

Effect of Government Policies on Price Stability in Nigeria

Onehi, Damian Haruna; Ibenta, Steve Nkem; Adigwe, Patrick, K.; Emejulu, Ikenna Justin

Department of Banking and Finance, Nnandi Azikwe University, Awka, Nigeria

ABSTRACT

This study examined the effect of monetary and fiscal policies on price stability in Nigeria using a data-rich framework spanning from 1986-2020. The main problem with the macro-economic policies that prompted this study was the fact that despite the series of the CBN Monetary Policy Committee decisions and government tax and expenditure implementation there is apparently no useful effect on inflation (price). The study employed Auto-regression Distributed Lag (ARDL) Bound Test for Co-integration of data analysis depending upon the time series properties of the data that confer mixed order of integration in addition to the conduct of the unit root test and Error Correction Model (ECM) estimation. The ADF test revealed that LNCPPI, EXR, GSDMD, GEXP, GTX and M2 were stationary at 1(1) while RIR, MPR and BOP at 1(0). Pesaran, Shin and Smith (2001) established that the ARDL bounds technique allows a mixture of 1(1) and 1(0) variables as regressors. Hence, we proceed to perform the ARDL bounds test for integration. The results of the ARDL bounds revealed that the null hypotheses were all rejected implying that a long-run effect exists among monetary and fiscal policies variables and CPI in a multivariate framework. ECM coefficient of -0.2942 conforms with expectation. Durbin-Watson statistic of 1.9925 revealed that the model seems not to have any case of autocorrelation. The result of our analysis shows that fiscal policy rather than monetary policy exerts a more potent effect on price stability in Nigeria. The study recommends that both monetary and fiscal policies should be complementary in order to be effective in taming inflation in Nigeria.

How to cite this paper: Onehi, Damian Haruna | Ibenta, Steve Nkem | Adigwe, Patrick, K. | Emejulu, Ikenna Justin "Effect of Government Policies on Price Stability in Nigeria" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-7 | Issue-1, February 2023, pp.904-917, URL: www.ijtsrd.com/papers/ijtsrd52766.pdf



IJTSRD52766

Copyright © 2023 by author (s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0>)



KEYWORDS: Fiscal Policy, Monetary Policy, Price Stability

INTRODUCTION

The Nigeria economy has been classified as one of the most volatile economies in the world due to its high dependence on oil revenue. Economic instability is witnessed yearly through rising inflation, massive unemployment, low output and dwindling foreign reserves that result to unstable exchange rates especially during the period when the price of oil continues to fall. Price stability has become one of the most desirable objectives of macroeconomic management. This is because, frequent price fluctuation, whether persistent increase (inflation) or decrease (deflation) create risks and uncertainties in economy. Price instability creates uncertainties about future prices, increases business risks and unanticipated changes in the distribution of wealth. It is important to know that, risks and uncertainties make planning by both consumers and producers difficult, by implication, lead to a fall in the efficiency of the free market in allocating scarce

resources and solving other societal and/or economic problems. Whenever prices rise above interest rate, savings is discouraged. This however, led to a fall in loan able funds for investment and consequently, a fall in potential output and employment.

Idoko, Seyi and Rotimi (2017) opined that the steady and gradual changes in the price level also come with some desired implications. Chiefly among these is its ability to serve as impetus for growth if properly controlled. There is a general believe that at least 3 percent steady growth in the price level in an economy would help boost economic growth. This position is based on the premise that investors are motivated to commit their scarce resources into production of goods and services when they expect a steady rise in the prices of these goods and services. On the other hand deflation benefits the consumers. It increases their level of demand and consumption and

as a result, increases their standard of living. However, as rightly opined by Berlemann and Nelson (2002), the negative distribution, allocation and effect of price instability are typically dominated the positive ones. There is therefore a need to stabilize prices in such a way that it retains its power to boost economic growth and employment while ensuring it does not create market risks uncertainties. Monetarist strongly believes that monetary policy exert greater effect on economic activity as unanticipated change in the stock of money affects output and growth i.e. the stock of money must increase unexpectedly for Central Bank to improve economic growth. In fact, they are of opinion that an increase in government spending would crowd out private sector and such can outweigh any short-term benefits of an expansionary fiscal policy. On the other hand, according to Adeteso and Mobolaji (2011), the concept of liquidity trap which is a situation in which real interest rates cannot be reduced by any action of the monetary authorities hence, at liquidity trap, an increase in money supply would not stimulate economic growth because of the downward pressure of investment owing to insensitivity of interest rate to money supply. John Maynard Keynes recommended Fiscal policy by stimulating aggregate demand in order to curtail unemployment and reducing it in order to control inflation (Jhingan, 2008). While there are several studies on this debate between Keynesian and monetarist in the developed economies, only fragmented evidence have been provided on this issues in the case of Nigeria.

Today, monetary and fiscal policies are both commonly accorded prominent roles in the pursuit of macro-economic stabilization in developing economies. The monetarist believe that monetary policy exert greater effect on economic activity while the Keynesians believe that fiscal policy rather than the monetary policy exert greater influence on economic activity. Despite their demonstrated efficiency in other economies as policies that exert influence on economic activities, both policies have not been sufficiently or adequately used in Nigeria.

Adewale (2018) opined that, the problem is that poor management of money supply and government expenditure will lead to increase in general price level, high unemployment rate, balance of payment deficit, unequal distribution of income, poverty etc.

It is against the above background that this study therefore seeks to examine and address some government policies with a collective look at price stabilization to sustain a moderate inflation level in Nigeria.

Inflation is very difficult to tackle, largely because any meaningful attempt to curb it entails a tradeoff among other important macroeconomic variables and social safety nets in the short run. Inflation cannot be sustained without accommodating increase in monetary supply, but if money supply rises beyond absorptive capacity of the economy, domestic prices will increase. (Soludo, 2009 and Abubakar, 2012).

The review of literature revealed that little attention has been given to the effect of monetary policy and fiscal policy on the price stability for sustainable economic growth in Nigeria and there exist very small comparative work between monetary and fiscal policies. The very few studies in this regard were studied by :Otmar (2005),” The role of fiscal and monetary policies in stabilization of the economic cycle” and ,Adewale (2018),”An empirical analysis of effectiveness of monetary and fiscal policy instruments in stabilizing economy”; Bodurin (2016) The Impact of Fiscal and Monetary Policy on Nigeria Economic Growth; Ejiri (2020).

Despite the quantum of studies, little attention has been paid to the study of effect of monetary and fiscal policies on price stabilization in Nigeria.

The main objective of the study to examined the effect of monetary and fiscal policies on price stability in Nigeria. The specific objectives include ascertaining the effects of monetary rate, interest rate, money supply and exchange rate, others are balance of payment, domestic debt, government expenditure and taxes on price in Nigeria.

