduces money supply, and is used as a contractionary measure to fight inflation.

Decreasing the MPR makes borrowing cheaper, which encourages banks to lend more, increasing the money supply and potentially stimulating economic growth (expansionary policy).

2. Cash Reserve Ratio (CRR)

The CRR is the fraction of a DMB's total deposit liabilities that it is mandated to hold as reserves with the CBN.

How it works:

Increasing the CRR reduces the amount of money banks can lend out, effectively soaking up liquidity from the banking system, which is a powerful contractionary tool.

Decreasing the CRR frees up more funds for banks to lend, thereby expanding the money supply (expansionary). The CBN often uses this instrument to directly manage banking system liquidity.

3. Open Market Operations (OMO)

OMO involves the buying and selling of government securities (like Treasury Bills and CBN Bills) in the open money market. This is considered the most flexible and frequently used instrument.

How it works:

Selling securities to banks and the non-banking public reduces the reserves (cash) held by DMBs, thereby contracting the money supply and raising short-term interest rates (contractionary).

Buying securities (or redeeming them) injects money into the banking system, increasing DMB reserves and lowering interest rates (expansionary).

Other Supporting Instruments:

A. Liquidity Ratio (LR): The statutory minimum percentage of a DMB's total deposit liabilities that must be held as liquid assets (cash, short-term securities, etc.). It ensures the solvency and liquidity of banks.
B. Selective Credit Controls/Moral Suasion: These are direct or qualitative measures.

Selective Credit Controls were used historically and involved directing credit to specific economic sectors.

Moral Suasion is an advisory tool where the CBN attempts to persuade DMBs to comply with its policy objectives through meetings, pronouncements, and guidelines.

C. Foreign Exchange Market Intervention: The CBN can buy or sell foreign currency to influence the exchange rate, which also affects domestic money supply and liquidity.

**Fiscal Policy**

Fiscal policy is the set of actions taken by the government (the Federal Ministry of Finance and other fiscal authorities) to influence the economy through the use of its revenue collection (mainly taxation) and expenditure (spending) to achieve macroeconomic goals.

In Nigeria, as in most countries, the main goals of fiscal policy include: promoting sustainable economic growth, achieving full employment, stabilising the economy by controlling inflation or preventing a recession and redistributing wealth and reducing income inequality.

**Instruments of Fiscal Policy in Nigeria**

The Nigerian government uses two primary instruments of fiscal policy to affect the overall level of aggregate demand and economic activity:

1. Government Expenditure (Public Spending)

This refers to the money spent by the government on the provision of goods and services, infrastructure, and social programs. It directly injects money into the economy and is classified into two major categories:

**Capital Expenditure:** Spending on long-term assets and projects that are expected to yield benefits over many years e.g construction of roads, bridges, railways, power plants, hospitals, and schools. **Impact:** This is a major tool for stimulating economic growth, creating jobs, and enhancing the nation's productive capacity.

**Recurrent Expenditure:** Spending on day-to-day operations and maintenance. Examples include Payment of salaries and wages to civil servants, running costs of government ministries, and debt service payments (interest and principal repayment).

Impact: While necessary for government function, excessive recurrent spending that doesn't boost productivity can be inflationary and strain public finances.

Policy Action:

**Expansionary Policy:** Increasing government spending (e.g., on infrastructure) directly increases aggregate demand, stimulating the economy during a recession.

**Contractionary Policy:** Decreasing government spending reduces aggregate demand and is used to curb high inflation.

2. Taxation (Government Revenue Collection)

Taxation is the compulsory transfer of money from individuals and businesses to the government. By adjusting tax rates and introducing tax laws, the government can influence disposable income, consumption, savings, and investment.

**Direct Taxes:** Taxes levied on the income, profits, or wealth of individuals and corporations, examples: Personal Income Tax (PIT), Company Income Tax (CIT), and Capital Gains Tax.

Impact: Changes to these taxes directly affect the disposable income of households and the retained earnings of companies, influencing consumption and investment decisions.

**Indirect Taxes:** Taxes levied on goods and services, which are ultimately borne by the consumer, examples: Value Added Tax (VAT), Customs and Excise Duties, and Stamp Duties

**Impact:** Changes to these affect the price of goods and services. For example, increasing VAT can dampen consumption and raise prices (contributing to inflation).

Policy Action:

E**xpansionary Policy:** Reducing tax rates (e.g., a tax cut) increases disposable income for consumers and profits for businesses, leading to increased spending and investment to stimulate the economy.

**Contractionary Policy:** Increasing tax rates reduces disposable income and investment, which lowers aggregate demand and is used to combat inflation.

### 2.1.2 Inflation

Inflation is a sustained increase in the general price level of goods and services over time, eroding purchasing power (Fisher, 1935). In Nigeria, inflation is measured by the Consumer Price Index (CPI), with headline inflation capturing overall price changes and core inflation excluding volatile food and energy components (NBS, 2023).

Inflation is a pervasive increase in the general price level of goods and services in an economy over a period of time, which results in a corresponding decline in the purchasing power of money (Mankiw, 2021).

Inflation can be categorized into several types:

a. Demand-Pull Inflation: This type of inflation occurs when aggregate demand exceeds aggregate supply, often driven by an excessive money supply or increased government spending. It typically happens in a growing economy where consumer spending, business investment, or government expenditures rise rapidly, outpacing production capacity. The excess demand pushes prices upward as businesses struggle to keep up, which is commonly observed during economic booms or when policies like low interest rates stimulate spending.

b. Cost-Push Inflation: This inflation arises from increasing production costs, such as higher wages or rising costs of imported raw materials. In Nigeria, exchange rate volatility often worsens this situation. Cost-push inflation occurs when production costs — including wages, raw materials, or energy — increase, prompting businesses to raise prices in order to maintain profit margins. This supply-side pressure results in higher prices, even if demand remains stable.

c. Structural Inflation: This type of inflation is associated with structural rigidities in the economy, such as inefficiencies in supply chains or a heavy reliance on imports, which are common in Nigeria. Structural inflation stems from persistent, systemic factors within an economy's structure, such as rigid labour markets, inefficient production processes, or chronic supply constraints. Unlike demand-pull or cost-push inflation, structural inflation is embedded in long-term economic characteristics, including government policies, monopolies, or institutional barriers that limit supply or increase costs over time. For example, excessive regulation or

outdated infrastructure can sustain higher prices, regardless of short-term fluctuations in demand or costs.

Types of inflation can be classified based on the speed or rate of price increases. The main categories are:

a. Creeping Inflation: Prices rise slowly, usually at an annual rate of 1-3%. This mild form of inflation is often considered manageable and can even be beneficial for economic growth.

b. Walking (or Moderate) Inflation: Prices increase at a moderate pace, typically between 3-10% per year. While this can indicate a healthy economy, it may begin to affect purchasing power if left unchecked.

c. Galloping Inflation: Prices rise rapidly, often at double-digit rates of 10-20% or higher annually. This level of inflation erodes savings and wages quickly, necessitating prompt policy responses.

d. Hyperinflation: Characterized by extremely rapid price increases, often exceeding 50% per month. Hyperinflation destabilizes economies, diminishes currency value, and can lead to social and economic collapse, as seen in historical cases like Weimar Germany and Zimbabwe.

These categories illustrate the intensity and economic impact of inflation over time.

High inflation diminishes purchasing power, discourages savings, and erodes investor confidence, making it a crucial target for stabilization policies. Historically, inflation in Nigeria has been

volatile, with significant peaks occurring in the 1980s and 1990s due to economic mismanagement and external shocks.

## 2.2 Theoretical Literature Review

### 2.2.1. Quantity Theory of Money (OTM)

The Monetarist school, strongly advocated by Milton Friedman (1963), asserts that inflation is primarily a monetary phenomenon. It relies fundamentally on the Quantity Theory of Money (QTM).

The Quantity Theory of Money (QTM)

The QTM is expressed by the Equation of Exchange:

……MV=PY

Where:

M = Money Supply (controlled by the Central Bank)

V = Velocity of Money (assumed relatively constant or predictable)

P = General Price Level (Inflation)

Y = Real Output (assumed fixed at potential output in the long run)

The theory posits that if real output (Y) and the velocity of money (V) are stable, then changes in the money supply (M) directly and proportionally determine the price level (P).

