CHAPTER ONE
INTRODUCTION

1.1   Background to the Study

Economic growth studies provided insights into why states grow at different rates over time and how the influence of government in her choice of tax and expenditure determines the level at which a given economy will grow (Ugwunta, 2014). It is widely upheld by scholars that economic growth and development is influenced by government fiscal policy paraphernalia particularly, in developing countries owing to liquidity constraints that characterized the economy, and attributed to underdeveloped and fragmentized nature of the financial system. Unlike monetary policy where the Central Bank sets monetary policy rate among others to control the level of money supply, through fiscal policy majorly via public expenditure, taxation and fiscal deficit, government can effectively and efficiently monitor and influence economic activities.

One of the main issues that economic policymakers have to face is the stabilization of economic fluctuations using monetary and fiscal policy as the main tools. This is one of the fields that have attracted considerable attention in the academic literature since the start of macroeconomics as a discipline (Kabashi, 2015). The weight of fiscal policy is felt virtually in all sectors of the economy. Fiscal policy through recurrent government expenditure results in more funds in the hands of citizens' and such money are spent on consumptions. Similarly, private business will have liquidity to expand their operations when government spends on goods and services. In period of economic crisis/recession, fiscal policy via government spending has been

unarguably considered as pivotal to reduce unemployment, improve welfare and aid economic recovery owing to the fact that government spending will argument the shortfall in private sector spending which ultimately spur growth.

The fiscal policy transmission mechanism through changes in the level and composition of taxation and government spending in various sectors has become vital in terms of its significant and substantial impact on economic activity (Mencinger, 2016). Taxation which is the reverse of expenditure as fiscal policy instrument affects the magnitude of fund in the hands of citizens. From the revenue side, a distinction is made between direct (income) and indirect (consumption) taxes since not all taxes give rise to similar distortions on real activities (Lozano & Rodríguez, 2009). Tax revenue yields to the government would also increase by virtue of increase spending because tax system is made progressive; i.e. the tax paid is a function of income received (Dada, 2013). When the tax rates are high, individuals and corporate entities are left with less fund for savings, spending and investments.

Put differently, proper functioning of the economy tends to trust more on government expenditure in situation of high tax rates as private sector are stripped of fund. Endogenous growth theory stipulates that the reduction in those taxes: discretionary and non-discretionary that distort the efficient allocation of production resources (taxes on labour, capital) should stoke higher economic growth hereafter, it is their essential interest to adjust fiscal policy in the direction to support economic convergence by choosing the most appropriate expenditure and revenue composition (Salim, 2012). A fiscal shock due to a shift in taxes or in government spending will, at some point in

time, constrain the future path of taxes and spending, since the government's inter-temporal budget constraint will eventually have to be met (Favero & Giavazzi, 2007).

The third arm of fiscal policy is government borrowing to finance expenditure otherwise called fiscal deficit. Fiscal deficit as a fiscal policy tool is considered to be counter-productive as it raises interest rates and crowds out private investment as government also compete for available resources to finance deficit, while private consumption would be significantly reduced. In such circumstances, the crowding out of the private investments by the government can outweigh any short-term benefits of an expansionary fiscal policy thus the need to striking a good balance in fiscal management (Akanni & Osinowo, 2013). Fiscal deficit will results in government acquiring more debt and introducing high tax rates to cover the interest costs of debt. From the neoclassical hinge point, these high interest rates and taxes accompanying fiscal deficit would equipoise the benefits associated with fiscal deficit. Justification of fiscal deficit as an ideal fiscal policy tool during period of economic recession (as government will borrow at low interest rate) is still not worth it because, during the economy recovery process, there will be in one way or the other, an amalgamation of higher interest rates and taxes to assiduously finance and re-finance the debt. For Mountford and Uhlig (2009), balanced budget expansions/fiscal deficit as fiscal policy tool can then be described as different linear combinations of revenue and tax shocks. For instance, a basic government spending shock is defined as a shock where government spending rises for a defined period after the shock, and which is orthogonal to the business cycle shock and the monetary policy shock.

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Fiscal policy is an important tool for managing the economy because of its ability to affect the total amount of output produced, which is the gross domestic product (Weil, 2008). Demand for goods and services upsurges in event of expansionary government fiscal policy leading to high prices and output as well, however, the extent at which demand influences or predicts outputs and prices thus depends on the prevailing economic situation in the country. Where the economy wallows in depression, expansionary fiscal policy is bound to rise output without a corresponding increase in price level. On the contrary, where the economy is experiencing boom scenario: employment is at its full capacity, increase in demands ultimately lead to inflation as prices of goods and services will rise, while output level will be unaffected or even where it is affected, the influence will be marginal. The fiscal policy paraphernalia being effective in influencing or determining the direction of demand and supply points to its well adored and magnificent role in economic growth and development. Reminiscently on the assertion of Weil (2008), when an economy is experiencing recession, expansionary fiscal policy by the government would help to restore output to its normal level and put unemployed workers back to work. Divergently, during a boom, when inflation is perceived to be a greater problem than unemployment, the government can run a budget surplus, helping to slow down the economy, and such a countercyclical policy would lead to a budget that was balanced on average.

A fiscal policy tool in Nigeria: government expenditure has been on the rise over the years. According to the Central Bank of Nigeria (CBN) statistical bulletin of 2016, total government expenditure had risen from

₦11.41 billion in 1981 to ₦5, 160.74 billion in 2016, as reflection of 0.07% and 7.60% of real gross domestic product accordingly. A component analysis of the pattern of expenditure as contained in CBN statistical bulletin of 2016 reveals recurrent expenditure is most preferred compared to capital expenditure. For instance, recurrent expenditure gulped 80.97% of the total federal budget in 2016, while a little fraction of 19.03% was allocated to capital expenditure which is seen a generator of employment and a catalyst for poverty reduction.

Sectorial insight of recurrent expenditure depicts that transfers (public debt servicing, pensions and gratuities and contingencies) received the lion share followed serially by administration (general administration, defence, internal security and national assembly), social and community services (education, health and other social and community services) and economic services (agriculture, road and construction, transport and communication and other economic services). On the capital expenditure component, economic services absorbs the majority of government capital expenditure. This is followed by administration, social and community services and transfers. The 2016 federal budget unveiled that capital expenditure on economic services was 41.16% of GDP, administration 23.69% of GDP, transfers 22.61% of GDP, while social and economic services was put at 12.54% of GDP. In the light of these, this study is set out to examine the effect of fiscal policy on selected macroeconomic variables in Nigeria from 1981 to 2016.

1.2   Statement of the Problem

This study was inspired by two controversial disputes in empirical and theoretical literature on the real effect of fiscal policy on macroeconomic variables. Firstly, theoretically and empirically, there is no harmony on the

true effects of fiscal policy on macroeconomic variables. The neoclassical theory states that the growth of the economy in general is not affected by any change in government fiscal policy tools, and even if it affect, it will be little or marginal. The notion of neoclassical theory is on the stylized fact that the economy will unambiguously regulates itself, that is, the economy is assumed to be at full employment. From the standpoint of the neoclassical theory, the benefits associated with rising government expenditure would be displaced by variation in private sector spending via high interest rates, inflation and higher tax rates.

Tenaciously, from the Keynesian theory argument, fiscal policy is a vital instrument for economic growth as it accelerates demand and supply of outputs particularly, during period of economic recession. The validation of the assumptions of these two theories in all economies is still marred with conflicts. The empirical study of Jawadi, Mallick and Sousa (2011) revealed that fiscal policy shocks have strong Keynesian effects on Brazil, Russia, India and China. Lozano and Rodrigues (2009), Tagkalakis (2013) and Trebicka (2015) authenticated and validated the Keynesian postulation in Colombia, Greece and Albania respectively. There is a contradiction as the recent and latest study in this subject matter in a highly recognised and reverend developed country: Germany by Grundler and Sauerhammer (2016) discredited the Keynesian assumption and asserts that fiscal policy lowers real gross domestic product and crowds out private consumptions and investments in Germany hence, in agreement with Ugwunta (2014) that fiscal policy tools have significant negative effect on macroeconomic stability in Benin Republic, Botswana, Burkina Faso, Burundi, Cameroun, Cape Verde, Central

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Africa Republic, Equatorial Guinea, Liberia, Kenya, Lesotho, Malawi, Madagascar, Namibia, Nigeria, Seychelles, Sierra Leone and South Africa.

Secondly and doggedly counting on Beetsma (2008), we are not even sure about the direction of the responses of some variables, let alone the magnitude of those responses. Mountford and Uhlig (2009) and Audu (2012) unveiled that fiscal policy predicts gross domestic product in United States of America and Nigeria respectively. On the controvert, Sacchi and Salotti (2014) asserted the inability of fiscal policy to influence inflationary trend in twenty (20) OECD countries, while Brasoveanu and Brasoveanu (2010) insisted on the negative causality between real gross domestic product and fiscal policy in Romania. To make matters worse, Lima, Maka and Pumar (2012) reported that it is not possible to distinguish empirically between Ricardian (monetary dominance) and non-Ricardian (fiscal dominance) regimes. These lack of consensus in theoretical and empirical literature on the alleged connection between fiscal policy and macroeconomic stability is a call for concern and necessitates the need for empirical investigation in a bid to resolve the bone of contention. Nigeria which has come out of recession based on the National Bureau of Statistic economic report of the second quarter of 2017 as released on 17th September, 2017, offers an idyllic environment to further re-ascertain the real effects of fiscal policy on macroeconomic variables and contribute to existing literature in this regard.

1.3   Objectives of the Study

The general objective of this study is to examine the effect of fiscal policy on selected macroeconomic variables in Nigeria. Specifically, the explicit objectives are stated as follows:

1. To determine the effect of recurrent expenditure, capital expenditure and fiscal deficit on real gross domestic product.

2. To ascertain the effect of recurrent expenditure, capital expenditure and fiscal deficit on industrial development.

3. To assess the effect of recurrent expenditure, capital expenditure and fiscal deficit on money supply.

4. To evaluate the effect of recurrent expenditure, capital expenditure and fiscal deficit on inflation rate.

5. To examine the effect of recurrent expenditure, capital expenditure and fiscal deficit on interest rate.

6. To determine the effect of recurrent expenditure, capital expenditure and fiscal deficit on exchange rate volatility.

1.4   Research Questions

The following questions were constructed to realize the objective of the study:

1. To what extent has recurrent expenditure, capital expenditure and fiscal deficit stimulated real gross domestic product?

2. To what extent has recurrent expenditure, capital expenditure and fiscal deficit influenced industrial development?

3. To what degree has recurrent expenditure, capital expenditure and fiscal deficit affected the level of money?

4. To what extent does recurrent expenditure, capital expenditure and fiscal deficit stir inflation rate?

5. To what degree does variation in interest rate be attributed to recurrent expenditure, capital expenditure and fiscal deficit?

6. To what extent does recurrent expenditure, capital expenditure and fiscal deficit induced volatility in exchange rate?

1.5   Research Hypotheses

The following hypothesis which were stated in the null format were tested in the course of this study:

1. Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on real gross domestic product.

2. Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on industrial development.

3. Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on money supply.

4. Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on inflation rate.

5. Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on interest rate.

6. Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on exchange rate volatility.

1.6   Scope of the Study

In determining the effect of Nigeria's fiscal policy on selected macroeconomic variables, this study dwelt only on expenditure and fiscal deficit aspects of fiscal policy. This study covered a period of thirty six (36) years, that is, from 1981 to 2016. The rationale behind the chosen time frame is on the argument that within the stated period, government of Nigeria has embarked on wide array of fiscal policy aimed at accelerating economic growth and development. Although, there is no significant fiscal policy changes in 1981 when compared to 1986 when the Structural Adjustment

Programme (SAP) was introduced but it is required in econometric to have a large number of observation (at least 30 years) for inferences made to be considered reliable and robust, hence the choice of 1981 as the base year. To add to this, the Central Bank of Nigeria statistical bulletin of 2016 has its base year as 1981 which showcases the harmonization of data from earlier pre SAP period thus utilization of the time frame by CBN would provide a more statistically reliable research finding. In addition, there is availability of data casing the period of the study as maintained by the Central Bank of Nigeria (CBN) through its statistical bulletin of 2016 as published on 28th July, 2017.

1.7   Limitations of the Study

One major limitation of this study is on the originality of the data as sourced from Central Bank of Nigeria statistical bulletin. This is attributed to the fact that the result of the analysis depend wholly on the accuracy of data on the concerned variables. The error margin in connection with data generation in its totality was fervently not the responsibility of the researcher. Besides, this study was hound downrightly on the premise and postulation of the neoclassical theory. In explicit term, the interpretation of results emanating from data analysis were only based on the proposition of the neoclassical theory. Other theories such as Keynesian theory and Richardian equivalence that sprang up in an attempt to illuminate the linkage between fiscal policy and macroeconomic stability were not given in consideration in data interpretation.

1.8   Significance of the Study

The empirical findings that will emit from analysis of data applied in this study will be of immense benefit to the following groups:

Government/Decision Makers: The outcome of this research work will bring government to their toe on effective and efficient management of fiscal policy tools to succeed in enthroning macroeconomic firmness or stability.

Academician/Scholars/Researchers: The debates on fiscal policy-macroeconomic nexus is still ongoing hence, findings of this study will contribute to the growing literature on the real effects of fiscal policy on macroeconomic stability of an emerging economy like Nigeria.

The Public in General: Rather than wallow in ignorance and sentiments specifically, in the issue of inflation, interest rate and exchange rate dynamics, the aftermath of this research work will enlighten the public on the real effect of Nigeria's fiscal policy on variations in macroeconomic fundamentals.

Investors and Potential Investors: Stability in macroeconomic environment is bound to attract investors (both domestic and foreign). For this reason, the findings of this study will enable investors wilfully diversify their investments in the event of government discretionary and non-discretionary fiscal policy. Contrariwise, government will be compelled to introduce and implement policies that will encourage investment inflows in informal sectors such as agriculture, mineral resources, small and medium scale enterprises, etc. to spur economic growth and development.

1.9   Operational Definition of Terms

The major terms as applied in this study for ease of exposition and clarity is defined as follows:

Capital Expenditure: This is the expenditure of the government on productive economic activities such as agriculture, road and construction, transportation and communication, etc. to proliferate real output.

Exchange Rate: This is the rate at which a unit of Nigeria Naira exchanges with other currencies of the world.

Fiscal Deficit: At a given point in time, the difference between government total revenue and expenditures is termed fiscal deficit. Put differently, fiscal deficit is that portion of government expenditure financed out of current revenue.

Industrial Development: Industrial development deals with the rate at which industrial activities increases or performs when compared with the magnitude of obtained from the economy.

Inflation: Inflation is the general rise in the prices of goods and services. The prices of goods and services in Nigeria recently increased owing to the depression witnessed in the economy.

Interest Rate: Interest rate as used in the context of this work is the rate at which deposit money banks charge to extend loans and advances to customers.

Money Supply: Money supply is total accumulation of currency and other near money assets at a specified period of time. Money supply include currencies in circulation as well as individual/corporate entities account balances in fixed, current and saving accounts.

Real Gross Domestic Product: Real GDP is the monetary value of goods and services produced in an economy over a given period of time deflated with inflation uncertainty.

Recurrent Expenditure: Recurrent expenditure is government spending on unproductive assets that does not results in escalation of real GDP. This expenditure include government spending on defence, administration, internal security, national assembly, etc.

CHAPTER TWO
REVIEW OF RELATED LITERATURE

2.1   Conceptual Issues

2.1.1.1 Fiscal Policy in Finance Literature

The concept of fiscal policy is artlessly the utilization of government spending, taxation and borrowing to convincingly bring about stability in the pricing system and influence economic activities to realize and desired or target level of growth and development. Specifically, fiscal policy is the use of government spending, borrowing and taxation to prompt variation in aggregate demand and output in an economy. Giving credence to Subhani (2010), fiscal policy is about expenditure, spending, and revenue as much as possible by the government at the interest and care of the public or the welfare of the people, thereby inspiring the country and increasing votes without lifting or keeping taxes stable.

Falade and Folorunso (2015) relate fiscal policy to involve the use of parameters such as taxation, budget and quotas that will influence government revenue and expenditure with a view to achieving macroeconomic objectives which monetary policy also stands to achieve. For instance, tax revenue will increase when an economy is expanding, all things being equal, even when there is no change in fiscal policy. From the standpoint of Obayori (2016), fiscal policy is used to reduce variations in aggregate spending which are important causes of fluctuations in economic activity in the midst of intricate economic development problems such as unemployment and persistent fiscal deficit. Shijaku and Gjokuta, (2013) argue that in the short run, fiscal policy can be used to counter output cyclicality and/or stabilise volatility in macro variables, which is descriptively same as the effects of the short run monetary

policy whereas in the long-run, fiscal policy and the debt financing methods can also affect both demand and supply side of the economy.

Gunasinghe (2014) distinctly sees fiscal policy as relevant tool for reducing income inequalities in an economy. Thus, the conventional wisdom of economic theory postulates that equity objectives can only be achieved at a cost of economic efficiency and hence the use of fiscal policy to meet such a target has an unavoidable trade-off between equity and efficiency. Similarly, fiscal policy remains the main tool of government to address extraordinary inequalities in income and access to social and infrastructural services. The relative effectiveness of fiscal and monetary policies in stabilizing demand pressures requires a coordinated effort of both policies to deal with huge fiscal deficits and high inflationary pressures (Karuhanga & Nyirakanani, 2015).

2.1.1.2 Real Gross Domestic Product

Economic growth as measured with real Gross Domestic Product (GDP) is the monetary value of goods and services a nation produced at a specified period in time after taking into consideration probable inflationary tendencies. Real GDP is an important macroeconomic variables that gives an insight on the health of the nation. Government fiscal policies aims towards sustaining steady appreciation in GDP. An expansionary fiscal policy causes upsurge in aggregate demand which results in more production leading to growth in GDP. On the other hand, a contractionary government fiscal policy results in reduction in aggregate demand which ultimately cause a decline in GDP. Economic growth can be positive or negative. When the GDP is continuously on the rise, then economic growth is positive, while a decline in GDP is termed negative growth and most often called recession. Scholars in the finance literature have distinguished short term economic stabilization

from long term economic growth. Economic growth is the most powerful instrument for reducing poverty and improving the quality of life in developing countries. Andolfatto (2005) notes that economists and policymakers care about the GDP (and the per capita GDP in particular) because material living standards depend largely on what an economy produces in the way of final goods and services. Residents of an economy that produces more food, more clothes, more shelter, more machinery, etc., are likely to be better off (at least, in a material sense) than citizens belonging to some other economy producing fewer of these objects.

2.1.1.3 Industrial Development

Industrial development in its shortest form implies the establishment of industries by the government for the production of various economic goods for local and foreign consumption. Industrial development are usually of priority to developing countries and incorporated in policy framework as a way of creating employment, reducing poverty level, improving welfare of residents and deterring income inequality among others. Industrial development has had an important role in the economic growth of countries like China, the Republic of Korea (Korea), Taiwan Province of China (Taiwan), and Indonesia (UN, 2007). Industrialized nations are seen as haven for investors as they (investors) bring new factories and technology due to the availability of abundant and cheap labour force in these industrialized countries. Industrial development is vital for attaining a desired level of economic growth and development. Countries normally embark of massive industrial development to raise aggregate domestic demand, improve exports especially where they have comparative advantage and to reach well-regulated, integrated, investment friendly business environment to attract foreign direct investments in the

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economy (UN, 2007). The status of China as a big contributor to world gross domestic product is attributed to massive industrialization campaign of the 12th century. Wen (2015) rhetorically asked how did China attained its status of an industrialized nation within a short period of time. According to him, in just 35 years, China transformed itself from an impoverished agrarian economy into an industrial powerhouse that produces nearly half of the world's industrial goods. How did it accomplish this in such a short time? Nigeria's reliance on importation for almost all her need is as result of the poor industrial sector performance and government poor entrenchment of industrial revolution in its policy framework.

2.1.1.4 Money Supply

Money supply is the quantum of money in circulation in an economy over a period of time. Money supply does not only include the currency notes or coins in circulation, it also encompasses money held by individuals in current, savings and fixed deposits accounts of deposit money banks, post office deposits and other related instruments of near money that is accepted as a medium of exchange (Hoang, 2014). The regulation of the volume of money in circulation has been on the arrow head of the monetary authority as its affects business cycle which ultimately influences the economy in general. In Nigeria, broad money supply (M_2) comprises of narrow money (M_1) and quasi money supply (QM). Narrow money supply is total demand deposit and currency notes in circulation less cash currency held in deposit money banks vaults, while quasi money is made of savings and time deposits held by individuals. The third quarter of 2017 fiscal year economic report of Central Bank of Nigeria reported that money supply in Nigeria fell below target. Money supply declined to ₦22.20 trillion in July, 2017 compared to ₦23.39

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trillion in December, 2016; an indication of 5.08% depreciation in money supply and lower than the CBN's growth target of 10.29% for the year 2017. Following the assertion of Howells (2010), for the money supply to be endogenous, two conditions must be fulfilled. The first is that the causes of monetary expansion (or contraction) must lie with other variables within the economy, as opposed to being at the discretion of some external agency ('the policymaker'). The second is that, in order to respond to these forces, commercial banks must be able to obtain reserves on demand, or be able to economise on their need for reserves. In either event, reserves must not be a constraint.

2.1.1.5 Inflation Rate

Inflation is an unanticipated rise in the prices of goods and services experienced in a scenario where the demand outweighs supply in an economy. Persistent rise in inflation rate results in fall in the purchasing power of a currency. One of the mandate of the Central Bank of Nigeria is to ensure price stability. However, the realization of this objective has been difficult owing to factors some of which are within and outside the control of the Central Bank of Nigeria. Inflation in Nigeria over the years have been very volatile and unpredictable. For instance, the September, 2017 economic report of the National Bureau of Statistics (NBS) put inflation rate to be 16.01% just for the month of August, 2017 compared to 1.8% in December, 1995. Even when the economy of Nigeria was in recession that inflation rate was expected to fall, it did not but catapulted to 14.2% in 2016 as against 13.2% in 2015. The inflationary trend in Nigeria has been attributed to inappropriate monetary and fiscal policies of the government. Falae (2016) notes that it's not even that its Central Bank of Nigeria policies are completely unreasonable but the biggest

problem is that the Central Bank of Nigeria is unable to react fast enough to the rising inflation. Over the years, it has tried both the expansionary and tight fiscal policies, but both have consequently failed. The first policy only worsened the inflation, while the second upset the population.

2.1.1.6 Interest Rate

Interest rate is an important economic price because, whether seen from the point of view of cost of capital or from the perspective of opportunity cost of funds, interest rate has fundamental implications for the economy (Acha & Acha, 2011). Interest rate as applied in the context of this study is the rate at which deposit money banks in Nigeria extend loan and advances to clients or customers. Interest rate would be describe also the lender's cost of giving out money. The fee charged by deposit money banks to grant any loan facility for any purpose be it economic or not is very high. Deposit money banks charge as high as 25% to give out loan. The fee charge for accessing credit facility from the banking systems makes investors and entrepreneurs to shy away from banks' loans and heavy reliance on equity capital. High interest rate discourages investments in productive economic activities which has the potential of boosting the gross domestic product. By either impacting on the cost of capital or influencing the availability of credit, by increasing savings, interest rate is known to determine the level of investment in an economy (Acha & Acha, 2011). The high interest rate has been purely hinged to Central Bank of Nigeria policy on monetary policy rate. The Monetary policy rate of the Central Bank of Nigeria is 14% as at 31st September, 2017. This level of monetary policy rate by the CBN, investors feel is high and affects the ultimate interest rate charge by deposit money banks in granting loans and

advances when other fees such as administrative, insurance, handling charges, etc. have been factored.

2.1.1.7 Exchange Rate Volatility

The exchange rate policy of the Federal Government of Nigeria has continued to dominate the economic cycle, presumably on Nigeria's inability to produce what they consume and wholly relies on revenue from oil exports (Anyanwu, Adigwe & Ananwude, 2017). Exchange rate in its simplest form is price of a country's country against another. Exchange rate is the rate at which a nation's currency is exchanged for another. In other words, it is the price of a nation's currency in relation to other nations of the world. The exchange rate policy seems to be the life-wire of the Nigeria economy following the introduction of structural adjustment programme in 1986 which mark the starting point of the depreciation of the local currency against the US dollar (Anyanwu, Ananwude & Okoye, 2017). The exchange rate of Nigerian Naira against other major currency like the US dollar, British Pound and European Euro has deteriorated over the years. Based on the Central Bank of Nigeria statistical bulletin of 2016, the official exchange rate of Nigerian Naira drastically depreciated from ₦1 per $0.6100 in 1981 to ₦1 per $253.50 in 2016. In terms of the parallel market otherwise called the black market, exchange rate surged to ₦1 per $490.0 in 2016 compared to ₦1 per $138.50 in 2004 based on the end period analysis. The depreciation in exchange rate coupled with the fact that Nigeria is not a production driven country, the prices of goods and services have escalated beyond the imagination of the citizens, especially during the 2016 fiscal year and second quarter of 2017 when Nigeria was in economic recession. Exchange rate volatility is the frequent fluctuation in the value of Nigerian Naira against other currencies of the

world, especially the US Dollar, British Pound and the European Euro. Volatility in exchange rate in Nigeria has affected national productivity and prices of goods and services in the country.

2.1.2 Patterns of Fiscal Policy

Fiscal policy can take two patterns: discretionary and contractionary.

Discretionary Fiscal Policy

Discretionary fiscal policy is a change in government fiscal policy based on the prevailing economic situation or on desired target. Discretionary fiscal policy is usually applied during period of economic recession or turbulence. Discretionary fiscal policy would be either to expand or contract production or other economic activities as deemed necessary. Amadeo (2017) observes that democracy itself ensures an expansionary discretionary fiscal policy because lawmakers get elected, and re-elected by spending money and lowering taxes as that is how they reward voters, special interest groups and those who donate to campaigns. The discretionary tools of fiscal policy by the government are budget and taxes. The impact of government debt dynamics on interest rate and risk premium can influence the macroeconomic effects of fiscal policy: restriction of private spending resulting from interest rate increase associated with debt growth, while risk premium at high levels of government debt is capable of enhancing the crowding out effect. Discretionary fiscal policy eliminates the recessionary gap existing in the economy which occurs when the equilibrium real GDP is less than the potential real GDP of the country (Ugwunta, 2014). Discretionary fiscal policy aims to boost demand and output in the economy either directly, through greater government expenditures, or indirectly, through tax reductions that stimulate private consumption and investment spending (FRBSF, 2002).

Discretionary fiscal policy via capital expenditure through public work programmes and indirectly through constructions creates employments as it increases the amount of money in the hands of the citizens. This results in appreciation in demand, hence upsurge in economic growth. While most empirical evidence indicates that a fiscal expansion raises output and consumption and deteriorates the trade balance. Beetsma (2008) showed that the stimulating effect of discretionary fiscal policy is weaker and the trade balance deterioration is larger for more open economies. In providing evidence on the energetic effect of discretionary fiscal policy, Follette and Lutz (2010) measured discretionary fiscal policy actions at the federal and state and local levels in United States of America (USA). They found that federal policy actions are somewhat counter-cyclical: expenditures and tax actions are typically more stimulative after a business cycle peak than before the peak. In contrast, they provided empirical evidence that state and local policy actions have been somewhat pro-cyclical, probably reflecting constitutional restrictions on general fund budget balances.

Despite the perceived gain attached to discretionary fiscal policy, DeLong and Tyson (2007) identified five powerful reasons for the near-consensus against the use of discretionary fiscal policy and for the use of monetary policy:

The problem of legislative confusion: Legislatures that were told that expansionary policies which led to cyclical deficits in downturns were good might have difficulty retaining the other important lesson that structural deficits which led to perpetually rising debt-to-GDP ratios were bad. Better, it was thought, to keep the legislative process focused on "classical"

considerations of the benefits and costs of spending programs and taxation levels.

The problem of legislative process: Legislatures are, by design, institutions that find it very difficult to make decisions quickly. Central banks, by contrast, can move asset prices in an hour. Fiscal policies that take effect this year as a result of decisions made by a legislature last year based on information from two or three years ago would seem to guarantee sub-optimal economic outcomes.

The problem of implementation: Public bureaucracies have limited capacities to ramp-up or ramp-down their spending levels quickly without incurring substantial waste. The larger the fiscal-policy intervention to balance aggregate demand, the less likely the intervention would be well timed, well designed and well executed.

The problem of rent-seeking: In a world where we fear that the structure of government already leads to policies favouring too-many politically-powerful winners at the expense of politically-weak losers, an additional excuse to undertake fiscal projects and programs that would not meet conventional societal benefit-cost tests is not welcome.

The problem of superfluity: Monetary policy was strong enough to do the job. Fiscal policy was simply not necessary.

Contractionary Fiscal Policy

Contractionary fiscal policy is a deliberate alteration in government fiscal policy aimed at correcting imbalances in the economy or returning the economy to equilibrium. This is attained by either reducing government expenditure or increasing taxes. In period of high inflation, a cut in government spending would automatically results in reduction money supply.

This diminishes the spending capacity of the citizen, hence forcing aggregate demand to fall which eventually shrinks inflationary trend in the economy. Contractionary fiscal policy occurs when net government spending is reduced either through higher taxation revenue, reduced government spending, or a combination of the two which would lead to a lower deficit or a larger surplus than the government previously had, or a surplus if the government previously had a balanced budget. It is usually associated with a surplus (Oke, 2011). While acknowledging Bornhorst et al (2011) Dinga (2009) and Martner (2000), Gondor (2012) asserted that automatic fiscal stabilizers are an integral part of the fiscal policy arsenal of a country, both on the revenue and expenditure side. On the revenue side, the literature reveals that taxes are the most pro-eminent automatic stabilizer and on the expenditure side, the most discussed automatic stabilizers are unemployment benefits. Contractionary fiscal policy reduces the level of production, and hence the level of employment and eliminates the inflationary gap existing in the economy (Ugwunta, 2014).

