

EFFECT OF FISCAL POLICY MEASURES, AND INSTITUTIONAL QUALITY ON PRICE STABILITY IN NIGERIA

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ABSTRACT

This paper appraises the dynamic interplay of fiscal policy measures, institutional quality, and price stability in Nigeria, 1990–2022. Data was sourced from the World Bank's World Development Indicators and the Statistical Bulletin of Central Bank of Nigeria. To measure fiscal policy and institutional quality, we utilised total public spending, total public revenue, rule of law, government effectiveness, as proxies, and to measure price stability, we utilised the consumer price index. After doing unit root tests on each series utilising the Augmented Dickey Fuller method, we found that the diagnoses revealed a mixture of I(0) and I(1) integration orders; hence, we had to use the Auto-Regressive Distributive lag limits test and its short-run variants. Fiscal policy, institutional quality, and price stability are not related in the long term, in congruent with the model's bound test upshots. Another takeaway from the short-run regression is that total government revenue had a positive and statistically substantially effect on the consumer price index from the prior year, but total government spending has a negative and statistically substantially effect from the previous year. However, government effectiveness had a positive influence on price stability. Finally, the correlation between the rule of law and price stability is negative but insubstantially in the most current year. Hence, it was concluded that fiscal policy and institutional quality had substantially impact on consumer price index. It is recommended amongst other that the central banks of Nigeria (CBN), as a complimentary policy should consider tight monetary policy.

Keywords: *Consumer Price Index, Fiscal Policy, Institutional Quality*

JEL Classification Code: E31, E62, R38

1. INTRODUCTION

Fiscal policy serves as a crucial lever for steering economic growth and stability through government spending and taxation. When the government increase spending on infrastructure, social programs, or other initiatives, it directly stimulates economic activities. Against this backdrop, the role of fiscal policy as a key instrument for influencing price dynamics has garnered increased attention. Therefore, fiscal policy can be defined as changes in tax and government expenditures to influence economic activities. It plays a crucial role in shaping the macroeconomic environment and determine the trajectory of prices in Nigeria. The use of policy tools like budgets, government expenditure, taxes, and transfer payments to

manage and control the economy via changes in spending and income levels is known as fiscal policy (Maheswaranathan & Jeewanthi, 2021).

The Nigerian government implemented expansionary fiscal policies after the global financial crisis of 2008–2009 and subsequent economic recessions. Road building and power regeneration were two examples of these infrastructure projects that saw increased funding in an effort to boost aggregate demand and aid in the economic recovery. For instance, government expenditure on infrastructure rose substantially from 6.8% of GDP in 2007 to 12.6% in 2010 (NBS, 2020). This contributed to improved economic activity and job creation. Thus, the quality of a country's institutions, as utilised in this study, is defined as the efficacy, efficiency, and honesty of those institutions that control the country's economic and social relations. High-quality institutions include strong legal frameworks, transparent governance, efficient bureaucracies, and robust regulatory environments. These institutions create a stable and predictable environment conducive to economic activities. For instance, between 2010 and 2020, Nigeria experienced substantial inflation fluctuations, with inflation rates peaking at over 18% in 2017. In congruence with the National Bureau of Statistics (NBS), these fluctuations were partly due to inconsistent policy implementation and external shocks, exacerbated by weak institutional frameworks. For example, during the 2016 economic recession, poor institutional quality hindered the CBN's efforts to stabilize the Naira and control inflation.

Moreover, corruption and lack of transparency in governance have led to market distortions, contributing to price instability. The 2020 Transparency International Corruption Perceptions Index ranked Nigeria 149th out of 180 countries, reflecting high levels of corruption. This has led to inefficiencies in resource allocation and increased costs for businesses, which are often passed on to consumers in the form of higher prices. Conversely, efforts to strengthen institutional quality have shown potential to improve price stability. For example, reforms aimed at improving transparency and reducing corruption in the oil sector, i.e. the implementation of the Nigerian Extractive Industries Transparency Initiative (NEITI), have had positive effects. These reforms have improved revenue management and reduced some of the inefficiencies that contribute to inflationary pressures. It is against this intricate interplay between fiscal policy and institutional quality that price stability emerges. Price stability stands as a keystone of macroeconomic stability, serving as a crucial determinant of economic performance, social welfare, and overall prosperity. As an upshot, keeping inflation rates low and stable over time—usually within a predetermined target range—is what we mean when we talk about price stability. This helps keep money's purchasing power intact, promotes economic efficiency and predictability, and so on. When inflation is minimal and the value of money remains relatively constant, a situation known as price stability is described by Ene and Kasim (2022). Its hallmark is a very low inflation rate, which has a negligible impact on business decisions.

Keeping inflation low over time is a key component of price stability, which is a primary goal of macroeconomic policy. It serves as a vital pillar of economic stability, contributing to overall prosperity, social welfare, and sustainable development. The pursuit of price stability is another critical objective for Nigeria's economic policy framework. Stable prices ensure predictability for businesses and consumers, encouraging long-term investments and promoting economic growth. In recent years, Nigeria has faced inflationary pressures driven by factors i.e. exchange rate volatility, food price increases, and supply chain disruptions. For example, inflation peaked at 18.7% in January 2017, reflecting challenges in maintaining price stability amidst economic uncertainties. Statistical data further illustrates the impact of these policies on Nigeria's economic landscape. For instance, analyzing the consumer price index (CPI) over the past decade reveals fluctuations in inflation rates, influenced by fiscal policy adjustments and external economic shocks. Additionally, statistical data from the World Bank revealed that

between 2015 and 2020, Nigerian experienced an average inflation rate of 12%, highlighting the challenges posed by inflationary pressures and the need for proactive fiscal policy interventions to maintain price stability. To be more specific, the consumer price index was at 9% in the year 2015, but it rose to 15% in the year 2016. To our great regret, it continued to climb to 16.5% in 2017, before seeing a little decline to 12.1 and 11.4% between the years 2018 and 2019. Between the years 2020 and 2021, the value of the consumer price index had an instantaneous rise, going from 13.2% to 17%. CPI increased to 18.8% and 24.7% in 2022 and 2023 respectively. (WDI, 2023)

Against this backdrop, it becomes obvious that understanding the connection between fiscal policy, institutional quality and price stability became necessary as a central theme, encapsulating the notion of economic progress that benefits all segments of society. A systematic literature assessment also revealed a lack of research on the correlation between price stability, fiscal policy, and institutional quality. Instances of prior research that found fiscal policy and institutional quality components to have considerable effect on price stability outcomes are Gbadebo *et al.* (2018); and Yakubu *et al.* (2013); Marius and Alwell (2013); and Ndari *et al.* (2012). The opposite is true in congruent with the research of Ene and Kasim (2022); Akobi *et al.* (2021); Lubo and Bigbo (2021); Onuaha and Okorie (2020); George-Anokwuru and Ekpenyong (2020) and Kalagbor and Ordu (2019) reported that fiscal policy instruments i.e. taxation, public debts and expenditure in some cases are positive and other time exert a negative correlation with price stability. However, they posted insubstantially impact on price stability. This suggest a gap in literature. Additionally, the present study discovered that previous studies either captured fiscal policy with public debt, public expenditure or taxation in isolation. To this end, this study empirically appraised the impact of fiscal policy, institutional quality on price stability in Nigeria.