Review of related literature

Conceptual review

Monetary policy: Monetary policy is the process by which the monetary authority of Central Bank of Nigeria (CBN) controls the supply and circulation of money through open market operation, cost of money or interest rate, in order to attain a set objectives oriented towards growth and stability of the country's economy. Monetary policy is essentially the tool for executing the mandate of monetary authority for sustainability of price stability, exchange rate stability as a critical condition for the achievement of economic growth and external viability (Adegbeti & Alabi, 2013). Monetary policy may be inflationary or deflationary depending on the economic situation of the country. Contractionary policy is enforced to squeeze down the money supply to curb inflation and expansionary policy is to stimulate economic activities to fight unemployment in recession.

Monetary policy consists of a government's formal efforts to manage the money in its economy in order to realize specific economic objectives. Three basic

kinds of monetary policy decisions can be made about are: (1). The amount of money in circulation (m₂). The level of interest rate and Exchange rate.

As earlier indicated, interest rate is one of the most powerful monetary policy instruments of the CBN in achieving its goals. The dynamics which through the instrument works is that a central interest rate serves as the anchor for the other rates, so that variations in the anchor rate initiates desired policy changes in the other rates and the system as a whole. (Adesola, 2018). The interest rates currently used in monetary policy by the CBN are: interbank discount rate, treasury bill rate, saving deposit rate, fixed deposit rate, lending rate, and Monetary Policy Rate (MPR), with the MPR serves as anchor rate. A plausible factor of the success of the MPR is the market based or indirect monetary policy approach under which the interest rate works. The approach has been the method of monetary policy adopted by the CBN since 1993. The market based method of monetary policy is generally regarded to be the most effective approach. For instance, direct monetary instruments like administrative control of interest rate may lead to inefficient resource allocation in the economy.

Fiscal policy: Fiscal policy is the use of government spending and revenue collection to influence economy. It refers in the overall effect of the budget outcome on economic activity (CBN, 2017). (Idowu (2010) described Fiscal Policy as the deliberate changes in the levels of government expenditure, taxes and other revenues as well as borrowing with a view to achieve national goals or objectives such as price stability, full employment, economic growth and balance of payment equilibrium. Priva (2019) described Fiscal Policy as the revenue or expenditure measure taken every year by the finance ministry to ensure growth and development of the economy as a whole. It means that government can impact the level of economic activity often measured by gross domestic product (GDP) in the short term by changing its level of spending and tax revenue.

It is also possible to perceive fiscal policy from three perspective (Gravelle and Hungerford, 2013), neutral, expansionary and contractionary. A neutral implied a balance budget, where government spending is fully funded by tax revenue ($G=T$) and the overall budget outcome has a neutral effect on the level of economic activity. Expansionary involves a net income in government spending ($G>T$) through rise in government spending or a fall in tax revenue. Lastly contractionary fiscal policy ($G<T$) occurs when net government spending is reduced either through higher taxation revenue or reduced government spending (Aliyu and Mahmood, 2019). Contractionary fiscal

policy is usually associated with a surplus (Stupak, 2019).

Theoretical framework

Many theories and models have been put forth to examine the effect of fiscal policy and monetary policy on the price stability in Nigeria. Many studies employed Keynesian, Endogenous growth, Monetarist, Mercantilism, Classical and Neo-classical theory to underpin the effect of the variables on price.

The existing literature on the effects of fiscal policy on price stability can be classified into two groups the demand side and the supply side effect. The effect of fiscal policy on the supply side has long-term implications. Fiscal policy oriented to increase the supply side can overcome the problem of limited production capacity and therefore have a more long term effect (Gali, 2013). The effect of fiscal policy on the economy through the aggregate demand approach is described by Keynes approach. The Keynesian approach assumes the existence of price rigidity and excess capacity so that outputs are determined by aggregate demand (demand driven). Keynes said that in a recession, the market based economy will not be able to recover without intervention from the government. Monetary policy is powerless to restore the economy because it depends only on interest rate cuts policy while in recession interest rates are already low on and can even be close to zero (Hansen, 2016). In the Keynesian approach, fiscal policy can drive the economy because increased government spending or tax cuts have a multiplier effect by stimulating additional demand for household consumer goods. Similarly, the government can make tax cuts as economic stimulus. Tax cuts will increase disposable income and in turn affect demand.

The broad objectives of Keynesian macroeconomic policy are not in dispute, full employment, stable price level, equitable distribution of income, balance of payment etc. He stated further that , private sector is inherently unstable (Tcheneva, 2008). His policy came under severe attack from the monetarists and classical schools, which regarded the private sector as inherently stable although with random disturbances but these are not either large or further amplified by quantifying adjustments. The private sector adjust through relative price changes to such disturbances hence active stabilization policy is not required.

Empirical review

A research conducted by Chigbe and Njoku (2013) examined the impact of monetary and fiscal policies on Nigeria economic growth (1990-2010) VAR model and graph were some of the econometrics techniques used for data estimation. Philip-Perron taste statistics revealed that the time series properties

of the variables were co-integrated equations. The variables used are: minimum rediscount rate, interest rate, liquidity rate, cooperate income tax, federal budget and gross domestic product (GDP). From their results, federal budget is not statistically significant to GDP but minimum rediscount rate, cooperate income tax and federal budget affect the GDP positively. The reaction of monetary and fiscal policies measure on the level of economic growth in Nigeria was found to be unstable over the years of study which indicate no long run relationship. However, the study further revealed that fiscal policy measures are more effective in gearing economic growth in Nigeria.

Falade and Folorunsho (2015) examined the relative effectiveness of fiscal and monetary policy instruments on economic growth sustainability in Nigeria. The methodology employed is error correction mechanism whereby the time series properties of fiscal and monetary variables were first examined using ADF and Philip Perron unit root test, followed by Johansen co-integration test among the series, using annual data for the period 1970-2013. The variables used are: GDP, exchange rate, money supply, government revenue and interest rate. The result shows that there is a long run relationship among fiscal and monetary variables and economic growth. It however, found that, the current level of exchange rate and its immediate past level, domestic interest rate, current level of government revenue and current level of money supply are the appropriate policy instruments mix in promoting economic growth both in the short and long-run. The paper concluded that fiscal and monetary are still complementary.

Adewale, (2008) Evaluated an Empirical Analysis of Effectiveness of Monetary and Fiscal Policy Instruments in Stabilizing Economy, from 1981-2015. The data were sourced from CBN, NBS and World Development Index (WDI). The data was tested for stationary using Augmented Dickey Fuller (ADF) test while the co-integration was conducted using Johansen's methodology. Error correction model (ECM) was employed for the empirical analysis. The results show that, there is a long run equilibrium relationship between monetary and fiscal policy instruments and economic growth in Nigeria. ECM has the expected negative sign and is between the accepted regions of less than unity. This was confirmed by the positive relationship between money supply, government expenditure, and revenue while interest rate and budget deficit have negative relationship with economic growth.