2.1.3   The Role of Fiscal Policy

Until the early eighties fiscal policy was widely regarded as a useful tool for economic stabilization (Beetsma, 2008). The government cannot just design a fiscal policy without inputting the facets of growth and development. The objectives of government fiscal policy are discussed in the following subsequent headings.

Price Stability: One of the major aim of fiscal policy to achieve price stability. Developing countries are characterized by economic instability majorly manifested by instability in prices of goods and services thus fiscal policy is needed to correct this imbalances. This is obviously realized by

increasing taxes luxurious goods. For a sample of OECD countries Rother (2004) suggested that activist fiscal policies may have an important impact on CPI inflation volatility. With regard to USA, Tulip (2014) empirically showed that fiscal activism can substitute for a high inflation target. If fiscal policy behaves as it has recently, then an increase in the inflation target is not warranted, despite increased volatility of macroeconomic shocks.

Realization as a desired level of employment: Realization of a desired level of employment are entrenched in government fiscal policy framework alleviate poverty and enhance the standard of living of the people. Government usually create employment by spending in capital projects such as construction, industrial establishment which indirectly generate employment for citizens. Tafuro (2015) ascertained whether fiscal policy is able to affect the trend of employment rate, triggering hysteresis independently from GDP behaviour using a Panel of 17 OECD countries, covering the period 1980-2009 with annual data. Result suggested that a fiscal shock can modify the employment equilibrium level even without influencing potential output.

Reduction in income inequality: The issue of income distribution in rich countries has centred on the question of who gains from public expenditures and who pays for them (Estache & Leipziger, 2010). The influence of fiscal policy on distribution of income is indisputable. In developing countries, the privileged few control huge fund owing to the fact that economic structure are mostly controlled by few private individuals. Citizens are taxed according to their income, wealthy citizen are taxed high, average income earners are moderately taxed, while the low income earners are taxed lower. That

notwithstanding, extreme inequalities create political and social discontentment which further generate economic instability thus suitable fiscal policy of the government can be devised to bridge the gap between the incomes of the different sections of the society (Economic discussion, 2017). The study of Gunasinghe (2014) on the impact of fiscal policy on economic growth and income inequality in Australia under a structural vector autoregressive (SVAR) framework using annual data from 1962 to 2012 revealed that both tax- and debt-financed fiscal policies have trade-offs between economic growth and net income equality; direct tax system is progressive whereas indirect tax system plays a neutral role in the determination of income redistribution.

Control of consumption pattern: Government can effectively control consumption pattern of the people through fiscal policy. Imposing higher taxes on foreign goods and lesser taxes on local products would indirectly increase domestic consumption, hence enhancement in domestic production. Estimating a consumption function for a panel of quarterly data for 14 advanced economies spanning 1998 to 2012, using an error correction specification, Jaramillo and Chailloux (2015) depicted a significant long-term relation between consumption and the different components of income and wealth. While fiscal policy had direct effects on consumption, the analysis suggests that wealth effects were sizeable, and therefore need to be kept in mind when analysing consumption trends going forward. In examining the effects of fiscal policy actions on private consumption in a yearly panel of sixteen OECD countries conditional on the phase of the business cycle and the state of the public finances, Hristov (2013) demonstrated that binding liquidity

constraints on households can alter the efficacy of the policy changes in the four regimes—defined by the conditioning states—with expansionary fiscal policy boosting consumption in recessions, having a nil effect on it in normal times or in fiscal stress, and strongly displacing consumption in mixed states when recession and fiscal stress coincide.

Allocation of economic resources: In recent years, policymakers have proposed various fiscal policies to spur long-run economic growth through increased capital formation (Chirinko & Morris, 1999). The style of government fiscal policy determines the allocation of fund in different sectors of the economy. Due to the liquidity constraints of developing countries, private sector provision of fund for infrastructural development would be inadequate but with government fiscal measure basic amenities, the economy would be cleaned of infrastructural deficiencies. Tax waivers and concession on specific sectors can attract capital to those sectors thus providing the needed fund for sector's growth. Similarly, high taxes on certain sectors of the economy automatically dwindle that sector of capital formation. Fiscal policy, either by direct or indirect means, can influence the process of capital formation through affecting the amount of net disposable income, or through the change of the marginal propensity to save (Kolodko, 2001).

Boosting of external reserves position: The external reserve position of a country can be continuously boosted by government pursuit of realistic fiscal policy. Export fiscal measure would unanimously lead to appreciation in foreign exchange earning which improves exchange rate and subsequent boost in external reserve position. Cheng (2013) fiscal spending increases the demand for domestic goods and affects the relative price, leading to domestic

exchange rate appreciation that subsequently increases firms' net worth and facilitates investment. As long as foreign reserves are sufficient to cover the private sectors external debt, this approach eliminates the bad equilibrium without an actual depletion of reserves. The research finding of Awujola, Obumneke and Oniore (2014) suggested that foreign exchange reserve is determined in the long-run by government fiscal policy via recurrent and capital expenditures.

Diminution in public debt profile: The public debt profile of a country can be gauged efficiently and effectively by guided fiscal measures. Expansionary government fiscal policy would results in borrowing, while taxes may rise in a bid to finance expenditure. Persistent borrowing (both domestic and foreign) increases the country's debt profile which economists argue that high public debt profile has the potential of crowding out private investment and raises interest rate which offset the stimulative effect of expansionary government fiscal policy. Collignon (2011) observe that specific fiscal policy stances taken by European governments are adjusted to changes in the environment so that debt will not explode. The research of Ardagna (2001) unveiled that fiscal adjustments implemented by cutting spending increases households' welfare and are more effective in primary deficit and public debt than increases in tax rates in OECD countries.

Economic growth and stability: In period of short run economic turbulence (deficit in balance trade and payment), fiscal policy can restore stability and enhance growth. As developing countries becomes integrated in international financial system, there are prone to both internal and external shocks e.g. fluctuation in exchange rate, and as such, fiscal policy would be applied to

topple these shocks. Processes such as globalization and integration, individuals' increasing reliance upon technology, limited vital resources in order to ensure normal life, social polarization growth, poverty augmentation, migrating flows, occurrence of diseases that can rapidly spread at world level – all the above increase the complexity of our world and make the State's economic involvement compulsory hence, an important role is held by the fiscal system (Popa & Codreanu, 2010).

Acceleration of Investments: To induce growth and development, government structures fiscal policy in such a way as to accelerate investments in the economy (both public and private sector investments). Fiscal policy that encourages public sector investments ultimately stimulate investments in the private sector. Omojolaibi, Okenesi and Mesagan (2016) assessed the nexus between fiscal policy and private investment in five selected West African countries using annual data from 1993 to 2014. Employing Fixed Effect Model for Panel data ordinary least square approach, the results showed the existence of a significant crowding in effect of government capital expenditure and tax revenue while non-tax revenue showed a crowding out effect. Recurrent expenditure and external debt also showed crowding out effects but these were insignificant. The accelerator effect of output growth was also found to be insignificant across the countries over the time period. Soli and Harvey (2008) also proved in the context of Ghana that changes in government recurrent expenditure, capital expenditure and international trade taxes are significant for growth, while changes in tax on domestic goods and services, tax on international trade and tax on income and property matter for private investments.

2.1.4   How Fiscal Policy Influences Economic Activity

Economic activities in a country is vehemently influenced by fiscal policy, especially in emerging economies where there is limited resources to propel economic growth and development to exit from emerging economy to developed or advanced economy. Through fiscal policy, economic activities be affected by government fiscal policy through the pattern of demand of goods and services. This can be attained by directly changing the style of government investment or indirectly through increase or decrease in taxation. Fiscal policy in harmony with monetary policy will no small measure affects the structure of the economy. In developed countries of the world, macroeconomic fluctuation can be corrected by fiscal policy measures which will act as a booster to real gross domestic product. Specifically, a plausible increase in fiscal stabilization-measured as the sensitivity of the overall budget balance to the output gap- could boost annual growth rates by 0.1 percentage point in developing economies and 0.3 percentage point in advanced economies (IMF, 2015).

Expenditure and taxes are the two powerful tools that government can use to influence overall economic activity. When the government increase both recurrent and capital spending, the economy will shift towards that direction. Persistent recurrent spending, for instance, increase in salaries and wages, transfers to the vulnerable and poor in the society and at the same time lowering taxes would result in more money in the hands of civil servants. Conversely, increased capital spending on provision of basic social amenities such as road construction, telecommunication and communication, creates employment and improves welfare of the people consequent to the income earned from employment. These would motivate the people to rise their

consumption which ultimately translate to increase in aggregate demand, hence upsurge in production to cover the needs necessitated by increased consumption. However, when the government cut spending in both recurrent and capital components and at the same time increase tax rates, citizen will be left with little money to spend hence, drastic decline in private consumption which leads to depreciation in overall output. High tax rates repel foreign direct investment which would magnificently enhance capital formation in the economy.

Theoretically, tax waiver and concession attract investment and this can be passed to eventual consumer through low prices in goods and services. If higher government spending is coupled with lower corporate taxes, as part of an aggressive expansionary fiscal policy, small businesses will enjoy greater sales while paying less to the tax authority, resulting in excellent net profits (Ozyasar, 2017). While an expansionary policy may be good news over the short term, carrying on such a policy for too long can backfire owing to the fact that if the government spends more than it takes in, it must borrow to balance its books, and when government borrowing becomes excessive, interest rates tend to climb because investors prefer to lend to the government than to corporations, since the government can, at worst, print money to pay its debt (Ozyasar, 2017). In determining whether fiscal policy decisions have real effects on the economy of Finland, and if they do, what are the strength and durations of the effects? Kuismanen and Kämppi (2009) applying the Structural Vector Autoregression (SVAR) method and the other is the Vector Stochastic Process with Dummy Variables (VSPD) techniques unveiled that a positive tax shock (or a policy that increases public sector revenues) seem to

have a positive effect on investment and GDP but the response of private consumption is mixed. From both models it seems that increase in Government spending crowds out private sector activity, and the effect takes place sooner than with the Revenue variable in question.

2.1.5 Fiscal Policy in Nigeria

Nigeria's fiscal intervention in recent years has been to stimulate economic recovery from the negative effects of the global economic and financial crisis (Osuala & Ebieri, 2014). The sectorial analysis of government expenditure in Nigeria have been on the rise over the years and geared towards economic growth and development by providing necessary enabling environment for public and private sector investments. The key priority sectors and areas where funds are mainly expended according to Osuala and Ebieri (2014) while citing Central Bank of Nigeria (2010) are critical infrastructure, human capital development, land reforms, food security, physical security and maintenance of law and order, the Niger Delta area, power sector (to enhance electricity generation, transmission and distribution; expansion, management and maintenance of existing and new power plants), provision of credit facilities to farmers, review of existing tariffs and provision of fiscal incentive to enhance productivity in the real sector and provide alternative transportation of goods and services through investment in upgrading the existing railway network and dredging the waterways. The growth and development of the Nigerian economy has not been stable over the years as a result, the country's economy has witnessed so many shocks and disturbances both internally and externally over the decades despite the government fiscal policy (Audu, 2012).

The Central Bank of Nigeria statistical bulletin of 2016 has shown that Federal Government expenditure has increased in recent time. Total Federal Government expenditure rose from ₦11.41 billion in 1981 to ₦5, 160.74 billion in 2016. On the recurrent and capital segment analysis, the average recurrent expenditure constitutes 74.49% of the total Federal Government spending, while capital expenditure is 25.51%. This suggests government preference of recurrent to capital expenditure as fiscal policy tool. Notwithstanding the upsurge in government spending as its major fiscal policy measure over the years, the desired pace of economic growth and development has not been attained. Nigeria is still rank among the poorest country in the world, poverty and unemployment rate are high and the same scenario applied to inflationary trend in the country. Abe (2012) declared that the Central Bank Nigeria (CBN) has been trying in terms of trying to control inflation growth rate and the foreign exchange, noting that the fiscal policy has been the major drawback that has made the monetary policy not felt by the people. He stressed that the fiscal dominance and growth will keep the inflation battle tough to win, saying as the CBN mops up funds from the economy to control inflation, there would be an upward pressure on the cost of money as interest rates would continually soar, making it hard for the real sector to get the funding that they need.

Unfortunately, the expansionary fiscal policy measure of the government appears to have spell doom for the unborn generation owing to high profile debt of the Federal Government. In a bid to finance its rising expenditure through borrowing, Nigeria's total debt has escalated to ₦3, 478, 920 million in 2016 from ₦2, 330 million in 1981, while domestic debt is put

at ₦11, 058, 200 million in 2016 compared to ₦11, 190 million in 1981. Debt servicing has increased to ₦2, 168, 220 million in 2016 as against ₦1, 030 million in 1981. The 2017 budget of the Federal Government that was passed on 10th May 2017 envisages that ₦1,488,002,436,547 was earmarked to service domestic debts; ₦175,882,993,952 for foreign debts; and ₦177,460,296707 for sinking fund to retire maturing loans, totalling ₦1,841,345,727,206 for debt service. This depicts that 24.73% of total government spending for the 2017 fiscal year was set aside to service debt. In a state of affair where such magnitude (24.73% of the total expenditure) is reserved for debt servicing, one imagines what remaining fund (75.27% of the total expenditure) can do to generate employment, reduce poverty through poverty alleviation programmes and better the welfare of the people coupled with rising population.

In Nigeria, tax as fiscal policy instrument are used for achieving different objectives such as raising revenue for the government, redistribution of income, efficient allocation of resources (through the provision of social goods and services) encouraging the propensity to save, encouraging investment, stimulate certain sectors of the economy, discouraging the production of certain goods, attracting foreign direct investment etc. (Osuala & Ebieri, 2014). Tax as a source of revenue has been weak. Revenue from taxation does not meet target projection. For instance, the Sun Newspaper of 13th March, 2017 reported that out of the projected tax revenue of ₦5.0 trillion expected from the Federal Inland Revenue Service (FIRS) for 2016, only ₦1.2 trillion was realised as at December 31, 2016, a shortfall of N3.8trn, a 12-year low. The empirical result of Ihenyen and Mieseigha (2014) suggested that the

hypothesized link among corporate income tax, value added tax and economic growth indeed exist in the Nigerian context. The study offered a tantalizing evidence that taxation is an instrument of economic growth in Nigeria thus the need for additional measures by government in ensuring that taxpayers do not avoid and evade tax so that income can be properly redistributed in the economy. Idris and Ahmad (2017) empirically envisaged the positive influence of taxation as a fiscal policy tool in enhancing macroeconomic growth in Nigeria, while further evidence shows that tax revenue increases the size of public sector savings and produces higher returns which can be used to encourage the provision of infrastructural facilities that stimulates output growth in the economy. The 2017 Budget of the Federal Government of Nigeria and the 2017-2019 Medium Term Expenditure Framework have no specific proposals to increase tax rates or impose new taxes in 2017 as the budget speech was silent on key tax policies but stated a commitment to align fiscal, monetary and trade policies (Oyedele, 2017).

2.1.6   Relationship between Fiscal Policy and Macroeconomic Variables

2.1.6.1 Relationship between Fiscal Policy and Real Gross Domestic Product

The relationship between fiscal policy and real GDP has been documented in literature. Expenditure and taxation been the two outstanding tools of fiscal policy exert a lot of influence on growth of GDP. An expansionary fiscal policy via increased government spending and an equivalent reduction in tax rate increase the quantum of fund available for consumption by citizens. The upsurge in consumption pattern of the people leads to expansion in aggregate demand and so, escalation in production to meet the needs of the citizen. The rise in domestic production results in outburst in gross domestic product. On the other hand, when government

adopts contractionary fiscal measure through cut in spending and increase in taxation, citizen would be stripped of fund for spending. This eventually will lead to decline in both private and public consumption which in turn reduce productive economic activities thus decline in real GDP.

In time of economic depression where the growth rate of the real GDP is negative, an expansionary fiscal measure can return the economy to equilibrium and significantly stimulate the real GDP to actualize a positive growth through appreciation in aggregate demand. An expansionary fiscal measure without a complimenting monetary policy would propel inflation thus decline in investment and eventual depreciation in GDP. In a study to test the correlation between fiscal policy and economic growth in Romania, for the period 1990-2007, Brasoveanu and Brasoveanu (2010) depicted the correlation pattern between the real growth rate of the GDP and the categories of budgetary revenues reveals a link of negative causality between the economic growth and fiscal revenues.

2.1.6.2 Relationship between Fiscal Policy and Industrial Development

Industrialization plays a significant role in economic development as it acts as a catalyst that accelerates the pace of structural transformation and diversification of economy, enables a country to fully utilize its factor endowment and to depend less on foreign supply of finished goods or raw materials for its economic growth, development and sustainability (Bakare-Aremu & Osobase, 2015). Government fiscal policy measure by strategic investment in delicate industries would significantly boom operations of such industries and aid in foreign capital accumulation. Following Economic discussion (2017), fiscal policy plays crucial role in underdeveloped countries by making investment in strategic industries and services of public utility on

one side and induces investment in private sector by giving assistance to new industries and introduces modern techniques of production therefore, investment on social and economic overheads are helpful in increasing the social marginal productivity and thereby raising the marginal productivity of private investment and capital formation.

Some manufacturing industries in Nigeria have been characterized by declining productivity rate, by extension employment generation, which is caused largely by inadequate electricity supply, smuggling of foreign products into the country, trade liberalisation, globalisation, high exchange rate, and low government expenditure (Eze & Ogiji, 2013) and consequent poor contribution of the industrial sector to GDP growth and tremendous reliance on importation for consumption. The results of the study conducted by Eze and Ogiji (2013) disclosed that fiscal policy significantly affect industrial sector output based on the magnitude and the level of significance of the coefficient and p-value and there is a long-run relationship between fiscal policy and industrial sector output.

2.1.6.3 Relationship between Fiscal Policy and Money Supply

The movement in the level of money supply is unarguably hinged to fiscal measure of the government prevailing at the circumstance. Government expansionary fiscal policy increases the magnitude of fund in the pocket of the citizens thus increase in the level of money supply. On the other hand, a cut in government spending and an equivalent increase in taxation shrink citizens' disposal income thus decline in money supply. Based on the liquidity preference theory, interest rate is one of the most determinant of money supply. Individuals prefer to hold money instead of other assets that may offer a high rate of return on the assumption that money is the most readily

instrument of transaction. Interest rate that could be earned by diversification in other assets that yield higher interest becomes the opportunity cost of holding money. Any increase in interest rate catapults to rise inopportunity cost of holding money and thus reduction in money supply. Musa, Usman and Zoramawa (2014) provided evidence that there is the existence of a long run relationship between money supply and fiscal policy when money supply is made the dependent variable. This indicates that changes in government fiscal policy in the past have significantly affected the money supply as macroeconomic indicator in Nigeria.

2.1.6.4 Relationship between Fiscal Policy and Interest Rate

Macroeconomists want to understand the effects of fiscal policy on interest rates, while financial economists look for the factors that drive the dynamics of the yield curve (Dai & Philippon, 2006). The central banks of countries generally tend to reduce interest rates when they wish to increase investment and consumption in the country's economy, however, a low interest rate as a macro-economic policy can be risky and may lead to the creation of an economic bubble, in which large amounts of investments are poured into the real-estate market and stock market (Mang'ang'a, 2014).When government expansionary fiscal policy raises money supply without a corresponding demand for money, interest rate fall, and this increases the aggregate demand in the economy. According to Claeys, Morenoand and Suriñach (2008), interest rates are insulated from fiscal policy under two alternative conditions. The first explanation for a zero impact of deficits on aggregate macroeconomic variables is that economic agents anticipate paying down currently high deficits with higher taxes in the future. A second explanation for the lacking crowding out effect is capital mobility. Fiscal deficits need not

be financed by domestic financial resources only. Erba and Sola (2011) showed that fiscal policy accounted for more than 60 percent of the variance in the long-term interest rates in OECD countries from 1989 to 2012 using employing a Factor Augmented Panel (FAP). Mang'ang'a (2014) has also established empirically that fiscal policy is great determinant of interest variation in Kenya.

2.1.6.5 Relationship between Fiscal Policy and Inflation Rate

Continuous increase in government spending without a complimenting increase in tax rates ultimately escalates inflationary trend. A decline in government coupled with moderate taxation or say high tax rate would decrease aggregate demand for goods and services which does not give rise to inflationary tendency. Inflation increases interest rate and make borrowing to be exorbitant which shy away investments by private sector individuals. Weak form fiscal theory of the price level states that fiscal policy helps determine the future inflation through money growth; money supply is the main cause of the fiscal authority thus fiscal policy is exogenous while the movement of money supply is endogenous (Surjaningsi, Utari & Trisnanto, 2010). Using data from the Central Bank of Nigeria spanning 32 years and employing ordinary least squares regression analysis, the study of Otto and Ukpere (2015) divulged that fiscal policy impacts on inflation in Nigeria though the impact was found to be insignificant. Tulip (2014) unveiled that fiscal activism can substitute for a high inflation target in the United States; an increase in the inflation target is not warranted, despite increased volatility of macroeconomic shocks, so long as fiscal policy behaves as it has recently.

2.1.6.6 Relationship between Fiscal Policy and Exchange Rate

Frequent depreciation in prices level reduces the exchange rate on the local currency against other currency of the world thus stimulation in domestic economy exports to revitalize or ensure appreciation in exchange rate. The occurrence of inflation owing to unguided expansionary government fiscal policy makes importation cheaper, while export becomes expensive. This encourages the demand for foreign currency for importation of necessities which unfortunately leads to depreciation in value of domestic currency when equated with other countries' currencies. Fiscal deficit via external borrowing can appreciate the value of domestic currency owing to magnitude of foreign capital inflows. Divergently, a contractionary fiscal policy lowers interest which would propel capital outflow from the economy thus depreciation in exchange rate. Parsley and Wei (2014) provided evidence that increases in government spending cause appreciation in the US. Chatterjee and Mursagulov (2013) note that the effect of government spending on the real exchange rate depends critically on sectoral composition of public spending, underlying financing policy, sectoral intensity of private capital in production, and relative sectoral productivity of public infrastructure. In Spain, Castro and Fernández-Caballero (2011) empirically demonstrated that government spending brings about positive output responses, jointly with real exchange rate appreciation, and such real appreciation is explained by persistent nominal appreciation and higher relative prices.

2.1.7 Budget Preparation Process in Nigeria

According to the Central Bank of Nigeria (2016), budget process in Nigeria are outlined and discuss as:

Budget Sharing Responsibility: The President is required by law to forward the budget proposal for the given year to the National Assembly (NASS) for them to approve after which it becomes the Appropriation Act and then forwarded to the President to assent. Both the Executive and Legislative are responsible for preparing the Federal Budget.

The Developmental Plan of the President: This process begins with the government articulating its vision and plans for the economy to the Federal Ministry of Finance (FMOF) and the Budget Office of the Federation (BOF), in order to be captured in the budget. The plans give details on government agenda on how to boost growth through infrastructure improvement, poverty reduction, among others. The Federal Budget acts as a policy tool which aims to achieve the short, medium and long term development goals.

The Medium-Term Fiscal Framework (MTFF): The Budget, under the law, is based on the MTFF which shows how government projects its revenue, expenditure, borrowing and fiscal balance for the next 3 years. These frameworks consist of the Revenue Framework, which handles how government gets its money and an Expenditure Framework that takes care of how it spends its money.

Consulting Stakeholders: A major improvement to the budgetary process in the form of transparency by the FMOF and BOF was the introduction of stakeholders to have a say on how the budget is put together, and making it more open to the public. Different Stakeholders such as NASS, the National Economic Council, Organized Private Sector, Civil Society and the Public Sector contribute during interactive sessions. The Legislature also plays an

important role because they represent their constituencies during the budget process.

Expenditure Limits for Ministries, Departments and Agencies (MDA): After the total income and spending are determined in the MTFF, the various Federal Government MDAs share amongst themselves the MDA Expenditure. This sharing process is done by the BOF, supervised by the FMOF and is then accepted by the FEC chaired by the President. The BOF considers the payroll size of each MDA and their undertakings in view of the Government's strategy programme, when making an allowance for spending ceilings. Each MDA is allocated an expenditure ceiling with which they must meet their needs and deliver services to Nigerians. This allocation is to guarantee that the total Expenditure Ceiling, which has been stated in the Medium-Term Expenditure Framework, is not exceeded by the government.

Medium-Term Sector Strategies (MTSS): The Medium-Term Sector Strategies (MTSS) are made available by MDAs in order to define their targets on the backdrop of the general medium and long-term growth targets of the government. The MDAs categorize and record the important tasks and programmes, which they would implement for the next three years, with their general targets in mind to fit within their Expenditure Ceiling. A price tag is fixed on these projects and programmes, grouped in stages for the next three years, and are concomitant to expected outcomes. This process is recorded in the MTSS report and it forms a policy document, which is then used against the MDAs' budget submissions. A substantial number of unfinished capital projects have been recorded within the MDAs over the years. This was due to poor administration by the MDAs of their capital project implementation. This

has led to MDAs starting many projects with limited resources, which makes it difficult for them to be completed.

Accepting the Medium Term Expenditure Framework (MTEF) & the Fiscal Strategy Paper: The MTEF contains the Fiscal Strategy Paper (FSP) which summarizes government's plans to complete its fiscal matters within the next three years. In the Fiscal Responsibility Act 2007, the FSP and the MTEF must be presented to the FEC for consideration and approval such that planned expenditure trade-offs would be correctly discussed and settled. During the preparation of the FSP and the MTEF, contributions are required from key participants like the National Population Commission, Nigerian National Petroleum Corporation, Central Bank of Nigeria and National Bureau of Statistics. Once the FEC has approved the MTEF and the FSP, they are delivered to NASS, where they are considered and passed.

Call for Budget & Evaluation of MDA Submissions: This process begins with the FMOF requesting MDAs to submit their budgets in form of a "Budget Call Circular". This Circular provides in depth directives to the MDAs on how to organize and present their spending projections within the limitations of the presented expenditure, and in agreement with the objectives of the government. MDAs would produce and then submit their budget proposals to the BOF that would confirm that the MDAs stay within the agreed limits of their spending, and that their budget proposals conform to the priorities of government. Additional discussions between the FMOF, NPC, the Chief Economic Adviser to the President, would be held to establish that the MDAs support the expenditure patterns in line with the objectives formed earlier.

Presidential Approval and Budget Transmission to NASS: Before the budget is submitted, a series of meetings between the Executive and the NASS with regards to the size and contents of the Budget are discussed. For example, the FMF, MDAs and various NASS committees meet frequently to perfect spending plan by the government. This procedure guarantees that the budget reflects concerns of the public and that the goals of the government are properly captured in the budget. After the draft budget is finalized it is handed to Mr. President to approve. After approval by Mr. President, the budget, along with other necessary documents is officially submitted to NASS.

Approval by the National Assembly & Assent by Mr. President: Upon presentation of the Appropriation Bill to NASS, the document is discussed by various committees of both the House of Representatives and the Senate. The committee recommendations will be reviewed and organized by the Appropriation Committees of both Houses. Final recommendations are put forward by each House, where they exchange views and then conclude as each house will pass the Appropriation Bill. If there are differences in their final figures of the expenditure votes, the Senate and the House of Reps would meet and iron out their differences. Once they are matched, the final Bill is delivered to Mr. President for his assent He will then assent to the Appropriation Bill and by law, it becomes an Appropriation Act.

2.1.8 The Stages of the Budget Process

According to the Budget Office of the Federation, the budget process has to go through four critical processes which are: drafting, legislative approval, implementation and; monitoring and evaluation.

Drafting: At this stage, Mr. President is mandated by law to produce and submit projections of earnings and disbursements for the fiscal year to NASS.

The Budget office of the Federation (BoF) then produces the Fiscal Strategy Paper (FSP) that summarizes government's complete budgetary policy. The FSP also includes the macroeconomic structure, major assumptions, earning estimates and disbursement projections. The Paper details the strategy objectives of Mr. President and is produced in conjunction with other MDAs, like the National Planning Commission and the CBN. The FMOF submits an outline of the budget to the President, who will then present same to FEC for their consideration and approval.

Legislative Approval: The President presents the Appropriation Bill to the Senate and the House of Representatives in a joint sitting. The appropriate committees in the Senate and House of Representatives will then examine and suggest revisions to the different sections of the budget. The process, which involves the legislature is usually long and requires compromise between the executive and legislature. The parameters used to draft the budget are considered throughout the stakeholder discussions during which, the Executive and the Legislature are engaged in extended debates. For example, issues such as appropriate oil price benchmark, oil and gas funding; gas Joint Venture Agreements and reimbursement for the fiscal year are discussed. Furthermore, the discussions also entail the review of the internal allocation of resources. During this stage, Civil Society groups have the chance to get involved and influence the budget process. The modifications are then merged and concluded to become the Appropriation Bill for the fiscal year after approval by the NASS. After this, the Bill is signed by Mr. President and then, it becomes the Appropriation Act.

Implementation Stage: This process involves various federal government MDAs, which receive funds for their capital projects every quarter. MDAs spend these funds based on the share of the budget from the Consolidated Revenue Fund of the Federation (CRF). The FMOF, in 2005, initiated a "Cash Management Committee", to make sure that funds are made accessible to allow for the easy funding of the budget and ensure that it reduces borrowing.

Monitoring and Evaluation Stage: This stage involves monitoring and evaluation of the budget. Starting from 2006, the FMOF prepares an annual Budget Implementation Report which reviews the level of execution of project implementation from various locations in the country, and the quality of each year's budget. MDAs involved in the monitoring process include: the FMOF, NPC, the National Economic Intelligence Agency (NEIA), the Presidential Budget Monitoring Committee (PBMC), the Office of Auditor General of the Federation (OAGF), the Office of the Accountant General of the Federation and the NASS. The BOF and the NPC together with the spending ministries and agencies, conduct physical inspection of the completed and ongoing projects.