2. LITERATURE REVIEW

2.1 Theoretical Literature

Keynesian Theory of Public Spending

In 1936, Keynes put out the notion of public expenditure. Government spending acts as a stabilizing mechanism, as the theory posits. Production and employment fell short of their potential levels during the Great Depression, in congruent with Keynesians, because overall demand was inadequate. The economy would inevitably revert to its full employment potential if demand could be raised, leading to increasing production and employment. To attain full employment, Keynesians advocated for expansionary fiscal policy. During economic downturns, Keynesians maintained that the government should run a deficit rather than a balanced budget by cutting taxes and increasing expenditures. The overall demand will go up as an upshot of this. However, Keynesians would argue that a restrictive fiscal policy would be necessary to curb excessive demand and, by extension, inflation, if the economy were to encounter such a crisis during an economic boom. As an upshot, the government will cut expenditure, increase revenue, and move toward a budget surplus. This will aid in the battle against inflation by reducing overall demand.

Debt Crowding Out Theory

It was in 1988 that Krugman first proposed the debt crowding out hypothesis. If a country's budget deficit rises without corresponding increases in private savings, the theory predicts that public savings would fall (Joy & Panda, 2020). If the government pays its debts off faster, this might happen. Consequently, this may lead to higher interest rates or less credit available for private investment, both of which would hinder economic growth. A rise in interest rates, caused by the government borrowing more money to pay for increased

expenditure or decreased taxes, deters private investment since borrowing becomes more costly. The interest rate sensitive private sector is likely to cut investment if return rates drop as an upshot of increased demand for money and loanable funds, which in turn causes prices to rise. The demand for money and loanable cash has grown, leading to rising pricing.

In congruent with this hypothesis, if the government borrows money to cover its deficit, interest rates would rise, which will cut into people's disposable income and lead to higher salaries and worse return on investment. As an upshot, private investment may be discouraged or crushed, leading to a drop in economic output (Spillioti & Vamuoukas, 2015; Abdulakarim et al., 2021). In congruent with this idea, private savings should be able to keep up with changes in government spending and income.

Consequently, a thorough examination of the debt crowding out theory and the Keynesian theory of public expenditure revealed that both theories, while from different angles, deal with the effects of fiscal policy implemented by the government. For example, they reach a consensus when it comes to the fact that fiscal policy may impact economic activity and that government spending substantially affects the economy. Interest rates are also recognized as playing a substantial influence, with changes in government borrowing having an effect on interest rates, which in turn affect investment and consumption choices. Government expenditure, in congruent with Keynesians, may increase production and employment, particularly in recessions, by increasing aggregate demand. On the other hand, in congruent with the debt crowding out hypothesis, private investment may fall and government expenditure would have no beneficial impact if interest rates were to rise as an upshot of increased borrowing. Thus, the Keynesian theory of government expenditure serves as the foundation for this article. The theory's central tenet is that the government should step in during economic downturns or instability by increasing public expenditure to stimulate demand, provide employment opportunities, and propel economic development. Given Nigeria's dependence on oil earnings and the need to diversify its economy, fiscal policy is of utmost importance in managing the country's economy. There is a need to include the Keynesian viewpoint into debates over institutional quality, as opposed to the debt crowding out theory's main emphasis on the fiscal consequences of government borrowing. For public expenditure to be effective and efficient, free from corruption and misallocation of funds, strong institutions are required. If institutions are better, then government expenditure will be more likely to result in productive investments and long-term economic growth, two goals of Keynesian fiscal policy.

2.2 Empirical Literature

From 2000–2022, Umunna et al. (2024) utilised panel data estimate methods to study the impact of institutions on GDP development in fifteen ECOWAS nations. Other tests utilized in the research include the Johansen Fisher co-integration test, which reveals that the variables are co-integrated, and the Hausman test, which, when applied, recommended utilising a fixed effect model for easy estimate. West African economic growth is favourably and substantially correlated with rule of law, voice, and accountability; unfavourably and substantially correlated with political stability and government effectiveness; and regulatory quality and control of corruption are found to be insubstantially.

In addition, Dominic and Olajide (2023) use a log t regression convergence model to analyze fiscal policy convergence in the West African Monetary Zone (WAMZ) from 2001 to 2020 utilising yearly panel data. Tax income, spending, deficit, and debt are the four fiscal policy instruments that show strong evidence of divergence. The debt policy (-4.32) and expenditure policy (-3.39) policies show the most substantial difference.

The impact of fiscal policies on the expansion of Nigeria's industrial sector from 1986 to 2021 is also appraised by Abimbola et al. (2023). ARDL was utilised to estimate the parameters of

the model. The upshots do, however, point to an unfavourable long-term impact of corporate income tax on Nigeria's solid mineral production, likewise a favourable effect of government capital expenditures on the mining and quarrying industry and the exchange rate. Public investment in the mining and quarrying industry outperforms corporate income taxes and exchange rates in the near term.

Moreover, utilising panel data for 12 states in Nigeria from 2011 to 2021, Mohammed and Taofik (2023) appraise the fiscal synchronization hypothesis and appraise the factors that contribute to subnational budget deficits in these states. The upshots demonstrate that the fiscal synchronization hypothesis is true in states when panel data analysis is utilised. Moreover, the upshots demonstrate that the primary determinants of fiscal deficit at the subnational level in Nigeria are economic size and state external borrowing. The upshots provide two key takeaways for policymakers. The first is that state governments must immediately step up their efforts to raise state income, and the second is that they must create practical budgets that keep the gap between authorized expenditures and actual spending to a minimum. The research conducted by Ashogbon et al. (2023) was yet another investigation into the ways in which public debt and institutional quality influenced the growth of Nigeria's economy. Data collected from secondary sources, i.e. the statistics bulletin published by the Central Bank of Nigeria, the World Development Indicators, the Debt Management Office, and the World Governance Indicators, covering the period of time from 1981 to 2021. The dependent variable was real gross domestic product, while the independent variables were labor force, public debt, exchange rate, institutional quality, and gross capital creation. The model utilised ARDL. There seemed to be a long-run equilibrium connection between the variables, in congruent with the data. Additionally, results showed that domestic public debt substantially influenced economic growth favourably over the long term, whereas foreign public debt substantially impacted economic growth unfavourably. It was also shown that institutional quality had a detrimental impact on economic growth over the long term, although no such effect was seen in the short run.