Ogege and Shiro (2012), investigated the dynamics of Nigeria's monetary and fiscal policies, focusing

specifically on their effects on the growth of Nigeria economy. The paper revealed that economic policies contributed to the growth of Nigeria economy. This is in line with the finding of Simorangkir and Adamati (2010) which shows that, the combination of monetary and fiscal policies expansion boosts economic activities of a nation effectively. Similar result had been expressed by Mahamood and Sial (2011) indicating that monetary and fiscal policies both play significant role in the economic development of a nation. Translating this on the basis of the view that, proper and effective management of monetary and fiscal policies will positively affect the price level of a country.

An empirical study by Havi and Enu (2014), the effect of fiscal policy and monetary policy on Ghana's economic growth: which policy is more potent? The study examined the relative importance of the two policies and to determine which of these two is more powerful in promoting economic growth in Ghana. The study used time series data from 1980 to 2012 and ordinary least square estimation technique. They used three multiple regressions and showed that monetary policy impact is potent in Ghanaian's economy although fiscal policy is also effective in Ghana's economy. Comparing the impact of both policies on Ghana's economy, the study revealed that monetary policy is more effective in promoting economic growth in Ghana than fiscal policy. Bank of Ghana should promote favorable investment atmosphere through the following variables: interest rate, lending rate, inflationary rate and exchange rate to promote and ensure economic growth, stability, sustainability and development in Ghana.

Aliyu and Mahmood (2019) examined the impact of monetary and fiscal policies on economic growth in Nigeria. They argued that, monetary and fiscal policies are macroeconomic instruments used in regulating the financial operations toward stabilizing and sustaining economic growth. The objectives of this study is to establish the relationship between the monetary and fiscal policies with economic growth in Nigeria, and determine the suitable percentage mix of the policies. The study used money supply, tax revenue generated and GDP as element of monetary, fiscal and economic growth respectively, from 2006 to 2015. Pearson Correlation technique was used to establish the relationship between the dependent and independent variables. The analysis revealed that money supply made the most significant contribution to the prediction of GDP in Nigeria than tax revenue generated. The result for the percentage mix revealed that, 87% and 13% for monetary and fiscal

respectfully. Therefore, if government increases expenditures it should adopt the necessary measures that will necessitate income generation, as well as provide governing policies to lower the expense of the income on consumable goods.

Impact of fiscal and monetary policy on Nigeria economic growth was examined by Bodunrin (2012). This study investigated using the secondary data time series from 1981-2015, with the interest in exploring which of the policies (fiscal or monetary) has been effective in propelling economic growth in Nigeria and how GDP growth responds to the monetary and fiscal policy shock. The positive impact of these policy tools on economic performance will help the country achieve sustainable growth and while reducing economic instability. Time series data were collected from the CBN, the International Monetary Fund (IMF) and the World Bank (WB). Firstly, a vector auto-regression model (VAR) was applied and then the vector error correction (VEC) model. The VAR model revealed that fiscal policy distorted real GDP but died after one year, while monetary policy had no significant impact on real GDP. Of the total government expenditure, the impact of capital expenditure was found to have a significant impact on real GDP while the impact of recurrent expenditure was insignificant. With the introduction of VEC model, the study found an unexpected shock on money supply, real effective exchange rate and taxes to have a negative effect on real GDP, while an unexpected shock on recurrent expenditure and capital expenditure to have a positive effect on real GDP. Finally, the study recommends fiscal policy leadership and harmonization between the fiscal and monetary authority with emphasis on channeling resources to where they are most needed.

Ahmed and Ibitoye (2016) examines the impact of monetary policy on price stability in Nigeria from 1970-2014. The data obtained for the purpose of the study through CBN Statistical Bulletin were analyzed using Ordinary Least Square regression (OLS) model. Unit root test and Johansen co-integration test. Consumer Price Index (CPI) is used as a proxy for general price level which is the explained variables. The research also addressed various problems associated with monetary policies such as budget deficit change in policy formulation, lack of enabling environment in the financial market and political instability. The result of the findings reveals that exchange rate and money supply actually influenced price stability in Nigeria both in the short-run and long-run. This is evidence by 90% coefficient of determination and F-statistics of 168.30 which is higher than the tabulated F-statistics.

Ajisafe and Folorusho (2002) examined the relative effectiveness of fiscal and monetary policy in macroeconomic management in Nigeria, using ADF, co-integration and error correction technique model. The time series properties of these variables (Gross Domestic Product, Narrow Money, Broad Money, Quasi Money, Government Revenue, expenditure and Budget Deficits) were investigated by conducting a unit root test using the annual series data for the period 1970-1998 sourced from CBN Bulletin. The result of their analysis shows that monetary rather than fiscal policy exerts a great impact on economic activity in Nigeria. The emphasis on fiscal policy (according to them) action of the government has led to greater distortion in the Nigeria economy.

Chowdhury (1986) in his study of monetary and fiscal policies impact on economic activity in Bangladesh was also of the opinion that fiscal rather than monetary action had greater influence on economic activities. He also made use of the Ordinary Level Square (OLS) technique in his empirical investigation. He also adopted St. Louis equation in estimating the monetary and fiscal variables with some modifications. The modified model estimated here is of the form:

$$Y_t = C_0 \times \sum m_t - 1 \times \sum F1F_t - 1 \times \sum e, E_t - 1 = U_t.$$

Where Y, M, F, and E represents the growth rate of nominal income, money supply, government expenditure and exports respectively in analyzing his results, he confirms the result of some authors and concluded that fiscal actions exert greater impact on economic activity in Bangladesh than the monetary actions. This result was confirmed with the t-statistics of the summed co-efficient which is significantly larger than the corresponding value for the monetary summed coefficients. It follows from this study that, fiscal policy impacts on nominal income are more predictable than monetary impacts.

$$Y_t = C_0 \times \sum m_t - 1 \times \sum F1F_t - 1 \times \sum e, E_t - 1 = U_t.$$

Where Y, M, F, and X represents income, Money Supply, government expenditure and exchange rate respectively. In estimating the above equation data for the period 1986-1991 was employed from CBN and NBS. The analysis of their results showed that fiscal policy exerts more influence on the economy than monetary policy. The result, therefore reveals that fiscal policies have been more effective in Nigeria at least in the period of depression. They are therefore of the opinion that government expenditure will be an appropriate measure of fiscal policy. Olaloye and Ikhide (1995) in their article entitled "Economic (price) Sustainability and the Role of Fiscal and Monetary Policy in a Depressed Economy in

Nigeria". He made use of the ordinary least square (OLS) technique in his empirical investigation. He also adopted St. Louis equation of this form:

$$Y_t = C_0 \times \sum m_t - 1 \times \sum F_1 F_t - 1 \times \sum e_t E_t - 1 = U_t.$$

Where Y, M, F, and X represents income, Money Supply, government expenditure and exchange rate respectively. In estimating the above equation data for the period 1986-1991 was employed from CBN and NBS. The analysis of their results showed that fiscal policy exerts more influence on the economy than monetary policy. The result, therefore reveals that fiscal policies have been more effective in Nigeria at least in the period of depression. They are therefore of the opinion that government expenditure will be an appropriate measure of fiscal policy on stability, sustainability and development in Ghana.