2.1.9   Medium-Term Fiscal Policy Objectives

Broadly, and in line with the goals of the Economic Recovery and Growth Plan (ERGP) 2017-20, the medium term fiscal strategy of Government according to the Federal Ministry of Finance is focused on the recovery of the economy and promotion of sustained inclusive growth. Specifically, government's fiscal strategy will be directed at:

1. Accelerating growth, intensifying economic diversification and promoting inclusiveness.

2. Achieving macroeconomic stability.

3. Enhancing oil revenues and accelerating non-oil revenues.

4. Addressing recurrent and capital spending imbalance.

5. improving efficiency and quality of public spending; and

6. Maintaining deficit/debts within sustainable limits.

Achieving these objectives require supportive coordinated policies – fiscal, monetary and trade policies. Thus, the medium term fiscal strategy is consistent with the Central Bank's monetary policy framework, which is designed to foster sustainable economic growth, low inflation, low interest rates, market reflective exchange rates and a strong balance of payments position. It is also in line with the Government's long-term sustainable debt strategy which ensures Nigeria's debt stock, and corresponding debt service costs, are maintained at appropriate and manageable levels. The strategy recognizes the need to deliberately cushion the effects of adjustments on the poor and economically vulnerable in a manner that creates opportunities for job creation, productivity and inclusiveness.

2.2 Theoretical Review

The finance literature has documented theoretical foundation on the linkage between fiscal policy and macroeconomic variables. The three major theories in connection to fiscal policy and macroeconomic performance in literature were precisely discussed. These theories are Keynesian Theory, Neoclassical Theory and Richardian Equivalence Theory.

2.2.1 Keynesian Theory

The Keynesian theory was developed by a British economist by the name John Maynard Keynes. The Keynesian theory states that government was efficiently influence macroeconomic fundamentals through the use of fiscal policy: government spending and taxation. The Keynesian economists

are of the unalloyed opinion that the government can magnificently attain a target level of growth and development in the economy through the mechanism of fiscal policy. Following the Keynesian postulation, developing economies are not financially buoyant due to underdeveloped nature of the financial system, and private sector cannot create full employment in an economy to the extent that can drive aggregate demand to stimulate production, hence the need for government intervention to accelerate growth and development. Nelson (2006) notes that when the economies of the world were mired in the deep and prolonged recession of the 1930s known as the Great Depression, British economist John Maynard Keynes, later Lord Keynes, declared that governments should increase spending and cut taxes to boost their economies. This was considered heretical since the prevailing view at that time was that a market economy would recover on its own, automatically, without government action. Keynes contended that monetary policy was powerless to boost the economy out of a depression because it depended on reducing interest rates, and in a depression interest rates were already close to zero, hence increased government spending, on the other hand, would not only boost demand directly but would also set off a chain reaction of increased demand from workers and suppliers whose incomes had been increased by the government's expenditure (Nelson, 2006).

Based on the Keynesian assumption Jahan, Mahmud and Papageorgiou (2014) identified three principal tenets how the economy works which include: Prices, and especially wages, respond slowly to changes in supply and demand, resulting in periodic shortages and surpluses, especially of labour; changes in aggregate demand, whether anticipated or unanticipated, have their

greatest short-run effect on real output and employment, not on prices and finally, aggregate demand is influenced by many economic decisions — public and private. The other tenets of the Keynesian theory outside how the economy works as stated by Blinder (2014) are Keynesians do not think that the typical level of unemployment is ideal — partly because unemployment is subject to the caprice of aggregate demand, and partly because they believe that prices adjust only gradually; Many, but not all, Keynesians advocate activist stabilization policy to reduce the amplitude of the business cycle, which they rank among the most important of all economic problems and lastly, and even less unanimously, some Keynesians are more concerned about combating unemployment than about conquering inflation. The conservative case against standard Keynesian fiscal stimulus policy rests on the assumption that all of the economy's resources are already being used to the fullest and the Keynesian thought that the orthodox economics of his time confined itself to this special case, the case of an economy at full employment (Reuss, 2009).

2.2.2. Richardian Equivalence Theory

Although the Keynesian and Neoclassical arguments on fiscal policy and macroeconomic apparatus tends to subjugated finance literature, some economists through the Richardian Equivalence theory are of the notion that government fiscal policy does not propel economic growth consequent to provocation in aggregate demand. Ricardian Equivalence states that the manner in which a government finances its spending (debt or taxes) is irrelevant for understanding the equilibrium effects of changes in spending (Sims, 2016). In the Richardain Equivalence, government expansionary fiscal policy is incapable of stimulating consumptions because individuals are rational in spending and assumed that whatever income acquired today by

virtue of expansionary fiscal policy will be ultimately counterweighed by a likely increase in tax rate or other unforeseen circumstances in future. Put differently, no matter the financing method (taxation and borrowing) of government expansionary fiscal measure, the outcome would remain the same and consumption pattern of the citizens unaffected.

The proposition of the Richardian Equivalance in relation to Steger (2012) is that for a given time path of government spending the particular method used to finance these expenditures (taxation or debt) does not affect real consumption, real investment, and real output whereas on the corollary, government bonds held by private agents should not be counted as net wealth since it is exactly matched by future liabilities (expected increase in tax rates). If the ideology of the Richardian Equivalence is to be accepted as true then for Pettinger (2009), it would mean a tax cut financed by higher borrowing would have no impact on increasing aggregate demand because consumers would save the tax cut to pay the future tax increases due to two related factors: income life cycle hypothesis and rational expectations on behalf of consumers. The assumption of the Richardian Equivalence was not without challenges and relying on the assertion of Pettinger (2009), the encumbrances were not limited to the fact some consumers are not rational as many would not anticipate that tax cuts will lead to tax rises in the future; the idea tax cuts are saved is misleading because in a recession, average propensity to consume may decline but, this is different to the marginal propensity to consume; tax cuts can boost growth and diminish borrowing requirements on the argument that in period of depression government borrowing rises sharply because of automatic stabilisers (lower tax revenue, higher spending on unemployment

benefits), and if tax cuts boost spending and economic growth, the increased growth will help improve tax revenues and reduce government borrowing; no crowding out in a recession because private sector saving rises in recessionary period because of lack of confidence and uncertainty regarding when the economy will recover and then finally, multiplier effect where initial increase in government spending may cause a further rise in spending in the economy causing the final increase in GDP to be bigger than the initial injection into the economy.

The Keynesian theory and the Richardian Equivalence postulations have been reviewed in a bid to provide a sound theoretical background to this study. In this regard and taking into consideration the reality of Nigeria macroeconomic paraphernalia over the years, the neoclassical theory was chosen as the theoretical basis for this study.

2.2.3 Neoclassical Theory

The Neoclassical theory is the exact opposite of the Keynesian theory. The Neoclassical theory envisaged growth of an economy as measured by real output is influenced by supply side. The theory argue that the use of fiscal policy by the government to boost aggregate demand is uncalled for as it crowd out private sector investments. Besides, pushing up the level of aggregate demand outside the outmost intent of the citizen is bound to result in inflation which in no small way defeat the government anticipated benefits of expansionary fiscal policy. As government was not assigned the role in the economy beyond providing some basic services (public goods) and to create apparatus whereby market functions efficiently there was hardly any role for the fiscal policy to regulate things in the economy (Khan & Aziz, 2011). In keeping with the postulation of the neoclassical theory, expansionary fiscal

policy may rebound an economy in time of depression but will definitely contract during boom period due to suppleness in prices and wage rates which will either adjust upward or downward to restore the economy to equilibrium.

The Neoclassical theory points towards the angle where the control of the economy be left with the private sector to create full employment by the interplay of demand and supply. From the Neoclassical assumption, the interaction between demand and supply should be allowed to determine the pace of growth and development of the economy which would be nourished by firmness in macroeconomic environment evidenced by low inflation, interest rate, exchange rate stability and low corporate tax among others. Low and inflexible tax rate would spur private sector investments productive economic activities, human and capital development and research as well which contributes immensely to the development of the economy. Cavallo (2005) empirical showed that allowing for the distinction between the two main components of government consumption improves the quantitative performance of the neoclassical growth model, and in particular, a neoclassical model economy with government employment does a good job of accounting for the dynamic response of private consumption to a fiscal policy shock in USA. Similarly, in testing the validity of the neoclassical theory in accounting for the effects of big fiscal shocks using data from World War II, which is by far the largest fiscal shock in the history of the United States, the findings of McGrattan and Ohanian (2008) disclosed that the theory quantitatively accounts for macroeconomic activity during this big fiscal shock in USA.

2.2.4. Relevance of the Neoclassical Theory as the Theoretical basis guiding this Research Work

This study applied the neoclassical framework which obviously dismiss government application of fiscal policy as a means of aggravating demand to spur real output and improve growth and development in the economy as a whole. While the underlying assumption of most theoretical and empirical literature is that this framework is incongruous on the argument that Nigeria is a developing country and lack the financial resources to command growth and development thus advocating for fiscal policy measure of the Keynesian theory is completely not out of place. However, it is worthy to note that despite the expansionary fiscal policy of the Federal Government of Nigeria over the years through persistent rise in both recurrent and capital expenditure plus subsequent escalation in fiscal deficit, Nigeria has not achieved the level of growth and development commensurate to the increased expenditure of the government, hence the conviction on the suitability of the Neoclassical assumption as the theory that guides this study. On the failure of government fiscal policy to attain the desired level growth, Udoka and Anyingang (2015) stated that it appears that either these funds are not released or they are released to finance an inappropriate expenditure item or maybe the funds are mismanaged or not duly utilized. The rising inflationary trend, interest rate, fiscal deficit and poor industrial output contribution to GDP (owing to crowding out effect) are signal of the validity of the neoclassical assumption.

2.3   Empirical Review

2.3.1   Fiscal Policy and Real GDP

Adigwe, Anyanwu and Udeh (2016) examined the long run relationship between fiscal policy and economic growth, short run and long run adjustment and the effect of fiscal policy on Nigeria's economic growth for a period of forty five (45) years from 1970 to 2015. The result of the long run test reveals the existence of a long run relationship between fiscal policy and economic growth in Nigeria, VECM analysis suggests that Nigeria would achieve a steady level of growth if preference is giving to capital expenditure over recurrent expenditure, and the granger causality effect result envisages that recurrent and capital expenditure which are the two components of fiscal policy have significant effect on Nigeria's economic growth. Findings also indicates that government application of fiscal policy via increasing expenditure as the sole tool for economic growth as currently the case will not spur economic growth in the long run. Ismal (2011) investigated whether Wagner and/or Keynes law(s) of economic development apply in Indonesia and what variables determine the economic growth and fiscal policies. Technically, the paper used econometric model called Autoregressive Distributed Lag model and Vector Auto Regression model to analyse both short and long run periods. The main finding was that both Wagner and Keynes law(s) occur in the Indonesian economy. Tagkalakis (2013) addressed the effects of discretionary fiscal policy changes on economic activity and its subcomponents in Greece in the period 2000-2011. An increase in government consumption has the most pronounced positive effects on output growth, private consumption and non-residential investment, while it reduces residential investment. Cuts in the public investment programme crowd in

private investment, but are associated negatively with the net exports ratio. Both indirect and direct tax hikes lower private consumption, private investment and output growth. Additionally, higher direct taxes, by lowering disposable income, reduce import demand, thus, improving the trade balance.

Abubakar (2016) appraised the effect of fiscal policy shocks on output and unemployment in Nigeria under the Keynesian framework by employing the Structural Vector Autoregression (SVAR) methodology to analyse annual series on the relevant variables for the period 1981-2015. Johansen co-integration test confirms the presence of long run association among the variables. Findings of the SVAR model shows shock in public expenditure as having a positive long- lasting effect on output. Revenue shock was found to exert a positive effect (lower than that of public expenditure shock) on output but the effect of revenue shock on unemployment was found to be negative but short-lived. Josten (2003) analysed the growth and employment effects of dynamic fiscal policies in an overlapping generation's model with endogenous growth and imperfect labour markets. With balanced-budget policies, the modelled closed economy grows at a constant rate which is the higher, the lower are the labour tax rate and the unemployment rate. In addition, while constant-stock fiscal policies are sustainable, an increase in the debt-to-capital ratio is accompanied by higher taxes, a rise in unemployment and lower economic growth. Osuala and Ebieri (2014) provided an empirical analysis of the impact of fiscal policy on economic growth in Nigeria. Time series data from 1986 to 2010 using data collected from the Central Bank of Nigeria. The ordinary least square method of multivariate regression was utilized in analysing the log-linearized Model. General-to-Specific approach to

Autoregressive Distributed Lag (ARDL) model was used for testing for the existence of long-run and short-run equilibrium conditions. The findings showed evidence of long run equilibrium relationship between fiscal policy and economic growth in Nigeria. Specific fiscal policy variables that have significant and positive impact on economic growth in Nigeria are government recurrent and capital expenditures. Non-oil taxes and government total debts have no significant impact on real GDP. Only capital expenditure has short run equilibrium relationship with economic growth.

Falade and Folorunso (2015) examined the relative effectiveness of fiscal and monetary policy instruments on economic growth sustainability in Nigeria in order to determine the appropriate mix of both policies. The paper employed error correction mechanism using annual data for the period 1970-2013. Data were sourced mainly from Statistical Bulletin published by the Central Bank Nigeria. The result also showed that all the fiscal and monetary variables of interest co-integrated with the economic growth series in the country. The study revealed 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 instrument mix in promoting economic growth both in the short and long run. Srithongrung and Sánchez-Juárez (2015) ascertained the effects of taxes and public investment on economic growth of Mexican states. The subnational government finance data were drawn from 32 states during the period of 1993 to 2011. Correcting for long-term trends and isolating co-integration effects between economic growth and public finance, the empirical results indicated that taxes have negative effect on growth and the effect can be seen in both

transitory and permanent manners. As predicted by growth theory, the effects of public investment on subnational growth are statistically significant and positive in both short and long-runs. Babalola (2015) determined the short and long run impact of fiscal policy on economic development in Nigeria between a period of 1981 and 2013 using annual time series data sourced from World Development Indicators (2014) and the Central Bank of Nigeria (2014). It used government recurrent expenditure, government capital expenditure, government investment and tax revenue to indicate fiscal policy. The model was estimated using Pair-wise Correlation to ascertain the relationship and then co-integration and Error Correction Mechanism for impact after confirming the data's stationarity using Unit Root. The result showed that government recurrent expenditure and government investment have significant positive impact on economic development in both the short and long run. Capital expenditure appeared to have a short run positive impact but not in the long run. Tax revenue had an inverse significant impact in both short and long run.

In Italy, Auteri and Constantini (2004) with the use of standard endogenous growth theory, assessed the effect of government public investment and public transfers on economic growth using data from 20 Italian region between 1970 and 1995. While the result disclosed a positive influence of government fiscal policy on economic growth, this was not the case for public transfer case in Italy. Asegehegn (2016) evaluated the effects of taxes and government spending on economic growth in Ethiopia. This was accomplished using a SVAR framework following Blanchard and Perotti's (1999) identification methodology on data spanning from the second quarter

of 1995 to the second quarter of 2008 Ethiopian fiscal year. The result for the contemporaneous effect of government spending and revenues on real GDP growth showed that the effect of government spending on GDP is positive and significant. Similarly, the sign on tax effect on GDP is negative but statistically insignificant. M'Amanja and Morrissey (2005) explored the relationship between various measures of fiscal policy on growth in Kenya on annual data for the period 1964 – 2002. Categorising government expenditure into productive and unproductive and tax revenue into distortionary and non-distortionary, they found unproductive expenditure and non distortionary tax revenue to be neutral to growth as predicted by economic theory. However, contrary to expectations, productive expenditure has strong adverse effect on growth whilst there was no evidence of distortionary effects on growth of distortionary taxes. On the other hand, government investment was found to be beneficial to growth in the long run.

Agu, Idike, Okwor and Ugwunta (2014) evaluated the impact of various components of fiscal policy on the Nigerian economy. They simply used descriptive statistics to show contribution of government fiscal policy to economic growth, ascertain and explain growth rates, and an OLS in a multiple form to ascertain the relationship between economic growth and government expenditure components after ensuring data stationarity. Findings revealed that total government expenditures have tended to increase with government revenue, with expenditures peaking faster than revenue. Investment expenditures were much lower than recurrent expenditures evidencing the poor growth in the country's economy. Hence there is some evidence of positive correlation between government expenditure on economic

services and economic growth. An increase in budgetary allocation to economic services will lead to an enhancement in economic stability. Babalola and Aminu (2011) analysed the impact of fiscal policy on economic growth in Nigeria using annual data covering 1977 – 2009. Error-correction models were estimated to take care of short-run dynamics. Over all, the results indicated that productive expenditure positively impacted on economic growth during the period of coverage and a long-run relationship exists between them as confirmed by the co-integration test. Shijaku and Gjokuta (2013) appraised the effects of fiscal policy on the economic growth in the case of a small open developing country, Albania, by employing an endogenous growth model on a GMM approach. The impact of revenue and expenditure on growth were analysed by categorising tax revenue into distortionary and non-distortionary, whilst government expenditure were divided into productive and non-productive. The results obtained showed that government revenue policies has a higher effect on economic growth than those on government expenditure.

Morina (2017) addressed the effects of fiscal policy on the economic growth of emerging developing countries such as Southeast European countries. The impact of income and expenditure on economic growth was analysed with data from 1994 to 2015. Based on empirical results they concluded that tax revenues have a positive impact on economic growth, while government spending has a negative impact on economic growth in Southeast Europe. Abdiweli (2005) investigated the effect of fiscal policy on economic growth. Unlike the literature on growth that emphasizes the level and the nature of fiscal parameters, this paper focused on the effect of fiscal volatility on economic growth. The empirical results of the paper indicated that the

effect of fiscal policy on economic growth is inconclusive. Most of the fiscal policy parameters commonly used in the growth literature had failed to explain growth differences across countries. However, when fiscal policy instability variables are used in the growth equation, almost all of the variables are significantly and negatively correlated with economic growth. Paparas, Richter and Paparas (2015) explored the relationship between fiscal policy and economic growth in the EU-15, and made an attempt to determine which of the fiscal policy instruments enhance economic growth. They deployed panel data techniques and included both sides of budget, spending and taxation, in the regressions and used the most recent dataset data for fiscal variables from Eurostat. In the empirical analysis, they included OLS, fixed effects models, random effects models and GMM estimators, the Arellano & Bond (1991) and the Arellano & Bover (1995) - Blundell & Bond (1998) estimators. They found a negative impact of spending on human capital accumulation on economic growth; an increase on government spending on infrastructure has a significant positive impact on the economy growth of a country.

Joharji and Starr (2010) explored the relationship between government spending and non-oil GDP in the case of Saudi Arabia. Using time-series methods and data for 1969-2005, outcome unveiled that increases in government spending have a positive and significant long-run effect on the rate of growth. Estimated effects of current expenditure on growth turn out to exceed those of capital expenditure -- suggesting that government investment in infrastructure and productive capacity has been less growth-enhancing in Saudi Arabia than programs to improve administration and operation of government entities and support purchasing power. Ogbole, Amadi and Essi

(2011) looked into the impact of fiscal policy on economic growth in Nigeria during regulation and deregulation periods. Econometric analysis of time series data from Central Bank of Nigeria was conducted. Results obtained showed that there is a difference in the effectiveness of fiscal policy in stimulating economic growth during and after regulation periods. The impact was marginally higher (only N140 million or 14% contribution to GDP) during deregulation, than in the regulation period. Gunasinghe (2014) examined the impact of fiscal policy on economic growth and income inequality in Australia under a structural vector autoregressive (SVAR) framework using annual data from 1962 to 2012. Empirical results revealed that both tax- and debt-financed fiscal policies have trade-offs between economic growth and net income equality; direct tax system is progressive whereas indirect tax system plays a neutral role in the determination of income redistribution; the negative effects of deficit financing on economic growth outweigh its positive effects; and financing government expenditure through indirect taxes does not create a trade-off between equity and efficiency.

Hanusch, Chakraborty and Khurana (2017) analysed the effectiveness of public expenditures on economic growth within the analytical framework of comprehensive Neo-Schumpeterian economics. Using a fixed-effects model for G20 countries, the paper investigated the links between the specific categories of public expenditures and economic growth, captured in human capital formation, defense, infrastructure development, and technological innovation. The results revealed that the impact of innovation-related spending on economic growth is much higher than that of the other macro variables. Data for the study was drawn from the International Monetary Fund's

Government Finance Statistics database, infrastructure reports for the G20 countries, and the World Development Indicators issued by the World Bank. Tilahun (2016) used time series techniques and applied empirical model by Kneller et al (1999) and Bleaney et al (2000) and explored the link between various components of fiscal policy on growth on annual data for the period 1981 – 2013. It employed the autoregressive distributed lag estimation technique. Results of the bound tests indicated that there was a long-run relationship between the variables. Disaggregating government expenditure into productive and unproductive and tax revenue into distortionary and non distortionary. The study found unproductive expenditure and non distortionary tax revenue to be neutral to growth as predicted by economic theory. Productive expenditure has positive effect on growth while there was evidence of distortionary effects on growth. On the other hand, government investment was found to be beneficial to growth in the long run. Nwankwo, Kalu and Chiekezie (2017) examined the impact of fiscal policy on economic growth in Nigeria from the period of 1970 to 2014. The data used were sourced from Central Bank of Nigeria Statistical Bulletin of various issues and World Bank Development Indicator (WDI) and the Co-integration and Error Correction (ECM) approaches were utilized in analysing the data. The estimated ECM has the required negative sign of -0.447 (45%) and lies within the accepted region of less than unity although, government capital and recurrent expenditures at lagged two years was found insignificant and therefore has no impact on economic growth.

Saqib and Aggarwal (2017) ascertained the comparative effect of fiscal and monetary policy on economic growth in Pakistan using annual time series

data from 1984 to 2014. The co-integration result suggested that both monetary and fiscal policy have significant and positive effect on economic growth. The coefficient of monetary policy is much greater than fiscal policy which implies that monetary policy has more concerned with economic growth than fiscal policy in Pakistan. Najaf (2016) assessed the impact of fiscal policy on the economy of India from 1981 to 2010 and applied the Johansen co integration test, error correction model and variance decomposition model. The results showed that there is long run association between GDP and other variables, and that fiscal policy has always long run phenomena on the growth of the economy. Kakar (2011) evaluated the impact of the fiscal variables on economic growth in Pakistan using time series data for the period 1980-2009. Co-integration and error correction techniques are used for this analysis and Granger causality test is used to determine the direction of causality. Empirical results indicated that fiscal policy is very important for sustainable economic growth and are more of long-run phenomena rather than short-run. In the short-run economic development can be stimulated by controlling interest rate and government expenditures at the cost of inflation. But such a policy might affect the speed of growth process. Khare (2016) used annual data from 1992/93 to 2009/10 to estimate the model and provide out-sample forecasts for 2010/11 to 2012/13, consistent with the current Three Year Plan period, in order to evaluate the plan performance. The empirical evidence suggested that fiscal policy, particularly governments' capital expenditure affects economic growth positively and also crowds-in private investment. However, there exists a trade-off between fiscal stability and high level of economic growth as the policy goal of achieving both

objectives seems to be unattainable. Finally, the out-sample forecast suggests that it is unlikely to attain the targeted economic growth in the Three Year Plan period from the planned fiscal outlay even if it is realized.

Brasoveanu and Brasoveanu (2010) tested the correlation between fiscal policy and economic growth in Romania, for the period 1990-2007. The correlation pattern between the real growth rate of the GDP and the categories of budgetary revenues reveals a link of negative causality between the economic growth and fiscal revenues. Applying the regression technique for the period 1990-2007, they can concluded that in Romania the effects of the distortionary and non distortionary taxes on economic growth are negative. Noman and Khudri (2015) dealt with the impact of fiscal and monetary policies on economic growth in Bangladesh. The data were collected on annual scale from the period of 1979-80 to 2012-13. The study employed line diagram, correlation matrix and multiple linear regression model. In accordance with the findings government revenue and expenditure have positive correlation with RGDP indicating that the unit increase in the abovementioned variables will lead to the unit increase in RGDP in Bangladesh. Empirical indication on the growth effectiveness of monetary and fiscal policies is still debatable hence, Usman and Miraj-ul-Haq (2017) studied this inconclusiveness by illustrating depictions by two major schools of thought in economics that is classical and Keynesian. The Johansson Juselius (1990) approach of co-integration in a VECM setting was used for empirical analysis, which is based on time series data over the period of 1972 to 2015. The results of Trace test and Maximum Eigenvalue validated the existence of co-integration among fiscal policy, monetary policy and economic growth in

case of Pakistan. The result of impulse response function showed that both fiscal and monetary policies positively affect the growth of GDP per capita in the long run.

Macek and Janku (2014) examined the impact of fiscal policy on economic growth depending on the institutional conditions in the OECD countries over the time period 2000-2012. The analysis was based on the methods and tests of panel regression. From the analysis results, it was evident that in the case of government spending there is positive impact on economic growth in the countries with lower fiscal transparency; negative impact in countries with higher fiscal transparency. In less developed countries there is higher proportion of pro-growth spending within total government spending. On the other hand in more developed countries the Wagner law becomes valid with the existence of welfare costs. In the case of taxation impact on economic growth it is visible that the negative impact of taxation is more harmful for economic growth in the countries with worse institutional conditions. Salim (2012) examined the effects of fiscal policy on economic growth in Turkey and Libya. After applying necessary econometric tools, the findings disclosed that economic development of Turkey and Libya is affected by the fiscal policy and the use of taxation and government spending influence the economy and thus the GDP. Also size and quality of fiscal adjustment determines the success of the consolidation. If the consolidation is coming from the expenditure side and the impact of the fiscal adjustment works either through private consumption and investment or through factor productivity. Audu (2012) evaluated the causal relationship between money supply, fiscal deficits and exports as a means of analysing the impact of policy on the

growth of the Nigerian economy between 1970 and 2010. The research employed the Co-integration Error Correction Mechanism (ECM), a two band recursive least square to test for the stability of the Nigerian economy as well as determine the effect of money supply, fiscal deficits, and exports on the relative effectiveness of fiscal policies in the Nigerian economy. The study revealed that there was a significant causal relationship between exports and gross domestic product and hence fiscal policies.

Bryan (2013) determined the consequences of government policy uncertainly and sought to identify gaps in the related literature, especially those arising from the application of new policy tools. The research found that contemporaneous monetary policy may be having a greater impact upon business activity than previously identified and is an area in need of further study. While the policy uncertainty and its impact on business expansion as studied are principally associated with the U.S., the implications can be readily applied across borders. Srithongrung and Kriz (2014) appraised the effect of state and local taxes and expenditures on economic growth by applying the Panel Vector Auto Regression (PVAR) to examine the effects of taxes and expenditures on state income growth. Consistent with prevailing wisdom, taxes are shown to have a negative effect on economic growth, but the effect only is present in the short-run. Public capital spending has a positive effect on growth in both the short and intermediate terms. Operational expenditures exhibit positive effects on growth over the entire analysis period. Castro (2007) provided an empirical answer to the question of whether Maastricht and SGP fiscal rules have affected growth of European Union countries. A growth equation augmented with fiscal variables and controlling for the period

in which fiscal rules were implemented in Europe was estimated over a panel of 15 EU countries (and 8 OECD countries) for the period 1970-2005. Empirical results showed that growth of real GDP per capita in the EU was not negatively affected in the period after Maastricht.

2.3.2   Fiscal Policy and Industrial Development

Aghion, Hemous and Kharroubi (2009) evaluated whether the cyclical pattern of fiscal policy can affect growth by first building a simple endogenous growth model where entrepreneurs can invest either in short-run projects or in long term growth enhancing projects using Rajan and Zingales (1998)'s diff-and-diff methodology on a panel data sample of manufacturing industries across 15 OECD countries over the period1980-2005. Empirical evidence confirmed that industries with relatively heavier reliance on external finance or lower asset tangibility tend to grow disproportionately faster in countries with more-counter cyclical fiscal policy, this being true in terms of value added, labour productivity and research and development expenditures. Andabai (2014) ascertained the determinants of public policies and the manufacturing sector in Nigeria using 17years time series data spanning (1997-2013). Secondary data used for the study were sourced from CBN statistical bulletin. Hypotheses were formulated and tested using the Ordinary Least Square (OLS) estimation technique. The result showed that, there is a negative significant relationship between excise duty, and capacity utilization.

Bakare-Aremu and Osobase (2015) unearth the impact of monetary and fiscal policy on the performance of the manufacturing sector as a real sector in Nigeria, using an error correction mechanisms model, and discover that those policies has expected impact on output of the manufacturing sector in Nigeria both in   the short-run and long-run. Relationship among the

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stabilization policies on one hand and industrial or manufacturing sector out put on the other hand. The model makes use of time series data while ordinary least squared was the techniques of analysis, the data were filtered with use of augmented dickey fuller unit root test while Johansen co-integration test was used to justify the long-run relationship among all included variables. The study established that fiscal policy has a great impact on manufacturing sector performance and that if certain adjustment are made it would better the lots of the people by developing the sector, through Government fiscal policy and its monetary policy measures. Osinowo (2015) broadly determined the effect of fiscal policy on sectoral output growth in Nigeria for the period of 1970-2013. The study employed an Autoregressive Distributed lag (ARDL) and Error Correction Model (ECM). The results showed that total fiscal expenditure (TEXP) have positively contributed to all the sectors output with an exception of agriculture sector. The findings established that manufacturing sector has a positive relationship with all the determinant variables, while inflation rate has negatively impacted output growth of the various sectors with an exception of manufacturing sector. The study concluded that the existence of disparity in the sectoral response to fiscal policy variables underscored the difficulty of conducting uniform and economic wide fiscal policy in Nigeria.