Fiscal decentralization and Nigeria's macroeconomic stability were nonetheless the subject of Oligbi's (2020) research. To conduct empirical research, we employ the Vector Autoregressive (VAR) model in conjunction with Johanson's Vector Error Correction Model (VECM). In congruent with the upshots of the co-integration analysis, the presence of co-integrating equations among the relevant variables was verified by the greatest Eigenvalue statistic. This was indicative of a possible long-term connection between the factors. Because its coefficient displays unfavourable values and is not statistically substantially, the VAR result concluded that the one-lagged period of the macroeconomic variable does not promote economic development. In congruent with the VECM finding, the variables being considered will have long-term relations with one another. Fiscal decentralization has not promoted macroeconomic stability, which has substantially boosted Nigeria's economy, in congruent with the empirical conclusion.

The usual transmission mechanism of policy instruments, i.e. interest rate, cash reserve requirement, government expenditure, tax, and public sector borrowing requirement, is also conceptualized by Amah (2019) in order to study how well they accomplish growth and job creation objectives. In order to create a dynamic system model and unconstrained vector autoregression (VAR) correction algorithms, the author utilised an ex-post facto research strategy to gather yearly data for 31 years. A number of things were discovered by the author. One of them was that interest rates entered the output function favourably as a lag variable. This indicates that this monetary policy anchor had a non-trivial delayed impact. Surprisingly, however, it did not seem to be consistently related to interest rates on loans. From a fiscal perspective, tax proxies were shown to be ineffective policy tools, exhibiting an unusually favourable correlation with national production. Both operating and capital expenditures had

contradictory outcomes, with no discernible benefit or drawback. Overall, the author discovered troubling signs of a lack of convergence between monetary and fiscal policies.

Using monthly time series data from 2000–2019, Ene and Kasim (2022) utilised the ARDL Model and the ECM to appraise the impact of fiscal policy aggregates on price stability in Nigeria. The budget deficit, government spending, and taxes were utilised as proxies for fiscal policy, while the inflation rate was utilised as a metric of price stability. Both the short- and long-term outcomes showed that there was no discernible impact on government spending or the budget deficit. Conversely, taxes have a substantially and beneficial effect on price stability.

Using data from 39 years (1981–2019), Akobi et al. (2021) analyzed how government spending affected Nigeria's inflation rate. Government spending on education is shown to have a small but favorable impact on inflation. A favourable but insubstantially effect on inflation rate was found for government expenditure on education and agriculture, while a favourable and substantially effect was found for government expenditure on health and telecommunications.

From 1981 to 2018, Lubo and Bigbo (2021) looked at how government spending affected inflation in Nigeria. There seems to be a long-term association among the factors, in congruent with the research. In addition, the paper found that at the 5% level, government spending on transportation and communication (XTCM) is favourably but insubstantiallyly related to inflation (CPI); defense (XDFS) is favourably but insubstantiallyly related to inflation (CPI) in Nigeria; agriculture (XAGR) is unfavourably but insubstantiallyly related to inflation (CPI); education (XEDU) is favourably but insubstantiallyly related to inflation (CPI); and health (XHLT) is unfavourably but insubstantiallyly related to inflation (CPI).

In their 2020 study, Onuoha and Okorie utilised data from 1990 to 2019 to look at a few African nations and how disaggregated public spending relates to inflation rate over the long term. The results of the cointegration test show that the variables do in fact have an equilibrium connection over the long term. In addition, the panel dynamic OLS showed that military spending changes by 0.27% and infrastructure spending changes by 0.56% for every 1% shift in these two categories of spending. In contrast, spending on healthcare has an inverse but statistically negligible effect on inflation rate in the area throughout the time period under consideration, whereas spending on education has a favourable but insubstantially link with inflation.

The effect of government spending on inflation in Nigeria was appraised by George-Anokwuru and Ekpenyong (2020). Government spending and inflation rate were shown to have a favourable but statistically insubstantially association in the short term, in congruent with the results. In addition, there is a statistically substantially unfavourable correlation between government spending and inflation over the long term. There is an unfavourable and statistically insubstantially correlation between the money supply and the inflation rate in the near term. Over the course of a longer period of time, there is a correlation that is both favourable and statistically substantially between the money supply itself and the rate of inflation. There was an unfavourable link between GDP and inflation during both the short-term and the long-term time periods. In addition, the exchange rate had an unfavourable impact on inflation in the short term, despite the fact that it had a favourable impact on inflation over the longest period of time. The increasing requirements of the population had a favourable and substantially influence, both in the short term and over the long run, on the rate of inflation. In spite of the fact that the short-term correlation between investment and inflation rate did not meet the criteria for statistical significance, the long-term correlation was determined to be unfavourable and statistically substantially. Gbadebo and colleagues conducted a research in 2018 that appraised the ways in which Nigeria's fiscal and monetary policies affects the country's price stability. Secondary sources for GR, GE, CRR, MPR, and CPI were utilised,

and the CBN statistics bulletin was utilised as a secondary source. In congruent with the upshots of the OLS analysis, the measures implemented by the government in Nigeria were effective in managing the consumer price index (CPI) to a substantially degree. This was the case despite the fact that the variables presented a variety of individual influences. This was due to the fact that both monetary and fiscal instruments had an effect on the CPI during the study period. Therefore, in order to achieve the target level of price stability, it is recommended that fiscal processes and monetary policies be improved.

From 1970 to 2013, Egbulonu and Wobilor (2016) analyze the correlation between Nigeria's fiscal policies and inflation rate. The study indicated that although there is a favourable and statistically substantially association between government debt stock and inflation in Nigeria, the correlation between government spending and tax income is statistically insubstantially. There is a long-run equilibrium connection between fiscal policy and inflation in Nigeria, in congruent with the upshots. The report suggests that the government should diversify the economy's base, execute a workable fiscal policy and monetary policy mix, and limit her borrowing levels (both domestic and foreign). It also suggests that she should enhance tax administration to decrease tax evasion and avoidance.

Research by Yakubu et al. (2013) appraises the correlation between Nigeria's fiscal and monetary policies and their effects on pricing and output increases. Variance decomposition and impulse response techniques have successfully captured the ever-changing correlations between variables. In congruent with evaluations of innovation, monetary policy and government revenue have a more favourable impact on price levels and economic growth in Nigeria. But this influence lasts a long time and is less important than other factors. Our research reveals that, for the majority of time periods, economic activity is mostly propelled by its own dynamics, with fiscal and monetary policy considerations also playing a role.