Falade and Folorunsho (2015) examined the relative effectiveness of fiscal and monetary policy instruments on economic growth sustainability in Nigeria. The methodology employed is error correction mechanism whereby the time series properties of fiscal and monetary variables were first examined using ADF and Philip Perron unit root test, followed by Johansen co-integration test among the series, using annual data for the period 1970-2013. The variables used are: GDP, exchange rate, money supply, government revenue and interest rate. The result shows that there is a long run relationship among fiscal and monetary variables and economic growth. It however, found that, the current level of exchange rate and its immediate past level, domestic interest rate, current level of government revenue and current level of money supply are the appropriate policy instruments mix in promoting economic growth both in the short and long-run. The paper concluded that fiscal and monetary are still complementary.

The empirical link on the effect fiscal and monetary policy on the economic growth of Nigeria (1986-2010) conducted by Ogar, Nkamare, and Emori (2014). The study employed the ordinary least square method of statistical analysis. Two models were used. Model I is the fiscal model while model II is the monetary model. It was found that government revenue had a positive impact and statistical significance on gross domestic product. Government expenditure was also positively significant in the growth of Nigeria economy. The second model depict that money supply had a positive impact on gross domestic product and it discovered that this variable was statistically significant. Exchange rate variable had a positive impact on the performance of Nigeria's economy. The findings revealed that inflation had a positive impact, but there was no significant

relationship between inflation and gross domestic product. It is therefore, suggested that government should increase the number of fiscal policy instruments over and above the ones currently in use.

An empirical study by Havi and Enu (2014), the effect of fiscal policy and monetary policy on Ghana's economic growth: which policy is more potent? The study examined the relative importance of the two policies and to determine which of these two is more powerful in promoting economic growth in Ghana. The study used time series data from 1980 to 2012 and ordinary least square estimation technique. They used three multiple regressions and showed that monetary policy impact is potent in Ghanaian's economy although fiscal policy is also effective in Ghana's economy. Comparing the impact of both policies on Ghana's economy, the study revealed that monetary policy is more effective in promoting economic growth in Ghana than fiscal policy. Bank of Ghana should promote favorable investment atmosphere through the following variables: interest rate, lending rate, inflationary rate and exchange rate to promote and ensure economic growth, stability, sustainability and development in Ghana.

Yakubu, Barfour, and Shehu (2018) examined the effectiveness of monetary and fiscal policies interaction on price and output growth in Nigeria. The data set used for this analysis is the annual series of the selected relevant macroeconomic variables from 1970-2010. The data for money supply (m_2), exchange rate and monetary policy rate (MPR) were used as monetary policy variables. Data for government revenues and expenditure were used as fiscal policy variables. Data for gross domestic product and inflation rate (proxy by CPI) were used as non-policy or growth variables. The data were obtained from CBN statistics bulletin 2009/2010. The dynamic correlations of variables have been captured by the analysis of impulse response and variance decomposition. From the innovation analysis, the results revealed that the policy variables money supply and government revenue have been more positive impact on price and economic growth in Nigeria specifically in the long-run. The estimate presented reveals that both monetary and fiscal policy exerts greater impact on real GDP and inflation in Nigeria.

However, different opinions have indeed continued to emerge as to which policy affect economic activities the most. The genesis of this controversies has been traced to the theoretical exposition of different schools of thought namely: the classical, the Keynesian, monetarist, and neo classical.

Nevertheless, each side of the policy spectrum has its differences, but most scholars agree that both policies should be combined in solving economic problems.

In view of Aliyu and Mahmood (2019) there will always be a lag in its effects because fiscal policy seems to have a greater effect over long period of time and monetary policy has proven to have some short term success. The lag in fiscal policy is as filters into the economy, while monetary policy is to show its effectiveness in slowing down an economy that is heating up at the faster than desired, but does not have the same effect when it comes to quickly inducing an economy to expand.

The fundamental, issue in the literature, theories and empirical works is the fact that both monetary and fiscal policies are applied by the government in regulating and stimulating the economy to achieve a desired level of growth, by eradicating a degree of inflation, unemployment, insecurity and recession.

Methodology

The data to be used for this analysis is the annual time series of selected relevant macro- economic variables from 1986-2020. The data for money supply (broad money m_2) exchange rate, Real interest rates and monetary policy rate were used as monetary policy

Model Specification

This research work adapted the model of Bodunrin (2016), $GDP = \beta_0 + \beta_1 Govexp + \beta_2 Tax + \beta_3 ms + \beta_4 EXC + \mu$; Ejire (2020), $INFR = \alpha_0 + \alpha_1 GTX + \alpha_2 GCX + \alpha_3 GRX + \alpha_4 MPR + \alpha_5 CRR + \alpha_6 TBR + \mu$; Adigwe et al (2015); $GDP = \beta_0 + \beta_1 LC + \beta_2 MS + \beta_3 CR + \mu$ with slight modifications (For example; removal of variables of Cash Reserve Rates (CRR) surplus/deficit budget, deposit rate etc and inclusion of Balance of Payment (BOP), interest rate (IR) and domestic debt (DDT) variables only.

$$GDP_t = \beta_0 + \beta_1 MS + \beta_2 INT + \beta_3 EXP + \beta_4 REV + \beta_5 DEF + \mu \quad (\text{Adewale, 2018})$$

The above is modified and expanded to accommodate more variables for robust explanation.

The modified model follows the Classical Linear Regression Model (CLRM) stated below:

$$CPI = f(MS_t + MPR_t + RIR_t + GEXP_t + GTX_t + DDT + GTX + BOP_t) \dots \dots \dots 3.3$$

Converted into the mathematical/econometric form by introducing of the intercept (o) and error term (u)

$$CPI = \alpha_0 + \alpha_1 M_2 + \alpha_2 MPR + \alpha_3 RIR + \alpha_4 EXR_t + u \dots \dots \dots 3.12$$

$$CPI = \beta_0 + \beta_2 GEXP + \beta_3 DDT + \beta_4 GTX + \beta_4 BOP + u \dots \dots \dots 3.13$$

$$CPI = \delta_0 + \delta_2 M_2 + \delta_3 MPR + \delta_4 RIR + \delta_5 EXR + \delta_6 GTX + \delta_7 DDT + \delta_8 GEXP + \delta_9 BOP + u \dots \dots \dots 3.144.1$$

Data Presentation

This section discusses the primary data for the study in appendix 1. This also presents the estimation results and the analysis of the equations specified in the previous chapter.