Olasunkanmi (2013) evaluated the impact of fiscal policy on sectoral output in Nigeria in a multivariate co-integration model over the period 1981-2011. Empirical evidence showed that the five subsectors and four fiscal policy variables are co-integrated and that the fiscal policy variables have significant impact on sectoral output. Also, the study revealed that the contribution of fiscal policy variables especially the productive expenditure to

building and construction is below expectation despite huge amount allocated to the sector yearly. Johannes (2005) analysed the impact of fiscal policy and other economic fundamentals on labour-productivity convergence between agriculture, manufacturing and services activities and provided the growth and poverty effects in Cameroon covering the period 1969-1998. Findings showed that the catch-up of the agricultural sector with the leading manufacturing/service sectors in terms of productivity is guaranteed in the long-run. They also found that while government spending on road infrastructure promotes convergence, spending on health and communication reinforce inequality in the level of sectoral labour productivity by a disproportionate increase in non-agricultural sector productivity. The study revealed that the catch-up of the lagging agricultural sector with the leading industrial/service sectors in terms of labour productivity fosters poverty reduction.

Ioana-Laura (2015) clarify the way in which fiscal policy influences an important sector of the economy, the manufacturing sector. To achieve this goal, business confidence in the production sector was quantified using the manufacturing confidence index. The tax burden was used as a way of describing and numerically capturing changes in taxation. The database used consists of information regarding countries with well-established manufacturing sectors, for a period of almost four decades. The impact of the different types of tax burden on business confidence in Japan is much more pronounced than in European countries. The estimated coefficients are much larger than in the case of OECD Eurozone Member States and, therefore, would impact business confidence significantly. Consequently, the study

concluded that the influence of taxation on the business confidence in the manufacturing sector in Japan and the USA is probably not a linear one, as shown by our research results. Kumar (2014) appraised the impact of fiscal policy in India with reference to Automobile Industry from the period of 2007-2016. The study seeks to assess whether corporate tax and government expenditure, as a fiscal policy tools, affect the sales of the company in selected manufacturing companies in India. Secondary data collected from Annual Survey of Industries (ASI), from various journals, publications, budgetary control report and financial statements for the selected automobile companies. The study found that the corporate tax and government expenditure has a significant effect on sales of the companies.

Eze and Ogiji (2013) addressed the growing concern on the role of fiscal policy on the output and input of manufacturing industry in Nigeria, despite the fact that the government had embarked on several policies aimed at improving the growth of Nigerian economy through the contribution of manufacturing industry to the economy and capacity utilization of the sector. An ex-post facto design was used and the finding indicated that government expenditure significantly affect manufacturing sector output based on the magnitude and the level of significance of the coefficient and p-value and there is a long-run relationship between fiscal policy and manufacturing sector output. Shevchuk and Kopych (2017) studied the effects of fiscal policies upon agriculture and industry in Ukraine, with the SVAR model using quarterly data for the 2001–2016 period. The results indicated a positive effect of the government spending on both agricultural production and industrial output, while an increase in the government revenue is of the same

expansionary impact for the latter only. Among other results, there is a weak negative short-lived spill-over from agriculture to industry, with no causality running on the reverse. As agricultural production in Ukraine is associated with a higher level of government spending in the short run, a direction of causality seems to be just the opposite for industrial output. Both agriculture and industry bring about higher budget revenues in the short run, but for the latter this effect is lagged and more persistent.

Ezejiofor, Adigwe and Echekoba (2015) examined whether tax as a fiscal policy tool affect the performance of the selected manufacturing companies in Nigeria. To achieve the aims of the study, descriptive method was adopted and data were collected through the use of six years financial accounts of the selected companies. The hypothesis formulated for the study was tested with the ANOVA, using the Statistical Package for Social Sciences (SPSS) version 20.0 software package. The study found that taxation as a fiscal policy instrument has a significant effect on the performance of Nigerian manufacturing companies. Wang (2014) used industry data to explore whether policy uncertainty indeed affects the dynamics of employment during this recovery, and particularly whether it has a differential impact on employment across industries. The estimation results revealed that policy uncertainty indeed retards employment growth more in industries that rely more heavily on federal government demand: the growth rate in the number of production employees in these industries appears to have been four-tenths of a percentage point lower during the quarters in recent years when policy uncertainty spiked. A similar impact is found for the growth of total employment, which also includes nonproduction employees. In addition, the evidence suggests that

increased policy uncertainty renders firms more reluctant to adjust the number of employees in response to changes in output, a contributing factor to the sluggish recovery in employment.

Oktaviani, Irawan, and Anggraeni (2011) ascertained the impact of both government fiscal policy and central bank monetary policy on industry and Indonesian economic performance by using the Computable General Equilibrium (CGE) model. Fiscal and monetary policy have positive impact on Indonesian macroeconomic performance in terms of change in real GDP, investment, consumption, and capital rate of return, with the biggest impact of fiscal policy. However, the result is expected to vary at the sector level and Indonesian industry is not so responsive to changes in interest rates that represent monetary policy. Tkalec and Vizek (2009) studied the impact of macroeconomic policies on manufacturing production in Croatia. They used multiple regressions in order to assess how personal consumption, investments, interest rates, the real effective exchange rate, government consumption, fiscal deficit and foreign demand affect the output of 22 manufacturing sectors. The analysis was conducted on quarterly data from 1998:1q to 2008:3q. The results suggested that changes in fiscal conditions, the real effective exchange rate and personal consumption mostly affect low technological intensity industries. Production in high technological intensity industries is, in general, elastic to changes in investments, foreign demand and fiscal policy. Fiscal policy seems particularly important for manufacturing output, both in terms of the magnitude of fiscal elasticities and shorter time lags.

2.3.3 Fiscal Policy and Money Supply

Bakare (2011) examined the determinants of money supply growth and its implications on inflation in Nigeria. The study employed quasi-experimental research design approach for the data analysis. This design combined theoretical consideration (a priori criteria) with empirical observations and extracted maximum information from the available data. The results of the regression showed that credit expansion to the private sector determines money supply growth by the highest magnitude in Nigeria. The results also showed a positive relationship between money supply growth and inflation in Nigeria. It demonstrated that a 1% rise in money supply in the current period leads to 5.6 percent rise in inflation. Hoang (2014) looked into the nexus among budget deficit, money supply and inflation by using a monthly data set from January 1995 to December 2012 and a SVAR model with five endogenous variables, inflation, money growth, budget deficit growth, real GDP growth and interest rate. Since real GDP and budget deficit are unavailable on the monthly basis, they interpolate those series using Chow and Lin's (1971) annualized approach from their annual series. Overall, they found that money growth has positive effects on inflation while budget deficit growth has no impact on money growth and therefore inflation.

Kosimbei (2009) applied Vector Autoregressions (VARs) together with annual time series data for the period 1963 to 2007 and evaluated the empirical effects of budget deficits on macroeconomic performance. The selected macroeconomic variables included; current account of the balance of payments, private consumption, private investments, money supply, treasury bill rates, and real GDP. The impulse response functions revealed that budget deficits have a significant effect on: private consumption, private investments,

money supply (M3), treasury bills rate, current account and real GDP. Srivyal and Venkata (2004) studied the interaction of budget deficit of India with other macroeconomic variables such as Nominal effective exchange rate, GDP, Consumer Price Index and money supply giving special emphasis on the budget deficit-exchange rate relationship using co-integration approach and Variance Error Correction Models (VECM) for the period 1970-2002. The results revealed that the variables under study are co-integrated and there is a bi-directional causality between budget deficit and nominal effective exchange rates but they did not observe any significant relationship between budget deficit and Money supply.

Evidence of the causal long term relationship between budget deficit, money supply and inflation in Colombia was ascertained by Lozano (2008) using VECM methodology on quarterly data over the last 25 years. The result of the analysis unveiled a close relationship between money supply and inflation on one hand, and between money supply and fiscal deficit on the other hand. Johnson (2014) assessed the causal relationship between fiscal deficits, money growth and inflation, having controlled for macroeconomic variables such as interest rate, exchange rate and real GDP in the Ghanaian economy for the period 1960-2012. Using the autoregressive distributive lag model the long and short run models were estimated, and the Granger Causality test was employed to test for causality among the variables. The results suggest a positive relationship between fiscal deficits and inflation in the Ghanaian economy occurs only in the short run; however the money supply shows a consistent positive relationship with inflation, both in the short and long run. The Granger causality test supported a unidirectional causality

from fiscal deficit to inflation and money supply; and a bi-directional causality existing between money supply and inflation.

Faramarzi, Avazalipour, Khaleghi and Hakimipour (2014) analysed the impact of fiscal policy on money supply in Iran's economy. In order to study the main factors of on employment of labour and, Vector Auto regressive model (VAR) and Vector Error Connection (VECM) as well as co-integration test of Johansen Co-integration Test during 1976-2009 is used to find out the relation and also to evaluate the model. Results showed that the effect of government expenditure on the both of the employment and money supply is positive but the effect of tax on the employment is negative. Milo (2012) evaluated the causal linkage between budget deficit, monetary mass and inflation in the transition economies. They study focused on the impact of public expenditures growth on money supply growth, and it does not take in account the amount of budget deficit. In their model, the money supply growth is function of budget deficit and GDP growth rate; and inflation is a function of money supply growth and budget deficits. They found a positive relationship between monetary financing of government deficits and money base growth in the case of Albania, Bulgaria, and Romania; public finance imbalances are the main cause of money creation and inflation in these countries.

Georgantopoulos and Tsamis (2014) determined short run as well the long run relationships between money supply, inflation, government expenditure and economic growth by employing the Error Correction Mechanism (ECM) and Johansen co-integration test respectively for the case of Cyprus using annual data from 1980 to 2009. Collectively, empirical results

implied that public spending promotes economic development in Cyprus. However, deficit financing by the government causes more liquidity effects/increases money supply but also inflationary pressure in the economy. Results show that inflation negatively effects economic growth probably due to adverse supply shock. Money supply should be allowed to grow according to the real output of the economy but excess growth of money causes inflationary pressure in case of Cyprus. Zuze (2012) appraised the relationship between budget deficit, money growth and inflation in Zimbabwe for the period 1980-2007. The study employed Vector Auto Regression (VAR) model coupled with variance decomposition and impulse response functions to analyse the relationship. The regression results reveal that there is a positive relationship between budget deficit and money growth and also a positive relationship between money growth and inflation. Umeora and Ikeora (2016) investigated the effects of government fiscal deficits on money supply in Nigeria. Data for the study are secondary data set for 1970 − 2014 obtained from CBN Statistical Bulletin. The method of analysis was Error Correction Model (ECM) and Pairwise Granger Causality. The regression results showed that government fiscal deficits have significant and negative effect on money supply and that inflation does not contribute significantly to money supply and fiscal deficits. Pairwise Granger Causality was that money supply granger cause fiscal deficits.

2.3.4 Fiscal Policy and Inflationary Trend

Nwakoby, Okaro and Ananwude (2016) unearthed the long run relationship between fiscal deficit and inflation in Nigeria as well as the effect of fiscal deficit on inflation covering a time frame of 1981 to 2015. They applied econometric tools such as unit root, Johansen co-integration, Granger

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causality and Vector Error Correction Model. The result of the Johansen co-integration established a long run relationship between fiscal deficit and inflation, while the granger causality impact assessment result showed that fiscal deficit does not significantly influence inflation in Nigeria. Umeora (2013) examined the relationship that exists between the Government Deficit Spending and selected macroeconomic variables such as Gross Domestic Product (GDP), Exchange Rate, Inflation, Money Supply and Lending Interest Rate. The period covered is 1970 (when the civil war ended) and 2011. Ordinary Least Squares (OLS) technique was adopted to analyse the relationships. The study concluded that Government Deficit Spending (GDS) has positive significant relationship with GDP. Government Deficit Spending also has positive significant relationship with Exchange Rate, Inflation, and Money Supply.

Dockery, Ezeabasili and Herbert (2012) used a modelling approach that incorporated the theory of co-integration and its implied vector error correction model to investigate the long term relationship between fiscal deficits and inflation for Nigeria, a country which has experienced very large fluctuations in the government fiscal deficits. The empirical results showed that there is a positive but insignificant relationship between fiscal deficits and inflation. The analysis of the Nigerian data also indicated a tenuous link to previous levels of fiscal deficits with inflation and provide, moreover, evidence of a positive long-run relationship between money supply growth and inflation, suggesting therefore that money supply growth is procyclical and tends to grow at a faster rate than the rate of inflation. Finally, from the impulse response and variance decomposition analysis, the study found that

the length of inflation is an important determinant of the ability of the system to return to its long-run equilibrium following a shock. Conventional notions suggest that persistently high budget deficits give rise to inflation, which monetary policy on its own is powerless to prevent hut empirical evidence does not provide convincing support for such a hypothesis hence, Oladipo and Akinbobola (2011) determined the nature and direction of causality between fiscal deficit and inflation in Nigeria. Data on inflation rate, exchange rate, Gross Domestic Product (GDP) and budget deficit were collected from statistical Bulletin of Central Bank of Nigeria. Granger Causality pair wise test was conducted in determining the causal relationship among the variables. The result showed that there was no causal relationship from inflation to budget deficit (F = 0.9, P > 0.005), while the causal relationship from budget deficit to inflation was significant (F = 3.6, P < 0.05). This implies that a unidirectional causality from budget deficit to inflation exist in Nigeria.

Nwakoby (2017) examined the effect of fiscal deficit on selected macroeconomic variables in Nigeria by specifically examining the effect of fiscal deficit on gross domestic product, money supply and inflation. To achieve these objectives, the study employed various econometric techniques such as unit root, Johansen co-integration, ordinary least square and granger causality test in which variations in gross domestic product, money supply and inflation were regressed on fiscal deficit and exchange rate using time series data from 1981 to 2015. The results of the analysis revealed that fiscal deficit has no significant effect on gross domestic product, money supply and inflation in Nigeria. Tiwari and Tiwari (2014) assessed the linkage between fiscal deficit and inflation in India by critically determining the factors that are

responsible for increasing fiscal deficit in India, by taking into account all factors that can affect the status of fiscal deficit. The study found that inflation is not at all cause of fiscal deficit but, government expenditure and money supply are found to be important determinants of mounting fiscal deficit.

Egbulonu and Wobilor (2016) analysed the relationship between fiscal policy and inflation rate in Nigeria from 1970 to 2013. Data on Government expenditure, government debt stock, government tax revenue and inflation rate were sourced from the National Bureau of for Statistics and Central Bank of Nigeria. The data were subjected to Unit root tests, Co-integration and Granger causality tests, and analysed using Ordinary Least Square (OLS) Regression and Error Correction Mechanism (ECM) techniques. The results found a statistically insignificant positive relationship between government expenditure; government tax revenue and inflation in Nigeria, while government debt stock is positive and statistically significant. The results also revealed that, there exist a long-run equilibrium relationship between inflation and fiscal policy in Nigeria. Rehman, Khan and Wahid (2016) focused on investigating the growth rate of government expenditure, taxes, budget deficit, GDP, employment rate and interest rate and its relationship with the inflation rate. For analysing the data for the period of 1980-2014 various techniques such as Multiple Regression, Ramsey RESET test, ARCH test, the ADF unit root test and white test, the paper concluded that four independent variables (growth rate of government expenditure, growth rate of GDP, interest rate and employment rate) are significant while the remaining two independent variables (growth rate of taxes and budget deficit) are insignificant. So, the impact of fiscal policy is great over inflation.

Kliem, Kriwoluzky and Sarferaz (2015) studied the impact of the interaction between fiscal and monetary policy on the low-frequency relationship between the fiscal stance and inflation using cross-country data from 1965 to 1999. In a first step, they contrasted the monetary-fiscal narrative for Germany, the U.S. and Italy with evidence obtained from simple regression models and a time-varying VAR. They found that the low-frequency relationship between the fiscal stance and inflation is low during periods of an independent central bank and responsible fiscal policy and more pronounced in times of high fiscal budget deficits and accommodative monetary authorities. In a second step, they used an estimated DSGE model to interpret the low-frequency measure structurally and to illustrate the mechanisms through which fiscal actions affect inflation in the long run. The findings from the DSGE model suggested that switches in the monetary-fiscal policy interaction and accompanying variations in the propagation of structural shocks can well account for changes in the low-frequency relationship between the fiscal stance and inflation. Mukhtar and Zakaria (2010) re-ascertained the issue in the case of Pakistan using Johansen co-integration analysis. The empirical results suggested that in the long-run inflation is not related to budget deficit but only to supply of money, and supply of money has no causal connection with budget deficit.

Tiwari, Bolat and Koçbulut (2015) tested the relationship between budget deficits and inflation for nine EU countries during the period of 1990-2013 using the quarterly data. The study employed the bootstrap causality and Granger causality test in the frequency domain analysis which allows us to distinguish short and long-run causality. The study did not find a relationship

between these variables when bootstrap causality analysis was applied. While the frequency domain causality showed that there is no relationship causality from budget deficits to inflation for all countries, causality from inflation to budget deficits indicates a permanent (long-run) relationship for Belgium, and France. Solomon and Wet (2004) explored the deficit-inflation relationship in the Tanzanian economy and established the causal link that runs from the budget deficit to the inflation rate using co-integration analysis over the period 1967-2001. Some dynamic simulations were done to gauge the effect of a change in the budget deficit and gross domestic product on inflation over time. Due to monetisation of the budget deficit, significant inflationary effects are found for increases in the budget deficit.

Mehraraa, Masoumibb and Barkhi (2014) studied the effect of fiscal policy on economic growth and inflation by using government expenditure and taxes. For this purpose, selected data from developing countries were used for the period 1990-2011. PVAR approach was been applied to study the effect of shocks on macro variables. The results of impulse response function and variance decomposition implied that economic growth will increase through government expenditure shock in short term, but in long term it is the opposite. The government expenditure shock decrease inflation. Shock of taxes, in short run, promotes slightly economic growth and in long term have no effect on growth. Makochekanwa (2010) the deficit-inflation nexus in the Zimbabwean economy and establishes the causal link that runs from the budget deficit to the inflation rate using Johansen (1991, 1995) co-integration technique over the period 1980 – 2005.

Ekanayake (2012) investigated the validity of the hypothesis that suggests there is a link between fiscal deficits and inflation in developing countries and further explored this link in the absence of public sector wage expenditure. An auto-regressive distributed lag (ARDL) model was employed in the analysis, using annual data from 1959 to 2008. The results suggested that, in the long run, a one percentage point increase in the ratio of the fiscal deficit to narrow money is associated with about an 11 percentage point increase in inflation. This link becomes weaker in the absence of the public sector wage expenditure. The overall inference is that inflation is not only a monetary phenomenon in Sri Lanka and public sector wage expenditure is a key factor in explaining the deficit-inflation relationship. Zonuzi, Pourvaladi and Faraji (2011) re-examined the deficit-inflation nexus in the Iranian economy by using quarterly data for the period of 1990-2007. We employ Bounds test approach to co-integration proposed by Pesaran et al. (2001) to investigate the long-run relationship between budget deficit and inflation. The key findings from the empirical studies investigating the relationship between the budget deficit and inflation indicated strong evidence towards supporting a significant and positive relationship between budget deficit and inflation in Iran. At the end, we obtained volatility of budget deficit by using GARCH model, and showed that, volatility of budget deficit has a positive effect on the inflation too. Mehrara and Sujoudi (2015) looked into relationship between, inflation, money supply and government spending in Iran during the period 1959- 2010. To that end, Bayesian econometric approach was used. The results of the Bayesian Model averaging method implied that the growth rate of money, economic growth rate, inflation rate, the logarithm of the ratio of

liquidity to GDP, and growth in energy prices had a significant positive significant effect on inflation. The results also showed that the growth rate of government spending, GDP growth rate and the exchange rate had no significant effect on the inflation. Ozurumba (2012) evaluated causal relationship between inflation and fiscal deficits in Nigeria, covering the period 1970-2009. The estimation technique used was the autoregressive distributed lag (ARDL) model and the Granger-causality test. The result of the Granger-causality test showed that the null hypothesis which says that fiscal deficit does not cause inflation should be rejected since the result is significant with probability less than 0.05. This implies that fiscal deficit causes inflation but, no feedback mechanism was observed, while results from the ARDL test confirm a significant negative relationship between growth in fiscal deficit and inflation.

2.3.5 Fiscal Policy and Interest Rate

Mukhtar and Zakaria (2008) explored the long run relationship between nominal interest rate and fiscal deficit in Pakistan using annual time series data from 1960 to 2005. They tested the conventional crowding out effect against the Richardian equivalence neutrality alternative. The regression result showed that fiscal deficit has no significant effect on nominal interest rate and validated the Richardian equivalence neutrality. Chen (2011) examined the behaviour of the long-term interest rate in Japan based on a sample during 1972Q1-2010.Q3. Applying to the extended open economy loanable funds model, the study found that a higher government deficit as a percent of GDP leads to a lower long-term interest rate in Japan. In addition, the real money market rate, the GDP growth rate, the expected inflation rate, the world long-term interest rate, and the expected depreciation of the yen

have positive effects on the Japan's long-term interest rate. Finally, inclusion of the world interest rate and the exchange rate in the model may better capture the behaviour of the long-term interest rate in Japan.

Bonga-Bonga (2012) ascertained the extent of the effects of the systematic and surprise changes in budget deficits on the long-term interest rate in South Africa. Co-integrating vector autoregressive (VAR) techniques whereby co-integrating vectors were identified based on the Fisher effect theory and the expectation hypothesis of the term structure to assess the effect of systematic changes in budget deficit on the long-term interest rate was applied. Moreover, the generalised impulse response functions obtained from the co-integrating VAR were used to assess the effect of the surprise change in budget deficit on the long-term interest rate. The results of the paper showed a positive relationship between the budget deficits and long-term interest rate under different assumptions of price expectations by economic agents. Aisen and Hauner (2008) extended the literature on budget deficits and interest rates in three ways: assessed both advanced and emerging economies and for the first time a large emerging market panel; explored interactions to explain some of the heterogeneity in the literature; and apply system GMM. There was overall a highly significant positive effect of budget deficits on interest rates, but the effect depends on interaction terms and is only significant under one of several conditions: deficits are high, mostly domestically financed, or interact with high domestic debt; financial openness is low; interest rates are liberalized; or financial depth is low.

Bayat, Kayhan and Senturk (2012) analysed causality between budget deficits and its ratio to gross domestic product and interest rate in the Turkish

economy during years between 2006 and 2011. By doing so, they investigated the validity of crowding out view against the Ricardian equivalence hypothesis. The conventional Toda-Yamamoto (1995) linear Granger type causality test and Hacker and Hatemi-J (2005, 2006) bootstrap process-based Toda-Yamamoto linear Granger type causality test was applied to analyse the data. Analysis results entailed that there is no causal relation between budget deficits, budget deficit ratio to gross domestic product and nominal interest rate hence, validating the existence of Ricardian equivalence hypothesis. Dell'Erba and Sola (2013) reconsidered the effects of fiscal policy on long-term interest rates employing a Factor Augmented Panel (FAP) to control for the presence of common unobservable factors. They constructed a real-time dataset of macroeconomic and fiscal variables for a panel of OECD countries for the period 1989-2012. They found that two global factors—the global monetary and fiscal policy stances—explain more than 60 percent of the variance in the long-term interest rates.

Noula (2012) evaluated the influence of budget deficits influence nominal lending interest rates by using annual time series data from 1974 to 2009 in the context of Cameroon. Regression analysis applied to annual time series data revealed a significant positive association between budget deficits and domestic nominal lending interest rates and there a clear evidence of a bidirectional causality between budget deficits and nominal interest rates in Cameroon. Asamoah (2016) appraised the macroeconomic effects of fiscal policy on retail interest rate in Ghana using the Autoregressive Distributed Lags model. A database of annual data on fiscal variables and lending rates for the period 1970 – 2013 were constructed largely from the World Bank

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Indicators and International Financial Statistics. The findings showed evidence of contemporaneous effects from fiscal spending to interest rate. Specifically, the result revealed that fiscal deficit induces a sizable and robust effect on the retail interest rate in the short run, but contrary in the long run. They also found that government investment, exchange rate and the yields on government short-term treasury instruments have simultaneous effects on the downward stickiness of the retail interest rate.

Marsal, Kaszab and Horvath (2015) addressed the role of government spending in the dynamics of the term structure of interest rates. They explored asset pricing implications of fiscal policy in what become paradigm in dynamic general equilibrium macro-finance literature. They break down the transmission of the government spending to macroeconomic attributes driving the dynamic response of the yield curve, both analytically and numerically. The novelty of our approach lies in the way we quantify the decomposition of pricing kernel. Finding unearthed that rise in fiscal uncertainty amplifies the hedging property of bonds against real and nominal risks. Depending on the size of uncertainty monetary policy drives up the price of nominal risk. Chakraborty (2012) explored whether there is any evidence of the fiscal deficit determining the interest rate in the context of India from 2006 to 2011. Contrary to the debates in policy circles, the paper found that an increase in the fiscal deficit does not cause a rise in interest rates. Using the asymmetric vector autoregressive model, the paper established that the interest rate is affected by changes in the reserve currency, expected inflation, and volatility in capital flows, but not by the fiscal deficit.

Laubach (2003) studied the relationship between long-horizon expected government debt and deficits and expected future long-term interest rates. The estimated effects of government debt and deficits on interest rates were statistically and economically significant: a one percentage point increase in the projected deficit-to-GDP ratio is estimated to raise long-term interest rates by roughly 25 basis points. Under plausible assumptions these estimates are shown to be consistent with predictions of the neoclassical growth model. Saher and Herbert (2010) appraised the long run relationship between budget deficit and long-term interest rate along with GDP growth, expected inflation, capital inflows and short-term interest rate during the period from 1975 to 2008 by applying co-integration technique. They have found that a 1 percent increase in the budget deficit leads to more than 40 basis points increase in long term interest rate in Pakistan thereby increasing the cost of funds for investment.

Nkalu (2015) examined the effects of budget deficits on selected macroeconomic variables in Nigeria and Ghana using annual time-series data of both economies covering from 1970 to 2013; and taking previous empirical studies as its point of departure. The study employed Eagle-Granger Co-integration test, Augmented Dickey Fuller (ADF) and Phillips-Perron (PP) tests in estimating the systems equations. The empirical findings demonstrated that budget deficit has statistically negative effects on interest rate, inflation, and economic growth thereby supporting the neoclassical argument in the literature that budget deficit slows growth of the economy through resources crowding-out. Pandit (2003) looked into the relationship between long-term nominal interest rate and budget deficit variables in Nepal. The study revealed

that there exists positive but insignificant relationship between long-term nominal interest rate of government securities and budget deficit variables.

Putri, Kuncoro and Sebayang (2015) ascertained whether the effects of fiscal policy credibility, in the form of deficit rule, debt rule, discretionary, and openness, can affect the stability of interest rates using quarterly data in the case of Indonesia during the period of 2001 to 2013. The study applied the ARDL (Auto Regressive Distributed Lag) model in the case in Indonesia. The result shows the debt rule is credible and has an impact on the interest rates in the long term. The short-term discretionary policy tends to increase the interest rates. Odionye and Uma (2013) empirically explored the link between budget deficit and interest rate in Nigeria using Vector Error Correction model (VECM) for the period of 1970-2010. In the long run co-integrating equation, budget deficit reported a positive and significant impact on interest rate implying that a high budget deficit will increase interest rate in the country. The result supported the Keynesian proposition. Also the evidence from Johansen co-integration result indicated that there is a long run relationship between budget deficit and interest rate.

2.3.6 Fiscal Policy and Exchange Rate

Saysombath and Kyophilavong (2013) examined the dynamic relation between budget deficit and the real exchange rate in the Lao PDR from 1980 to 2010. The empirical analysis applied ARDL co-integration methodology in conjunction with the VAR as well as the structural VAR (SVAR) analysis to provide evidence for both the long and short run dynamics between the variables. They found that there is no long run relationship between budget deficit and real exchange rate in the case of Laos. In addition, they also found that there is no Granger causality between budget deficit and real exchange

rate in Laos. Kuncoro (2012) ascertained the potential impact of fiscal policy credibility on the exchange rates stabilization in Indonesia over the period 2001-2013. Based on the quarterly data analysis, they found that the impact of credible fiscal policy typically depends on characteristics of fiscal rules commitment. In one hand, the credible debt rule policy reduces the exchange rate fluctuation. In contrast, the deficit rule policy – which is incredible – does not have any impact on the exchange rate and thus does not support to the exchange rates stabilization.

Using a panel data set of 61 countries for the 1951-2007 period, Karras (2011) showed that fiscal policy is indeed more potent under fixed exchange rates than under flexible, and that the difference is substantial: the estimated models implied that maintaining a fixed exchange rate raises the long-run fiscal multiplier by roughly a third. Chatterjee and Mursagulov (2011) determined the mechanism through which public infrastructure spending affects the dynamics of the real exchange rate. Using a two-sector dependent open economy model with intersectoral mobility costs for private capital, results showed that government spending generates a non-monotonic U-shaped adjustment path for the real exchange rate with sharp intertemporal trade-off. The effect of government spending on the real exchange rate depends critically on sectoral composition of public spending, underlying financing policy, sectoral intensity of private capital in production, and relative sectoral productivity of public infrastructure

Parsley and Wei (2014) employed a novel approach to identify exogenous fiscal shocks to provide evidence that exogenous increases in government spending cause real exchange rate appreciations. By focusing on

intra-U.S. real exchange rates and exogenous shocks to state-level federal fiscal expenditures, and avoid several econometric issues (e.g., endogenous monetary policy, and Ricardian equivalence) which plagued studies using observational data to study the effects of fiscal shocks. Results differ from OLS and suggest that a one standard deviation exogenous fiscal stimulus at home produces a real exchange rate appreciation of about 3.3 percent. Virtually identical results hold for an exogenous fiscal contraction in the "foreign" state and findings were consistent with simple neo-classical and Keynesian theory. Monacelli and Perotti (2010) employed Vector Auto Regression (VAR) techniques to estimate the effects of fiscal policy and, in particular, government spending on the CPI real exchange rate and the trade balance in the US and three other OECD countries. Empirical analysis delivers two key results. First, a rise in government spending tends to induce a real exchange rate depreciation and a trade balance deficit, although, especially in the US, the latter effect tends to be small. Second, in all countries private consumption rises in response to a government spending shock and, therefore, co-moves positively with the real exchange rate.