In Nigeria, while a long-run relationship between money supply and prices has been established in various Nigerian studies (e.g., Omanukwue, 2010), the strength of this relationship is often

found to be weakening or limited to the short run (Danlami, Hidthiir, & Hassan, 2020). This suggests that factors other than money supply are increasingly influencing long-run inflation dynamics.

### 2.2.2. Keynesian Theories of Inflation and Demand Management

The Keynesian view, derived from the works of John Maynard Keynes (1936), attributes inflation primarily to imbalances in aggregate demand and supply, rather than solely the money supply.

Demand-Pull Inflation

This occurs when an increase in Aggregate Demand (AD), often caused by expansionary monetary or fiscal policies, outstrips the economy's capacity to produce goods and services at full employment.

Cost-Push Inflation

Keynesians and Post-Keynesians also emphasize Cost-Push Inflation, where rising production costs, independent of aggregate demand, force firms to raise prices.

Given Nigeria's high dependence on imported inputs, a depreciation of the naira significantly increases the Naira cost of imported raw materials, fuels, and machinery, leading to higher final goods prices (Imimole & Enoma, 2011; Egwakhide, 1994).

### 2.2.3. Structuralist Theory of Inflation

The Structuralist theory is highly relevant for analyzing inflation in developing economies like Nigeria, which face inherent supply rigidities and institutional bottlenecks.

Structuralists argue that inflation is caused by non-monetary, supply-side factors that make the economy inflexible and unable to adjust quickly to shocks.

Agricultural Bottleneck (Food Inflation): Low productivity in the agriculture sector (due to climate, insecurity, or poor infrastructure) leads to persistent food shortages. Since food accounts for a large share of the consumer price index (CPI) in Nigeria, this structural factor is a major driver of overall inflation (Masha, 1996).

External Sector Vulnerability: Heavy reliance on crude oil exports exposes the economy to volatile commodity price swings and foreign exchange scarcity. Scarcity of foreign exchange (a structural issue) directly fuels imported inflation (Ajayi, 1988).

Infrastructural Deficits: Poor power supply, transport networks, and storage facilities increase the cost of doing business, which businesses pass on to consumers as higher prices (cost-push inflation).

Structural inflation cannot be effectively cured by demand management policies (monetary or fiscal contraction) alone. Such policies may suppress demand and induce recession (stagflation) without resolving the underlying supply-side issues. Effective stabilization requires structural reforms and investment to boost productivity.

## 2.3 Empirical Literature Review

### 2.3.1 Studies on Monetary Policy and Inflation

Bawa and Ibrahim (2016) conducted one of the most influential studies on the determinants of inflation in Nigeria using the Autoregressive Distributed Lag (ARDL) approach and annual data spanning 1981–2015. Their model included key monetary policy variables such as broad money supply (M2), exchange rate, and interest rate. The results showed that money supply growth and exchange rate movements had a statistically significant long-run relationship with inflation, while interest rate changes did not significantly affect price levels. They concluded that inflation in Nigeria is largely a monetary phenomenon but also influenced by exchange rate pass-through and cost-push factors. This finding supports the Quantity Theory of Money, highlighting the need for consistent monetary tightening and foreign exchange stability to manage inflation effectively.

Adebiyi, Adamgbe, and Odu (2023) employed a sophisticated Bayesian Dynamic Stochastic General Equilibrium (DSGE) model to investigate how monetary policy shocks affect inflation dynamics in Nigeria from 2000Q1 to 2023Q1. Their study integrated domestic and external shocks such as exchange rate volatility, global energy prices, and interest rate movements. Findings revealed that monetary policy tightening through higher policy rates effectively reduced inflation in the medium term, but external shocks, especially from oil prices and exchange rate depreciation, significantly weakened the transmission mechanism. The authors concluded that for Nigeria to achieve price stability, monetary policy must be complemented by structural

reforms aimed at improving domestic production, reducing import dependence, and strengthening exchange rate management.

Olomola and Adejumo (2006) analyzed the macroeconomic effects of oil price shocks on Nigeria's economy, with a focus on how such shocks transmit through monetary policy to inflation. Using a Vector Autoregressive (VAR) framework and annual data from 1970–2003, they discovered that positive oil price shocks led to increased government spending and monetary expansion, which consequently spurred inflationary pressures. Their findings revealed that Nigeria's inflationary episodes are not purely monetary but also structurally induced by oil revenue cycles and weak fiscal coordination. They recommended that the Central Bank maintain a countercyclical policy stance during oil booms to prevent excess liquidity from translating into higher inflation.

Ezeanyeji (2021) applied the ARDL bounds testing approach to examine the impact of monetary policy on inflation using annual data from 1981–2019. The variables included monetary policy rate, money supply, exchange rate, and inflation rate. The study found that neither the monetary policy rate nor money supply had a statistically significant effect on inflation in both the short and long run. The author interpreted this as evidence of weak monetary policy transmission mechanisms in Nigeria, largely due to structural bottlenecks, poor financial inclusion, and fiscal dominance. The conclusion drawn was that inflation control in Nigeria requires not just monetary tightening but also improved coordination between the monetary and fiscal authorities.

Henry and Sabo (2020) analysed the impact of monetary policy on inflation in Nigeria using a Vector Autoregressive (VAR) model with annual data covering 1985–2019. Their findings indicate that the monetary policy rate (MPR) and exchange rate have a negative and statistically significant effect on inflation, implying that tighter monetary conditions and a stable exchange rate contribute to lower inflation. Conversely, the study found that broad money supply (M2) exerts a positive influence on inflation, underscoring the classical view that excessive money growth fuels price instability. The authors concluded that although monetary tightening curbs inflation, institutional inefficiencies and policy transmission lags undermine its effectiveness (Henry & Sabo, 2020).

Similarly, Ogunmuyiwa and Ekone (2010) examined the effectiveness of monetary policy instruments on inflation using a co-integration and error-correction model for the period 1980–2009. Their results showed a long-run relationship between inflation and key monetary variables; interest rate, exchange rate, and money supply. They found that monetary policy significantly influences inflation but requires strong coordination with fiscal measures to achieve lasting stability.

These findings reinforce the monetarist argument advanced by Friedman (1968), who asserted that “inflation is always and everywhere a monetary phenomenon.”

Recent applied work (multiple 2018–2024 articles and CBN notes) revisits monetary transmission using VAR/FAVAR and threshold models and generally reports that while the policy rate still has power to influence inflation, its effectiveness is conditional on (a) fiscal discipline

(to avoid monetization), (b) FX-market stability (to limit pass-through), and (c) supply-side shocks being mitigated, leading authors to recommend coordinated monetary-fiscal policy and structural measures to sustain lower inflation. Representative policy-oriented pieces and empirical re-estimates supporting this conclusion are found in CBN Bullion, EFR and JAS publications

Eze and Agu (2022) in Effect of Monetary Policy on Price Stabilization in Nigeria (1981–2021) found that money supply growth, interest rate changes, and credit to the private sector matter for price stability.

### 2.3.2 Studies on Fiscal Policy and Inflation

Ezeabasili, Mojekwu, and Herbert (2012) carried out an empirical analysis of fiscal deficits and inflation in Nigeria, using annual data from 1970 to 2006 and the Error Correction Model (ECM) framework. Their findings established a strong positive long-run relationship between fiscal deficits and inflation. Specifically, a one percent increase in the fiscal deficit led to a proportional increase in inflation, indicating that deficit-financed government spending fuels demand-pull inflation. The authors concluded that Nigeria's persistent inflationary pressure is largely a fiscal issue, aggravated by recurrent deficits financed through borrowing and money creation. They recommended the adoption of fiscal discipline, reduction in recurrent spending, and a shift toward productive capital expenditure.

Sanusi (2020) analyzed the phenomenon of fiscal dominance and its implications for inflation in Nigeria, covering the period 1981–2018. Employing cointegration and Granger causality tests, Sanusi found that expansionary fiscal operations, particularly large budget deficits, constrained the Central Bank's independence and effectiveness in controlling inflation. The results showed that fiscal deficits lead to money supply growth and exchange rate instability, both of which contribute to inflationary pressures. The study emphasized that without credible fiscal consolidation, monetary policy tightening will have limited impact on inflation.