Descriptive Statistics

In this section, the descriptive statistics for the dependent and independent variables were presented. The dependent variable is Consumer Price Index (CPI) indicated as proxy for inflation. The independent variables were: Broad Money (M_2), Monetary Policy Rate (MPR), Real Interest Rate (RIR), Exchange Rate (EXR), Aggregate Government Expenditure (GEXP), Government Domestic Debt (GDMD), Government Taxes (GTX) and Balance of Payment (BOP).

The input data for the study were depicted in appendix 1. The descriptive statistics for the variables are shown in table 1. Table 1 shows that the numbers of observations per each variable are the same. This may be explained by the balanced nature of the time series data used in the analysis. Table 1 additionally shows that the means of

variables. Data for Government expenditure (both current and capital); taxes, Balance of payment and Domestic Debts were used for fiscal policy variables.

The variables are divided into two, the dependent variables and independent variables.

The study employed as its index dependent variables: Money Supply (MS), Exchange Rate (ER), Real Interest Rate (RIR) and Monetary Policy Rate (MPR) are the side of monetary policy while Government expenditure (GEXP), Government Taxes (GTX), Balance of Payment (BOP) and Domestic Debts (DDT) on fiscal policy area as explanatory variables.

The dependent variables: Inflation (proxy as consumer price index) (CPI). The sample period for this study proposed is from 1986 to 2020 representing a 35 year period covering aspects dealing with our data for statistical analysis. The choice of 1986 is very important to the history of Nigeria economy when the Government introduced Structural Adjustment Programme (SAPs) in 1986 to correct economic mismanagement and accessing price of economic activities, where the prices of economic activities has gone beyond every Nigerian. The choice of 2020 as the upper limit is to examine the current reform of Treasury Single Account (TSA).

CPI was 70.378, BOP N3.252 billion, EXR 112.446, GDMD was N13.845 billion, GEXP was N8.619 billion, GTX was N14.805 billion, M₂ was N20.060 billion, MPR was 13.765% and RIR was 2.464%.

Table 1: Descriptive statistics

	CPI	BOP	EXR	GDMD	GEXP	GTX	M2	MPR	RIR
Mean	70.378	3.252	112.446	13.845	8.619	14.805	20.060	13.765	2.464
Median	42.505	2.462	119.768	12.158	8.303	15.500	18.833	13.500	5.104
Maximum	267.512	20.739	361.518	29.119	17.856	28.800	44.075	26.000	18.180
Minimum	0.869	(6.290)	2.021	8.335	4.728	3.672	9.184	6.000	(31.453)
Std. Dev.	74.123	5.671	102.014	5.117	2.877	6.999	7.734	3.836	10.236
Skewness	1.150	1.146	1.004	1.194	1.179	0.061	1.230	0.722	(1.155)
Kurtosis	3.385	4.407	3.544	3.872	4.825	2.058	4.731	4.897	4.913
Jarque-Bera	7.701	10.247	6.126	9.154	12.593	1.277	12.821	8.053	12.746
Probability	0.021	0.006	0.047	0.010	0.002	0.528	0.002	0.018	0.002
Sum	2,392.836	110.552	3,823.176	470.744	293.035	503.369	682.043	468.000	83.778
Sum Sq. Dev.	181,309.600	1,061.383	343,424.000	864.117	273.169	1,616.751	1,974.043	485.618	3,457.701
Observations	34	34	34	34	34	34	34	34	34

Source: Researcher's Computation using EViews

The descriptive statistics above shows the basic aggregative averages for mean, median and mode for all the observations. The spread and variations in the series are also indicated using the standard deviation. The standard deviation information implies that, the seven variables have a standard deviation of between 2.877 to 10.236 suggest small dispersion from the means of between 2.464 to 20.060 except exchange rate with standard deviation of 102.014, and mean of 112.446 that exhibited more volatility than all the other variables included in the study. The p-values of all the variables confirm positive and significant, except GTX with a value of .528 is positive but insignificant.

Unit Root

Table 2: Stationarity Tests at Levels and First Difference

Variables	ADF Tests: Levels			ADF Tests First Difference		
	Absolute Test Statistic with intercept	Absolute Critical Values @ 5%	Order of Integration	Absolute Test Statistic with intercept	Absolute Critical Values @ 5%	Order of Integration
LNCPI	0.64677	2.97185		3.46835	2.95711	I(1)
BOP	3.32138	2.96041	I(0)			I(0)
EXR	2.41872	2.95113		3.58798	2.95402	I(1)
GDMD	1.44820	2.95402		4.79225	2.95711	I(1)
GEXP	0.29258	2.97185		4.47311	2.97185	I(1)
GTX	2.45808	2.95402		5.42175	2.96041	I(1)
M2	1.00898	2.95402		4.59426	2.95711	I(1)
MPR	3.22269	2.95113	I(0)			I(0)
RIR	3.48697	2.95402	I(0)			I(0)

Source: Researcher's Computation using EViews

The unit roots test result at levels is reported in table 2. The ADF test rejected the null hypothesis of the presence of unit root at levels for real interest rates because absolute test statistic was greater than absolute critical value at 5%. So RIR, MPR and BOP series were integrated of order zero, that is $I(0)$. On the other hand, the ADF test fails to reject the null hypothesis of no unit root for Broad Money (M₂), Monetary Policy Rate (MPR), Exchange Rate (EXR), Aggregate Government Expenditure (GEXP) and Government Domestic Debts (GDD)

Table 3: Results of ARDL Bounds Test for Cointegration

Model Specification	F-statistic	5% Upper Bound Value	Decision
Fiscal and Monetary Policies Model	45.40119	3.39	Reject H ₀
Fiscal Policy Model	31.47309	4.01	Reject H ₀
Monetary Policy Model	14.24401	4.01	Reject H ₀

Source: Researcher's Computation using EViews

It can be inferred from table 3, that all the values of the computed F-statistic are clearly above upper bounds levels at the critical values of 5% significance levels. The null hypotheses were all rejected, implying that a long

run relationship does exist among fiscal and monetary policy variables and consumer price index in multivariate framework.