Contrary to widespread empirical evidence, standard NOEM models imply that the real exchange rate appreciates following an increase in public spending, Giorgio, Nistico and Traficante (2016) introduced productive government purchases and shows that the real exchange rate can depreciate after a positive spending shock, thus reconciling the theoretical model with the empirical evidence. Under empirically consistent parameterization, the model implied a depreciation both on impact and in the transition. The transmission mechanism works through an increase in domestic private-sector productivity,

spurred by government purchases, which reduce domestic real marginal costs. Enders, Muller and Schollc (2010) used vector autoregressions on U.S. time series relative to an aggregate of industrialized countries and provided new evidence on the dynamic effects of government spending and technology shocks on the real exchange rate and the terms of trade. To achieve identification, they derive robust restrictions on the sign of several impulse responses from a two-country general equilibrium model. They found that both the real exchange rate and the terms of trade—whose responses are left unrestricted—depreciate in response to expansionary government spending shocks and appreciate in response to positive technology shocks.

Ramasamy and Abar (2015) used bootstrapping technique to increase the sample size to run regression to study the effect the effect of macroeconomic policy on interest rate in United States, Australia and Germany. Results showed that model B was robust which indicated all macroeconomic variables significantly influenced the exchange rates except employment and budget deficit. Most of the macroeconomic variables showed opposite sign contrary to the expectations and we concluded that the psychological factors like investor confidence dominate over economic variables in deciding exchange rate fluctuation. Okoye, Evbuomwan, Modebe and Ezeji (2016) explored the relationship between the performance of key macroeconomic indicators (exchange rate, inflation rate, gross fixed capital formation and unemployment) and fiscal deficits. Data on the research variables covering the period 1981-2014 were sourced from the publications of the Central Bank of Nigeria (CBN) and the National Bureau of Statistics (NBS). Employing the econometric methodology of the vector error correction

model (VECM), the study showed significant positive effect of gross fixed capital formation as well as significant negative impact of inflation rate and unemployment on fiscal deficits in Nigeria. Though, there is evidence of negative effect of exchange rate, the study shows it is not significant.

Gülcan and Bilman (2005) investigated the effect of budget deficit reduction on exchange rate between US dollar and Turkish lira (TL). Co-integration method and causality tests were used in order to find out the possible effects of budget deficit reduction on exchange rates during the period of 1960-2003 in Turkey. Long run relationship between budget deficits and real exchange rates reveals that when the share of budget deficits in GDP increase by 1 percent, real exchange rates will increase by 288,023 points. Castro and Fernández-Caballero (2011) analysed the impact of fiscal shocks on the Spanish effective exchange rate over the period 1981-2008 using a standard structural VAR framework. They showed that government spending brings about positive output responses, jointly with real appreciation. Such real appreciation was explained by persistent nominal appreciation and higher relative prices. The results indicated also that the adoption of the common currency has not implied any significant change in the way fiscal shocks affect external competitiveness through their effect on relative prices. In turn, the current account deteriorates when government spending rises mainly due to the fall of exports caused by the real appreciation.

Asgari (2012) assessed the impact of reducing of budget deficit on the foreign exchange rate. For doing so, ARDL was used in order to find contingency effects of reduction of budget deficit on the exchange rate during 1978-2006 in Iran. The results of evaluation of the economic model in Iran

show that there is a long term balanced relationship between budget deficit and foreign exchange. Afonso and Sousa (2009) determined the macroeconomic effects of fiscal policy using a Bayesian Structural Vector Autoregression approach. They build on a recursive identification scheme, but included the feedback from government debt; looked at the impact on the composition of output; assessed the effects on asset markets (via housing and stock prices); add the exchange rate; assessed potential interactions between fiscal and monetary policy; used quarterly data, particularly, fiscal data; and analysed empirical evidence from the U.S., the U.K., Germany, and Italy. The results showed that government spending shocks, in general, have a small effect on GDP; lead to important "crowding-out" effects; have a varied impact on housing prices and generate a quick fall in stock prices; and lead to a depreciation of the real effective exchange rate. Government revenue shocks generate a small and positive effect on both housing prices and stock prices that later mean reverts; and lead to an appreciation of the real effective exchange rate.

2.4   Summary of Literature Reviewed

The linkage between fiscal policy and macroeconomic variables has remained inconclusive in empirical findings. The theories modelled in discussing fiscal policy – macroeconomic fundamentals: Neoclassical theory, Keynesian and Richardian Equivalence have been validated in some economies by scholars on one hand, and refuted on the other hand hence, prevalence of an unending debate in the subject matter. The public of the empirical literature reviewed points towards the beneficial effect of fiscal policy on developing countries but such was not the case for developed nations. The devastating effect of fiscal expansion on inflation, interest rate,

crowding out effect where widely upheld and accepted in literature. It is not of place to re-ascertain the validity of the fiscal policy – macroeconomic paraphernalia theories in Nigeria considering her persistent upsurge in government expenditure as an avenue of actualization of economic growth and development.

2.5   Critique of Literature

Abubakar (2016) investigated the effect of fiscal policy shocks on Real Gross Domestic Product (RGDP) and unemployment in Nigeria under the Keynesian framework by employing the Structural Vector Autoregression (SVAR) methodology to analyse annual series on the relevant variables for the period 1981-2015. Findings of the SVAR model showed shock in public expenditure as having a positive long- lasting effect on RGDP. Revenue shock was found to exert a positive effect (lower than that of public expenditure shock) on RGDP. The author's use of total public expenditure instead of disaggregating into the recurrent and capital expenditure which are the two components of Nigeria's government fiscal policy envisaged by spending is poor and a source of criticism. Disaggregation of total expenditure into the components: recurrent and capital would have provided an insight as regard the component that exerts greater influence on RGDP which could be assessed by virtue of the application of the variance decomposition as contained in the econometric tool employed in the study. The study on fiscal policy and economic growth in Nigeria: a granger-causality analysis by Ogbole, Amadi and Essi (2011) was also criticised on the ground that total government expenditure was not disaggregated into recurrent and capital expenditure.

2.6   Gap in Literature

The macroeconomic implication of fiscal policy has been extensively researched in literature. From the empirical studies reviewed, scholars have studied the effect of government recurrent expenditure, capital expenditure, fiscal deficit and taxation as paraphernalia of fiscal policy on real gross domestic product, industrial development, money supply, inflation, interest rate and exchange rate volatility in different countries of the world and applied suitable econometric techniques in the realization of their researches objectives. However, it was discovered that in the context of Nigeria the only fiscal policy tool in studying the nexus between fiscal policy and money supply was fiscal deficit hence, no empirical study based on internet search on the effect of government expenditure (recurrent and capital) on money supply. This may be due Nigerians scholars' reliance on the theoretical or conventional notion that increased government spending would ultimately cause an upsurge in money without recourse to empirical validation of this theoretical or conventional claim. The available study of Bakare (2011) in Nigeria used banking sector credit to private sector, while Srivyal and Venkata (2004), Lozano (2008), Johnson (2014), Faramarzi, Avazalipour, Khaleghi and Hakimipour (2014) and Milo (2012) applied fiscal deficit to ascertain the nexus between fiscal policy and money supply in India, Colombia, Ghana, Iran and three transition economies in Europe (Albania, Bulgaria and Romania).

This study improved on the deficiency noticed in fiscal policy and macroeconomic paraphernalia nexus in the following ways:

1. Disaggregating fiscal policy via government spending into recurrent and capital expenditure in addition to fiscal deficit to ascertain its

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effect on the stock of money supply in the context of Nigeria as against the prevalence of only fiscal deficit and banking sector credit to private sector credited to the works of Bakare, Adesanya and Bolarunwa (2014) and Bakare (2011).

2. Ascertaining the response of selected macroeconomic variables: real gross domestic product, industrial development, money supply, inflation, interest rate and exchange rate volatility to shocks in fiscal policy instruments: recurrent, capital expenditure and fiscal deficit in the context of Nigeria as lacking the works of Alimi, Yinusa, Akintoye and Aworinde (2015), Akpan and Atan (2015) and Jalil, Haruin and Mat (2012). This was effectively executed with the aid of the impulse response function of Structural Vector Autoregressive (SVAR) analysis.

3. Using up-to-date data and extended the period to thirty six years (1981 to 2016) to add to existing literature which was a source of criticism in all the previous studies as none of the studies covered up to 2016.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Research Design

In ascertaining the macroeconomic effects: real gross domestic product, industrial development, money supply, inflationary trend, interest rate and exchange rate volatility of fiscal policy in Nigeria, the hypothetico-deductive research design was adopted for a time period of thirty six (36) years from 1981 to 2016. This research design was considered appropriate for this research work because it permits for the validating or refuting on a theory, and this study is guided by the assumption of the Neoclassical Theory of macroeconomic effect of fiscal policy. A hypothetico-deductive research design allows for formulation of hypotheses by on an existing theory which can be accepted or rejected by eventual completion of the research work.

3.2 Nature and Sources of Data

The nature of the data in this study is secondary based and no other type except otherwise stated. The data were collected from the 2016 statistical bulletin of Central Bank of Nigeria (CBN). The data were on annual bases as stated in the published statistical bulletin of Central Bank of Nigeria (CBN)

3.3 Models Variables

The dependent variables are the selected six macroeconomic fundamentals: Real Gross Domestic Product (RGDP), Industrial Development (IND), Money Supply (MSP), Inflationary Trend (INFT), Interest Rate (INTR) and Exchange Rate Volatility (EXR). Total government expenditure were disaggregated into Recurrent Expenditure (REXP) and Capital Expenditure (CEXP), while Fiscal Deficit (FD) were added and accommodated to represent fiscal policy paraphernalia of the Nigeria's government. The fiscal policy paraphernalia:

recurrent expenditure, capital and fiscal deficit served as the independent variables.

3.4 Model Specification

In an attempt to realize the objective of this study, an estimation of a linear regression model was followed. The linear model for this study were formulated based on empirical studies of Alimi, Yinusa, Akintoye and Aworinde (2015) and Akpan and Atan (2015). The original model adopted is stated as:

$$Y_t = C + \sum_{i=1}^{p} A_i + Y_{i-1} + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.1$$

Where Y_t denotes the vector of the six endogenous variables given by

$Y_t = [gov\ rev, gov\ exp, fbg_t, M_2 gdp_t, lr_t, tradegdp_t, exr_t, pcig_t]$, C is vector of intercept term, A_i is the matrix of auto-regressive coefficients of the order i. $gov\ rev$ = government revenue; $gov\ exp$ = government expenditure; fbg = fiscal balance growth; $m2gdp$ = money supply to economic size; lr = lending rate; $tradegdp$ = total trade to GDP; exr = exchange rate and $pcig$ = per capita income growth.

Following Alimi, Yinusa, Akintoye and Aworinde (2015) and Akpan and Atan (2015), fiscal policy as not instrumental for macroeconomic performance in Nigeria amalgamating recurrent expenditure, capital expenditure and fiscal deficit in modified models were functionally estimated thus:

$$RGDP = REXP + CEXP + FD + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.2$$

$$IND = REXP + CEXP + FD + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.3$$

$$MSP = REXP + CEXP + FD + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.4$$

$$INFT = REXP + CEXP + FD + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.5$$

$$INTR = REXP + CEXP + FD + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.3.6$$

$$EXR = REXP + CEXP + FD + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.3.7$$

Transforming the models to log-linear format to normalize the divergence that may result from different numerical base of the variables, the following equations were estimated:

Model 1

$$LogRGDP_t = a_0 + a_1 LogREXP_t + a_2 LogCEXP_t + a_3 LogFD_t + \varepsilon_t \ldots\ldots.3.8$$

Model 2

$$LogIND_t = a_0 + a_1 LogREXP_t + a_2 LogCEXP_t + a_3 LogFD_t + \varepsilon_t \ldots\ldots\ldots.3.9$$

Model 3

$$LogMSP_t = a_0 + a_1 LogREXP_t + a_2 LogCEXP_t + a_3 LogFD_t + \varepsilon_t \ldots\ldots.3.10$$

Model 4

$$LogINFT_t = a_0 + a_1 LogREXP_t + a_2 LogCEXP_t + a_3 LogFD_t + \varepsilon_t \ldots.3.11$$

Model 5

$$LogINTR_t = a_0 + a_1 LogREXP_t + a_2 LogCEXP_t + a_3 LogFD_t + \varepsilon_t \ldots.3.12$$

Model 6

$$LogEXR_t = a_0 + a_1 LogREXP_t + a_2 LogCEXP_t + a_3 LogFD_t + \varepsilon_t \ldots.3.13$$

Where:

RGDP is real gross domestic product: This is the monetary value of goods and services produced in a country over a specified period of time. It is the widely accepted measurement of health of an economy. Rising GDP is an indication that an economy is doing well but declining GDP portrays recession in an economy. GDP as a macroeconomic variable was applied in the works of Adigwe, Anyanwu and Udeh (2016), Alimi, Yinusa, Akintoye and Aworinde (2015) and Akpan and Atan (2015), Ismal (2013), Tagkalakis (2013), Abubakar (2016), Josten (2003), Osuala and Ebieri (2014), Falade and

Falorunsho (2015), Babalola (2015) and Auteri and Constantini (2004) among others.

IND is industrial development: Industrial development in the context of this study was measured with index of industrial production. The index of industrial production is the total output generated by the industrial sector in a specified time period. It the index that captures all industrial activity in Nigeria economy. The use of industrial production index to surrogate an economy's industrial activity over time is supported by Aghion, Hemous and Kharoubi (2009), Andabai (2014), Bakare-Aremu and Osobase (2015), Osinowo (2015), Olasunkanmi (2013), Ioana-Laura (2015), Kumar (2014), Eze and Ogiji (2013) and Ezejiofor, Adigwe and Echekoba (2015).

MSP is money supply: Money supply is the total amount of money in circulation in an economy at a particular time period. Money supply encompasses coins, currency notes, fixed, savings and time deposit of individuals held in banks. The extent of liquidity different money instruments have on the economy at a specified period stipulates the money supply. Bakare (2011), Hoang (2014), Faramarzi, Avazalipour, Khaleghi and Hakimipour (2014) and Georgantopoulous and Tsamis (2014) recognize money supply as an important financial macroeconomic fundamental.

INFT is inflationary trend: Inflation is the unanticipated rise in the price of goods and services occasioned by high volume of money in circulation. Inflation reduces the purchasing power of money. Nigeria has recorded a high level of inflation over the years. Inflation as a macroeconomic element was authenticated in the studies of Nwakoby, Okaro and Ananwude (2016), Nwakoby (2016), Umeora (2013), Dockery, Ezeabasili and Herbert (2012),

Oladipo and Akinbobola (2011), Tiwari and Tiwari (2014), Ozurumba (2012), Egbulonu and Wobilor (2016) and Rehman, Khan and Wahid (2016).

INTR is interest rate: Interest rate as used in this study is the rate at which deposit money banks lend to individuals for personal, commercial or productive economic activity in the country. Interest rate in Nigeria has been adjudged to be among the highest in the world which deter access to credit from the banking sector. Interest rate as factor affecting access to finance from the banking industry is confirmed in the works of Mukhtar and Zakaria (2008), Chen (2016), Bonga-Bonga (2012), Aisen and Hauner (2008), Bayat, Kayhan and Senturk (2012), Noula (2012), Asemoah (2016), Marsal, Kaszab and Horvath (2015), Chakraborty (2012) and Nkalu (2015).

EXR is exchange rate: Exchange rate is the price of one country's currency against another. It is the rate at which a country's currency is exchanged for another or currencies of other countries. The exchange rate of Nigerian Naira against other countries of the world especially the USA Dollar, British Euro and European Euros has greatly deteriorated over the years starting in 1986 when the Structural Adjustment Programme (SAP) was introduced in the Nigerian economy by the Ibrahim Badamasi Babangida administration. Saysombath and Kyophilavong (2013), Kuncoro (2012), Karra (2011), Chatterjee and Mursagulov (20110, Parsley and Wei (2014), Monacelli and Perotti (2010), Giorgio, Nistico and Traficante (2016), Enders, Muller and Schollc (2010) and Ramasamy and Abar (20150 have documented the fiscal policy – exchange rate linkage.

REXP is recurrent expenditure: Recurrent expenditure is unproductive government expenditure on day to day running of government functions.

Recurrent expenditure are obvious fund embarked for salaries and wages, transfers to pension and social programmes, interest payment and provision of subsidies on specified type of consumption among others. Asegehegn (2016), M'Amanja and Morrissey (2005), Agu, Idike, Okwor and Ugwunta (2014), Babalola and Aminu (2011), Shijaku and Gjokuta (2013), Morina (2017) and Abdiweli (2005) see recurrent expenditure as an important fiscal policy measure of a government.

CEXP is capital expenditure: Capital expenditure is productive investment expenditure by government that creates employment, improves incomes and better the standard of living of the people. Capital expenditure is evidence in funds allocated for construction of roads, telecommunication and transports, hospital, school and industrial edifices. Adigwe, Anyanwu and Udeh (2016), Ogbole, Amadi and Essi (2011), Nwankwo, Kalu and Chiekezie (2017), Saqib and Aggrarwal (2017), Najaf (2016), Khare (2016), Noman and Khudri (2015), Macek and Janku (2014) and Audu (2012) see capital expenditure as a perquisite to realizing a desired level of economic growth and development.

FD is fiscal deficit: Fiscal deficit is government borrowing to finance expenditure that could not be covered by revenue. In other words, fiscal deficit occurs when government expenditure is in excess of revenue. Nigeria has continuously operated on fiscal deficit over the years with the sole aim of accelerating growth and development. Nwakoby, Okaro and Ananwude (2016), Dockery, Ezeabasili and Herbert (2012), Kosimbei (2009), Srivyal and Venkata (2004), Lozano (2008), Johnson (2014), Milo (2012), Zuze (2012) and Umeora and Ikeora (2016) utilized fiscal deficit as a fiscal policy tool of the government.

a_0 is a constant term, ε is the error term and i is the time trend incorporated in any regression model based on the classical assumption of a linear regression model to account for variables omitted in the model.

3.5   Method of Data Analysis

The result of the analysis were presented based on the research hypotheses and questions formulated. The models were estimated using the Auto-Regressive Distributed Lag (ARDL) technique of data analysis as against the traditional Ordinary Least Square (OLS). This is on the argument that most time series data are not stationary at level hence, necessitating the need for second differencing, and ARDL was structured in such a way to accommodate dynamism and shocks that are associated with long term time series data. The Structural Vector Auto-regression (SVAR) Model was used to ascertain the impulse response of selected macroeconomic variables to shocks in fiscal policy paraphernalia.

Unit Root Test

Augmented Dickey-Fuller (ADF), Philip Peron (PP) and Kwiatkowski-Phillips-Schmidt-Shin (KPSS) tests will be used to determine the stationarity of the variables in line with econometric postulation. The stationarity of the data is relevant to avoid spurious regression result. The suitable lag length for ADF estimation starts with maximum lag but that of PP and KPSS starts with few lags.

Co-integration Relationship

Co-integration is a sin qua non for SVAR estimation. The co-integration relationship between the variables was ascertained by Auto-Regressive Distributed Lag (ARDL) bound as against the conventional technique of Johansen co-integration. In Johansen co-integration framework, the presence

or absent of long run relationship is determined by the trace test and the maximum eigen-values test which brings into reality the number of co-integrating equation (s) in the models where the variables were observed to be stationary at the same level or are integrated of order one, that is, 1(1).

Granger Causality Test

The direction of the causal relationship between the variables as well as the macroeconomic effect of fiscal policy were ascertained by the aid of the Granger causality test. The granger causality technique gives an idea of the predicting power of a variable. Take for instance, a is said to predict changes in b only if a granger-cause b and b is said to predict variation in a only if b granger cause a. For the inferences on the predicting power of a and b to valid, then p-value of f-statistic of a and b must be statistically significant at 5% level of significance.

Error Correction Model (ECM)

The speed of adjustment of the model to equilibrium following disequilibrium in previous period were assessed using the ADRL error correction model in the event that the variables in the models are co-integrated. The error correction mechanism of the ADRL gives an idea of the nature of relationship (positive/negative) between the variables in short run and long run as well. A negative and significant error correction coefficient depicts a situation that the model is able to return to equilibrium consequent in imbalance is preceding year. However, a positive (whether significant or not) unveils the failure of the model to move towards equilibrium consequent in disequilibrium recorded in previous periods.

3.6   Interpretation of Regression Results

The Adjusted R-Squared, F-Statistic and Durbin Watson test were the statistical criteria to interpret the result of the models that were estimated. Furthermore, the coefficient of the respective variables also explained the nature of relationship between regressand and the regressor.

Adjusted R-Square (R^2): The Adjusted R-Square details the variation in the dependent variables that was as a result of changes in the independent variable (s). An Adjusted R-Square statistic that is close to one is an indication of tremendous power of the explanatory variable (s) on the dependent variable. Similarly, a very low Adjusted R-Square statistic points to the weakness of the explanatory variable (s) in influencing the dependent variable.

F^* Statistic: The significance of the independent variable (s) in influencing the dependent variable is ascertained by the F-statistic. A p-value of less than 0.05 implies the significant of the explanatory variable (s) in influencing the explained variable. However, a p-value higher than 0.05 envisages the insignificance of the explanatory variable (s) in determining the variation in the dependent variable.

Durbin Watson Statistic: The Durbin-Watson test is the conventional tool to check for autocorrelation in the model. In a situation where is the Durbin-Watson detects the presence of autocorrelation in the model, the serial correlation LM test was utilized to correct the autocorrelation issue observed.

3.7 A Priori Expectation

The Neoclassical Theory put to dismay the economic growth and development attribute of government fiscal policy thus macroeconomic effect of fiscal policy is negative. This is to say that fiscal policy as surrogated by recurrent expenditure, capital expenditure and fiscal deficit is expected to have a negative relationship gross domestic product, industrial development, money supply, inflationary trend, interest rate and exchange rate volatility. Table 1 depicts the expected signs of the independent variables.

Table 1: A Priori Expectation on Neoclassical Assumption

Symbol	Variable	Substitution	Supposed Signs
Real Gross Domestic Product (RGDP)			
REXP	Recurrent Expenditure	Fiscal Policy	-
CEXP	Capital Expenditure	Fiscal Policy	-
FD	Fiscal Deficit	Fiscal Policy	-
Industrial Development (IND)			
REXP	Recurrent Expenditure	Fiscal Policy	-
CEXP	Capital Expenditure	Fiscal Policy	-
FD	Fiscal Deficit	Fiscal Policy	-
Money Supply (MSP)			
REXP	Recurrent Expenditure	Fiscal Policy	+
CEXP	Capital Expenditure	Fiscal Policy	+
FD	Fiscal Deficit	Fiscal Policy	+
Inflation Rate (INFL)			
REXP	Recurrent Expenditure	Fiscal Policy	+
CEXP	Capital Expenditure	Fiscal Policy	+
FD	Fiscal Deficit	Fiscal Policy	+
Interest Rate (INTR)			
REXP	Recurrent Expenditure	Fiscal Policy	-
CEXP	Capital Expenditure	Fiscal Policy	-
FD	Fiscal Deficit	Fiscal Policy	+
Exchange Rate (EXR)			
REXP	Recurrent Expenditure	Fiscal Policy	+
CEXP	Capital Expenditure	Fiscal Policy	+
FD	Fiscal Deficit	Fiscal Policy	-

Source: Researcher's Assumption from Neoclassical Theory of Fiscal Policy

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1   Data Presentation

The data presentation details the data that were utilized in the model estimation as developed in chapter three. The data were sourced from Central Bank of Nigeria (CBN) statistical bulletin of 2016. Table 2 unveils the data for industrial production index, money supply, inflation, interest rate and exchange rate, while the equivalent data on real gross domestic product, government recurrent and capital expenditure and fiscal deficit from 1981 to 2016 are shown in Table 3.

Table 2: Industrial Production Index, Money Supply, Inflationary Trend, Interest rate and Exchange Rate Volatility from 1981 to 2016

Year	Industrial Production Index (Points)	Money Supply (₦'Million)	Inflation Rate (%)	Interest Rate (%)	Exchange Rate Volatility (₦ per USD)
1981	115.60	14,470.0	21.40	7.75	0.6100
1982	122.90	15,790.0	7.20	10.25	0.6729
1983	96.40	17,690.0	23.20	10.00	0.7241
1984	91.60	20,110.0	40.70	12.50	0.7649
1985	100.00	22,300.0	5.50	9.25	0.8938
1986	103.50	23,810.0	5.40	10.50	2.0706
1987	122.10	27,570.0	10.20	17.50	4.0179
1988	108.80	38,360.0	38.30	16.50	4.5367
1989	125.00	45,900.0	40.90	26.80	7.3916
1990	130.60	52,860.0	7.50	25.50	8.0376
1991	138.80	75,400.0	13.00	20.01	9.9095
1992	136.20	111,110.0	44.50	29.80	17.2984
1993	131.70	165,340.0	57.20	18.32	22.0511
1994	129.20	230,290.0	57.00	21.00	21.8861
1995	128.80	289,090.0	72.80	20.18	21.8861
1996	132.50	345,850.0	29.30	19.74	21.8861
1997	140.60	413,280.0	8.50	13.54	21.8861
1998	133.90	488,150.0	10.00	18.29	21.8861
1999	129.10	628,950.0	6.60	21.32	92.6934
2000	138.90	878,460.0	6.90	17.98	102.1052
2001	144.10	1,269,320.0	18.90	18.29	111.9433
2002	145.20	1,505,960.0	12.90	24.85	120.9702
2003	147.00	1,952,920.0	14.00	20.71	129.3565
2004	151.20	2,131,820.0	15.00	19.18	133.5004
2005	158.80	2,637,910.0	11.60	17.95	132.1470
2006	158.90	3,797,910.0	8.20	17.26	128.6516
2007	124.80	5,127,400.0	6.60	16.94	125.8331
2008	117.60	8,008,200.0	15.10	15.14	118.5669
2009	118.20	9,419,920.0	12.10	18.99	148.8802
2010	121.50	11,034,940.0	11.80	17.59	150.2980
2011	132.00	12,172,490.0	10.40	16.02	153.8600
2012	136.70	13,895,390.0	12.00	16.79	157.5000
2013	138.24	15,158,620.0	7.90	16.72	157.3100
2014	139.11	17,680,520.0	8.01	16.55	158.5626
2015	120.24	18,301,300.0	9.60	16.77	193.2792
2016	109.60	21,607,680.0	15.70	16.87	253.4923

Source: Central Bank of Nigeria Statistical Bulletin, 2016

Table 3: Gross Domestic Product, Recurrent Expenditure, Capital Expenditure and Fiscal Deficit from 1981 to 2016

Year	Real Gross Domestic Product (₦'Million)	Recurrent Expenditure (₦'Million)	Capital Expenditure (₦'Million)	Fiscal Deficit (₦'Million)
1981	15,258,000.00	4,850.00	6,570.00	-3,902.1
1982	14,985,080.00	5,510.00	6,420.00	-6,104.1
1983	13,849,730.00	4,750.00	4,890.00	-3,364.3
1984	13,779,260.00	5,830.00	4,100.00	-2,660.4
1985	14,953,910.00	7,580.00	5,460.00	-3,039.7
1986	15,237,990.00	7,700.00	8,530.00	-8,254.3
1987	15,263,930.00	15,650.00	6,370.00	-5,889.7
1988	16,215,370.00	19,410.00	8,340.00	-12,160.9
1989	17,294,680.00	25,990.00	15,030.00	-15,134.7
1990	19,305,630.00	36,220.00	24,050.00	-22,116.1
1991	19,199,060.00	38,240.00	28,340.00	-35,755.2
1992	19,620,190.00	53,030.00	39,760.00	-39,532.5
1993	19,927,990.00	136,730.00	54,500.00	-107,735.3
1994	19,979,120.00	89,970.00	70,920.00	-70,270.6
1995	20,353,200.00	127,630.00	121,140.00	1,000.0
1996	21,177,920.00	124,290.00	212,930.00	32,049.4
1997	21,789,100.00	158,560.00	269,650.00	-5,000.0
1998	22,332,870.00	178,100.00	309,020.00	-133,389.3
1999	22,449,410.00	449,660.00	498,030.00	-285,104.7
2000	23,688,280.00	461,600.00	239,450.00	-103,800.0
2001	25,267,540.00	579,300.00	438,700.00	-221,000.0
2002	28,957,710.00	696,800.00	321,380.00	-301,400.0
2003	31,709,450.00	984,300.00	241,690.00	-202,700.0
2004	35,020,550.00	1,032,700.00	351,300.00	-172,600.0
2005	37,474,950.00	1,223,700.00	514,500.00	-161,400.0
2006	39,995,500.00	1,290,200.00	552,390.00	-101,400.0
2007	42,922,410.00	1,589,270.00	759,320.00	-117,200.0
2008	46,012,520.00	2,117,360.00	960,890.00	-47,380.0
2009	49,856,100.00	2,127,970.00	1,152,800.00	-810,010.0
2010	54,612,260.00	3,109,380.00	883,870.00	-1,105,400.0
2011	57,511,040.00	3,314,510.00	918,550.00	-1,158,500.0
2012	59,929,890.00	3,325,160.00	874,830.00	-975,700.0
2013	63,218,720.00	3,689,060.00	1,108,390.00	-1,153,500.
2014	67,152,790.00	3,426,900.00	783,120.00	-835,680.0
2015	69,023,930.00	3,831,950.00	818,370.00	-1,557,790.0
2016	67,931,230.00	4,178,590.00	634,590.00	-2,208,220.0

Source: Central Bank of Nigeria Statistical Bulletin, 2016

Real Gross Domestic Product Growth Rate

In 1981, real gross domestic product of Nigeria stood at ₦15,258,000 million but over the years, it has increased magnificently. By 2010, the real gross domestic product has risen by 72.61% as it was valued at ₦54,612,260 million. From 2000 to 2015, real gross domestic product maintained a steady increase before experiencing a marginal depreciation of 1.52% owing to economic depression in the country. The trend in real gross domestic product is envisaged in Table 3, Fig. 1 and 2.