Marius and Alwell (2013) use partial equilibrium analysis to look at how VAT affects price stability in Nigeria. To conduct the study, data from 1994 to 2010 were subjected to static multiple regression analysis. Owing to the upshots, it is clear that VAT has a substantially impact on driving up prices. This is probable because VAT is imposed on intermediate products. Because it is difficult to differentiate between intermediate and final products, the research disqualifies VAT exemptions for intermediate outputs as a potential remedy. On the contrary,

A study conducted by Ndari et al. (2012) delves into the effects of fiscal policy on inflation and output, likewise examining discretionary fiscal policy and its effects on the volatility of inflation and production. On quarterly data spanning 1990–2009, the Model Vector Error Correction Model (VECM) was utilised. Government expenditure and taxes are shown to have a long-run cointegration correlation with regard to production in empirical studies. Taxation, in contrast to government expenditure, actually promotes economic development over the long run. A rise in government expenditure boosts production, but a rise in taxes has the opposite effect, in congruent with short-term adjustment. Government expenditure has a more immediate impact on production than tax measures do.

In their 2019 study, Kalagbor and Ordu analyze how government spending and taxation affect the achievement of Nigeria's long-term economic goals. The study focused on the years 2015–2017 and how government spending and income affected inflation (price stability), unemployment, and GDP growth in Nigeria. Information was culled from tradingeconomics.com, the statistics bulletin of the Central Bank of Nigeria, and the Nigerian Bureau of Statistics. The study's analysis made use of content analysis and theme analysis. The upshots show that the government's macroeconomic goals of low inflation, steady and growing economic growth within the specified time frame, and low unemployment were not achieved. In addition, public spending and income in Nigeria rose, but the country's inflation rate and unemployment rate also rose. Economic development was sluggish and unpredictable. The

prevailing Keynesian theory, which is followed here, states that the government can accomplish its macroeconomic goals by effectively manipulating spending and income via fiscal policy. This is in contrast to the current scenario.

Gaps and Value Addition

An exhaustive examination of prior research uncovers a notable deficiency in the literature about the correlation between fiscal policy, institutional quality, and price stability. Contrary to the upshots of Dominic and Olajide (2023), Mohammed and Taofik (2023), and Ndari et al. (2012), which suggest that elements of fiscal policy and institutional quality have a substantially impact on price stability, other research presents a different perspective. Notably, Ashogbon et al. (2023), Abimbola et al. (2023), Ene and Kasim (2022), Akobi et al. (2021), Lubo and Bigbo (2021), Onuaha and Okorie (2020), George-Anokwuru and Ekpenyong (2020), and Kalagbor and Ordu (2019) have documented a combination of positive and negative effects of fiscal policy instruments, including taxation, public debts, and expenditure, on price stability. In contrast, the studies conducted by Umunna et al. (2023) and Oligbi (2020) did not reveal any noteworthy impact of fiscal policy measures and institutional quality factors on price stability. Furthermore, previous studies have mostly neglected the consequences of essential dimensions of institutional quality, i.e. the efficacy of the government, indicating a substantially deficiency in the existing body of knowledge. Furthermore, prior research has often analysed fiscal policy by independently considering public debt, public spending, or taxes. The objective of this research is to address these disparities by conducting an empirical examination of the aggregate influence of fiscal policy and institutional quality, which includes total public income, total public spending, government effectiveness, and rule of law, on price stability. This will be quantified utilising the consumer price index. This study will make a substantial contribution to the current scholarly understanding.

3. METHODOLOGY

This article's secondary data was sourced from the development indicators maintained by the World Bank and the statistics bulletin of the Central Bank of Nigeria (CBN). The research approach utilised was ex-post facto. This data source is considered trustworthy and dependable for this investigation. From 1990 to 2022, a total of thirty-two years' worth of data will be available. To represent fiscal policy and inclusive growth, we utilised the following proxies: stock total public revenue, (TPR), total public expenditure (TPE), government effectiveness (GEF), and rule of law (ROL). To capture price stability outcomes, we utilised the consumer price index (CPI).

3.1 Theoretical Framework

This study applies the Keynesian theory to the analysis of governmental expenditure. The justification for utilising the Keynesian theory of public expenditure in analyzing the impact of fiscal policy and institutional quality on price stability in Nigeria lies in its emphasis on the essential role of government involvement in effectively regulating economic volatility. In Nigeria, characterized by economic volatility and price-level changes, Keynesian theory advocates for the use of fiscal policy instruments, i.e. government spending and taxes, to stabilize demand and manage inflation. Moreover, the presence of competent government institutions and a robust rule of law, which are essential for the successful execution of fiscal policies, correspond to the Keynesian perspective that properly controlled public expenditure may reinforce economic stability. The present methodology offers a complete framework for the analysis of the combined impact of fiscal policies and institutional quality on price stability in Nigeria.

3.2 Model Specification

This study's model is an adaptation of Gbadebo *et al.* (2018) when investigating the effect of government policy on price stability. Their model was;

$$CPI = f(GRE, GCE, MPR, CRR) \tag{1}$$

where TXR stands for Tax Revenue during the study years, PC is a credit indicator (Credit to the private sector to GDP) during the study years, EDT and DDT stand for External Debt and Domestic Debt, respectively; PRE and PCE denote Public Recurrent Expenditure.

In order to achieve the purpose of this study, the researcher made adjustments to the model to incorporate additional elements. Total tax revenue (TPR), government effectiveness (GEF), and rule of law (ROL), as new factors. An assertion made by the newly expanded model is as follows:

$$CPI_t = f(TPR_t, TPE_t, GEF_t, ROL_t) \tag{2}$$

Where:

CPI = Consumer Price Index, TPR = Total Public Revenue, TPE = Total Public Expenditure, GEF = Government Effectiveness, ROL = Rule of Law, μ = Error term, β_0 = Constant and β_1 to β_4 = Parameter Estimates.

The expectations are as follows: $\beta_2, \beta_3,$ and $\beta_4 > 0$ $\beta_1, < 0$ indicating that the magnitude of $\beta_2, \beta_3,$ and β_4 is theoretically expected to have a positive correlation with the consumer price index. This is because an increase in TPR, GEF, and ROL is expected to decrease uncertainties and risks related to business transactions, so promoting investment and economic activities that contribute to price stability. Conversely, β_1 is expected to have a negative correlation with the consumer price index. This is because an increase in TPR indicates a slack in the labor market, with more job seekers than available jobs. This situation tends to reduce aggregate demand as unemployed individuals have less disposable income to spend on goods and services. Accordingly, the explicit version of the specification may be expressed as an ARDL model derived from equation (2).

$$\begin{aligned} \Delta \ln cpi_t = & \alpha + \sum_{i=0}^p a_{1i} \Delta \ln cpi_{t-i} + \sum_{i=0}^q a_{2i} \Delta \ln tpr_{t-i} + \sum_{i=0}^r a_{3i} \Delta \ln tpe_{t-i} \\ & + \sum_{i=0}^s a_{4i} \Delta \ln gef_{t-i} + \sum_{i=0}^v a_{5i} \Delta \ln rol_{t-i} \\ & + C_1 \ln cpi_{t-i} + C_2 \ln tpr_{t-i} + C_3 \ln tpe_{t-i} \\ & + C_4 \ln gef_{t-i} + C_5 \ln rol_{t-i} + \mu_t \end{aligned} \tag{3}$$