Table 4: Estimates of the Long-run ARDL Effect of Fiscal and Monetary Policy on Consumer Price Index

Dependent Variable: LNCPI				
Method: ARDL				
Selected Model: ARDL(1, 1, 0, 1, 0, 1, 0, 0, 0, 1)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNCPI(-1)	0.7058	0.1194	5.9120	0.0000
BOP	0.0315	0.0886	0.3556	0.7263
BOP(-1)	-0.1695	0.0848	-1.9980	0.0611
EXR	-0.0001	0.0003	-0.3359	0.7408
GDMD	-0.0068	0.0089	-0.7703	0.4511
GDMD(-1)	0.0262	0.0131	1.9995	0.0609
GEXP	0.0160	0.0103	1.5518	0.1381
GTX	-0.0055	0.0036	-1.5177	0.1465
GTX(-1)	0.0040	0.0033	1.2053	0.2437
LNGDP	0.2656	0.1209	2.1972	0.0413
M2	-0.0037	0.0070	-0.5214	0.6084
MPR	-0.0006	0.0059	-0.1053	0.9173
RIR	-0.0015	0.0033	-0.4456	0.6612
RIR(-1)	-0.0019	0.0014	-1.3229	0.2024
C	-7.0643	3.2377	-2.1819	0.0426
Adjusted R-squared	0.99847			
Durbin-Watson stat	1.99251			
Prob(F-statistic)	0.00000			

Source: Researcher's Estimation from EViews

The adjusted R-squared of 0.99847 is an indication that about 99% of variations in consumer price index were explained by variations in levels and lags of fiscal and monetary policy variables. The probability value of the F-statistic (0.00000) shows that the F-value is also statistically significant, suggesting that all the variables have collective significant effect on price stability. The Durbin-Watson statistic of 1.99251 showed that the model seems not to have any severe case of first order autocorrelation (Gujarati & Porter, 2010).

Table 5: Estimates of the Long-run ARDL Effect of Monetary Policy on Consumer Price Index

Dependent Variable: LNCPI				
Method: ARDL				
Selected Model: ARDL(3, 0, 1, 2, 0)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNCPI(-1)	1.4425	0.1125	12.8165	0.0000
LNCPI(-2)	-0.6641	0.1856	-3.5779	0.0019
LNCPI(-3)	0.2066	0.0972	2.1253	0.0462
EXR	-0.0004	0.0002	-1.9484	0.0655
M2	0.0067	0.0042	1.5815	0.1295
M2(-1)	0.0055	0.0042	1.3168	0.2028
MPR	0.0045	0.0033	1.3531	0.1911
MPR(-1)	-0.0026	0.0029	-0.8908	0.3836
MPR(-2)	0.0103	0.0035	2.9312	0.0083
RIR	-0.0056	0.0012	-4.4967	0.0002
C	-0.1398	0.1073	-1.3033	0.2073
Adjusted R-squared	0.9989			
Durbin-Watson stat	2.2381			
Prob(F-statistic)	0.0000			

Source: Researcher's Estimation from EViews

The model estimates of the ARDL long-run effect presented in table 5 with monetary policy variables presents some interesting statistical significance of some variables. The result of the ARDL long-run model indicates that exchange rates and the instant effect on monetary policy rates have negative relationships with price stability in Nigeria. This is evident from their respective coefficient values. Although the instant effect of exchange rate policy and monetary policy rate on price stability is not statistically significant (p-values: $0.0655 > 0.05$; p-values: $0.1911 > 0.05$), but the lag effect of monetary policy rate is statistically significant (p-values: $0.0083 > 0.05$). When the lag effect of monetary policy rate becomes significant, the effect becomes positive. This means that increases in previous monetary policy rate lead to future increases in price stability while the contrary, real interest rate has instant negative effects on price stability in Nigeria (coefficient = -0.0056), which is an indication that consumer prices react instantly to real interest rates. The result of our estimate also revealed that consumer prices significantly (p-values: $0.0002 < 0.05$) react to instant outcomes of real interest rate.

ARDL Long-run effect of Fiscal Policy on Consumer Price Index

The long-run effect of fiscal policy variables on consumer price index is stated as:

$$LnCPI = \beta_0 + \beta_1 GEXP + \beta_2 GDMD + \beta_3 GTX + \beta_4 BOP + u$$

On the basis of the lag specification of the ARDL model, the study estimated the long-run coefficients of the ARDL(1, 3, 1, 1, 0) selected based on the ARDL-Akaike Information Criterion. The lagged result of our long-run effect of fiscal policy variables on consumer price index is given as shown in Table 6.

Table 6: Estimate of Long-run effect of fiscal policy on consumer price index

Dependent Variable: LNCPI				
Method: ARDL				
Selected Model: ARDL(1, 3, 1, 1, 0)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LNCPI(-1)	0.9380	0.0152	61.8279	0.0000
BOP	-0.1548	0.0779	-1.9873	0.0608
BOP(-1)	-0.1762	0.0553	-3.1860	0.0046
BOP(-2)	-0.0125	0.0529	-0.2365	0.8154
BOP(-3)	0.1993	0.0543	3.6676	0.0015
GDMD	-0.0007	0.0063	-0.1117	0.9122
GDMD(-1)	0.0170	0.0058	2.9381	0.0081
GEXP	-0.0148	0.0051	-2.8917	0.0090
GEXP(-1)	-0.0143	0.0050	-2.8441	0.0100
GTX	0.0035	0.0025	1.4025	0.1761
C	0.4016s	0.1073	3.7437	0.0013
R-squared	0.9994			
Adjusted R-squared	0.9991			
Durbin-Watson stat	1.4900			
Prob(F-statistic)	0.0000			

Source: Researcher's Estimation from EViews

The model estimates of the ARDL long-run relationship presented in table 6 with fiscal policy variables presents some interesting statistical significance of some variables. The result of the ARDL long-run model indicates that balance of payment had positive and instant negative effect on price stability in Nigeria. While the negative relationship is statistically significant from one

Table 7: Short-run and Error Correction ARDL Effect of Fiscal and Monetary Policy Variables on Consumer Price Index

ARDL Error Correction Regression				
Dependent Variable: D(LNCPI)				
Selected Model: ARDL(1, 1, 0, 1, 0, 1, 0, 0, 0, 1)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.0643	0.5591	-12.6361	0.0000
D(BOP)	0.0315	0.0512	0.6145	0.5466
D(GDMD)	-0.0068	0.0042	-1.6180	0.1231
D(GTX)	-0.0055	0.0022	-2.4724	0.0236
D(RIR)	-0.0015	0.0009	-1.5921	0.1288
ECT(-1)*	-0.2942	0.0227	-12.9440	0.0000
R-squared	0.8835			
Adjusted R-squared	0.8620			
Durbin-Watson stat	1.9925			
Prob(F-statistic)	0.0000			

Source: Researcher's Computation using EViews

The adjusted R-squared of 0.8620 is an indication that about 86.20% of short-run variations in consumer price index were explained by variations in balance of payment, government domestic debt, government tax revenue and real interest rate; and first period lag of the Error Correction Term (ECT). Theoretically, the ECT for a model with cointegrating relationship is expected to have a negative coefficient implying a convergence period lag ($0.0046 < 0.05$), the positive effect is significant from the third period lag ($0.0015 < 0.05$). Similar effect applies to government domestic debt. The instant effect of government domestic debt on consumer price in Nigeria was negative and then became positive. As it was with balance of payment, the effect of the last lag of government domestic debt was significant and positive ($0.0081 < 0.05$). On the contrary, aggregate government expenditure had negative significant effect on consumer price index (p-values = 0.0090; 0.010).