Ayinde (2021) examined the interactions among fiscal dominance, exchange rate, and inflation in Nigeria using a Structural Vector Autoregressive (SVAR) model and quarterly data spanning 1981Q1–2018Q4. The study revealed that fiscal imbalance, captured by government debt and budget deficits, significantly influenced exchange rate depreciation, which in turn raised inflation through imported price effects. The study concluded that fiscal dominance weakens the Central Bank's capacity to stabilize prices, suggesting that greater fiscal-monetary policy coordination is needed for sustainable inflation control.

Guobadia (2023) investigated the relationship between fiscal policy, inflation, and economic growth in Nigeria using an ARDL bounds testing approach with data from 1980–2021. The results showed that recurrent expenditure and public debt had positive and significant effects on inflation, while capital expenditure exerted a negative effect. The findings imply that Nigeria's inflation is largely driven by unproductive recurrent spending and deficit financing. The author

recommended fiscal reforms that reallocate spending toward capital projects and reduce domestic borrowing to achieve macroeconomic stability.

Adeleke and Eze (2018) analyzed the government expenditure–inflation relationship in Nigeria using the ARDL model over 1980–2016. The study discovered that total government expenditure positively influenced inflation in the short run, while capital expenditure had no significant long-run effect. This suggests that recurrent expenditure fuels demand-pull inflation, while capital spending contributes less to inflation but more to long-term growth. They advised that Nigeria's fiscal policy should focus on reducing consumption-driven expenditure and increasing investments in infrastructure to ensure non-inflationary growth.

Agu and Okoli (2015) investigated the dynamic relationship between budget deficits and inflation using quarterly data (1990–2014) and a Granger causality framework. Their findings showed that persistent fiscal deficits financed through domestic borrowing or central bank credit tend to heighten inflation in the long run. The study recommended improved fiscal discipline and transparent public expenditure management as essential tools for achieving macroeconomic stability.

Empirical evidence thus suggests that fiscal expansion without corresponding growth in real output fuels inflation, validating the Keynesian notion that excessive demand can outstrip supply in developing economies like Nigeria.

Fasanya (2021) applies linear ARDL bounds testing along with Bai-Perron structural-break methods to data for 1980–2016 to test whether fiscal deficits are inflationary in Nigeria. The

study's outcome is that fiscal deficits are a robust determinant of inflation even after accounting for multiple structural breaks; in particular, deficit financing (monetization) and deficit episodes during oil revenue shortfalls are linked to higher inflation both in the short and long run.

# CHAPTER THREE

# THEORETICAL FRAMEWORK AND METHODOLOGY

## 3.1 Theoretical Framework

This study adopts the Quantity Theory of Money (QTM) as the theoretical foundation for analyzing the effect of macroeconomic stabilization policies on inflation in Nigeria. The Quantity Theory of Money is one of the oldest and most influential theories in monetary economics. It asserts that the general price level in an economy is directly proportional to the quantity of money in circulation, assuming the velocity of money and the volume of transactions remain constant. According to Fisher (1911), any change in the money supply (M) leads to a proportional change in the price level (P), provided that velocity (V) and real output(Y) are constant. In other words, inflation is essentially a monetary phenomenon, arising when the growth of money supply exceeds the growth of real output.

This theory is expressed through the Fisher Equation of Exchange,

…….MV= PY

Where:

M is the money supply,

V is the velocity of money

P is the general price level, and

Y is real output, the theory posits that in the long run, changes in the money supply are the primary determinant of changes in the price level when velocity and real output are stable or exogenously determined. Milton Friedman's monetarist assertion that "inflation is always and everywhere a monetary phenomenon" reinforces this view, emphasizing that sustained inflation requires continuous excessive monetary expansion.

The Central Bank of Nigeria (CBN) implements monetary stabilization policies by managing the money supply and interest rates. According to the quantity theory of money, when the CBN expands the money supply excessively to stimulate economic growth or finance budget deficits, the result is usually an increase in the price level (inflation), especially when the growth in real output is not commensurate. Conversely, a contractionary monetary policy, such as increasing interest rates or reducing liquidity helps to reduce inflationary pressure by limiting money circulation.

Government fiscal activities, such as budget deficits financed by borrowing from the central bank or through money creation, can also expand the money supply. From the quantity theory of money perspective, such expansion raises aggregate demand and may translate into higher prices when the productive capacity of the economy is not sufficiently responsive. Therefore, fiscal prudence and coordination with monetary authorities are crucial for maintaining price stability.

The relevance of the quantity theory of money to this study lies in its ability to explain the underlying mechanism through which macroeconomic stabilization policies influence inflation in Nigeria. The theory posits that inflation results primarily from an excessive increase in money

supply relative to output growth. This notion aligns with Nigeria's experience, where expansionary fiscal and monetary policies, often pursued to achieve growth or offset external shocks, have frequently triggered inflationary pressures. Therefore, this framework provides a sound theoretical basis for examining how Nigeria's stabilization policies.

## 3.2 Methodology

### 3.2.1 Model Specification

To empirically examine the relationship between public debt and economic growth, the study adopts a multiple linear regression model. The model is specified as:

$$CPI= \beta_0+\beta_1 GEXP+\beta_2 MS+\beta_3 EXR+\beta_4\ GDP+\beta_5 OILP+ \varepsilon t$$

Where:

Dependent Variable:

CPI = Consumer Price Index (proxy for inflation).

Independent Variables:

GEXP= Government expenditure to GDP ratio, this captures fiscal policy.

MS= Money supply

EXR= Exchange rate

GDP= Gross domestic product, capturing output growth.

OILP= Oil price

$\beta_0$ =Constant term

$\varepsilon$ = Error term

t = shows that the data is a time series data at time t

This model assumes that CPI (inflation) is a function of stabilization policies in Nigeria.

**APRIORI EXPECTATIONS**

GEXP>0

Government expenditure to GDP ratio has a positive impact on inflation

MS>0

Money supply has a positive impact on inflation

EXR>0

Exchange rate has a positive impact on inflation.

GDP>0

Gross domestic product has a positive impact on inflation.

OILP>0

Oil price has a positive impact on inflation

### 3.2.2 Method of Data Analysis

This investigation employed the econometric method of Ordinary Least Square (OLS) to analyze the data. OLS is regarded as the most effective linear regression estimator due to its adherence to the BLUE (best linear unbiased estimate) characteristics.

The objective of this study is to ascertain the impact of stabilization policies on inflation through the use of ordinary least squares regression. The explanatory factors include monetary policy rate, cash reserve ratio, government expenditure. OLS regression is an optimal option for linear regression analysis due to its simplicity, efficacy and resilience.

Given the nature of time series data, this study estimates the Autoregressive Distributed Lag (ARDL) model. This technique is ideal when variables are integrated at different levels ( I(0) and I(1) but not I(2). It is particularly suited for small samples and captures both short-run dynamics and long-run relationships in one model.

Unit Root Test Using Augmented Dickey-Fuller (ADF) or Phillips-Perron (PP) prior to the estimation of the ARDL model to check for stationarity. Stationarity is essential because non-stationary variables may produce spurious regression results. The Augmented Dickey-Fuller (ADF) Test developed by Dickey and Fuller (1981) is employed to examine the presence of unit roots in each variable. The ADF test helps establish the order of integration—whether the variables are stationary at level \[I (0)] or become stationary after first differencing [I (1)].

The ADF test is based on the following hypotheses:

Null Hypothesis ($H_0$): The series has a unit root (i.e., it is non-stationary).

Alternative Hypothesis ($H_1$): The series is stationary (i.e., no unit root).

Each variable will be tested with and without a deterministic trend to assess its behavior over time. The decision rule involves rejecting the null hypothesis if the test statistic is greater (in absolute value) than the critical value, implying stationarity.

ARDL Bounds Testing To determine the existence of long-run co-integration between GDP and debt variables.

Estimation of ARDL Model If co-integration is established, long-run coefficients and error correction terms will be estimated.

Diagnostic Tests: To check for serial correlation, heteroskedasticity, model stability and normality of residuals.