Fig. 1: Real Gross Domestic Product Graph Trend from 1981 to 2016
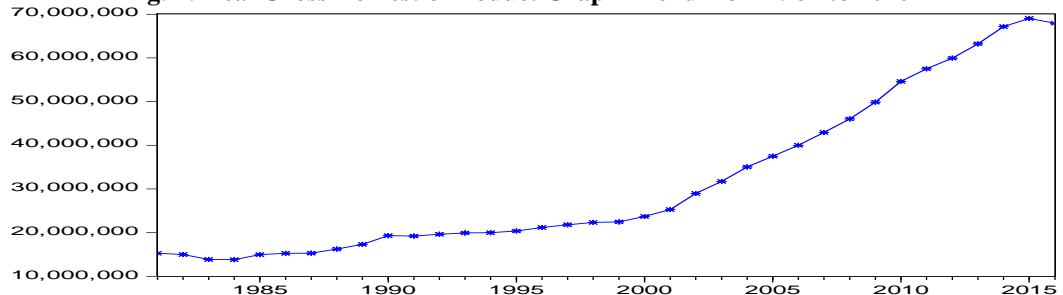
Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0

Fig. 2: Real Gross Domestic Product Bar Chart Trend from 1981 to 2016
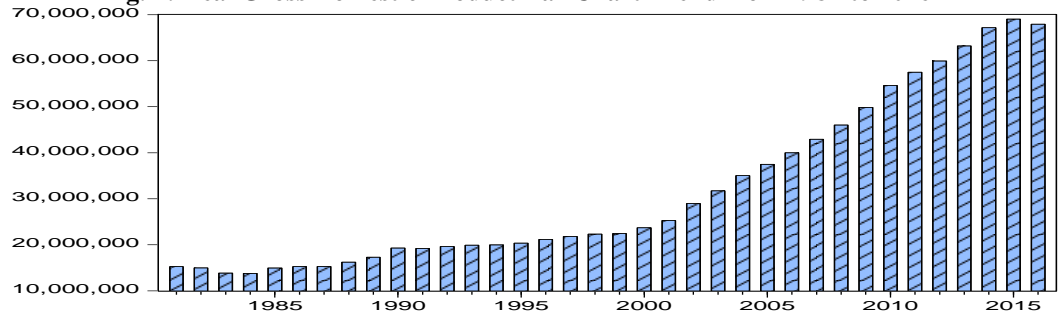
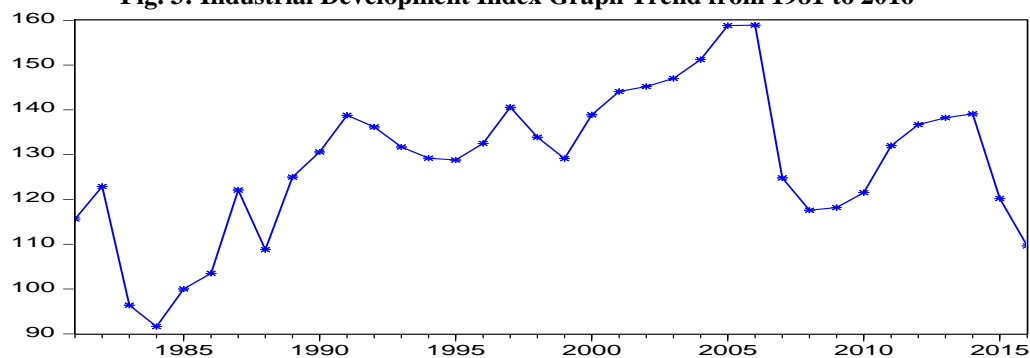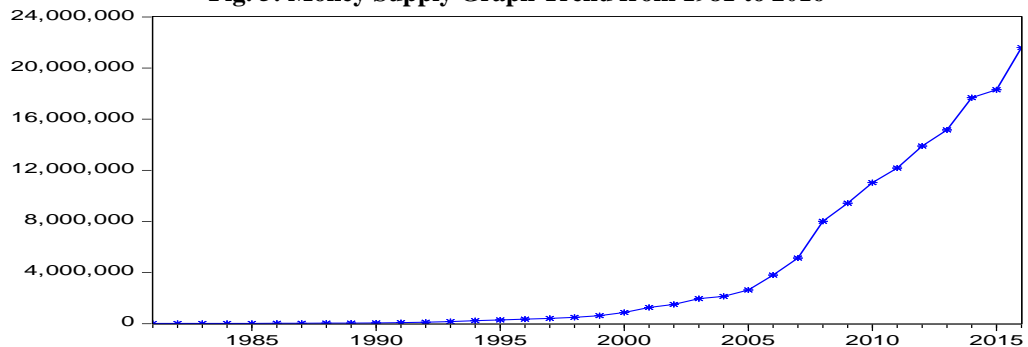*Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0*

Industrial Development

Industrial development as measured by index of industrial production has perform poorly over the period studied, a clear evidence of death of industries. The index of industrial production which was 115.6 points in 1981 has depreciated to 109.6 points despite the marginal increases in some period. It is only the period 1981 to 1993 that saw continues rise in the industrial production index, while others periods were characterized by fluctuation. Table 1, Fig 3 and 4 depict the trend in industrial development index in Nigeria.

Fig. 3: Industrial Development Index Graph Trend from 1981 to 2016

Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0

Fig. 4: Industrial Development Index Bar Chart Trend from 1981 to 2016
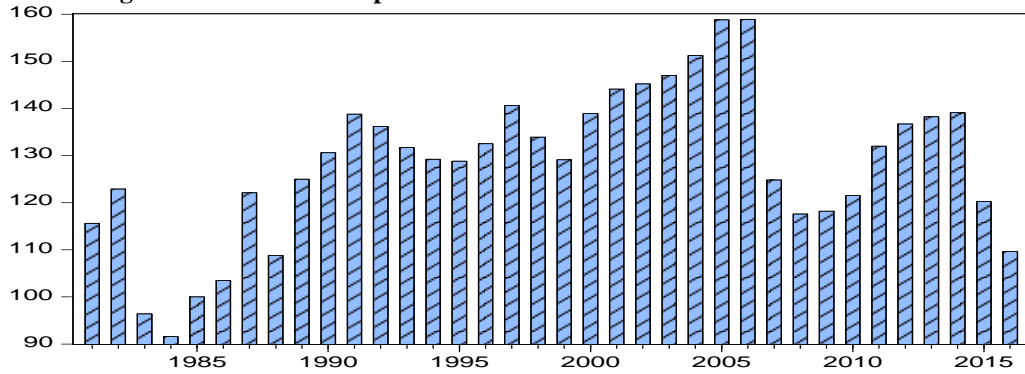
Money Supply

The stock of currency in Nigeria has increased tremendously over the years. From ₦14,470 million in 1981, it rose to reach ₦413,280.0 at the end of 1997 then continue to appreciate closing at ₦878,460.0 in 2000. Between 2000 and 2016 money supply rose from ₦878,460.0 to ₦21,607,680. Table 1, Fig. 5 and 6 illustrate the trend in money supply over the period studied.

Fig. 5: Money Supply Graph Trend from 1981 to 2016

Fig. 6: Money Supply Bar Chart Trend from 1981 to 2016
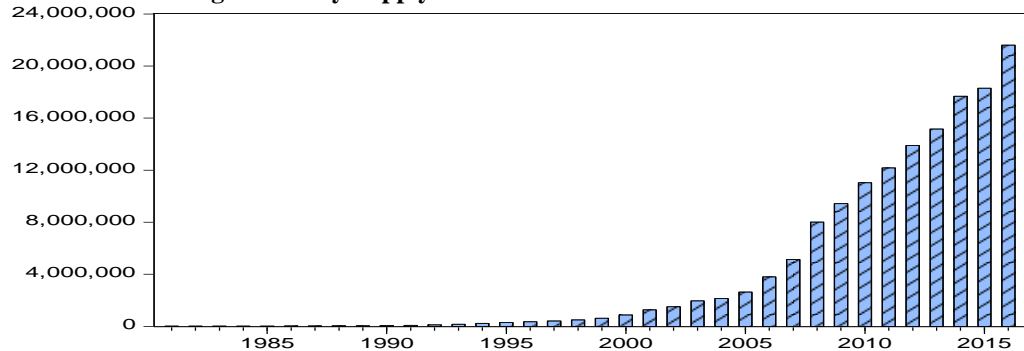
Inflation

The inflation rate was 21.40% in 1981, which had declined by 9.60% at the end of 2010 to settle at 11.80%. The inflation fluctuated marginally from 2010 to 2015, declining to 9.60% in 2015 compared to 11.80% in 2010. From 1981 to 2016, as shown in Table 1, Fig. 7 and 8, inflation rate gradually declined from 21.40% in 1981 to 15.7% in 2016.

Fig. 7: Inflation Level Graph Trend from 1981 to 2016

Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0
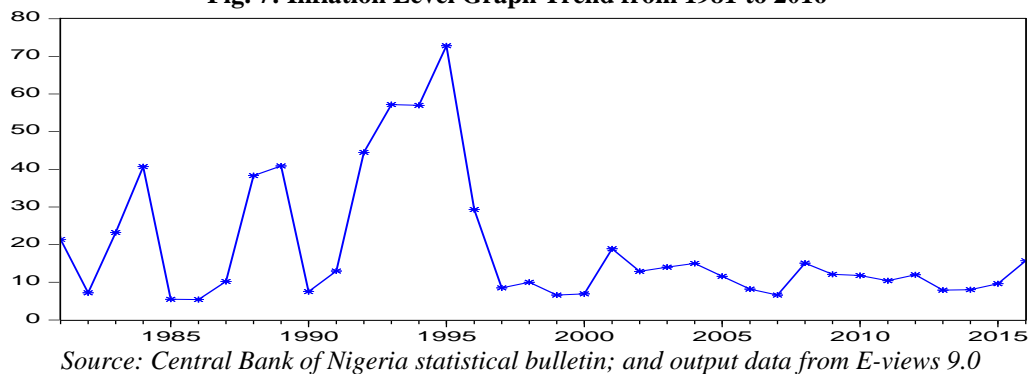
Fig. 8: Inflation Level Bar Chart Trend from 1981 to 2016

Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0
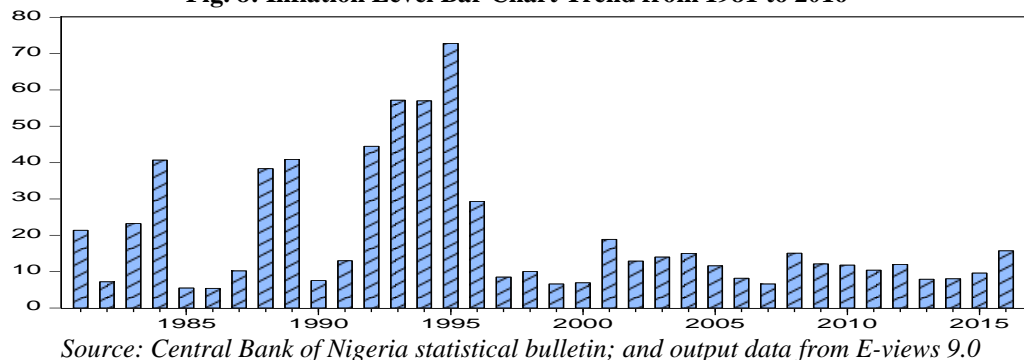
Interest Rate

Interest rate in Nigeria has been adjudged to be among the highest in the world. In 1981, interest rate was 7.75% before it rose to 26.80% in 1989 and further went to 29.80 which is the highest within the period studied. As at today, the interest rate is still on the high side which result in high cost of capital. In 2013, interest rate went down to 16.72% compared to 16.79% in the previous year. As can be seen from Table 2, Fig. 9 and 10, interest rate went

up to 16.87% in 2016 which is higher than 16.77% of 2056 despite the recession in the economy at that point in time.

Fig. 9: Interest Rate Graph Trend from 1981 to 2016

Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0
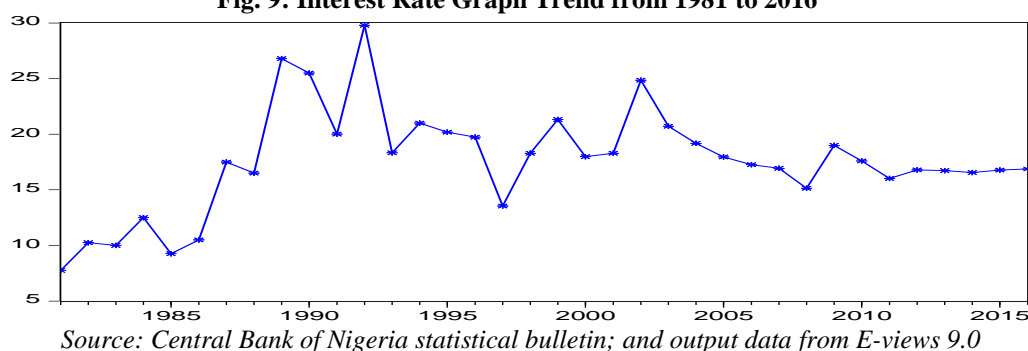
Fig. 10: Interest Rate Bar Chart Trend from 1981 to 2016

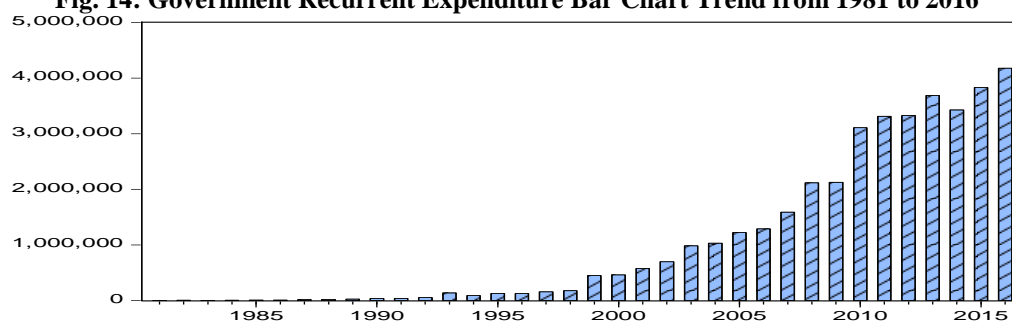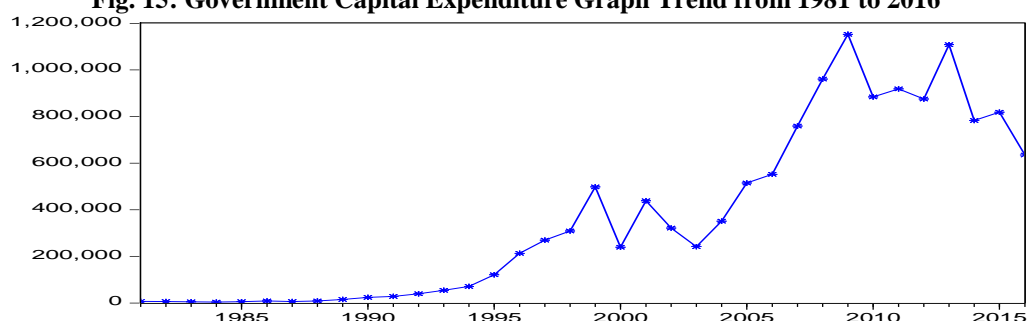*Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0*
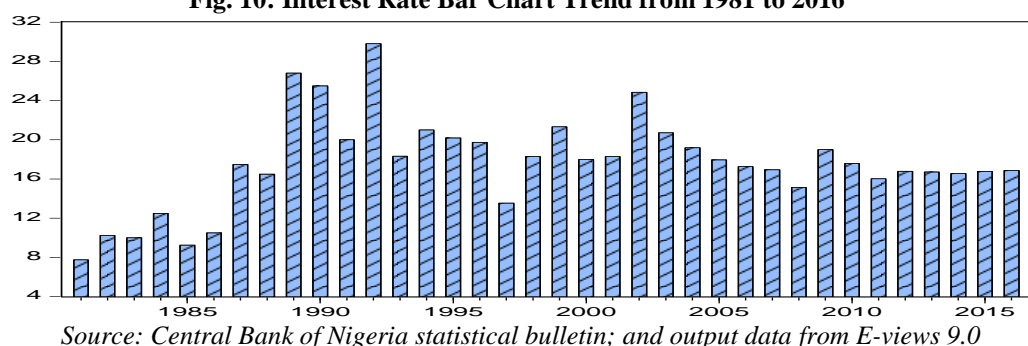
Fig. 11: Exchange Rate Graph Trend from 1981 to 2016

Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0
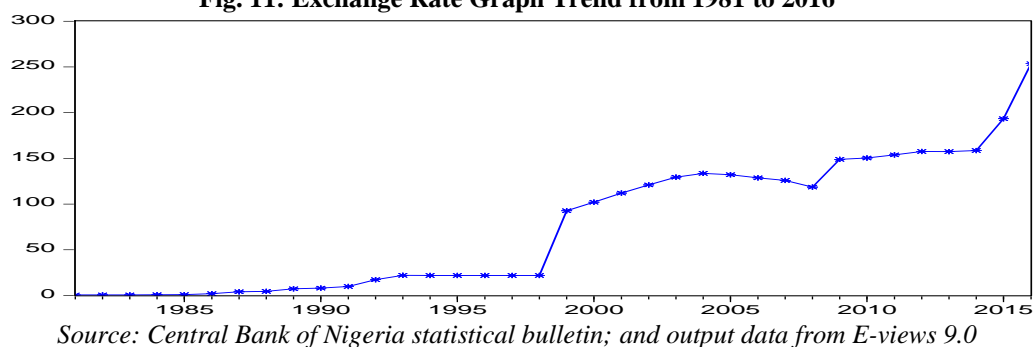
Exchange Rate

Table 2, Fig.11 and Fig. 12 show that the trend in exchange rate during the period 1981 and 2016 deteriorated considerably, depreciating from 0.6100 to 253.4923 a depreciation of over 9,971% based on the official exchange rate of one Naira against one US dollar. The exchange rate at the end of the year 2009 declined to 148.8802, a depreciation of 20.36% from 2008, when it was 118.5669 against one US dollar. It deteriorated further in 2016 to 253.4923 per

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US Dollar coupled with exchange rate crisis in the country at that point in time.

Fig. 12: Exchange Rate Bar Chart Trend from 1981 to 2016
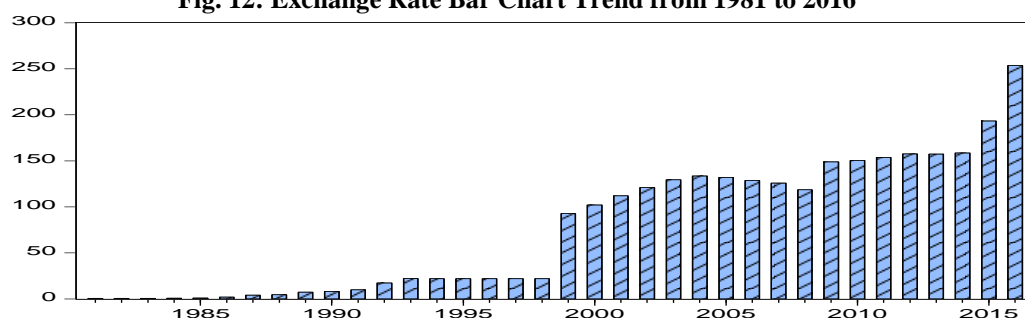
Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0

Government Recurrent Expenditure

The recurrent expenditure of the government as at 1981 was valued at ₦4, 850 million but has risen to ₦3, 109,380 million in 2010. There was further appreciation in 2011 as it was put at ₦3, 314,510 million but went down in 2012 to amount ₦3, 325,160 million. Nevertheless, in 2016, recurrent expenditure increased to ₦4, 178,590 as shown in Table 3, Fig. 13 and 14.

Fig. 13: Government Recurrent Expenditure Graph Trend from 1981 to 2016
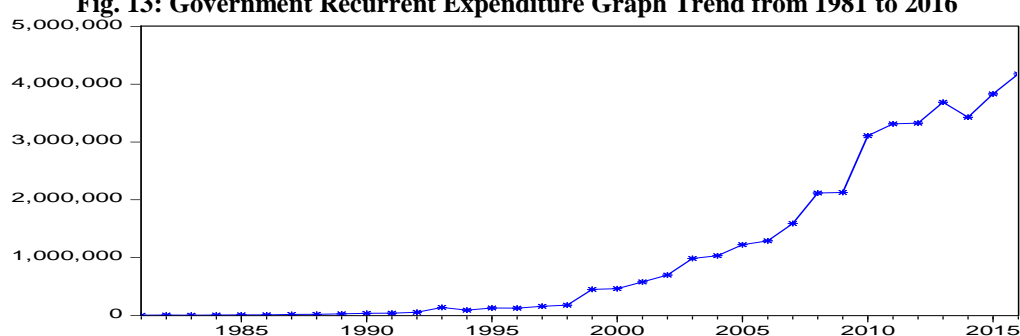
Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0

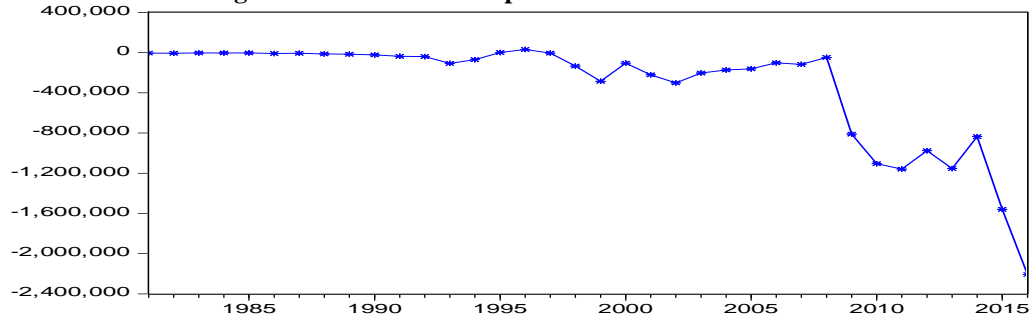**Fig. 14: Government Recurrent Expenditure Bar Chart Trend from 1981 to 2016**

Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0

Government Capital Expenditure

Government capital expenditure rose to 590 million in 2016 from ₦6, 570 million in 1981 to ₦634, 590 million, an increase of over 500% within a period of thirty six years. From 2007 to 2016, the capital expenditure of the government has maintained a steady rise. There was a little reduction in capital expenditure of the government in 2016 owing to fall in revenue largely from decline in oil price in the international oil market. Table 2, Fig. 15 and 16 give the trend in capital expenditure within the period studied.

Fig. 15: Government Capital Expenditure Graph Trend from 1981 to 2016

Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0

Fig. 16: Government Capital Expenditure Bar Chart Trend from 1981 to 2016
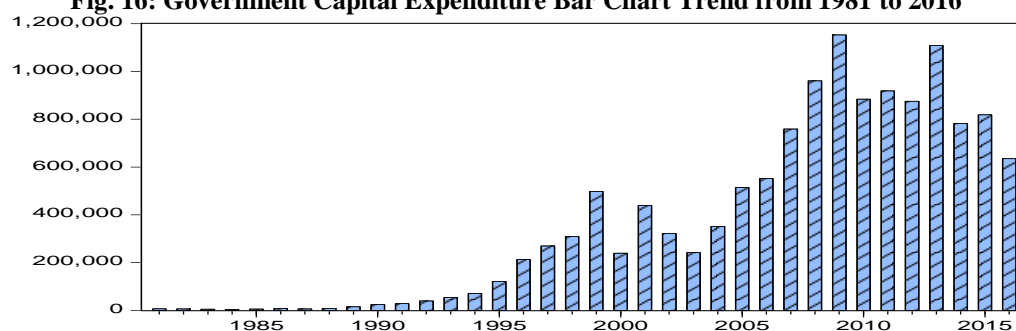
Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0

Fiscal Deficit

Fiscal in 2009 was -810.01 as a percentage of GDP, a rise of over 9,419% from the -47.38 as a percentage of GDP. In 2012, fiscal deficit decline by 18.74% to -975.7 as a percentage of GDP. As can be seen from Table 4.1, Fig. 4.4a and Fig. 4.4b, between 1981 and 1994, fiscal deficit rose tremendously, however, with sharp decline from -3,902.1 as a percentage of GDP in 1981 to 1,000 as a percentage of GDP in 1995. In 2010, fiscal deficit was -1,105.4 as a

percentage of GDP, a rise of 26.71% compared to -810.10 as a percentage of GDP of 2009. It continued to fluctuate from -1,153.5 in 2013 to -1,557.79 as a percentage of GDP in 2015 and depreciated further by -2, 208,220.

Fig. 17: Fiscal Deficit Graph Trend from 1981 to 2016

Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0

Fig. 18: Fiscal Deficit Bar Chart Trend from 1981 to 2016
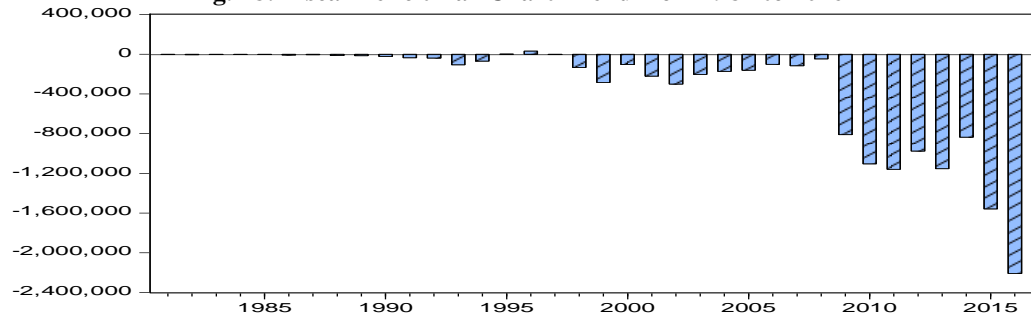
Source: Central Bank of Nigeria statistical bulletin; and output data from E-views 9.0

4.2   Descriptive Statistics of Data

The descriptive statistics give an insight to the mean, median, maximum, standard deviation, skewness, kurtosis, Jarque-Bera, p-value and number of observations of the data. The data descriptive statistics are shown in Table 4. Real gross domestic product, industrial production, money supply, inflation, interest rate, exchange rate, recurrent expenditure, capital expenditure and fiscal deficit have the mean of 31757148, 128.32, 4155752, 19.33083, 17.59, 76.59, 1068568, 368005.3 and -332223.5 respectively. The median for the variables are 2239114, 129.90, 558550, 12.05, 17.55, 57.38 and 313880 accordingly for real gross domestic product, industrial production, money supply, inflation, interest rate, exchange rate, recurrent expenditure, capital expenditure and fiscal deficit. The maximum and minimum value for real

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gross domestic product are 69023930 and 13779260, 158.9000 and 91.60000 for industrial production, 21607680 and 14470.00 for money supply, 72.8 and 5.4 for inflation, 29.8 and 7.75 for interest rate, 253.49 and 0.61 for exchange rate, 4178590 and 4750 for recurrent expenditure, 1152800 and 4100 for capital expenditure and 32049 and -2208220 for fiscal deficit. The standard deviation were observe to be 18151713, 16.19, 6324938, 17.01, 4.78, 72.04, 1375246, 372270.1 and 532509.2 sequentially for real gross domestic product, industrial production, money supply, inflation, interest rate, exchange rate, recurrent expenditure, capital expenditure and fiscal deficit. All the variables were positively skewed to normality with the exception of real gross domestic product and fiscal deficit. From the Kurtosis coefficients, the variables were largely not leptokurtic in nature. In terms of normality of the distribution, p-value of the Jarque-Bera significant at 5% significance level evidence that the data were normally distributed and free from any outlier that may result in spurious regression.

Table 4: Descriptive Statistics of Data

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	P-value	Obs
RGDP	31757148	2239114	69023930	13779260	18151713	0.874864	2.318378	6.289229	0.04103	36
IND	128.3164	129.900	158.9000	91.60000	16.18626	-0.325207	2.809731	7.688861	0.00862	36
MSP	4155752.	558550	21607680	14470.00	6324938.	1.442928	3.717749	13.26499	0.00131	36
INFL	19.33083	12.0500	72.80000	5.400000	17.00779	1.637783	4.745381	20.66353	0.00003	36
INTR	17.59306	17.5450	29.80000	7.750000	4.757660	0.188229	3.475247	9.551371	0.04905	36
EXR	76.59332	57.3722	253.4923	0.610000	72.03735	0.423761	1.985578	7.621017	0.04968	36
REXP	1068568.	313880.	4178590.	4750.000	1375246.	1.077378	2.635110	7.164181	0.02782	36
CEXP	368005.3	255670.	1152800.	4100.000	372270.1	0.655318	2.061156	6.898791	0.04236	36
FSD	-332223.5	-102600.	32049.40	-2208220.	532509.2	-1.901221	5.993820	35.13228	0.00000	36

Source: Output data from E-views 9.0

4.3 Test for Stationarity of Data

Data are expected to be stationary for inference made from estimation to be robust and statistically reliable. Most time series data are encumbered by stationarity defect which lead to spurious regression result. To avoid this and ensure that the data are cleaned of stationarity problem, the data were

subjected to stationarity test through Augmented Dickey-Fuller (ADF), Phillips Perron (PP) and Kwiatkowski-Phillips-Schmidt-Shin (KPSS). The ADF results for the variables at three set estimations: constant, trend and constant; and none are summarized in Tables 5 and 6, PP in Tables 7 and 8, while KPSS was feature in Tables 9 and 10. Estimation was first performed at level but owing to non-stationarity of all the variables, the first difference estimation was ascertained.