The function Δ takes the natural logarithm of each variable in the model, while \ln stands for the first difference operator. With the use of Equation 3, it was determined whether or not the regressors are moving in tandem with the $\ln cpi$. A research was conducted to determine whether or not the consumer price index (cpi) is moving in tandem with the independent variables utilising the ARDL model. utilising a limited F-test, the researchers restricted the coefficients of $C_1, C_2, C_3, C_4,$ and C_5 to be zero in comparison to the alternative. This was done in order to determine whether or not there is a long-term link between $\ln cpi$ and the regressors. Consequently, the following is how the null hypothesis and the alternative hypothesis are expressed:

There is no long-term link between $\ln cpi$ and the regressors, as shown by the hypothesis that $C_1 = C_2 = C_3 = C_4 = C_5 = 0$

$C_1 \neq C_2 \neq C_3 \neq C_4 \neq C_5 \neq 0$ (there is a long-run connection between $\ln cpi$ and the regressors)

Utilizing the cutting-edge framework that was created by Pesaran *et al.* (2001), the distribution of the test statistics displays nonstandard behavior. This is the case regardless of whether the variables are integrated of order zero (I(0)) or order one (I(1)). Pesaran and his colleagues calculated two unique sets of asymptotic critical values in order to traverse this complexity.

The first set of critical values was computed under the assumption that the variables are I(0), which represents the lower-bound critical values (LCB). The second set of critical values was computed under the assumption that the variables are I(1), which represents the upper-bound critical values (UCB). The significance of these essential numbers cannot be overstated when it comes to establishing whether or not the Consumer Price Index (CPI) and the variables that are connected with it have a stable and long-term connection, also known as cointegration. The calculated F-statistics are the most important factor in the decision-making process: If the F-statistic is greater than the UCB, then the null hypothesis that there is no cointegration is rejected, which indicates that the connection is stable over the long term. It is not possible to reject the null hypothesis if it is found to be lower than the LCB, which indicates that there is no evidence of cointegration. When the F-statistic falls anywhere in the middle of the LCB and the UCB, the conclusion is confusing and calls for more investigation. The robust two-step technique of the ARDL model, which was presented by Pesaran and Shin (1997), is utilised in this research once the cointegration has been established. In order to ensure that a thorough grasp of the dynamic interactions among the variables is achieved, this method is utilised to rigorously estimate both the long-run and short-run coefficients (elasticities) inside the ARDL framework that has been described [p, q, r, s, v]. This technique not only reveals the permanent economic links that continue to exist throughout time, but it also well catches the subtleties of variations that occur over a short period of time.

$$\ln \text{cpi}_t = \alpha + \sum_{i=0}^q a_{1i} \ln \text{cpi}_{t-i} + \sum_{i=0}^q a_{2i} \ln \text{tpr}_{t-i} + \sum_{i=0}^r a_{3i} \ln \text{tpe}_{t-i} + \sum_{i=0}^q a_{4i} \ln \text{gef}_{t-i} + \sum_{i=0}^q a_{5i} \ln \text{rol}_{t-i} + \mu_t \quad (4)$$

Constructing an error correction mechanism (ECM) of the above equation to derive the short-run elasticities.

$$\Delta \ln \text{cpi}_t = \alpha + \sum_{i=0}^q a_{1i} \Delta \ln \text{cpi}_{t-i} + \sum_{i=0}^q a_{2i} \Delta \ln \text{tpr}_{t-i} + \sum_{i=0}^r a_{3i} \Delta \ln \text{tpe}_{t-i} + \sum_{i=0}^q a_{4i} \Delta \ln \text{gef}_{t-i} + \sum_{i=0}^q a_{5i} \Delta \ln \text{rol}_{t-i} + \psi \text{ECM}_{t-1} + \mu_t$$

A rate of adjustment is quantified by ψ , whereas the short-run dynamics of the convergence to equilibrium are correlated with the elasticities β s. A range of lag durations were utilised in the study to arrive at the model's estimation. We reduced the maximum lag selection to three to make up for the loss of degree of freedom. To find the best lag length for the ARDL model, the Akaike information criterion (AIC) was utilised.

Description of Variables in the Model

i. Consumer Price Index (CPI): Consumer price indexes track the overall trend of price changes for products and services over a certain period of time. As a stand-in for price stability, the consumer price index serves as the dependent variable. Consumer price index is measured in US\$

ii. Total Public Revenue (TPR): This refers to the overall income collected by the government from various sources i.e. taxes, tariffs, fees, and other revenue streams. The impact of total public revenue on the consumer price index (CPI) in Nigeria is substantial. Higher total public revenue allows the government to finance increased expenditure on infrastructure, social programs, and public services. These investments can enhance productivity, reduce supply-side constraints, and stimulate economic growth. On the other hand, changes in taxation policies and revenue collection methods directly influence disposable income and consumer spending patterns. Effective management of public revenue is crucial for maintaining price stability, promoting economic development, and addressing inflationary pressures in Nigeria's

economy. As a consequence, this paper expect a negative correlation between total public expenditure and consumer price index. Total public expenditure is measured in billions of Naira annually.

iii. Total Public Expenditure (TPE): This represents the overall spending by the government on goods and services, transfers, and debt interest payments within a defined period, typically a fiscal year. This expenditure plays a substantially role in influencing the consumer price index (CPI) through various economic mechanisms. For instance, increased government spending can stimulate demand in the economy. When the government spends more on goods, services, and transfers to individuals and businesses, it enhances overall demand. If production capacity cannot keep up with this increased demand, it may lead to higher prices for goods and services, thereby affecting the CPI. Therefore, it is expected that total public expenditure will be positively related to consumer price index. Total public expenditure is measured in this paper in billions of Naira.

iv. Government Effectiveness (GEF): This refers to how well a government can formulate and implement policies, deliver public services efficiently, and manage resources efficiently, and manage resources transparently. When government effectiveness is high, it tends to lead to better policy outcomes and economic stability, which can impact price stability. For instance, they can enact fiscal policies that maintain balanced budgets and sustainable public finances, thereby avoiding excessive inflationary pressures that arise from unsustainable deficit spending. A strong regulatory environment enforces by effective governance ensure fair competition, prevents market abuses, and protects consumer interests. This stability reduces uncertainty for businesses, contributing to stable pricing mechanisms and preventing price distortions. Therefore, this paper hypotheses a positive correlation between GEF and CPI. Government effectiveness is been utilised to proxy institutional quality and is measured in index.

v. Rule of Law (ROL): This is a foundational principle of governance, establishes a framework where laws are clear, consistently applies, and applicable to all individuals and entities equally. This legal certainty and predictability play a crucial role in maintaining price stability within an economy. For example, under the rule of law, legal frameworks provide clear guidelines for economic activities. Businesses and investors operate with confidence knowing that laws and regulation are transparent and enforced consistently. This reduces uncertainty in business operations and investment decisions, which helps to stabilize prices by avoiding sudden disruptions or changes in regulatory environments. As a consequence, this paper assume that the rule of law will be positively related to price stability. Rule of law is utilised in this paper as a stand-in for institutional quality and is measured in index.