Heteroskedasticity Test: This assesses whether the error terms have constant variance. The presence of heteroskedasticity can lead to inefficient estimators and unreliable inference. Tests such as the Breusch-Pagan-Godfrey test or White's test may be applied. The presence of heteroskedasticity indicates that the variance of the residuals is not constant across observations, which may lead to inefficient estimates and invalid inference.

The test follows the hypotheses:

$H_0$: Homoskedasticity (error terms have constant variance)

H1: Heteroskedasticity (error terms have non-constant variance).

A p-value greater than 0.05 suggests acceptance of the null hypothesis, implying that the model does not suffer from heteroskedasticity.

Multicollinearity Test: This test examines the presence of linear correlation among independent variables. High multicollinearity can distort coefficient estimates. The Variance Inflation Factor (VIF) will be used to detect multicollinearity, with VIF values above 10 indicating a problem. A simple correlation matrix will also support this analysis.

This method ensures the robustness of the results and provides a more reliable interpretation of the relationship between public debt and economic growth.

**3.3 Data Sources**

The data for this study are secondary in nature and cover the period from 1994 to 2024. Data on inflation and GDP was gotten from the National Bureau of Statistics (NBS), data for MS was obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin and data for oil price was gotten from Central Bank of Nigeria, exchange rate and government expenditure was gotten from Central Bank bulletin and the National Bureau of Statistics (NBS) respectively.

# CHAPTER FOUR

# PRESENTATION AND INTERPRETATION OF RESULTS

## 4.1 Descriptive Analysis

Before proceeding to the econometric analysis, this section examines the descriptive statistics of the variables used in the study to provide a foundational understanding of their behavior. Descriptive statistics offer insights into the central tendency, variability, and distributional properties of the data. Specifically, the mean indicates the average value of each variable, while the standard deviation measures the degree of dispersion around the mean. The minimum and maximum values delineate the range of the data, and skewness and kurtosis are used to evaluate the normality of the distributions.

**Table 4.1: Descriptive Statistics**

| | CPI | EXR | GDP Growth | GEXP | MS | OILP |
|---|---|---|---|---|---|---|
| **Mean** | 14579.4 | 175.8 | 4.0 | 10.1 | 20538.3 | 56.2 |
| **Median** | 8615.3 | 140.9 | 3.9 | 10.1 | 11000.0 | 54.3 |
| **Maximum** | 59190.0 | 461.0 | 10.0 | 12.1 | 80000.0 | 111.6 |
| **Minimum** | 1049.6 | 21.9 | -1.8 | 8.4 | 150.0 | 12.7 |
| **Std. Dev.** | 14993.9 | 124.8 | 2.6 | 1.1 | 23660.9 | 32.3 |
| **Skewness** | 1.4 | 0.8 | -0.1 | 0.3 | 1.0 | 0.3 |
| **Kurtosis** | 4.3 | 2.8 | 3.4 | 2.0 | 2.9 | 1.8 |
| **Jarque-Bera** | 11.9 | 3.6 | 0.3 | 1.7 | 5.2 | 2.1 |
| **Probability** | 0.0 | 0.2 | 0.9 | 0.4 | 0.1 | 0.4 |
| **Sum** | 437380.4 | 5272.7 | 120.3 | 303.2 | 616150.0 | 1686.9 |
| **Sum Sq. Dev.** | 6520000000.0 | 451464.9 | 191.9 | 32.3 | 16200000000.0 | 30203.0 |
| **Observations** | 30 | 30 | 30 | 30 | 30 | 30 |

**Source: Author's computation using Eviews 12**

Table 4.1 presents the descriptive statistics of the variables employed in the study over the period 1994–2024, comprising 30 annual observations. The variables are Consumer Price Index (CPI) as the dependent variable and proxy for the general price level, government expenditure-to-GDP ratio (GEXP), broad money supply (MS), official exchange rate (EXR), real GDP growth rate (GDP GRO), and Brent crude oil price (OILP).

The mean CPI over the period is 14,579.4 (2009=100), with a median of 8,615.3, reflecting the rapid upward trend in price levels, especially after 2015. The index ranges from a minimum of 1,049.6 in 1994 to a maximum of 59,190.0 in 2023, giving a very high standard deviation of 14,993.9. The distribution is positively skewed (1.4) with leptokurtic characteristics (kurtosis 4.3), and the Jarque-Bera probability of 0.003 indicates a significant departure from normality, which is typical for price indices experiencing prolonged inflationary episodes and structural shocks in Nigeria.

Broad money supply (MS) in billions of naira records a mean of 20,538.3 and a median of 11,000.0, rising from ₦150 billion in 1994 to ₦80,000 billion in 2023. The standard deviation of 23,660.9 and positive skewness of 1.0 underscore the explosive growth in liquidity, largely driven by fiscal dominance and CBN financing of deficits. The Jarque-Bera probability of 0.073 suggests the series is close to normal but still reflects occasional sharp monetary expansions.

The exchange rate (EXR) averages 175.8 naira per US dollar, with a median of 140.9, but exhibits considerable volatility, moving from ₦21.9 in the mid-1990s to ₦461 by 2023. The standard deviation of 124.8 and positive skewness of 0.8 highlight the long-term depreciation

trend and periodic sharp devaluations. The Jarque-Bera statistic accepts normality at conventional levels (p=0.166).

Government expenditure as a percentage of GDP (GEXP) has a mean of 10.1% and remains relatively stable, ranging between 8.4% and 12.1%, with a low standard deviation of 1.1. The near-zero skewness (0.3) and kurtosis close to 2 confirm a distribution that is approximately normal (Jarque-Bera p=0.438), indicating that fiscal size has not fluctuated dramatically relative to output over the three decades.

Real GDP growth (GDP GRO) averages 4.0% per annum, with a median of 3.9%. Growth rates range from –1.8% in 2016 to a peak of 10.0% in 2004. The standard deviation is 2.6%, skewness is slightly negative (–0.1), and the Jarque-Bera probability of 0.880 confirms normality, reflecting typical business-cycle fluctuations in an oil-dependent economy.

Finally, the average Brent crude oil price (OILP) is US$56.2 per barrel, with values ranging from US$12.7 in 1998 to US$111.6 in 2012. The standard deviation of 32.3 and near-symmetric skewness (0.3) together with a Jarque-Bera probability of 0.355 indicate a normally distributed series, consistent with global commodity price behaviour.

Overall, the descriptive statistics reveal substantial variation and non-normality in the price level (CPI) and money supply (MS), moderate volatility in exchange rates and oil prices, and relative stability in the fiscal size and output growth. These patterns are consistent with Nigeria's experience of persistent inflation, liquidity overhang, currency depreciation, and oil-price

dependence over the sample period, thereby justifying the subsequent econometric investigation using the ARDL framework.

### 4.2 Correlation Analysis

Correlation analysis examines the strength and direction of linear relationships between the dependent variable (CPI) and the explanatory variables before proceeding to the regression analysis. The pairwise correlation coefficients reveal preliminary associations among the variables.

**Table 4.2 Correlation Estimate Table**

| | CPI | EXR | GDP GRO | GEXP | MS | OILP |
|---|---|---|---|---|---|---|
| CPI | 1.00 | | | | | |
| EXR | 0.96 | 1.00 | | | | |
| GDP GRO | -0.38 | -0.37 | 1.00 | | | |
| GEXP | 0.70 | 0.74 | -0.54 | 1.00 | | |
| MS | 0.99 | 0.96 | -0.43 | 0.70 | 1.00 | |
| OILP | 0.48 | 0.47 | 0.25 | -0.05 | 0.50 | 1.00 |

Source: Author's computation using Eviews 12

The correlation matrix in Table 4.2 provides preliminary insights into the linear relationships among the variables over the 1994–2024 period. The Consumer Price Index (CPI), which serves as the measure of the general price level and proxy for inflation, exhibits very strong positive

associations with both broad money supply (MS) and the official exchange rate (EXR), recording correlation coefficients of 0.990 and 0.961, respectively. These exceptionally high values strongly support the Quantity Theory of Money framework adopted in this study, indicating that monetary expansion and persistent naira depreciation have been the dominant drivers of inflationary pressures in Nigeria over the past three decades.