Augmented Dickey-Fuller (ADF)

The ADF stationarity test result in Table 5 reveals that all the variables were not stationary at level form despite estimated at constant, trend and constant; and none. However, by virtue of the result in Table 6, all the variables became stationary at the same level at the first difference estimation, that is, the data are integrated of order one, 1(1).

Table 5: ADF Test Result at Level

Variables	Constant	Trend and Constant	None	Remark
RGDP	-0.709427 (0.83)	-2.006479 (0.58)	0.483189 (0.81)	Not Stationary
IND	-2.056558 (0.26)	-2.008410 (0.58)	-0.320855 (0.56)	Not Stationary
MSP	1.672485 (0.99)	1.005155 (0.99)	0.889602 (0.89)	Not Stationary
INFL	-2.861776 (0.06)	-2.833294 (0.20)	-1.844533 (0.06)	Not Stationary
INTR	-2.367578 (0.16)	-4.792898 (0.00)*	0.070077 (0.70)	Stationary
EXR	1.311125 (0.99)	-1.385767 (0.85)	2.809754 (0.99)	Not Stationary
REXP	2.348498 (0.99)	-0.667090 (0.97)	3.933926 (0.99)	Not Stationary
CEXP	-1.142910 (0.69)	-2.395787 (0.38)	-0.253794 (0.59)	Not Stationary
FSD	3.666892 (1.00)	3.682206 (1.00)	3.746005 (0.99)	Not Stationary

Source: Output data from E-views 9.0
Note: The optimal lag for ADF test is selected based on the Akaike Info Criteria (AIC), p-values are in parentheses where (*) and (**) denote significance at 1% and 5% respectively.

Table 6: ADF Test Result at First Difference

Variables	Constant	Trend and Constant	None	Remark
RGDP	-4.958444 (0.00)*	-4.545549 (0.00)*	-3.417180 (0.04)**	Stationary
IND	-5.274653 (0.00)*	-5.266442 (0.00)*	-5.355890 (0.00)*	Stationary
MSP	-4.460050 (0.00)*	-3.352945 (0.00)*	-2.701603 (0.04)**	Stationary
INFL	-5.693337 (0.00)*	-5.617884 (0.00)*	-5.784443 (0.00)*	Stationary
INTR	-5.808585 (0.00)*	-6.047522 (0.00)*	-5.850014 (0.00)*	Stationary
EXR	-3.669242 (0.00)*	-3.995108 (0.02)**	-3.041231 (0.00)*	Stationary
REXP	-5.733958 (0.00)*	-3.842017 (0.03)**	-3.775142 (0.03)**	Stationary
CEXP	-7.475509 (0.00)*	-7.347241 (0.00)*	-7.361155 (0.00)*	Stationary
FSD	-4.393942 (0.03)**	-5.147236 (0.00)*	-2.836084 (0.04)**	Stationary

Source: Output data from E-views 9.0
Note: The optimal lag for ADF test is selected based on the Akaike Info Criteria (AIC), p-values are in parentheses where (*) and (**) denote significance at 1% and 5% respectively.

Phillips Perron (PP) Test

The PP test result is similar to that of the ADF test. All the variables would not achieve stationarity as shown in Table 7. Stationarity was evidenced at first difference estimation based on the result in Table 8 which prove that the variables at integrated of order one.

Table 7: PP Test Result at Level

Variables	Constant	Trend and Constant	None	Remark
RGDP	-0.709427 (0.83)	-2.006479 (0.57)	0.483189 (0.81)	Not Stationary
IND	-2.056558 (0.26)	-2.008410 (0.58)	-0.320855 (0.56)	Not Stationary
MSP	1.672485 (0.99)	1.005155 (0.99)	0.889602 (0.90)	Not Stationary
INFL	-2.861776 (0.06)	-2.833294 (0.20)	-1.844533 (0.06)	Not Stationary
INTR	-2.367578 (0.06)	-4.792898 (0.00)*	0.070077 (0.69)	Stationary
EXR	1.311125 (0.99)	-1.385767 (0.84)	2.809754 (0.99)	Not Stationary
REXP	2.348498 (0.99)	-0.667090 (0.96)	3.933926 (0.99)	Not Stationary
CEXP	-1.142910 (0.69)	-2.395787 (0.38)	-0.253794 (0.56)	Not Stationary
FSD	3.666892 (1.00)	3.682206 (1.00)	3.746005 (0.99)	Not Stationary

Source: Output data from E-views 9.0
Note: In determining the truncation lag for PP test, the spectral estimation method selected is Bartlett kernel and Newey-West method for Bandwidth, p-values are in parentheses where (*) and (**) denote significance at 1% and 5% respectively.

Table 8: PP Test Result at First Difference

Variables	Constant	Trend and Constant	None	Remark
RGDP	-5.095488 (0.00)*	-5.329364 (0.00)*	-5.187868 (0.00)*	Stationary
IND	-5.274653 (0.00)*	-5.266442 (0.00)*	-5.187868 (0.00)*	Stationary
MSP	-3.443667 (0.02)**	-4.244017 (0.00)*	-3.211037 (0.00)*	Stationary
INFL	-5.693337 (0.00)*	-5.617884 (0.00)*	-5.784443 (0.00)*	Stationary
INTR	-5.808585 (0.00)*	-6.047522 (0.00)*	-5.850014 (0.00)*	Stationary
EXR	-3.669242 (0.00)*	-3.995108 (0.02)**	-3.041231 (0.00)*	Stationary
REXP	-5.733958 (0.00)*	-3.842017 (0.02)**	-8.800843 (0.00)*	Stationary
CEXP	-7.475509 (0.00)*	-7.347241 (0.00)*	-7.361155 (0.00)*	Stationary
FSD	-3.832721 (0.00)*	-4.523048 (0.02)**	-2.952244 (0.00)*	Stationary

Source: Output data from E-views 9.0
Note: In determining the truncation lag for PP test, the spectral estimation method selected is Bartlett kernel and Newey-West method for Bandwidth, p-values are in parentheses where (*) and (**) denote significance at 1% and 5% respectively.

Kwiatkowski-Phillips-Schmidt-Shin (KPSS) Test

Using a another unit root test of KPSS which is different from ADF and PP, Table 9 showcases that all the data were stationary at level form performed at constant, trend and constant estimates. In Table 10, first difference estimation did not satisfy the stationarity of all the variables. Invariably, from the output of the KPSS, all the variables are free stationarity defects that characterized virtually all time series financial data.

Table 9: KPSS Test Result at Level

Variables	Constant	Trend and Constant	Remark
RGDP	0.643187 (0.00)*	0.186541 (0.00)*	Stationary
IND	0.342740 (0.00)*	0.165637 (0.00)*	Stationary
MSP	0.564160 (0.00)*	0.183784 (0.00)*	Stationary
INFL	0.292044 (0.00)*	0.101367 (0.05)**	Stationary
INTR	0.174622 (0.00)*	0.145162 (0.00)*	Stationary
EXR	0.687698 (0.00)*	0.120301 (0.00)*	Stationary
REXP	0.606129 (0.00)*	0.185448 (0.00)*	Stationary
CEXP	0.618973 (0.00)*	0.112060 (0.00)*	Stationary
FSD	0.631353 (0.00)*	0.191304 (0.00)*	Stationary

Source: Output data from E-views 9.0

Note: The spectral estimation method selected for KPSS test is Bartlett kernel and Newey-West method for Bandwidth, p-values are in parentheses where (*) and (**) denotes significance at 1% and 5% respectively.

Table 10: KPSS Test Result at First Difference

Variables	Constant	Trend and Constant	Remark
RGDP	0.555547 (0.00)*	0.106796 (0.00)*	Stationary
IND	0.189852 (0.92)	0.141619 (0.39)	Not Stationary
MSP	0.690318 (0.00)*	0.190057 (0.00)*	Stationary
INFL	0.427694 (0.95)	0.428230 (0.97)	Not Stationary
INTR	0.192829 (0.71)	0.064170 (0.46)	Not Stationary
EXR	0.343652 (0.01)*	0.068785 (0.05)**	Stationary
REXP	0.061268 (0.00)*	0.609521 (0.00)*	Stationary
CEXP	0.105190 (0.42)	0.106238 (0.83)	Not Stationary
FSD	0.438626 (0.11)	0.151785 (0.03)**	Stationary

Source: Output data from E-views 9.0

Note: The spectral estimation method selected for KPSS test is Bartlett kernel and Newey-West method for Bandwidth, p-values are in parentheses where (*) and (**) denotes significance at 1% and 5% respectively.

4.4   Diagnostic Test
Serial Correlation LM Test

Before estimating a regression equation for statistical inferences visa viz hypothesis testing and forecasting, it is econometrically ideal to examine the residuals for evidence of serial correlation. In compliance with this econometric criteria, the serial correlation LM test was conducted for all the models developed in the study. The serial correlation LM test in Table 11 details that there is no element of serial correlation in the models as stated in chapter three as the p-values of the f-statistics are insignificant at 5% level of significance.

Table 11: Serial Correlation LM Test

Regression Estimates	F-statistic	Prob. F(2,26)
RGDP →REXP + CEXP + FSD	0.827537	0.4574
IND →REXP + CEXP + FSD	1.037520	0.3757
MSP →REXP + CEXP + FSD	0.000193	0.9891
INFL →REXP + CEXP + FSD	0.319106	0.7296
INTR →REXP + CEXP + FSD	1.085905	0.3524
EXR →REXP + CEXP + FSD	0.476503	0.6290

Source: Output data from E-views 9.0

Heteroskedasticity Test

The situation in which the variability of a variable is unequal across the range of values of a second variables that predicts it leads to problem of heteroskedasticity. To ensure that there is homoscedasticity in the model estimaton, the heteroskedasticity test via the Harvey selection criteria was performed. With the result in Table 12, there is no problem of heteroskedasticity in the models as the p-values of the f-statistics are insignificant at 5% significance level.

Table 12: Harvey Heteroskedasticity test

Regression Estimates	F-statistic	Prob. F(1,31)
RGDP →REXP + CEXP + FSD	0.220591	0.9973
IND →REXP + CEXP + FSD	0.607821	0.8101
MSP →REXP + CEXP + FSD	1.492973	0.2143
INFL →REXP + CEXP + FSD	0.079206	0.7802
INTR →REXP + CEXP + FSD	1.487405	0.2255
EXR →REXP + CEXP + FSD	3.181374	0.0850

Source: Output data from E-views 9.0

Ramsey RESET Test

To determine whether extra variables were included in the attempt to ascertaining the effect of fiscal policy on selected macroeconomic variables, the Ramsey Reset specification test was performed and the result presented in Table 13. From the Ramsey Reset specification result, it was obvious that the models were well-specified and no extra variable (s) included as it related to government fiscal policy in Nigeria. The p-values of the f-statistics for all the models are insignificant at 5% significance level.

Table 13: Ramsey Reset Specification

Estimates	t-statistic	df	P-value
RGDP →REXP + CEXP + FSD	0.107139	15	0.9161
IND →REXP + CEXP + FSD	0.185499	18	0.8549
MSP →REXP + CEXP + FSD	1.147824	16	0.0622
INFL →REXP + CEXP + FSD	0.050601	27	0.9600
INTR →REXP + CEXP + FSD	2.158699	16	0.1357
EXR →REXP + CEXP + FSD	1.257844	16	0.2245

Source: Output data from E-views 9.0

Multicollinearity Test

The issue of multi-collinearity was obviously avoided by estimating the correlation matrix of the variables in the models. As can be seen in Table 14, the correlation between recurrent expenditure and capital expenditure is 0.57, recurrent expenditure and fiscal deficit -0.51, while capital expenditure and fiscal deficit -0.59. This is an indication that the correlation between the independent variables are within the acceptable range that suggests that multi-collinearity problem does not exist between the explanatory variables in the models. Consequently, regression estimates would be devoid of element of multi-collinearity as no independent variable vehemently explain the other.

Table 14: Correlation Matrix

	RGDP	IND	MSP	INFL	INTR	EXR	REXP	CEXP	FSD
RGDP	1.0000	0.20566	0.9622	-0.359	0.01722	0.91449	0.98816	0.90055	-0.87006
IND	0.2057	1.00000	0.0059	-0.142	0.49915	0.33267	0.10525	0.22424	0.03665
MSP	0.9622	0.0059	1.0000	-0.312	-0.07249	0.83737	0.97914	0.80652	-0.93253
INFL	-0.359	-0.14198	-0.312	1.0000	0.28741	-0.40035	-0.35492	-0.41205	0.26639
INTR	0.0172	0.4991	-0.073	0.2874	1.00000	0.10177	-0.04646	0.00578	0.01209
EXR	0.9145	0.33267	0.8374	-0.400	0.10177	1.00000	0.89308	0.84789	-0.80983
REXP	0.9882	0.10525	0.9791	-0.355	-0.04646	0.89308	1.00000	0.57695	-0.51037
CEXP	0.9006	0.22424	0.8065	-0.412	0.00579	0.84789	0.57695	1.00000	-0.69620
FSD	-0.870	0.03665	-0.933	0.2664	0.01209	-0.80983	-0.51037	-0.59618	1.00000

Source: Output data from E-views 9.0

4.5   Co-integration ARDL Result

The unit root test through ADF, PP and KPSS proved that the variables are stationary and have no stationarity defect that may encumber the result of the analysis. The ARDL test of the long run relationship between government expenditure and selected macroeconomic variables are detailed in Tables 15 – 20. From the result of the ARDL long run relationship, it was clear that there is a long run relationship between real gross domestic product, industrial production, money supply, exchange rate and government expenditure in Nigeria. The f-statistic of 4.37, 6.33, 10.37 and 7.91 respectively for real gross domestic product, industrial production, money supply, exchange rate are greater than the lower and upper bound test of 3.23 and 4.35 at 5% level of

significance. On the contrary, inflation and interest rate have no long run relationship with government expenditure in Nigeria owing to the fact that the f-statistic of 3.81 and 1.68 is less than the upper bound test critical value of 4.35 at 5% level of significance.

Table 15: Bound Test for Real Gross Domestic Product and Government Expenditure

T-Test	5% Critical Value Bound		Remark
F-Statistic	**Lower Bound**	**Upper Bound**	
4.371233	3.23	4.35	Null Hypothesis Rejected

Source: Output data from E-views 9.0

Table 16: Bound Test for Industrial Development and Government Expenditure

T-Test	5% Critical Value Bound		Remark
F-Statistic	**Lower Bound**	**Upper Bound**	
6.323544	3.23	4.35	Null Hypothesis Rejected

Source: Output data from E-views 9.0

Table 17: Bound Test for Money Supply and Government Expenditure

T-Test	5% Critical Value Bound		Remark
F-Statistic	**Lower Bound**	**Upper Bound**	
10.37160	3.23	4.35	Null Hypothesis Rejected

Source: Output data from E-views 9.0

Table 18: Bound Test for Inflation and Government Expenditure

T-Test	5% Critical Value Bound		Remark
F-Statistic	**Lower Bound**	**Upper Bound**	
3.810681	3.23	4.35	Null Hypothesis Accepted

Source: Output data from E-views 9.0

Table 19: Bound Test for Interest Rate and Government Expenditure

T-Test	5% Critical Value Bound		Remark
F-Statistic	**Lower Bound**	**Upper Bound**	
1.677660	3.23	4.35	Null Hypothesis Accepted

Source: Output data from E-views 9.0

Table 20: Bound Test for Exchange Rate and Government Expenditure

T-Test	5% Critical Value Bound		Remark
F-Statistic	**Lower Bound**	**Upper Bound**	
7.911657	3.23	4.35	Null Hypothesis Rejected

Source: Output data from E-views 9.0

4.6   Nature of ARDL Long Run relationship and Speed of Correction to Equilibrium

With the affirmation of the long relationship between real gross domestic product, industrial development, money supply, exchange rate and the two components of government expenditure: recurrent and capital expenditure, it is econometrically mandatory to ascertain the speed of adjusted of the variables

that are co-integrated. From Table 21, the speed of adjustment of government expenditure to equilibrium with regard real gross domestic product showed the expected negative sign but insignificant. This is an implication that there is no tendency by the model to move toward equilibrium owing to disequilibrium in previous period. About 9.84% of error generated in previous period is insignificantly not corrected in current period. The nature of long run relationship is that there is positive but insignificant relationship between real gross domestic product, government recurrent and capital expenditure and fiscal deficit.

Table 21: ARDL Error Correction RGDP→REXP, CEXP and FSD

Short Run Co-integrating Form			
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(REXP)	-0.277705	1.765768	-0.157272	0.8770
D(REXP(-1))	-4.204679	1.981192	-2.122298	0.0498
D(REXP(-2))	1.220226	1.963917	0.621322	0.5431
D(REXP(-3))	4.839454	1.115379	4.338842	0.0005
D(CEXP)	-3.905962	2.055719	-1.900047	0.0756
D(CEXP(-1))	-3.527162	2.911929	-1.211280	0.2434
D(CEXP(-2))	-7.161566	2.842290	-2.519646	0.0228
D(FSD)	2.774613	0.790705	3.509038	0.0029
D(FSD(-1))	-5.350993	2.343405	-2.283426	0.0364
D(FSD(-2))	-1.708083	3.000864	-0.569197	0.5771
D(FSD(-3))	6.297726	2.680965	2.349053	0.0320
CointEq(-1)	-0.098439	0.079719	-1.234826	0.2347
Long Run Coefficient			
REXP	15.845867	10.497486	1.509492	0.1507
CEXP	62.941612	54.585602	1.153081	0.2658
FSD	65.883570	70.993428	0.928024	0.3672
C	23974162.57	6169527.58	3.885899	0.0013

Source: Data output via E-views 9.0

On the speed of adjustment for industrial development and fiscal policy model, Table 22 insights that the ECM depicted the supposed negative sign and is significant at 5% significance level. The ECM evidences industrial development and fiscal policy adjust to equilibrium following disequilibrium in past periods. The coefficient of the ECM provided detailed that 40.98% of error generated in past period is corrected in current year. The revelation of the nature of long run relationship is that fiscal policy instruments through

recurrent expenditure and fiscal deficit have negative significant relationship with industrial development in Nigeria, while capital expenditure also entailed a negative but insignificant relationship with index of industrial production.

Table 22: ARDL Error Correction IND→REXP, CEXP and FSD

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Short Run Co-integrating Form				
D(REXP)	-0.000002	0.000014	-0.131164	0.8970
D(REXP(-1))	-0.000006	0.000016	-0.401666	0.6924
D(REXP(-2))	0.000044	0.000019	2.354496	0.0295
D(REXP(-3))	0.000033	0.000012	2.779111	0.0120
D(CEXP)	-0.000004	0.000015	-0.260091	0.7976
D(FSD)	0.000001	0.000008	0.111722	0.9122
D(FSD(-1))	-0.000003	0.000013	-0.250268	0.8051
D(FSD(-2))	0.000010	0.000017	0.564653	0.5789
D(FSD(-3))	0.000060	0.000022	2.748030	0.0128
CointEq(-1)	-0.409803	0.112437	-3.644747	0.0017
Long Run Coefficient				
REXP	-0.000080	0.000027	-2.901824	0.0091
CEXP	-0.000010	0.000038	-0.254342	0.8020
FSD	-0.000207	0.000073	-2.835463	0.0106
C	126.569389	6.337375	19.971895	0.0000

Source: Data output via E-views 9.0

As can be seen in Table 23, the ECM did not show the expected negative sign even though the p-value is statistically significant thus there is no empirical evidence that the model moves towards equilibrium due to imbalances in the previous years. The 58.69% error generated in previous period as claimed to be corrected at current year is insignificant. In the long run, recurrent and capital expenditure have insignificant negative relationship with money supply, whereas fiscal deficit has significant negative relationship with money supply. With the result in Table 24, there is empirical evidence that the model of inflationary level and fiscal policy move toward equilibrium following disequilibrium in past years as the ECM is statistically significant at 5% level of significance. The supposed negative sign was observed for the ECM indicating that 62.95% of error from past period is addressed in present year. In terms of the nature of the long run relationship, it was clear that recurrent expenditure and fiscal deficit have positive but insignificant relationship with

inflation, while capital expenditure showcased a negative insignificant relationship with inflation in Nigeria.

Table 23: ARDL Error Correction MSP→REXP, CEXP and FSD

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Short Run Co-integrating Form				
D(MSP(-1))	-0.925499	0.253748	-3.647322	0.0020
D(MSP(-2))	0.129232	0.485968	0.265927	0.7935
D(MSP(-3))	-1.857569	0.409448	-4.536758	0.0003
D(REXP)	1.102302	0.592239	1.861245	0.0801
D(REXP(-1))	2.051397	0.539502	3.802391	0.0014
D(REXP(-2))	-0.103121	0.787613	-0.130929	0.8974
D(REXP(-3))	1.298985	0.537067	2.418664	0.0271
D(CEXP)	0.266664	0.435538	0.612263	0.5485
D(FSD)	1.167536	0.409389	2.851897	0.0110
D(FSD(-1))	0.144321	1.130035	0.127714	0.8999
D(FSD(-2))	-1.715895	1.111762	-1.543402	0.1411
CointEq(-1)	0.586918	0.189765	3.092877	0.0066
Long Run Coefficient				
REXP	-0.044836	1.143318	-0.039216	0.9692
CEXP	-0.454346	0.770650	-0.589562	0.5632
FSD	-7.520155	2.044459	-3.678311	0.0019
C	-32915.75	116127.44	-0.283445	0.7803

Source: Data output via E-views 9.0

Table 24: ARDL Error Correction INFL→REXP, CEXP and FSD

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Short Run Co-integrating Form				
D(INFL(-1))	0.310874	0.173469	1.792103	0.0839
D(REXP)	0.000001	0.000007	0.166331	0.8691
D(CEXP)	-0.000017	0.000015	-1.136667	0.2653
D(FSD)	0.000000	0.000012	0.025579	0.9798
CointEq(-1)	-0.629534	0.168249	-3.741688	0.0008
Long Run Coefficient				
REXP	0.000002	0.000011	0.165442	0.8698
CEXP	-0.000027	0.000025	-1.109546	0.2766
FSD	0.000000	0.000019	0.025574	0.9798
C	28.632341	5.507010	5.199253	0.0000

Source: Data output via E-views 9.0

From the result in Table 25, recurrent expenditure and fiscal deficit have negative insignificant long run relationship with interest rate, while capital expenditure of the government shows a positive but insignificant relationship with interest rate in the long run. With inferences from the speed of adjustment, the ECM reveals that expected negative sign indicating that 37.52% of errors generated in previous period is significantly corrected in current year. There is also evidence that the model of interest rate and fiscal policy shift to equilibrium owing to imbalances in past years.

Table 25: ARDL Error Correction INTR→REXP, CEXP and FSD

Short Run Co-integrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INTR(-1))	-0.300834	0.162957	-1.846089	0.0755
D(REXP)	-0.000002	0.000002	-1.200038	0.2402
D(CEXP)	0.000002	0.000004	0.568888	0.5740
D(FSD)	-0.000004	0.000003	-1.174105	0.2502
CointEq(-1)	-0.371584	0.152104	-2.442961	0.0211
Long Run Coefficient				
REXP	-0.000006	0.000006	-1.075480	0.2913
CEXP	0.000006	0.000011	0.556352	0.5824
FSD	-0.000010	0.000010	-1.040604	0.3070
C	19.488500	2.615838	7.450194	0.0000

Source: Data output via E-views 9.0

Last but not the least, Table 26 depicts that government recurrent expenditure and fiscal deficit have insignificant positive relationship with exchange rate in the long run, while capital expenditure associates negatively and insignificantly with exchange rate. The ECM unveils that there is no tendency for the model to move to equilibrium following imbalances in previous periods as the ECM p-value is insignificant at 5% significance level and did not depict the supposed negative sign.

Table 26: ARDL Error Correction EXR→REXP, CEXP and FSD

Short Run Co-integrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(REXP)	0.000003	0.000023	0.128541	0.8991
D(REXP(-1))	0.000048	0.000021	2.303678	0.0327
D(REXP(-2))	0.000026	0.000015	1.764201	0.0938
D(REXP(-3))	-0.000069	0.000015	-4.483726	0.0003
D(CEXP)	0.000092	0.000026	3.614079	0.0018
D(CEXP(-1))	0.000056	0.000031	1.795661	0.0885
D(FSD)	-0.000059	0.000011	-5.112646	0.0001
D(FSD(-1))	0.000053	0.000034	1.576796	0.1313
CointEq(-1)	0.045742	0.065105	0.702585	0.4908
Long Run Coefficient				
REXP	0.000978	0.001380	0.708889	0.4870
CEXP	-0.001119	0.001686	-0.663544	0.5150
FSD	0.003014	0.004385	0.687362	0.5002
C	66.633402	93.126313	0.715516	0.4830

Source: Data output via E-views 9.0

4.7 Short Run Relationship

The Auto-regressive Distributive Lag (ARDL) model was utilized in estimating the short run relationship between fiscal policy instruments and selected macroeconomic variables. The choice of the ARDL against the

traditional OLS was vehemently stated in chapter three of this study. The Adjusted R-square, f-statistic, Durbin Watson and coefficients of the individual variables were the statistical criteria for interpretation of the regression result.

Real Gross Domestic Product and Fiscal Policy Instruments

Table 27 reveals that government recurrent and capital expenditure have negative insignificant relationship with real gross domestic product, whereas fiscal deficit has significant positive relationship with real gross domestic product. When fiscal deficit, government recurrent and capital expenditure are held constant amidst different number of lags, real gross domestic product would be valued at ₦2, 359, 992 million. A percentage rise in recurrent and capital expenditure lower real gross domestic product by ₦0.27 million and ₦3.91 million respectively, a unit rise in fiscal deficit increases real gross domestic product by ₦2.77 million.

Table 27: ARDL Regression: Real Gross Domestic Product and Fiscal Policy

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RGDP(-1)	0.901561	0.079719	11.30925	0.0000
REXP	-0.277705	1.765768	-0.157272	0.8770
REXP(-1)	3.692557	1.355677	2.723773	0.0150
REXP(-2)	4.204679	1.981192	2.122298	0.0498
REXP(-3)	-1.220226	1.963917	-0.621322	0.5431
REXP(-4)	-4.839454	1.115379	-4.338842	0.0005
CEXP	-3.905962	2.055719	-1.900047	0.0756
CEXP(-1)	-0.586859	2.358964	-0.248778	0.8067
CEXP(-2)	3.527162	2.911929	1.211280	0.2434
CEXP(-3)	7.161566	2.842290	2.519646	0.0228
FSD	2.774613	0.790705	3.509038	0.0029
FSD(-1)	2.949548	1.817604	1.622767	0.1242
FSD(-2)	5.350993	2.343405	2.283426	0.0364
FSD(-3)	1.708083	3.000864	0.569197	0.5771
FSD(-4)	-6.297726	2.680965	-2.349053	0.0320
C	2359992.	1353024.	1.744235	0.1003
R-squared	0.999444	Mean dependent var		33918289
Adjusted R-squared	0.998924	S.D. dependent var		18125995
S.E. of regression	594682.2	Akaike info criterion		29.73629
Sum squared resid	5.66E+12	Schwarz criterion		30.46916
Log likelihood	-459.7807	Hannan-Quinn criter.		29.97922
F-statistic	1918.947	Durbin-Watson stat		2.199396
Prob (F-statistic)	0.000000			

Source: Data output via E-views 9.0

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The adjusted R-square reveals that 99.89% variation in real gross domestic product was accounted by recurrent, capital expenditure and fiscal deficit within the period studied thus showing a goodness of fit of the model. The p-value (0.00) of the f-statistic (1918.95) suggests that fiscal policy instruments of recurrent, capital expenditure and fiscal deficit significantly explained the variation in real gross domestic product. The Durbin Watson coefficient of 2.1 discloses no autocorrelation in the model.

Industrial Development and Fiscal Policy Instruments

The inferences from the output in Table 28 is that recurrent and capital expenditure have insignificant negative relationship with industrial development in Nigeria, whereas fiscal deficit depicted a positive insignificant relationship with industrial development. Despite the different lags of recurrent expenditure and fiscal deficit, holding recurrent, capital expenditure and fiscal deficit constant, index of industrial development would amount to 51.87 points. A percentage increase in recurrent and capital expenditure of the government respectively lead to 1.86 points and 3.96 points depreciation in index of industrial production, while a unit rise in fiscal deficit improves industrial development by 8.44 points. The result in Table 28 discloses the coefficient of the adjusted R-square as 0.735001. This mean that 73.50% changes in index of industrial production was as a result of joint variation in fiscal deficit, recurrent and capital expenditure, and this is highly significant at 5% significance level following the p-value (0.00) and f-statistic (8.16). There is no element of autocorrelation in the model as divulged by the Durbin Watson value (2.39).