4. RESULT AND DISCUSSION OF UPSHOTS

Unit Root Test

Researchers utilised the ADF unit root test to establish the proper sequence of variables to be integrated in order to reduce the occurrence of false regression. Choosing the right method becomes easier with this information.

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

Variables	Levels		First Difference		Order of Integration	P-value
	ADF Statistics	5% Critical Value	ADF Statistics	5% Critical Value		
LCPI	-3.305640	-2.986225			1(0)	0.0255
LTPR	-2.189657	-2.981038	-6.288617	-2.991878	1(1)	0.0000
LTPE	-0.599519	-2.981038	-7.239877	-2.988225	1(1)	0.0000
LGEF	-2.892728	-2.981038	-7.220910	-2.988225	1(1)	0.0000
LROL	-0.457763	-2.981038	-8.494339	-3.020686	1(1)	0.0000

Source: Author Computation 2024* Level of significance at 5%

Table 1 displays the results of the ADF unit root tests, which were utilised in this study to verify the order of variables' integration. The variables were found to be integrated in either a different order or a combination of the I(0) and I(1) series, in congruent with the upshots. Level 1(0) is the stationary point for LCPI in congruent with the ADF upshot, while levels 1(1) is the initial difference for LTPR, LTPE, LGEF, and LROL. To study the long-term connection between these variables, the ARDL Bounds test method of co-integration is suitable under these conditions.

Table 2: ARDL Bound Test

Test Statistics	Value	K	
F-statistics	3.769303	4	
Significance		I (0)	I(1)
10%		2.45	3.52
5%		2.86	4.01
2.5%		3.25	4.49
1%		3.74	5.06

Source: Authors Computation 2024

In congruent with Table 2, the variables are related to one another throughout the course of the long run. This is shown by the F-statistic, which is 3.769303, which is greater than the critical values for the lower limit but lower than the upper bounds. Our decision to embrace the null hypothesis is owing to the fact that there is no association over the long term. For this reason, it seems that Nigeria's fiscal policy and institutional integrity are not connected to the long-term stability of prices. In congruent with the upshots of the research, there is a positive correlation between price stability, institutional quality, and fiscal policy in Nigeria over the short term. Prices are stable.

Table 3: ARDL Short-run Result (LPOR)

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	15.34740	6.019941	2.549426	0.0435
D(LTPR)	0.003338	0.155253	0.021503	0.9835
D(LTPR-1)	0.821716	0.227368	3.614030	0.0112
D(LTPR(-2)	0.317467	0.184292	1.722632	0.1357
D(LTPE)	-0.204981	0.366028	-0.560015	0.5957
D(LTPE(-1)	-1.779161	0.520091	-03420866	0.0141
D(LTPE(-2)	-0.481376	0.533488	-0.902319	0.4017
D(LGEF)	-0.986254	0.532152	-1.185330	0.1133

D(LGEF(-1))	1.569128	0.637994	2.459473	0.0492
D(LGEF(-2))	1.658458	0.549982	1.242415	0.2604
D(LROL)	-0.558172	0.334463	-1.668858	0.1462
D(LROL(-1))	0.440643	0.305280	1.443409	0.1990
D(LROL(-2))	0.551224	0.272947	2.019526	0.0900
Ecm (-1)	-0.691135	0.272964	-2.531967	0.0446
Adj R ² = 0.413635, F-stat = 2.248056 (0.002481), DW = 2.336927				

Source: Authors computation 2024

In the case of the error correcting component, the coefficient estimate for ECM (-1) has a negative value when the significance level is set at 0.05. An annual rate of 69% indicates that the model is getting closer and closer to reaching a state of equilibrium in the long term. At an annual adjustment pace of 69%, this indicates that the mistake that occurred the year before might potentially be rectified. The independent variables (LTPR, LTPE, LGEF, and LROL) are responsible for 41% of the total variance in the dependent variable (LCPI), in congruent with the value of the corrected R-Square (R²) statistic. In light of the large F-statistic at the 5% level of significance, the model stands out when seen in its whole. In congruent with the Durbin-Watson statistics, which are near to 2, the model would not be able to work properly if serial correlation was not present.

On display in Table 3 are the short-term outcomes of the model. A positive logarithm of total public revenue (LTPR) of (+0.821716) was seen in Nigeria for the previous year periods when the log value of the Consumer price index (LCPI) was replaced for price stability. In light of this, the log value of the consumer price index (LCPI), which is a measure of price stability, would increase by about 0.82% for every one unit increase in Nigeria's logarithm of total public revenue (LTPR). It may be concluded that there is a substantial correlation between the total log value of government revenue (p=0.0112). This outcome is not something that can be anticipated by economic theory. The consumer price index's log value is projected to decrease as an upshot of an increase in total public income brought about by the execution of more capital projects. When the log value of the consumer price index (LCPI) is utilised as a proxy for price stability in Nigeria over the prior year, the total public expenditure log value (LTPE) is -1.779161. This is the value that LTPE represents. If there were to be a one-unit increase in the total public expenditure logarithm value (LTPE) in Nigeria, the consumer price index (LCPI), which is a measure of price stability, would decrease by about one point eight (1.8) units. It has been discovered that there is a substantially association between the logarithm of total public expenditure and the log of consumer price index (p = 0.0141). This correlation is noteworthy since it is statistically substantially. This finding in economics does not even have a theoretical foundation to support it. The log value of the consumer price index will also increase if, as anticipated, there is an increase in the amount of money spent by the government. When applied to the consumer pricing index (LCPI) as a proxy for price stability in Nigeria in the preceding year, the logarithm of government effectiveness (LGEF) provides a positive upshot (+1.569128). This is because the LGEF is utilised instead of institutional quality. There would be a 1.6-unit increase in the consumer price index (LCPI), which is a measure of price stability, if the log value of government effectiveness (LGEF) in Nigeria were to increase by one unit. The logarithms of government effectiveness and the consumer price index have a link that is statistically substantially, with a p-value of just 0.0492, indicating that this association exists. This is the outcome that economists anticipate to take place. An administration that was more successful was expected to result in policies and the economy that were more stable, which would, in turn, have the potential to impact price stability. In conclusion, the rule of law (LROL) has a negative log value (+0.440643 & +0.551224) relative to the price stability in Nigeria measured by the consumer price index (LCPI) in the previous and following years. An increase of one unit in the rule of law (LROL) log value for

Nigeria would lead to an increase of 0.44% and 0.55% in the log value of the LCPI, which is a measure of price stability. The logarithm of the rule of law and the logarithm of the consumer price index do not have any statistically substantially association with one another ($p = 0.1990, 0.0900$). This is the outcome that economists anticipate to take place. The consumer price index is anticipated to see a rise in its log value as an upshot of an increase in the rule of law on price stability.