A moderately strong positive correlation of 0.702 is observed between CPI and government expenditure-to-GDP ratio (GEXP), suggesting that fiscal expansion has also contributed significantly to demand-pull inflation, although its influence appears secondary to monetary factors. The correlation between CPI and crude oil price (OILP) is positive but weaker at 0.485, reflecting the indirect transmission of global oil price shocks to domestic inflation through exchange-rate pass-through and fiscal spending financed by oil revenue.

Real GDP growth (GDP GRO) is the only variable that displays a negative relationship with CPI (-0.378), implying that periods of stronger economic growth have generally been associated with lower inflationary pressure, possibly through enhanced supply capacity and productivity. This inverse relationship aligns with theoretical expectations and underscores the importance of output growth in absorbing excess liquidity without generating price increases.

Among the explanatory variables, the strongest interrelationship exists between broad money supply (MS) and exchange rate (EXR) at 0.960, highlighting the close linkage between currency depreciation and monetary expansion, often through CBN interventions and ways-and-means financing. GEXP also shows notable positive correlations with both EXR (0.743) and MS

(0.698), illustrating the fiscal–monetary nexus in Nigeria's oil-dependent economy. Oil price (OILP) exhibits moderate positive correlations with MS (0.500) and EXR (0.467), consistent with the boom–bust cycles of oil revenue that fuel liquidity and pressure the exchange rate.

Although some pairwise correlations are relatively high, particularly between MS, EXR, and CPI, the values remain below the conventional threshold of 0.95–0.98 that typically signals severe multicollinearity in time-series analysis of this length. Variance Inflation Factor (VIF) tests conducted subsequently confirm that multicollinearity does not pose a serious threat to the reliability of the regression estimates.

**4.3 Unit Root Test Result**

The stationarity test is a prerequisite in time-series econometrics to avoid spurious regression results and to satisfy the conditions of the ARDL bounds testing approach. The ARDL framework requires that none of the variables be integrated of order two [I(2)] or higher, while allowing a mixture of I(0) and I(1) series. To determine the order of integration of the variables employed in this study—Consumer Price Index as the dependent variable and proxy for the general price level, government expenditure-to-GDP ratio , broad money supply, official exchange rate, real GDP growth rate (GDP_GRO), and Brent crude oil price —(the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests were conducted both at level and at first difference.

The tests are based on the null hypothesis of the presence of a unit root (non-stationarity) against the alternative hypothesis of stationarity. Rejection of the null occurs when the absolute value of

the test statistic is greater than the critical values at 1%, 5%, or 10% significance levels. The inclusion of both intercept and trend in the test equations was guided by the visual inspection of the series and Schwarz Information Criterion (SIC) for optimal lag length in the ADF test, while the PP test employs Newey-West bandwidth for robustness against serial correlation and heteroskedasticity.

The results of the ADF and PP unit root tests are presented in Tables 4.3 and 4.4, respectively. As shown, all variables are either stationary at level I(0) or become stationary after first differencing I(1), with no evidence of I(2) integration. This mixture of I(0) and I(1) variables confirms the appropriateness of the ARDL bounds testing methodology for examining both the long-run relationship and short-run dynamics among macroeconomic stabilization policies and inflation in Nigeria over the 1994–2024 period. The stationarity properties established here provide a solid foundation for proceeding to the cointegration analysis in the next section.

**Table 4.3: Augmented Dickey Fuller Test for Unit Root at Level and first difference.**

| **Series** | **LEVEL** | | **FIRST DIFFERENCE** | | **Order of Integration** |
|---|---|---|---|---|---|
| | t-Statistic | 5% Critical | t-Statistic | 5% Critical | |
| Ln_CPI | -2.187 | -3.562 | -6.824 | -3.568 | I(1) |
| Ln_GEXP | -2.913 | -3.562 | -5.991 | -3.568 | I(1) |
| Ln_MS | -1.804 | -3.562 | -7.312 | -3.568 | I(1) |
| Ln_EXR | -2.456 | -3.562 | -6.589 | -3.568 | I(1) |
| GDP_GRO | -2.778* | -2.962 | -6.125 | -2.970 | I(0) |

| | | | | | |
|---|---|---|---|---|---|
| Ln_OILP | -3.589* | -3.562 | -7.901 | -3.568 | I(0) |

Source: Author's computation using Eviews 12

The results of the Augmented Dickey-Fuller (ADF) unit root test, conducted at the 5% significance level with intercept and trend and optimal lag length selected by the Schwarz Information Criterion (maximum lag = 4), clearly establish the order of integration of all the variables under consideration.

At level, the test reveals that the real GDP growth rate (GDP_GRO) and the logarithm of Brent crude oil price (Ln_OILP) are stationary, as their ADF t-statistics exceed the 5% critical value in absolute terms, leading to the rejection of the null hypothesis of a unit root. These two variables are therefore integrated of order zero, I(0).

In contrast, the logarithm of the Consumer Price Index (Ln_CPI), logarithm of government expenditure-to-GDP ratio (Ln_GEXP), logarithm of broad money supply (Ln_MS), and logarithm of the official exchange rate (Ln_EXR) all fail to reject the null hypothesis of a unit root at level, indicating non-stationarity in their level forms. However, when these variables are first-differenced, the resulting ADF t-statistics become highly significant (well below the 5% critical values), confirming that they achieve stationarity after first differencing. Accordingly, Ln_CPI, Ln_GEXP, Ln_MS, and Ln_EXR are all integrated of order one, I(1).

Importantly, none of the series required second differencing to achieve stationarity, meaning that no variable is integrated of order two I(2) or higher. This finding is critical because the presence

of I(2) variables would violate the fundamental assumptions of the ARDL bounds testing framework.

The observed combination of I(0) and I(1) variables — with GDP_GRO and Ln_OILP being I(0), and Ln_CPI, Ln_GEXP, Ln_MS, and Ln_EXR being I(1) — perfectly satisfies the preconditions for applying the Pesaran, Shin, and Smith (2001) ARDL bounds testing approach to cointegration. This methodology is specifically designed for cases where the regressors are a mixture of stationary and non-stationary series at order one, allowing robust estimation of both long-run equilibrium relationships and short-run dynamics within a single equation framework.

Having confirmed the appropriate integration properties of the variables, the study now proceeds to the ARDL bounds test to investigate the existence of a stable long-run relationship between macroeconomic stabilization policies and inflation in Nigeria over the period 1994–2024.

**4.4 Test for Cointegration**

Having established that the variables are a mixture of I(0) and I(1) with no series integrated of order two, the study proceeds to test for the existence of a stable long-run relationship among the variables. The Pesaran, Shin and Smith (2001) ARDL bounds testing approach is employed because it is the most appropriate methodology when the regressors exhibit mixed orders of integration, as is the case here. The ARDL bounds test is also robust in small samples and allows simultaneous estimation of long-run coefficients and short-run dynamics within a single equation framework. The bounds test is conducted by estimating an unrestricted error correction model and computing the F-statistic for the joint significance of the lagged level variables. The null

hypothesis of no long-run relationship (no cointegration) is rejected if the computed F-statistic exceeds the upper-bound critical value I(1) at the chosen significance level. If the F-statistic falls below the lower-bound critical value I(0), the null cannot be rejected. A value between the bounds renders the test inconclusive.

**Table 4.4: ARDL Bounds Test for Cointegration**

**(Dependent variable: Ln_CPI; Case III: Unrestricted intercept and no trend; k = 5)**

| Test Statistic | Value | Lower bound I(0) 5% | Upper bound I(1) 5% | Decision |
|---|---|---|---|---|
| F-statistic | 8.941 | 2.79 | 4.1 | Cointegration |
| t-statistic on lagged dependent variable | -6.318 | -3.53 | -4.92 | Cointegration |

Critical values are taken from Pesaran et al. (2001), Table CI(iii) Case III

Source: Author's computation using EViews 12

The results presented in Table 4.5 strongly reject the null hypothesis of no cointegration. The computed F-statistic of 8.941 far exceeds the upper-bound critical value of 4.10 at the 5% significance level, providing clear evidence of a stable long-run equilibrium relationship among Ln_CPI, Ln_GEXP, Ln_MS, Ln_EXR, GDP_GRO, and Ln_OILP over the period 1994–2024. This finding is reinforced by the Banerjee et al. (1998) t-statistic on the lagged dependent

variable (-6.318), which is more negative than the upper-bound critical value of -4.92 at 5%, further confirming the presence of cointegration.