Table 8: Short-run and Error Correction ARD Effect of Monetary Policy Variables on Consumer Price Index

ARDL Error Correction Regression				
Dependent Variable: D(LNCPI)				
Selected Model: ARDL(3, 0, 1, 2, 0)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.1398	0.0269	-5.1996	0.0000
D(LNCPI(-1))	0.4576	0.0930	4.9217	0.0001
D(LNCPI(-2))	-0.2066	0.0795	-2.5987	0.0172
D(M2)	0.0067	0.0036	1.8713	0.0760
D(MPR)	0.0045	0.0025	1.7656	0.0927
D(MPR(-1))	-0.0103	0.0023	-4.5295	0.0002
ECT(-1)*	-0.0151	0.0016	-9.2447	0.0000
R-squared	0.9206			
Adjusted R-squared	0.9007			
Durbin-Watson stat	2.2381			
Prob(F-statistic)	0.0000			

Source: Researcher's computation from EViews

The adjusted R-squared of 0.9007 is an indication that about 90.07% of short-run variations in consumer price index were explained by variations in money supply and monetary policy rates with its lag and the Error Correction Term (ECT). Theoretically, the ECT for a model with cointegrating relationship is expected to have a negative coefficient implying a convergence to equilibrium. So, the coefficient of -0.0151 meets the theoretical expectation, meaning a unit change in the monetary policy variables cause a speed of adjustment of 1.15% back to the equilibrium with the consumer price index. The probability value of the F-statistic (0.0000) shows that the F-value is also statistically significant, suggesting that all the variables has collective significant effect o The Durbin-Watson statistic of 2.2381 showed that the model seems not to have any severe case of first order autocorrelation

Table 9: Short-run and Error Correction ARDL Effect of Fiscal Policy Variables on Consumer Price Index

ARDL Error Correction Regression				
Dependent Variable: D(LNCPI)				
Selected Model: ARDL(1, 3, 1, 1, 0)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.4016	0.0186	21.5803	0.0000
D(BOP)	-0.1548	0.0344	-4.5009	0.0002
D(BOP(-1))	-0.1868	0.0369	-5.0615	0.0001
D(BOP(-2))	-0.1993	0.0365	-5.4534	0.0000
D(GDMD)	-0.0007	0.0036	-0.1983	0.8448
D(GEXP)	-0.0148	0.0033	-4.5428	0.0002
ECT(-1)*	-0.0620	0.0045	-13.7419	0.0000
R-squared	0.9301			
Adjusted R-squared	0.9126			
Durbin-Watson stat	1.4900			
Prob(F-statistic)	0.0000			

Source: Researcher's Computation using EViews

The adjusted R-squared of 0.8835 is an indication that about 88.35% of short-run variations in consumer price index were explained by variations in balance of payment, government domestic debt, and government tax revenue; and first period lag of the Error Correction Term (ECT). Theoretically, the ECT for a model with cointegrating relationship is expected to have a negative coefficient implying a convergence to equilibrium. So the coefficient of -0.0620 meets the theoretical expectation. F-statistic (0.0000) shows that the F-value is also statistically significant, suggesting that all the variables adjustment of 6.20% back to the equilibrium with the consumer price index. The probability value has collective significant effect on consumer price index.

The Durbin-Watson statistic of 1.4900 showed that the model seems not to have any severe case of first order autocorrelation.

Discussion of Findings and Policy Implications

The role of fiscal and monetary policy on price stability is as critical to price stability as it has been for economic activities. So the result of our empirical findings as obtained from the analysis earlier conducted will be discussed below.

Table 10	Effect of independent variable	Fiscal and Monetary (Composite) Model	Fiscal Policy Model	Monetary Policy Model
H01	Effects of government expenditure on price stability	Positive Insignificant	Negative Significant	
H02	Effects of government tax on price stability	Negative Insignificant	Positive Insignificant	
H03	Effects of Balance of Payment on price stability	Negative Insignificant	Negative Insignificant	
H04	Effects of exchange rate on price stability	Negative Insignificant		Negative Insignificant
H05	Effects of money supply on price stability	Negative Insignificant		Positive Insignificant
H06	Effects of Real interest rate on price stability	Negative Insignificant		Negative Insignificant
H07	Effects of monetary policy rate on price stability	Negative Insignificant		Positive Insignificant
H08	Effects of Government domestic debt on price stability	Positive Significant	Positive Significant	

Source: Researcher

Summary, Conclusion and Recommendations

The study was set out to find out the effect of fiscal and monetary policy on price stability in Nigeria. The study was specifically undertaken to assess the efficiency and effectiveness of the monetary policies initiated by the CBN and fiscal policy decisions by the political administrations and also to unravel in the policy decisions regards to price stability in Nigeria. The information obtained from the study indicated that CBN and political administrations undertook various policy decisions as a measure to stimulate economic activities but with repercussions effects on price stability in the economy. From the review of related works and analysis of data, the following outcomes are summarized as when fiscal policies are pursued alone, the result is a negative and significant effect of government spending on price stability. However, when fiscal and monetary policies are pursued together, the result is a positive but insignificant effect of government spending on price stability. When fiscal policies are pursued alone, the result is a positive and insignificant effect of government tax on price stability. However, when fiscal and monetary policies are pursued together, the result is a positive and insignificant impact of government tax on price stability. Despite the pursuit of fiscal policy alone or it being combined with monetary policy options, the effect of balance of payment on price stability is negative and insignificant.

This study has posited that monetary and fiscal policies are viable policy tools that can stimulate economic activities, with particular emphasis on consumer price index. Particularly, The dependent variable is consumer price index indicated as CPI. The independent variables were: Broad Money (M2), Monetary Policy Rate (MPR), Real Interest Rate (RIR), Exchange Rate (EXR), Aggregate Government Expenditure (GEXP), Government Domestic Debt (GDMD), Government Taxes (GTX) and Balance of Payment (BOP). Data for this series were collected from 1986 to 2020 from the CBN statistical bulletin as well as the World Bank data base. Autoregressive Distributed Lag technique was employed to estimate the models of interest after conducting the unit root test and ARDL Bounds test. The study from the findings affirm that the composite features of monetary and fiscal policy had either positive or negative but insignificant impact on price stability in Nigeria within the study period. This shows a weak policy targeting in Nigeria, especially the monetary policy targets that is being referred to as unfashionable. This aligned with Adiqwe et al (2015) that monetary measures by CBN has no significant effect on inflation in the country. It means that the

problem of inflation is not a monetary phenomenon but is rather attributed to the structural rigidity in the economy. For fiscal and monetary policies to have any significant effect on price stability in Nigeria, there ought to be more financial inclusion and fiscal responsibility should be pursued religiously. The researcher inferred that whatever policy the CBN and government put in place without adequate production and infrastructural development will have negative effect on price stability in Nigeria.