Diagnostic Test

Table 4: Ramsey Reset Test, Serial Correlation LM Test and Homoscedasticity Test Results

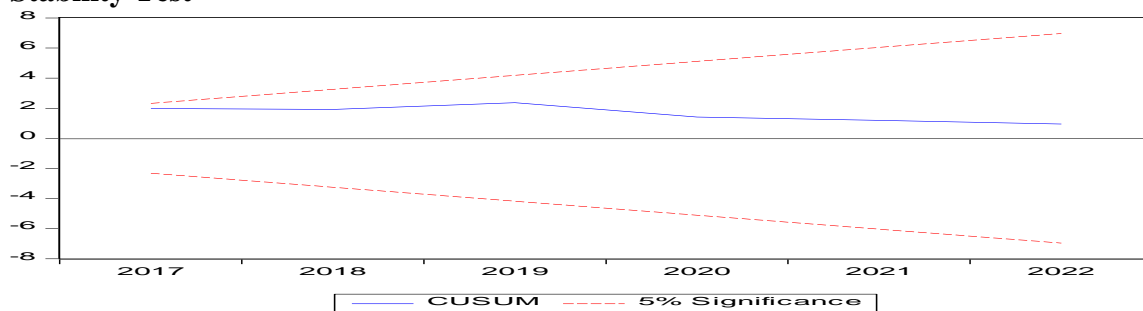
	F-Statistic	Prob-Value
Ramsey Reset Test	0.299840	0.6075
Breusch-Godfrey Serial Correlation LM Test	1.012151	0.4409
Breusch-Pagan-Godfrey Heteroskedasticity Test	1.214376	0.4327

Source: Authors computation 2024

Table 4 displays the upshots of the diagnostic tests. The Ramsey Reset test for linearity yielded a calculated p-value of 0.6075 and an f-statistic of 0.299840, both of which are higher than the 5% (0.05) critical limit. So, the model is well stated, and we can reject the null hypothesis.

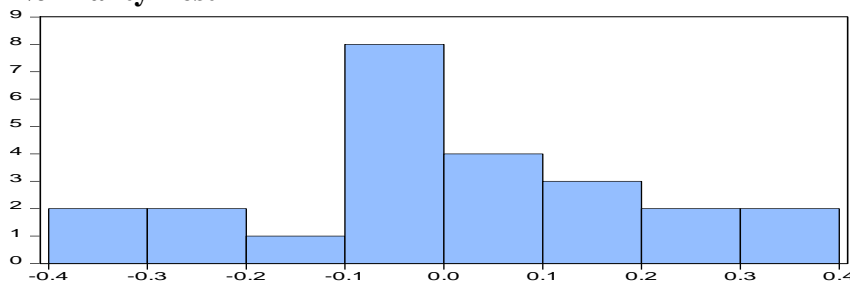
Owing to the upshots of the Serial or Autocorrelation Test utilising the Breusch-Godfrey Serial Correlation LM Test, the f-statistic is 1.012151 and the Chi-Square probability value is 0.4409. Given that the probability value of around 0.44% (0.4409) exceeds the critical threshold of 5% (0.05), this indicates that the model does not include serial correlation. The heteroscedasticity test, which utilised the Breusch-Pagan-Godfrey test, yielded an f-statistic of 1.214376 and a Chi-Square probability value of 0.4327. There does not seem to be heteroskedasticity in the model, as shown by a probability Chi-square value more than 5% ($P > 0.05$). This means that the residuals are perfect for regression since they are homoscedastic, or have a constant variance.

Stability Test



The stability test, summarized in Figure 1, confirmed the model's stability. The fact that the blue line is between the two red lines (-5 and +5) or is less than the significance threshold of 0.05 makes this very clear.

Normality Test



Series: Residuals	
Sample 1999 2022	
Observations 24	
Mean	-7.63e-17
Median	-0.011574
Maximum	0.325555
Minimum	-0.369715
Std. Dev.	0.196163
Skewness	-0.029304
Kurtosis	2.540228
Jarque-Bera	0.214825
Probability	0.898155

Figure 1 outlines the normality test and shows that the residuals follow a normal distribution. Jarque-Bara and related probability values are more than the 0.05 significance level; the former is 0.214825 and the latter is 0.898155.

Discussion of Upshots

(i) Total Public Revenue and Consumer Price Index in Nigeria.

A favorable connection between total public revenue (TPR) and consumer price index (CPI) was found in the short-run regression analysis utilizing the ARDL approach in the previous year. The positive correlation between total public revenue (TPR) and consumer price index (CPI) does not provide support for economic theory.

Public opinion is that if overall tax income were to rise, the government would be able to spend more on essentials like public services, infrastructure, and social programs. These expenditures have the potential to boost productivity, alleviate limitations on the supply side, and encourage economic expansion. The upshots show that there is a substantial correlation between total public revenue and consumer price index, rejecting the null hypothesis. Contrary to previous work by Ene and Kasim (2022), this study found different outcomes.

(ii) Total Public Expenditure and Consumer Price Index in Nigeria.

The upshots of the regression analysis showed that the total public expenditure (TPE) had a negative correlation with the consumer price index (CPI). The idea that total public spending (TPE) is negatively correlated with the consumer price index (CPI) is at odds with economic theory. Simply put, more government expenditure has the potential to boost economic demand. A rise in aggregate demand occurs when the government increases expenditure on products and services likewise payments to households and companies. A possible impact on the CPI might be price increases for products and services if manufacturing capacity is unable to meet the increased demand. The upshots show that there is a substantial correlation between total public expenditure (TPE) and consumer price index (CPI), thereby rejecting the null hypothesis. This study's upshots contradict those of Lubo and Bigbo (2021) and Abubi et al. (2021).

(iii) Government Effectiveness and Consumer Price Index in Nigeria.

There is a positive short-term correlation between the government effectiveness index (GEF) and the consumer price index (CPI), in congruent with data from the prior year as well. Consistent with economists' expectations, the GEF is expected to have a positive association with the CPI. Increased consumer protection, honest business practices, and a level playing field are all upshots of well-governance regulations. However, the p-value of the finding indicates that the GEF does, in fact, affect the CPI in a statistically substantially way. Consequently, the upshots of the research support the premise that there is a statistically substantially association between the GEF and CPI.

(iv) Rule of Law and Commodity Price Index in Nigeria.

In the last two years, there seems to have been a positive correlation between the rule of law (ROL) and the consumer price index (CPI). In congruent with standard economic theory, the ROL and CPI should be positively correlated. Owing to the p-value of the upshot, it is believed that an increase in rule of law (ROL) helps to stabilize prices by reducing uncertainty in corporate operations and investment choices, which in turn helps to prevent abrupt disruptions or changes in regulatory settings. The study's weak correlation between ROL and CPI supports the rejection of the alternative hypothesis that the two variables are related.