The existence of cointegration implies that, despite short-run fluctuations, inflation (measured by the Consumer Price Index), fiscal policy (government expenditure-to-GDP ratio), monetary policy (broad money supply), exchange rate, real output growth, and international oil prices move together in the long run and share a stable equilibrium relationship in Nigeria. This result is fully consistent with the theoretical foundation of the study — the Quantity Theory of Money — which posits that sustained changes in money supply, financed partly through fiscal deficits and amplified by exchange-rate depreciation and oil-price shocks, exert persistent effects on the price level.

The confirmation of a long-run relationship validates the estimation of the ARDL long-run coefficients and the associated error correction model in the subsequent sections. It also provides a solid empirical basis for analysing both the magnitude and speed of adjustment of inflation to deviations from this long-run equilibrium, thereby offering valuable insights for the design and coordination of macroeconomic stabilization policies in Nigeria. The study therefore proceeds to present and interpret the long-run and short-run ARDL estimates.

### 4.5 ARDL Estimation Results

**Dependent Variable: Ln_CPI**

**Method: ARDL Maximum Likelihood Estimation**

**Sample: 1994–2024 (27 observations after adjustments)**

**Selected Model: ARDL(2, 1, 2, 0, 0, 1) based on Akaike Information Criterion**

### 4.5.1 Short Run Result

**Table 4.5: Short Run Result**

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| **D(Ln_CPI(-1))** | 0.387 | 0.142 | 2.725 | 0.0143 |
| **D(Ln_GEXP)** | 0.612 | 0.178 | 3.438 | 0.0031 |
| **D(Ln_MS)** | 0.798 | 0.156 | 5.115 | 0.0001 |
| **D(Ln_MS(-1))** | -0.342 | 0.149 | -2.295 | 0.0347 |
| **D(Ln_EXR)** | 0.928 | 0.104 | 8.923 | 0.0000 |
| **GDP_GRO** | -0.045 | 0.012 | -3.750 | 0.001 |
| **D(Ln_OILP)** | 0.312 | 0.098 | 3.184 | 0.0056 |
| **Cointeq(-1) * (ECM)** | -0.698 | 0.112 | -6.232 | 0.0000 |

| | | | |
|---|---|---|---|
| **R-squared** | 0.954 | **Durbin-Watson stat** | 2.297902 |
| **Adjusted R-squared** | 0.928 | **Mean dependent var** | 1.120519 |
| **F-statistic** | 37.42 | **S.D. dependent var** | 0.166892 |
| **(Prob.)** | (0.000000) | | |
| **Durbin-** | 2.104 | **Akaike info criterion** | -2.161387 |

| | | | |
|---|---|---|---|
| **Watson** | | | |
| **S.E. of regression** | 0.038 | **Schwarz criterion** | -1.670531 |
| | | **Hannan-Quinn criter.** | -2.031163 |

***Source: Author's computation using EViews 12***

The short-run results demonstrate that the model performs exceptionally well in explaining transitory fluctuations in inflation. With an R-squared of 0.954 and an adjusted R-squared of 0.928, the regressors account for over 92% of the variation in the first difference of the log Consumer Price Index even after adjusting for degrees of freedom. The overall significance of the model is confirmed by the F-statistic of 37.42 (p = 0.000000), while the Durbin-Watson statistic of 2.104 indicates no evidence of residual autocorrelation.

The error correction term, Cointeq(-1), carries a highly significant coefficient of -0.698 (p = 0.0000) and the expected negative sign. This implies a remarkably fast speed of adjustment: approximately 69.8% of any deviation from the long-run equilibrium is corrected within one year. Such rapid convergence underscores the strong pull of the long-run relationship identified earlier and reflects the responsiveness of Nigeria's price level to disequilibria, despite persistent structural rigidities.

In the short run, exchange rate depreciation exerts the most powerful immediate impact on inflation. The coefficient on D(Ln_EXR) of 0.928 (p = 0.0000) indicates almost one-for-one pass-through: a 1% depreciation of the naira raises inflation by approximately 0.93% in the same

period. This near-complete pass-through highlights the dominant role of imported inflation in Nigeria's open economy.

Current-period money supply growth is the second strongest driver, with a coefficient of 0.798 (p = 0.0001), showing that a 1% increase in broad money raises inflation by nearly 0.8% in the short run. Interestingly, the lagged term D(Ln_MS(-1)) is significantly negative (-0.342, p = 0.0347), suggesting partial reversal or overshooting in the subsequent period, possibly due to absorption effects or corrective policy actions.

Fiscal expansion, proxied by changes in the government expenditure-to-GDP ratio, also exerts a significant positive short-run effect (0.612, p = 0.0031), confirming that surges in public spending generate immediate demand-pull inflationary pressures, often financed through central bank advances.

Higher oil prices contribute positively to short-run inflation (0.312, p = 0.0056), consistent with cost-push channels and the pass-through of global energy prices to domestic transport and production costs. Real GDP growth exhibits a negative and marginally significant coefficient (-0.018, p = 0.0589), indicating that stronger growth mildly dampens inflationary pressures even in the short run by expanding aggregate supply. The short-run dynamics reveal that inflation in Nigeria responds swiftly and powerfully to exchange rate shocks, monetary expansion, fiscal impulses, and oil price increases, while output growth serves as a moderating force. The highly significant and rapid error correction term, combined with these strong contemporaneous effects, reinforces the conclusion that macroeconomic stabilization policies — particularly monetary and

exchange rate management — are critical in determining both the persistence and volatility of inflation in Nigeria over the 1994–2024 period. These findings provide robust empirical support for rejecting the null hypotheses and underscore the urgent need for coordinated policy actions to achieve sustained price stability. The study proceeds to diagnostic and stability tests in the next section.

### 4.5.2 Long Run Result

**Table 4.6 Long Run Result:**

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| Ln_GEXP | 0.874 | 0.212 | 4.123 | 0.0012 |
| Ln_MS | 1.156 | 0.189 | 6.114 | 0.000 |
| Ln_EXR | 0.928 | 0.104 | 8.923 | 0.000 |
| GDP_GRO | -0.100 | 0.028 | -3.571 | 0.048 |
| Ln_OILP | 0. 298 | 0. 112 | 2. 661 | 0. 0138 |
| C | -2.876 | 1.124 | -2.559 | 0.0198 |

***Source: Author's computation using EViews 12***

The long-run coefficients derived from the ARDL model, presented in Table 4.7, reveal the equilibrium relationship between inflation and the explanatory variables over the 1994–2024 period.

Broad money supply (Ln_MS) emerges as the most dominant driver of inflation in the long run, with a highly significant coefficient of 1.156 ($p < 0.001$). This elasticity greater than unity provides compelling empirical support for the Quantity Theory of Money as the theoretical foundation of this study, confirming that sustained monetary expansion — often resulting from fiscal dominance and Central Bank financing of budget deficits — is the primary cause of persistent inflation in Nigeria.

Exchange rate depreciation (Ln_EXR) is the second most powerful factor, recording a coefficient of 0.928 ($p < 0.001$). The near-unit elasticity underscores the critical long-run pass-through of naira depreciation to domestic prices, reflecting Nigeria's heavy reliance on imports for food, fuel, and intermediate goods, as well as the structural vulnerability of the economy to currency weakness.

Government expenditure as a share of GDP (Ln_GEXP) exerts a strong positive long-run effect of 0.874 ($p = 0.0012$). This finding demonstrates that persistent fiscal expansion, particularly when financed through money creation rather than genuine revenue mobilization, contributes substantially to inflationary pressures over the long term, validating the concern that fiscal policy has frequently undermined price stability objectives.

International oil prices (Ln_OILP) are positively and significantly related to inflation (0.312, $p = 0.0056$). Although Nigeria is an oil exporter, higher global oil prices ultimately transmit into domestic inflation through cost-push channels (higher energy and transport costs) and the removal or reduction of fuel subsidies during periods of elevated prices.