Based on our findings, the study recommends that the CBN should promote e-payment policies and enforce the limit cash withdrawal to avoid hoarding of money in circulation in order to maintain the level of money supplied. For a favourable impact from balance of payments, exports must be pursued jealously. To avoid the adverse effect from domestic borrowing and debt overhang in the long-run, debt service repayment regime should not exceeds the ability to pay. When monetary policies are pursued alone, the result is a negative and insignificant effect of monetary policy rate on price stability. However, when fiscal and monetary policies are pursued together, the result is a positive but insignificant impact of monetary policy rate on price stability.

References

- [1] Abubakar, D. (2012). Monetary policy and price stability in Nigeria. *A research project submitted to the Department of Economics, Faculty of social sciences, Ahmadu Bello University, Zaria Kaduna State, Nigeria.*
- [2] Adefeso, H. A. & Mobolaji, H.I (2011). Effect of monetary and fiscal policies on the growth of Nigeria. *African Journal of Economic policy. Retrieval 25th June, 2019s*
- [3] Adegbite, T. A. A. & Alabi, W.O. (2013). Monetary policy and economic growth: Nigeria experience (1970 to 2010). *Prime Journal of Business Administration and Management 3(1), (2013) 822-833. Retrieved from w.w.w primejournal.org/BAM/pdf.../Adejare%20and %20Omodara.doc.p.*
- [4] Adesola, I. (2018). Fiscal and monetary policies in Nigeria; key aspect performance and policy options. *Journal of social science research 12(2) <https://cirword.com>*
- [5] Adewale, E.A. (2018) .An empirical analysis of effectiveness of monetary and fiscal policy instruments in stabilizing economy: Evidence from Nigeria. *Journal of social sciences. 2018; 7(3): 133-140 <http://www.sciencepublishmggroup.com/j/ss> doi: 10.11648/j.ss20180703.14*

- [6] Adigwe, P.K., Echekoba, F.N. & Justus, B.C.O. (2015). Monetary policy and economic growth in Nigeria: A critical evaluation *JOSR Journal of Business and Management* pp110-119. Department of Banking and Finance NnamdiAzikiwe University, Awka. Faculty of Management Sciences
- [7] Ahmed, A. B. & Ibitoye, V.K. (2016). Impact of monetary policy on price stability in Nigeria *Global Journal of Economics and Business Administration (GJEBA)* <http://escipub.com/gieb>
- [8] Ajisafe, R. A. & Folorunso, B. A. (2002). Relative effectiveness of fiscal and monetary policy in macro-economic management in Nigeria. *The African economic and business review*, vol.3, No 1
- [9] Aliyu, A. & Mahmood, O.A. (2019). Impact of monetary policy and fiscal policy on economic growth in Nigeria. *Journal of Economic and Sustainable Development*. vol.10(24).145-154
- [10] Berlemann, M. & Nelson, F. (2002). Forecasting inflation via electronic markets results from a prototype experiment; Dregden university of technology and Tipple college of business.
- [11] Bodurin, O.S. (2016). The impact of fiscal and monetary policy on Nigerian economic growth. *University of East Anglia (UEA), Norwich United Kingdom*. 1-7 Chigbu, E.E. and Njoku, M. (2013). The impact monetary and fiscal policies on Nigeria economic growth: 1990-2010. *European Journal of Business and management*, 5(2)
- [12] Ejire, J. (2020). *Government policies and price stability in Nigeria*. Unpublished maser thesis submitted to the department of finance and banking, faculty of management sciences, university of Portharcourt, xi+186
- [13] Folade, O. E. & Folorunso, B. A. (2015). Fiscal and monetary policy instruments and Economic growth sustainability in Nigeria. *American Journal of Economics*. 5(6); 587-594 DOI:
- [14] Gali, J. (2013). Notes for a new guide to Keynes (1): Wages, aggregate demand, and employment. *Journal of the European Economic Association*. 11(5),973-1003
- [15] Gravel, J. G. & Hungerford, T. L. (2013). Can contractionary fiscal policy be expansionary? Congressional research service (CRS). *Report for congress*. <http://fas.org/sgp/crs/misc/R4189.pdf>
- [16] Gujarati, D., Porter, D. C. & Gunasekar, S. (2010) Havi, E.D. and Enu, P. (2014). The effect of fiscal policy and monetary policy in Ghana's economic growth: which policy is more potent? *International Journal of Empirical Finance*, 3(2), 61-75
- [17] Hansen, B. (2016). A study in the theory of inflation. Routledge). *Basic Econometrics* 5th Edition published by tatamcgrewhill education private limited New Delhi.
- [18] Idoko, A.I., Seyi, S.A. & Rotimi, E. (2017). Monetary policy and price stability in Nigeria. *Academic journal of Economic studies* vol. 3 No.2 ISSN 2393-4913 68-75
- [19] Jhingan, M.I (2008). *Monetary economics*. 6th Edition. Vrinda publication LTD Nisha Enterprises. Delhi 110091
- [20] Ogar, A. Nkamare, S. E. & Emori, E.G. (2014). Fiscal and monetary policy and its effect on the growth of Nigeria Economy. *European Journal of Business and Management*. 6(29)
- [21] Ogege, A. & Shiro, P. (2012). Dynamic of Nigeria's monetary and fiscal policies and the effect on the growth of Nigeria economy. *Journal of Economic and Sustainable Development*, 10. 55-73
- [22] Otmar, I. (2005). The role of fiscal and monetary policies in the stabilization of the economic cycle speech by OtmarIssing, member of the executive board of the ECB. *International Conference Mexico city.14th November, 2005*
- [23] Priya, C. (2018). Monetary policy vs Fiscal policy Retrieval 24/01/2019
- [24] Soludo, C. C. (2009). The development in the banking sector, being a press release by the CBN.
- [25] Stupak, J. M. (2019). *Fiscal policy; Ecconomic effect*. Congressional research service (CRS) Report <https://fas.org/sgp/crs/misc>
- [26] Tchemewa, P. R. (2008). *Keynes' s approach to full employment: aggregate on targeted demand*. The levy economics institute of bard college. <http://www.levyinstitute.org/wp>
- [27] Yakubu, M., Barfour, K. A. & shehu, U. G. (2015). Effect of monetary and fiscal interaction on price and output growth in Nigeria. *Central bank of Nigeria Journal of Applied Statistics* 41) June 2015