5. CONCLUSIONS AND POLICY RECOMMENDATIONS

The research found that changes in fiscal policy and inclusive growth indicators, i.e. total public income, had a considerable impact on the consumer price index. utilising data from the previous years, regression analysis revealed a positive and statistically substantially correlation between total public revenue and government effectiveness and consumer price

index, while total public expenditure had a negative and statistically substantially correlation with consumer price index during the same time period. Finally, the regression upshots show that the rule of law has a somewhat positive correlation with the consumer price index for the first and second years.

Recommendation:

- i. The Central Banks of Nigeria (CBN), should consider tightening monetary policy. Specific action i.e. increasing the benchmark interest rate to reduce aggregate demand and curb inflation.
- ii. Federal ministry of finance and budget planning should conduct a thorough review of budget allocations to identify areas where spending can be reallocated to more productive sectors.
- iii. Ministry of finance, and federal ministry of labour and employment, should implement policies to boost public sector investment in infrastructure, education and healthcare. This will create job, directly and stimulate demand in the economy thereby reducing unemployment.
- iv. ministry of humanitarian affairs, disaster management and should implement targeted social protection programs aimed at vulnerable groups, i.e. cash transfers, food association, and healthcare subsidies, to mitigate the impact on low-income household.

REFERENCES

- Abdulkarim, Y., & Saidatulakmal, M. (2021). The impact of government debt on economic growth in Nigeria. *Cogent Economics & Finance*, 9(1), 117 – 129.
- Abimbola, O. O., Benjamin, Y. J., Ignatius, O. M., Abdul, M. Y., & Maryjane, E. A. (2023). Fiscal policy and industrial sector development in Nigeria. *Journal of Economics and Allied Research*, 8(4), 78 - 90.
- Akobi, K. C., Umeora, C. E., & Atueyi, C. L. (2021). Government expenditure and inflation rate in Nigeria. *International Journal of Business Systems and Economics*, 13(4), 276 – 293.
- Amah, P. N. (2019). Using monetary and fiscal policy mix to restore macroeconomic equilibrium: An examination of contemporary realities. *Journal of Economics and Allied Research*, 3(2), 123 – 140.
- Ashogbon, F. O., Onakoya, A., Obiakor, R. T., & Lawal, E. (2023). Public debt, institutional quality and economic growth: Evidence from Nigeria. *Journal of Economics and Allied Research*, 8(1), 267 – 279.
- Chandran, V. G. R., & Krishnan, G. (2008). Foreign direct investment and manufacturing growth: The Malaysian experience. *International Business Research*, 1(3), 83–90.
- Dominic, C. O., & Olajide, O. (2023). Fiscal policy convergence in the West African monetary zone. *Journal of Economics and Allied Research*, 8(2), 90-105.
- Egbulonu, K. G., & Wobilor, A. K. (2016). Impact of fiscal policy on inflation in Nigerian economy. *International Journal of Innovative Development & Policy Studies*, 4(3), 53-60.

- Ene, J., & Kasim, B. (2022). Effect of fiscal policy on price stability in Nigeria. *Baze University Journal of Entrepreneurship and Interdisciplinary Studies (BUJEIS)*, 1(1), 65-80.
- Gbadebo, A. O., Ogbonna, K. S., & Adoms, F. U. (2018). Effect of government policy on price stability (1990-2015). *European Journal of Accounting, Auditing and Finance Research*, 6(3), 86-94.
- George-Anokwuru, C. C., & Ekpenyong, B. I. (2020). Government expenditure and inflation in Nigeria. *Journal of Economics and Management Sciences*, 3(2), 67 – 80.
- Joy, J., & Panda, P. K. (2020). Pattern of public debt and debt overhang among BRICS nations: An empirical analysis. *Journal of Financial Economic Policy*, 12(3), 345-363.
- Kalagbor, K G., & Ordu, P. A. (2019). The effect of public revenue and public expenditure in the Realization of macroeconomic objectives of government of Nigeria. *International Journal of Innovative Finance and Economics Research*, 7(3), 1-13.
- Keynes, J. M. (1936). *The general theory of employment, interest and money*. The University of Adelaide Press.
- Lubo, E., & Bigbo, O. (2021). Public expenditure and inflation in Nigeria. *International Journal of Multidisciplinary Research and Analysis*, 04(7), 929-938
- Maheswaranathan, S., & Jeewanth, K. M. N. (2021). Empirical investigation of the influence of fiscal policy on Sri-lanka's economic growth from 1990 to 2019. *Asian Journal of Economic Modelling*, 9(2), 122-131.
- Marius, I., & Alwell, N. (2013). Value added tax and price stability in Nigeria: A partial equilibrium analysis. *European Journal of Government and Economics*, 2(2), 107 – 125.
- Mohammed S & Taofik M. I (2023). Analysis of the fiscal synchronization hypothesis in selected sub-nationals in Nigeria. *Journal of Economics and Allied Research*, 8(1), 253 – 276.
- National Bureau of Statistics (2017). *Consumer price index report 2017*. <http://www.nigerianstat.gov.org>.
- Ndari, S., Diah, G., A., U., & Budi, T. (2012). The impact of fiscal policy on the output and inflation. *Bulletin of Monetary Economics and Banking*, 1(1), 56-70.
- Oligbi, B O (2020). Fiscal decentralization and macroeconomic stability in Nigeria. *Journal of Economics and Allied Research*, 4(1), 90 – 112.
- Onuoha, F. C., & Okorie, G. (2020). Impact of disaggregated public expenditure on inflation rate in selected African countries: A panel cointegration analysis. *West African Journal of Monetary and Economic Integration, West African Monetary Institute (WAMI), Accra*, 20(1a), 1-21.

- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approach to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289–326. doi:10.1002/jae.616
- Pesaran, M. H., & Shin, Y. (1997). An Autoregressive distributed lag modelling approach to cointegration analysis. In S. Strom, A. Holly, & P. Diamond. (Eds.), *Centennial volume of ragnar frisch, econometric society monograph*, 1-24. Cambridge University Press: Cambridge. [http://www.econ.cam.ac.uk/faculty/ Pesaran](http://www.econ.cam.ac.uk/faculty/Pesaran)
- Spilioti, S., & Vamvoukas, G. (2015). The impact of government debt on economic growth: An empirical investigation of the Greek market. *The Journal of Economic Asymmetries*, 12(2), 34–40.
- Umunna, G. N., Henry, O., & Charles, C. E. (2024). Institutions and economic growth in economic community of West African States (Ecowas). *Journal of Economics and Allied Research*, 9(1), 265-277.
- World Bank. (2023). *World development indicators*. <http://databank.worldbank.org>
- Yakubu, M., Barfour, K. A., & Shehu, U. G. (2013). Effect of monetary-fiscal policies interaction on price and output growth in Nigeria. *CBN Journal of Applied Statistics*, 4(1), 125 – 138.