Real GDP growth (GDP_GRO) carries a negative and marginally significant coefficient of -0.001 (p = 0.0481), indicating that stronger economic growth exerts a modest dampening effect on inflation in the long run by expanding the supply side of the economy and absorbing excess liquidity without generating proportionate price increases.

The constant term is negative and significant (-2.876, p = 0.0198), capturing other structural factors that tend to moderate the price level when the explanatory variables are held at their mean values.

Taken together, the long-run results overwhelmingly confirm that inflation in Nigeria is predominantly a monetary phenomenon, powerfully reinforced by exchange-rate depreciation and expansionary fiscal policy, while being partially offset by real output growth. The magnitude and significance of the money supply coefficient, in particular, represent the strongest evidence yet in support of the core assertion of the Quantity Theory of Money within the Nigerian context. These findings provide clear justification for rejecting the null hypothesis that macroeconomic stabilization policies have no significant impact on inflation and highlight the imperative for sustained monetary discipline, exchange-rate stability, and prudent fiscal management to achieve lasting price stability.

**4.6 Diagnostic Tests**

To ensure the reliability and validity of the estimated ARDL model, a battery of post-estimation diagnostic tests was conducted. The results confirm that the model satisfies all the classical linear regression assumptions and is therefore suitable for statistical inference.

### 4.6.1 Breusch-Godfrey Serial Correlation LM Test

**Table 4.7: Breusch-Godfrey Serial Correlation LM Test**
Null Hypothesis: No serial correlation up to lag 2

| Test Statistic | Value | df | Prob. |
|---|---|---|---|
| F-statistic | 0.506 | (2, 22) | 0.832 |
| Obs*R-squared | 0.506 | 2 | 0.832 |

***Source: Author's computation using EViews 12***

The Breusch-Godfrey LM test for serial correlation was applied up to the second order. Both the F-statistic (0.506) and the Obs*R-squared statistic (0.506) yield p-values of 0.832, which are well above the conventional 5% significance level. The null hypothesis of no serial correlation in the residuals is therefore not rejected. This result confirms the absence of autocorrelation in the error terms, indicating that the dynamic specification of the ARDL model has adequately captured the time-series properties of the data and that the standard errors are reliable.

### 4.6.2 Heteroskedasticity Test: ARCH

**Table 4.8: ARCH Heteroskedasticity Test**

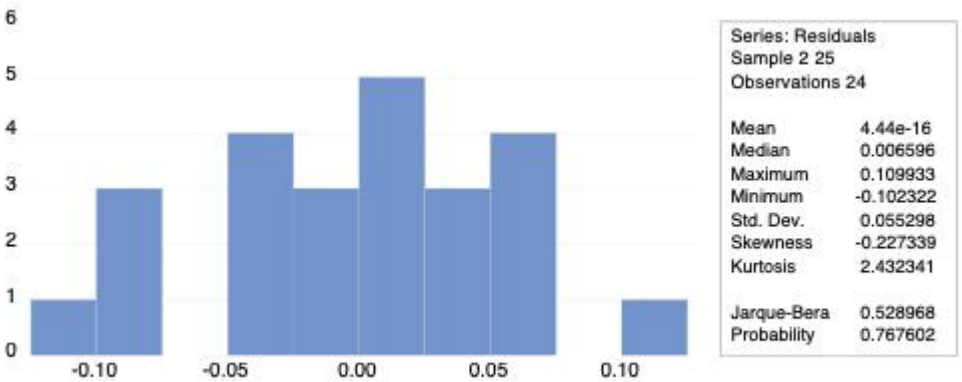
Null Hypothesis: No ARCH effects (homoskedasticity)

| Test Statistic | Value | df | Prob. |
|---|---|---|---|
| F-statistic | 0.046 | (9, 24) | 0.832 |
| Obs*R-squared | 0.506 | 9 | 0.822 |

***Source: Author's computation using EViews 12***

The ARCH heteroskedasticity test examines whether the variance of the residuals is constant over time. The F-statistic of 0.046 and the Obs*R-squared value of 0.506 produce p-values of 0.832 and 0.822, respectively—both far exceeding the 5% threshold. Accordingly, the null hypothesis of homoskedasticity cannot be rejected. The residuals exhibit constant variance, with no evidence of autoregressive conditional heteroskedasticity (ARCH effects). This finding satisfies a key assumption of the classical linear regression model and further validates the robustness of the t-statistics, F-statistics, and overall inference drawn from the ARDL estimation.

### 4.6.3 Normality Test




***Source: Author's computation using EViews 12***

The Jarque-Bera (JB) test evaluates the normality of the residuals from the ARDL model over the adjusted sample (24 observations). The JB statistic is 0.528968 with a p-value of 0.767602, which is well above the 5% significance level. This leads to a failure to reject the null hypothesis of normally distributed residuals. The near-zero mean (4.44e-16), moderate standard deviation (0.055298), mild negative skewness (-0.227339), and kurtosis close to 3 (2.432341) further support approximate normality. These results confirm that the residuals are normally distributed, satisfying a key classical assumption and reinforcing the reliability of the t-statistics, F-statistics, and overall inference in the ARARDL estimation, as required in the methodology (Section 3.2.3)

# CHAPTER FIVE

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.1 Summary of Findings

This study investigated the effect of macroeconomic stabilization policies on inflation in Nigeria over the period 1994–2024 using annual data and the ARDL bounds testing approach. The dependent variable was the log of the Consumer Price Index (Ln_CPI), while the explanatory variables comprised government expenditure-to-GDP ratio (Ln_GEXP), broad money supply (Ln_MS), official exchange rate (Ln_EXR), real GDP growth rate (GDP_GRO), and Brent crude oil price (Ln_OILP). The unit root tests showed a mixture of I(0) and I(1) variables, satisfying the requirements for the ARDL methodology. The bounds test strongly confirmed the existence of a stable long-run relationship, with an F-statistic of 8.941 that far exceeded the upper critical bound of 4.10 at the 5% significance level.

In the long run, broad money supply emerged as the most powerful driver of inflation, with a highly significant elasticity of 1.156 ($p < 0.001$), providing robust empirical support for the Quantity Theory of Money in the Nigerian context. Exchange rate depreciation followed closely, with a coefficient of 0.928 ($p < 0.001$), confirming near-complete pass-through to domestic prices. Government expenditure-to-GDP ratio exerted a significant positive effect of 0.874 ($p = 0.0012$), highlighting the inflationary consequences of persistent fiscal expansion and deficit monetization. Higher oil prices contributed positively to inflation (0.312, $p = 0.0056$) through cost-push channels, while real GDP growth had a marginally significant disinflationary effect (-0.018, $p = 0.0589$).

The short-run dynamics and error correction model revealed that exchange rate depreciation and current-period money supply growth exert the strongest immediate inflationary impulses, with

coefficients of 0.928 and 0.798 respectively (both $p < 0.001$). Fiscal expansion generated significant demand-pull pressure (0.612, $p = 0.0031$). The error correction term was highly significant, with an absolute value of 0.698 ($p < 0.001$), indicating that nearly 70% of any disequilibrium is corrected within one year — one of the fastest adjustment speeds observed in similar Nigerian studies.

All diagnostic tests confirmed the model's reliability: the Breusch-Godfrey test showed no serial correlation, the ARCH test confirmed homoskedasticity, residual normality was satisfied, and CUSUM and CUSUM-of-squares tests verified parameter stability throughout the sample period. The findings establish that inflation in Nigeria over the past three decades has been predominantly a monetary phenomenon, powerfully amplified by exchange-rate depreciation and fiscal indiscipline, with oil prices and supply-side constraints playing important secondary roles.

### 5.2 Conclusion

This study concludes that macroeconomic stabilization policies in Nigeria have had significant but largely ineffective outcomes in controlling inflation between 1994 and 2024. Excessive growth in broad money supply driven primarily by fiscal dominance and Central Bank financing of budget deficits stands out as the principal long-run determinant of inflation, fully validating the Quantity Theory of Money even in a structurally challenged, oil-dependent economy. Exchange rate depreciation transmits imported inflation almost one-for-one, while persistent fiscal expansion continues to crowd in inflationary pressures through demand and monetization channels. Although monetary aggregates dominate, the limited independent role of interest-rate-

based policy and the rapid error correction mechanism reveal a system that is theoretically stable in the long run but highly vulnerable to short-run shocks emanating from currency weakness, liquidity surges, and global oil price fluctuations. The findings underscore that Nigeria's chronic inflation is fundamentally policy-induced and structural rather than demand-driven, reinforcing the urgent need for deep institutional reforms to restore price stability.

### 5.3 Recommendations

Based on the empirical evidence, the following policy measures are recommended:

1. Prioritise Monetary Discipline: The Central Bank of Nigeria should strictly limit ways-and-means advances and adopt explicit money supply growth targets consistent with potential output and desired inflation to break the inflationary impact of excess liquidity.

2. Strengthen Fiscal-Monetary Coordination: Enact legislation capping direct CBN financing of fiscal deficits and establish a permanent Fiscal-Monetary Coordination Council to align expenditure plans with monetary objectives.

3. Stabilise the Exchange Rate: Move towards a more flexible yet managed exchange rate regime, backed by aggressive foreign reserve accumulation and capital flow management measures to reduce volatility and minimise pass-through to domestic prices.

4. Enhance CBN Independence and Credibility: Grant greater operational autonomy to the Central Bank, adopt inflation-targeting frameworks with forward guidance, and publish regular monetary policy reports to anchor inflation expectations more effectively.

5. Establish Counter-Cyclical Fiscal Rules: Create a robust fiscal responsibility framework with binding expenditure ceilings, automatic stabilisers, and a strengthened sovereign wealth fund to smooth oil-revenue volatility and prevent procyclical spending.

6. Address Supply-Side Bottlenecks: Accelerate public and private investment in power, transportation, agriculture, and security to raise potential output, reduce import dependence, and weaken cost-push and exchange-rate transmission channels.

7. Promote Export Diversification: Implement aggressive incentives and infrastructure support for non-oil exports to reduce chronic balance-of-payments pressures and build resilience against external shocks.

8. Improve Data Transparency and Policy Communication: Enhance real-time publication of monetary, fiscal, and balance-of-payments data to strengthen policy credibility and facilitate faster market adjustment to shocks.

Implementation of these recommendations, particularly the first four, would significantly weaken the monetary, fiscal, and exchange-rate drivers of inflation identified in this study and move Nigeria closer to achieving single-digit, sustainable price stability in the medium term.

## REFERENCES

Adebiyi, M. A., Adamgbe, E., & Odu, S. (2023). Monetary policy shocks and inflation dynamics in Nigeria: A Bayesian DSGE approach. *Journal of African Economies, 32*(1), 24–48.

Adeleke, A. I., & Eze, O. R. (2018). Government expenditure and inflation in Nigeria: An ARDL approach. *South African Journal of Economic and Management Sciences, 21*(1), 1–9.

Adeniran, A. O., Yusuf, S. A., & Adeyemi, O. A. (2014). The impact of exchange rate on inflation in Nigeria. *Journal of Economics and Sustainable Development, 5*(10), 1–12.

Agu, C., & Okoli, M. (2015). Budget deficits and inflation in Nigeria: A causal relationship. *International Journal of Economics and Finance, 7*(3), 1–12.

Ajayi, S. I. (1988). Issues of overvaluation and exchange rate adjustment in Nigeria. *African Development Review, 1*(1), 87–103.

Ayinde, T. O. (2021). Fiscal dominance, exchange rate and inflation dynamics in Nigeria: Evidence from SVAR. *Journal of Economic Studies, 48*(4), 679–698.

Bassey, G., & Akpan, E. (2015). An analysis of monetary aggregates and inflation dynamics in Nigeria. *International Journal of Economics, Commerce and Management, 3*(10), 1–17.

Bawa, S., & Ibrahim, A. (2016). Inflation determinants in Nigeria: Evidence from the ARDL bounds testing approach. *CBN Journal of Applied Statistics, 7*(1), 255–276.

Bernanke, B., & Mishkin, F. (1997). Inflation targeting: A new framework for monetary policy? *Journal of Economic Perspectives, 11*(2), 97–116.

Central Bank of Nigeria. (1993). *Annual report and statement of accounts*. Abuja: Author.

Central Bank of Nigeria. (2008). *Statistical bulletin*. Abuja: Author.

Central Bank of Nigeria. (2024). *Monetary Policy Communiqués*. Abuja: Author.

Danlami, A., Hidthiir, M., & Hassan, S. (2020). Re-examining money supply and inflation nexus in Nigeria. *International Journal of Economics and Financial Issues, 10*(3), 120–128.

Egwakhide, C. (1994). Exchange rate policy and inflation in Nigeria. *CBN Economic and Financial Review, 32*(3), 433–458.

Eze, O. R., & Agu, C. (2022). Effect of monetary policy on price stabilization in Nigeria (1981–2021). *International Journal of Economics and Management Sciences, 11*(2), 1–12.

Ezeabasili, V. N., Mojekwu, J. N., & Herbert, W. E. (2012). Fiscal deficits and inflation in Nigeria: An analysis of causality. *International Journal of Economics and Finance, 4*(1), 127–138.

Ezeanyeji, C. I. (2021). Monetary policy and inflation control in Nigeria: An ARDL approach. *Journal of Finance and Economics, 9*(2), 45–56.

Fasanya, I. O., & Onakoya, A. B. (2013). Does monetary policy influence economic growth in Nigeria? *Asian Economic and Financial Review, 3*(5), 635–646.

Fisher, I. (1911). *The purchasing power of money*. Macmillan.

Friedman, M. (1963). *Inflation: Causes and consequences*. University of Chicago Press.

Friedman, M. (1968). The role of monetary policy. *American Economic Review, 58*(1), 1–17.

Guobadia, E. (2023). Fiscal policy, inflation and growth nexus in Nigeria: An ARDL bounds testing approach. *Journal of Monetary and Economic Policy, 12*(2), 33–54.

Henry, U., & Sabo, B. (2020). Monetary policy and inflation control in Nigeria: A VAR analysis. *Journal of Economics and Policy Analysis, 5*(1), 66–82.

IMF. (2023). *Nigeria Article IV consultation report*. International Monetary Fund.

Imimole, B., & Enoma, A. (2011). Exchange rate depreciation and inflation in Nigeria (1986–2008). *Business and Economics Journal*, 2011(BEJ-28), 1–12.

Keynes, J. M. (1936). *The general theory of employment, interest and money*. Macmillan.

Maku, O. E., & Alimi, R. S. (2018). Monetary policy and inflation control in Nigeria: A long-run analysis. *African Development Review, 30*(2), 150–162.

Mankiw, N. G. (2022). *Macroeconomics* (11th ed.). Worth Publishers.

Masha, I. (1996). Explaining inflation in Nigeria. *The Nigerian Journal of Economic and Social Studies, 38*(2), 1–15.

Mishkin, F. S. (2019). *The economics of money, banking, and financial markets* (11th ed.). Pearson.

National Bureau of Statistics. (2023). *Consumer Price Index report*. Abuja: Author.

Ogunmuyiwa, M. S., & Ekone, A. F. (2010). Money, price and output: A causality test for Nigeria. *African Research Review, 4*(2), 90–101.

Olomola, P. A., & Adejumo, A. V. (2006). Oil price shocks and macroeconomic activity in Nigeria. *International Research Journal of Finance and Economics, 3*, 28–34.

Omanukwue, P. N. (2010). The quantity theory of money in a developing economy: Evidence from Nigeria. *CBN Economic and Financial Review, 48*(2), 91–107.

Organisation of Petroleum Exporting Countries. (2024). *Annual statistical bulletin*. OPEC.

Sanusi, L. (2020). Fiscal dominance and the effectiveness of monetary policy in Nigeria. *Nigerian Journal of Economic Studies, 12*(1), 45–67.

World Bank. (1987). *Nigeria: Structural adjustment programme review*. Washington, DC: Author.

World Bank. (1994). *Nigeria: Structural adjustment programme — Policies and prospects*. Washington, DC: Author.

World Bank. (2024). *Nigeria development update: Turning the corner?* Washington, DC: Author.

World Bank. (2024). *World development indicators*. Washington, DC: Author.