Table 28: ARDL Regression: Industrial Development and Fiscal Policy

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IND(-1)	0.590197	0.112437	5.249159	0.0000
REXP	-1.86E-06	1.42E-05	-0.131164	0.8970
REXP(-1)	4.01E-05	1.32E-05	3.031361	0.0069
REXP(-2)	6.42E-06	1.60E-05	0.401666	0.6924
REXP(-3)	-4.45E-05	1.89E-05	-2.354496	0.0295
REXP(-4)	-3.28E-05	1.18E-05	-2.779111	0.0120
CEXP	-3.96E-06	1.52E-05	-0.260091	0.7976
FSD	8.44E-07	7.56E-06	0.111722	0.9122
FSD(-1)	-1.90E-05	1.57E-05	-1.207000	0.2422
FSD(-2)	3.16E-06	1.26E-05	0.250268	0.8051
FSD(-3)	-9.77E-06	1.73E-05	-0.564653	0.5789
FSD(-4)	-5.99E-05	2.18E-05	-2.748030	0.0128
C	51.86848	13.59428	3.815463	0.0012
R-squared	0.837582	Mean dependent var		131.0278
Adjusted R-squared	0.735001	S.D. dependent var		14.34233
S.E. of regression	7.383145	Akaike info criterion		7.127479
Sum squared resid	1035.706	Schwarz criterion		7.722935
Log likelihood	-101.0397	Hannan-Quinn criter.		7.324856
F-statistic	8.165147	Durbin-Watson stat		2.397123
Prob (F-statistic)	0.000035			

Source: Data output via E-views 9.0

Money Supply and Fiscal Policy Instruments

As depicted in Table 29, government recurrent expenditure and fiscal deficit have positive significant relationship with money supply. Similarly, capital expenditure relates positively but insignificantly with money supply. Keeping fiscal deficit, recurrent and capital expenditure constant, money supply would be valued at ₦19, 318.86 million. Money supply would rise by a magnitude of ₦1.10 million and ₦1.17 million following a unit appreciation in recurrent expenditure and fiscal deficit respectively. A percentage increase in capital expenditure causes a ₦0.30 million upsurge in money supply. With respect to the adjusted R-squared, fiscal policy instruments through recurrent, capital expenditure and fiscal deficit explained 99.90% changes in money supply in Nigeria, and this is statistically significant as unveiled by the p-value (0.00) and f-statistic (2206.21). The Durbin Watson value of 1.99 absolves the variables in the model of autocorrelation.

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Table 29: ARDL Regression: Money Supply and Fiscal Policy

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MSP(-1)	0.661420	0.232763	2.841604	0.0113
MSP(-2)	1.054731	0.512210	2.059175	0.0551
MSP(-3)	-1.986801	0.667091	-2.978305	0.0084
MSP(-4)	1.857569	0.409448	4.536758	0.0003
REXP	1.102302	0.592239	1.861245	0.0401
REXP(-1)	2.171274	0.420712	5.160952	0.0001
REXP(-2)	-2.051397	0.539502	-3.802391	0.0014
REXP(-3)	0.103121	0.787613	0.130929	0.8974
REXP(-4)	-1.298985	0.537067	-2.418664	0.0271
CEXP	0.266664	0.435538	0.612263	0.5485
FSD	1.167536	0.409389	2.851897	0.0110
FSD(-1)	1.674608	0.768333	2.179533	0.0436
FSD(-2)	-0.144321	1.130035	-0.127714	0.8999
FSD(-3)	1.715895	1.111762	1.543402	0.1411
C	19318.86	69966.37	0.276116	0.7858
R-squared	0.999450	Mean dependent var		4673094.
Adjusted R-squared	0.998997	S.D. dependent var		6533013.
S.E. of regression	206912.9	Akaike info criterion		27.62296
Sum squared resid	7.28E+11	Schwarz criterion		28.31003
Log likelihood	-426.9674	Hannan-Quinn criter.		27.85070
F-statistic	2206.208	Durbin-Watson stat		1.999959
Prob (F-statistic)	0.000000			

Source: Data output via E-views 9.0

Inflation Level and Fiscal Policy Instruments

The result of the linkage between level of inflation and fiscal policy instruments in Table 30 dispels that recurrent expenditure and fiscal deficit have positive insignificant relationship with inflation level in Nigeria, while a negative insignificant relationship was observed for inflation and capital expenditure of the government. Assuming fiscal policy instruments of the government through recurrent, capital expenditure and fiscal deficit are maintained at same degree, inflationary level would be 18.03%. Inflation in Nigeria would rise by 1.17% and 3.10% if recurrent expenditure and fiscal deficit increase by a unit, while an equivalent reduction by 1.72% if bank capital expenditure of the government improves by a percentage. Fiscal policy instruments of the government significantly explained the variation in inflationary level as revealed by the significant p-value (0.00) and f-statistic (5.23). Only 39.38% variation in inflationary level was attributed to the joint influence of recurrent, capital expenditure and fiscal deficit. The Durbin

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Watson coefficient of 1.87 is within the acceptable range of no autocorrelation in the model.

Table 30: ARDL Regression: Inflationary Level and Fiscal Policy

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFL(-1)	0.681340	0.173381	3.929724	0.0005
INFL(-2)	-0.310874	0.173469	-1.792103	0.0839
REXP	1.17E-06	7.04E-06	0.166331	0.8691
CEXP	-1.72E-05	1.51E-05	-1.136667	0.2653
FSD	3.10E-07	1.21E-05	0.025579	0.9798
C	18.02503	5.557851	3.243165	0.0031
R-squared	0.485685	Mean dependent var		19.62676
Adjusted R-squared	0.393844	S.D. dependent var		17.38151
S.E. of regression	13.53255	Akaike info criterion		8.206859
Sum squared resid	5127.641	Schwarz criterion		8.476216
Log likelihood	-133.5166	Hannan-Quinn criter.		8.298717
F-statistic	5.288278	Durbin-Watson stat		1.875944
Prob (F-statistic)	0.001524			

Source: Data output via E-views 9.0

Interest Rate and Fiscal Policy Instruments

Judging from the global utility evaluation in Table 31, only 30.11% changes in interest rate that was as a result of variation in recurrent, capital expenditure and fiscal deficit as instruments of fiscal policy. Fiscal policy instruments significantly explained the changes in interest rate volatility judging from the p-value (0.00) and f-statistic (3.84). The Durbin Watson value of 2.1 entails no autocorrelation in the estimated regression. From the perspective of relative statistic evaluation, it is only capital expenditure that has positive but insignificant relationship with interest rate, whereas recurrent expenditure and fiscal deficit were found to have insignificant negative association with interest rate. Interest rate would be 7.24% if recurrent, capital expenditure and fiscal deficit are kept constant. Interest rate would go down by 2.34% following a unit rise in capital expenditure. On the contrary, interest rate would go up by 2.28% and 3.85% respectively by virtue of a percentage swell in recurrent expenditure and fiscal deficit patterns of the government of Nigeria.

Table 31: ARDL Regression: Interest Rate and Fiscal Policy

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INTR(-1)	0.327582	0.173596	1.887033	0.0696
INTR(-2)	0.300834	0.162957	1.846089	0.0755
REXP	-2.28E-06	1.90E-06	-1.200038	0.2402
CEXP	2.34E-06	4.12E-06	0.568888	0.5740
FSD	-3.85E-06	3.28E-06	-1.174105	0.2502
C	7.241619	2.876666	2.517365	0.0178
R-squared	0.407014	Mean dependent var		18.09853
Adjusted R-squared	0.301124	S.D. dependent var		4.378817
S.E. of regression	3.660640	Akaike info criterion		5.591938
Sum squared resid	375.2079	Schwarz criterion		5.861296
Log likelihood	-89.06295	Hannan-Quinn criter.		5.683797
F-statistic	3.843729	Durbin-Watson stat		2.131815
Prob (F-statistic)	0.008905			

Source: Data output via E-views 9.0

Table 32: ARDL Regression: Exchange Rate and Fiscal Policy

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXR(-1)	1.045742	0.065105	16.06240	0.0000
REXP	2.89E-06	2.25E-05	0.128541	0.8991
REXP(-1)	-4.26E-05	1.60E-05	-2.660003	0.0155
REXP(-2)	-4.76E-05	2.07E-05	-2.303678	0.0327
REXP(-3)	-2.61E-05	1.48E-05	-1.764201	0.0938
REXP(-4)	6.87E-05	1.53E-05	4.483726	0.0003
CEXP	9.25E-05	2.56E-05	3.614079	0.0018
CEXP(-1)	1.44E-05	3.39E-05	0.423209	0.6769
CEXP(-2)	-5.57E-05	3.10E-05	-1.795661	0.0885
FSD	-5.85E-05	1.14E-05	-5.112646	0.0001
FSD(-1)	-2.62E-05	2.51E-05	-1.044362	0.3094
FSD(-2)	-5.32E-05	3.37E-05	-1.576796	0.1313
C	-3.047929	3.233166	-0.942707	0.3577
R-squared	0.988822	Mean dependent var		86.08086
Adjusted R-squared	0.981763	S.D. dependent var		70.87116
S.E. of regression	9.570861	Akaike info criterion		7.646527
Sum squared resid	1740.426	Schwarz criterion		8.241982
Log likelihood	-109.3444	Hannan-Quinn criter.		7.843903
F-statistic	140.0670	Durbin-Watson stat		1.979148
Prob (F-statistic)	0.000000			

Source: Data output via E-views 9.0

Exchange Rate and Fiscal Policy Instruments

As shown in Table 32, a significant positive relationship was found between exchange rate, government recurrent and capital expenditure (significant), while fiscal deficit is associated significantly and negatively with exchange rate. Exchange rate would amount to -3.04 if recurrent, capital expenditure and fiscal deficit are held constant. Exchange rate would appreciate by ₦2.89 and ₦9.25 per US Dollar respectively where government increases recurrent and capital expenditure by a unit. That notwithstanding, the reverse would be the

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case if fiscal deficit increases by a unit as exchange rate would depreciate by
₦5.32. With regard to the adjusted R-squared, fiscal policy instruments
through recurrent, capital expenditure and fiscal deficit discussed 98.17%
changes in exchange rate, and this is statistically significant at 5% significance
level as dispelled by the p-value (0.00) and f-statistic (140.06). The estimated
regression has no issue of autocorrelation as Durbin Watson coefficient of
1.97 is within the acceptable range evidencing the absent of autocorrelation in
the model.

4.8 Variance Decomposition

With the determination of the nature of both short and long run relationship
between fiscal policy tools (fiscal deficit, recurrent and capital expenditure)
and selected macroeconomic variables (real gross domestic product, index of
industrial production, money supply, inflationary level, interest rate and
exchange), the ascertainment of the fiscal policy tool that influences each
macroeconomic variables thus become necessary. This was achieved through
the application of the variance decomposition mechanism as envisaged in
Tables 33 − 38. . The result in Table 33 shows that capital expenditure of the
government causes more changes in real gross domestic product followed by
fiscal deficit compared to recurrent expenditure.

Table 33: Variance Decomposition of RGDP

Period	S.E.	RGDP	REXP	CEXP	FSD
1	801229.1	100.0000	0.000000	0.000000	0.000000
2	1723717.	85.91304	3.944504	7.530497	2.611957
3	3033024.	63.69641	10.98061	15.33440	9.988584
4	4682719.	48.32351	14.72125	23.27830	13.67694
5	6591002.	38.07526	16.24014	29.80867	15.87593
6	8697584.	31.12457	16.32723	35.50478	17.04342
7	10950336	26.31130	15.60163	40.34550	17.74157
8	13290884	22.97069	14.42294	44.59214	18.01423
9	15645050	20.64562	13.04193	48.37578	17.93667
10	17931407	19.00265	11.61762	51.82549	17.55424

Source: Data output via E-views 9.0

However, the variation in real gross domestic product was more explained by fluctuation in real gross domestic product itself. Based on the variance decomposition result in Table 34, fiscal deficit was most powerful in explaining the variation in industrial production index in Nigeria relative to government capital and recurrent expenditure, while the variation in index of industrial production was better explained by volatility in industrial production in Nigeria. With regard to money supply, Table 35 discloses that recurrent expenditure was stronger in determining the volume of money in circulation. This is followed by fiscal deficit, while the least is capital expenditure.

Table 34: Variance Decomposition of IND

Period	S.E.	IND	REXP	CEXP	FSD
1	10.21277	100.0000	0.000000	0.000000	0.000000
2	14.14031	92.10667	1.637967	5.674050	0.581312
3	16.25235	82.70696	1.286279	8.813508	7.193256
4	17.73737	75.53266	1.338829	10.19363	12.93488
5	18.20678	74.15206	1.303511	10.76825	13.77618
6	18.38268	73.56761	1.387232	11.52610	13.51906
7	18.61104	72.10191	1.752122	12.26887	13.87709
8	18.88037	70.34804	2.136770	13.21802	14.29717
9	19.11923	69.01145	2.349478	14.27365	14.36542
10	19.31847	68.13853	2.397072	15.29902	14.16538

Source: Data output via E-views 9.0

Table 35: Variance Decomposition of MSP

Period	S.E.	MSP	REXP	CEXP	FSD
1	342659.7	100.0000	0.000000	0.000000	0.000000
2	500836.8	59.40919	15.46086	1.573639	23.55632
3	735788.3	53.60672	8.480437	5.311483	32.60136
4	1029348.	31.48939	27.43114	2.736064	38.34341
5	1159071.	27.46231	33.65702	2.941649	35.93902
6	1430314.	18.30010	54.22611	2.974149	24.49965
7	1605240.	14.58715	63.57601	2.368598	19.46825
8	1918947.	10.27271	73.41605	2.634555	13.67668
9	2196067.	7.844487	78.97799	2.097436	11.08009
10	2592890.	5.694993	83.07074	2.319106	8.915165

Source: Data output via E-views 9.0

As can be seen in Table 36, capital expenditure was very influential in determining the level of inflation in Nigeria. In the second place is fiscal deficit, while recurrent expenditure showed the least influence. Nevertheless, variation in level of inflation was attributed changes in inflation itself. It was

evident in Table 37 that fiscal deficit was more vital in explaining the changes in interest rate, and subsequently followed by recurrent expenditure, while in the last place is recurrent expenditure of the government. Finally, in Table 38, exchange rate was greatly influenced by fiscal deficit followed by recurrent expenditure, while capital expenditure of the government as the least in causing variation in exchange rate.

Table 36: Variance Decomposition of INFL

Period	S.E.	INFL	REXP	CEXP	FSD
1	14.20311	100.0000	0.000000	0.000000	0.000000
2	17.30179	97.27309	0.996498	0.928373	0.802036
3	18.03244	90.61365	3.250036	2.933155	3.203163
4	18.90150	83.41088	5.493231	5.370317	5.725575
5	19.72720	77.66804	7.091967	7.481448	7.758543
6	20.38803	73.01559	8.223853	9.439303	9.321256
7	20.95393	69.16860	9.024041	11.24163	10.56574
8	21.45204	66.01065	9.555390	12.91557	11.51839
9	21.87100	63.53762	9.851745	14.40902	12.20162
10	22.19634	61.74203	9.950744	15.68148	12.62574

Source: Data output via E-views 9.0

Table 37: Variance Decomposition of INTR

Period	S.E.	INTR	REXP	CEXP	FSD
1	3.929081	100.0000	0.000000	0.000000	0.000000
2	4.153647	98.55845	0.313231	0.436476	0.691841
3	4.426263	98.66555	0.276001	0.410291	0.648161
4	4.537763	98.34382	0.405409	0.433251	0.817518
5	4.605269	98.19040	0.496801	0.434473	0.878326
6	4.654793	97.69761	0.722252	0.443635	1.136499
7	4.689914	97.08611	0.985659	0.526225	1.402005
8	4.721712	96.29652	1.306503	0.672741	1.724237
9	4.751611	95.37146	1.655805	0.901010	2.071723
10	4.782536	94.31319	2.027377	1.206305	2.453130

Source: Data output via E-views 9.0

Table 38: Variance Decomposition of EXR

Period	S.E.	EXR	REXP	CEXP	FSD
1	17.33004	100.0000	0.000000	0.000000	0.000000
2	26.92113	98.22103	0.476874	1.222740	0.079354
3	34.01172	97.06644	0.452028	2.392275	0.089256
4	38.15108	95.63494	0.361856	3.330288	0.672915
5	40.56124	94.25308	0.579251	3.513075	1.654594
6	42.21410	92.94850	1.160490	3.336188	2.554818
7	43.73269	91.87977	1.904469	3.110950	3.104811
8	45.38463	90.98347	2.643439	2.949701	3.423389
9	47.22824	90.09448	3.363294	2.862181	3.680042
10	49.20638	89.01200	4.119150	2.874201	3.994645

Source: Data output via E-views 9.0

4.9   Impulse Response Function

To determine the magnitude of variation in the selected macroeconomic variables owing to a unit change in fiscal policy tools: recurrent, capital expenditure and fiscal deficit, the impulse response function analysis was performed and the result summarized in Tables 39 – 44. From Table 39, real gross domestic product responds positively to any shock in recurrent, capital expenditure and fiscal deficit at any point in time. For index of industrial production as shown in Table 40, industrial development index responds positively to any shock in capital expenditure both in short and long run. However, in short term (periods 3 – 5), it responds negatively to any shock in recurrent expenditure and fiscal deficit but positively in the long term (period 6 – 10).

Table 39: Impulse Response Function of RGDP

Period	RGDP	REXP	CEXP	FSD
1	801229.1	0.000000	0.000000	0.000000
2	1382273.	342343.5	473018.1	278579.3
3	1818497.	944951.0	1089450.	917205.9
4	2176403.	1489269.	1921922.	1442285.
5	2438049.	1956240.	2800865.	1974247.
6	2646643.	2301367.	3729526.	2448732.
7	2829265.	2521244.	4638921.	2894977.
8	3004550.	2601900.	5512959.	3247740.
9	3155413.	2538628.	6295814.	3475838.
10	3250607.	2330738.	6944715.	3541177.

Source: Data output via E-views 9.0

Table 40: Impulse Response Function of IND

Period	IND	REXP	CEXP	FSD
1	10.21277	0.000000	0.000000	0.000000
2	8.936730	1.809721	3.368259	-1.078111
3	5.856230	-0.349961	3.454668	-4.223489
4	4.378961	-0.902544	2.964913	-4.657765
5	2.857919	-0.329875	1.903869	-2.229629
6	1.672623	0.605648	1.803892	0.133427
7	1.066798	1.175186	1.883199	1.543433
8	1.014207	1.244215	2.149952	1.702558
9	1.224428	0.985640	2.249114	1.243849
10	1.423851	0.597957	2.218070	0.594618

Source: Data output via E-views 9.0

As revealed in Table 41, money supply responds positively to any change in recurrent and fiscal deficit both in short and long run but responds negatively to shocks in capital expenditure only in the short run (period 2 − 5). With the inferences from Table 42, inflation level responds negatively to any shock in recurrent, capital expenditure and fiscal deficit in both short and long run (period 2 − 10). Just as the case of inflation, interest rate as disclosed in Table 43 insights that interest rate responds negatively at any point in time (both short and long run) to any shock in fiscal policy tools of recurrent, capital expenditure and fiscal deficit. From Table 44, exchange rate responds negatively to shocks in capital expenditure only in the short run (period 2 − 6) but positively in the long term (7 − 10). On the other hand, exchange rate responds positively to any shock in recurrent expenditure and fiscal deficit (period 1 − 10).

Table 41: Impulse Response Function of MSP

Period	MSP	REXP	CEXP	FSD
1	342659.7	0.000000	0.000000	0.000000
2	177777.4	196930.5	-62827.35	243080.4
3	375763.1	84440.20	-157506.4	342652.4
4	208398.1	494709.0	-15317.52	479345.1
5	187864.3	401889.3	-102612.3	276677.7
6	73768.03	810674.1	146032.9	135617.5
7	38707.05	727233.4	13744.10	21074.64
8	48956.32	1032094.	189683.4	44353.32
9	-6253.600	1051398.	64339.31	175317.9
10	-67542.04	1332678.	234012.9	254975.9

Source: Data output via E-views 9.0

Table 42: Impulse Response Function of INFL

Period	INFL	REXP	CEXP	FSD
1	14.20311	0.000000	0.000000	0.000000
2	9.458368	-1.727147	-1.667065	-1.549487
3	1.859717	-2.754101	-2.599732	-2.831039
4	-1.830813	-3.009549	-3.106228	-3.168578
5	-2.062892	-2.823789	-3.150972	-3.120539
6	-1.118118	-2.566115	-3.181433	-2.924462
7	-0.437478	-2.331816	-3.181473	-2.764931
8	-0.279097	-2.085989	-3.174567	-2.572118
9	-0.389740	-1.775377	-3.080264	-2.314917
10	-0.512719	-1.378470	-2.887033	-1.959314

Source: Data output via E-views 9.0

<p align="center">**Table 43: Impulse Response Function of INTR**</p>

Period	INTR	REXP	CEXP	FSD
1	3.929081	0.000000	0.000000	0.000000
2	1.251560	-0.232467	0.274416	-0.345488
3	1.525215	-0.005695	-0.071268	0.087319
4	0.959116	-0.171480	0.093961	-0.203349
5	0.757928	-0.147936	-0.054159	-0.133949
6	0.586107	-0.226113	-0.063068	-0.244881
7	0.431437	-0.245576	-0.140079	-0.249256
8	0.338399	-0.272912	-0.185040	-0.275746
9	0.252772	-0.287342	-0.231179	-0.288684
10	0.197844	-0.299784	-0.269231	-0.305526

<p align="center">*Source: Data output via E-views 9.0*</p>

<p align="center">**Table 44: Impulse Response Function of EXR**</p>

Period	EXR	REXP	CEXP	FSD
1	17.33004	0.000000	0.000000	0.000000
2	20.28606	1.859067	-2.976873	0.758362
3	20.27331	1.331508	-4.337279	0.676314
4	16.40456	0.194405	-4.560564	2.960034
5	12.59736	2.064723	-3.053701	4.174602
6	10.28133	3.339216	-1.286192	4.278553
7	10.04361	3.967820	0.215678	3.722012
8	10.80744	4.245555	1.121833	3.336579
9	11.64123	4.535404	1.756198	3.401444
10	12.06880	4.971636	2.398121	3.825896

<p align="center">*Source: Data output via E-views 9.0*</p>

4.10   Granger Causality Analysis

To determine the effect of fiscal policy tools: recurrent, capital expenditure and fiscal deficit on selected macroeconomic variables, the granger causality analysis was performed. The choice of granger causality analysis is on the premise that it structured to detect a variable that can predict or cause changes in another which is obviously lacking in the use of OLS which only ascertains the nature of relationship between variables. Two variables may relate but that does not mean that one can affect another. The result of the granger causality test in Table 45 unveils that unidirectional relationship between real gross domestic product, recurrent and capital expenditure, while a bidirectional relationship observed for real gross domestic product and fiscal deficit at 5% level of significance. This implies that capital expenditure has significant effect on real gross domestic product in Nigeria on one hand, whereas on the

other hand, real gross domestic product significantly affects or determines recurrent expenditure of the government. Fiscal deficit exerts significant influence on real gross domestic product, and at the same time real gross domestic product significantly influences fiscal deficit.

Table 45: Granger Causality Result for Fiscal Policy Tools and Selected Macroeconomic Variables

Null Hypothesis:	Obs	F-Statistic	Prob.	Remarks
REXP does not Granger Cause RGDP	35	0.87756	0.3559	No Causality
RGDP does not Granger Cause REXP		16.4549	0.0003	Causality
CEXP does not Granger Cause RGDP	35	18.3920	0.0002	Causality
RGDP does not Granger Cause CEXP		0.64128	0.4292	No Causality
FSD does not Granger Cause RGDP	35	5.88994	0.0210	Causality
RGDP does not Granger Cause FSD		7.03425	0.0123	Causality
REXP does not Granger Cause IND	35	0.26300	0.6116	No Causality
IND does not Granger Cause REXP		0.04395	0.8353	No Causality
CEXP does not Granger Cause IND	35	0.03813	0.8464	No Causality
IND does not Granger Cause CEXP		2.17112	0.1504	No Causality
FSD does not Granger Cause IND	35	0.00665	0.9355	No Causality
IND does not Granger Cause FSD		0.46892	0.4984	No Causality
REXP does not Granger Cause MSP	35	7.49768	0.0100	Causality
MSP does not Granger Cause REXP		0.49762	0.4857	No Causality
CEXP does not Granger Cause MSP	35	10.2313	0.0031	Causality
MSP does not Granger Cause CEXP		0.28231	0.5989	No Causality
FSD does not Granger Cause MSP	35	0.04267	0.8377	No Causality
MSP does not Granger Cause FSD		21.9676	0.0000	Causality
REXP does not Granger Cause INFL	35	0.92129	0.3443	No Causality
INFL does not Granger Cause REXP		0.60383	0.4428	No Causality
CEXP does not Granger Cause INFL	35	1.96665	0.1704	No Causality
INFL does not Granger Cause CEXP		0.00078	0.9780	No Causality
FSD does not Granger Cause INFL	35	0.32587	0.5721	No Causality
INFL does not Granger Cause FSD		0.19345	0.6630	No Causality
REXP does not Granger Cause INTR	35	0.33966	0.5641	No Causality
INTR does not Granger Cause REXP		0.65013	0.4260	No Causality
CEXP does not Granger Cause INTR	35	0.19316	0.6633	No Causality
INTR does not Granger Cause CEXP		0.04978	0.8249	No Causality
FSD does not Granger Cause INTR	35	0.27160	0.6059	No Causality
INTR does not Granger Cause FSD		0.30277	0.5860	No Causality
REXP does not Granger Cause EXR	35	1.38329	0.2482	No Causality
EXR does not Granger Cause REXP		5.12329	0.0305	Causality
CEXP does not Granger Cause EXR	35	0.31932	0.5760	No Causality
EXR does not Granger Cause CEXP		0.72413	0.4011	No Causality
FSD does not Granger Cause EXR	35	2.31635	0.1378	No Causality
EXR does not Granger Cause FSD		0.78997	0.3807	No Causality

Source: Data output via E-views 9.0

With regard to industrial development, it was clear that fiscal policy tools have no significant effect on industrial development in Nigeria owing to the lack of causality in either direction. In the money supply result, there exist a unidirectional relationship between fiscal deficit tools of recurrent, capital expenditure and fiscal deficit and money supply at 5% significance level. Thus, recurrent and capital expenditure of the government have significant

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effect on the quantum of money in circulation in Nigeria, while money supply significantly affects the fiscal deficit pattern of the government. Inflationary level and interest rate volatility are not affected by fiscal policy tools of the government as there is no evident of causality running from either direction at a significant level of 5%. There is a unidirectional relationship between exchange ate and recurrent expenditure flowing from exchange rate to recurrent expenditure at 5% level of significance. Invariably, it is exchange rate volatility that affects or determine the pattern of recurrent expenditure of the Federal Government of Nigeria.

4.11 Hypotheses Testing

Decision Rule: If the p-value of f-statistic in granger causality test is significant at 5% level of significance, the null hypothesis is rejected. On the other hand, the null hypothesis is accepted if the p-value of f-statistic in granger causality test is insignificant at 5% level of significance.

Restatement of Hypotheses

Hypothesis One

H_0: Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on real gross domestic product.

H_1: Recurrent expenditure, capital expenditure and fiscal deficit have significant effect on real gross domestic product.

Table 46: Test of Hypothesis One

Estimated Model	f-statistic	P-value	Decision
RGDP → REXP + CEXP + FSD			
REXP	0.87756	0.3559	Accept H_0 and Reject H_1
CEXP	18.4549	0.0003	Reject H_0 and Accept H_1
FSD	5.88994	0.0210	Reject H_0 and Accept H_1

Source: Granger Causality Output in Table 45

Table 46 unveils that the p-values of the f-statistic for capital expenditure and fiscal deficit are significant at 5% level of significance. This suggests that

causality flows from capital expenditure and fiscal deficit real gross domestic product in Nigeria. In effect, the null hypothesis that capital expenditure and fiscal deficit have significant effect on deficit real gross domestic product in Nigeria is rejected, while the alternate hypothesis accepted. In the same manner, the p-value for recurrent expenditure is insignificant at 5% significance level thus the null hypothesis of recurrent expenditure having no significant effect on real gross domestic product in Nigeria is accepted, and the alternate hypothesis rejected.

Hypothesis Two

H_0: Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on industrial development.

H_1: Recurrent expenditure, capital expenditure and fiscal deficit have significant effect on industrial development.

Table 47: Test of Hypothesis Two

Estimated Model	f-statistic	P-value	Decision
IND → REXP + CEXP + FSD			
REXP	0.26300	0.6116	Accept H_0 and Reject H_1
CEXP	0.03813	0.8464	Accept H_0 and Reject H_1
FSD	0.00665	0.9355	Accept H_0 and Reject H_1

Source: Granger Causality Output in Table 45

As can be seen in Table 47, there is no causal relationship between recurrent expenditure, capital expenditure, fiscal deficit and industrial development. There is no evidence of causality running from recurrent expenditure, capital expenditure and fiscal deficit to industrial development. This implies that recurrent expenditure, capital expenditure and fiscal deficit have significant effect on industrial development. In the light of this, the null hypothesis that recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on industrial development is accepted, and the alternate hypothesis rejected.

Hypothesis Three

H_0: Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on money supply.

H_1: Recurrent expenditure, capital expenditure and fiscal deficit have significant effect on money supply.

Table 48: Test of Hypothesis Three

Estimated Model	f-statistic	P-value	Decision
MSP → REXP + CEXP + FSD			
REXP	7.49762	0.0100	Reject H_0 and Accept H_1
CEXP	10.2313	0.0310	Reject H_0 and Accept H_1
FSD	0.04267	0.8377	Accept H_0 and Reject H_1

Source: Granger Causality Output in Table 45

The causality result in Table 48 depicts that causality flows from recurrent expenditure and capital expenditure to money supply at 5% level of significance. By implication, recurrent expenditure and capital expenditure have significant effect on money supply. In this regard, the null hypothesis that recurrent expenditure and capital expenditure have significant effect on money supply is rejected, while the alternate hypothesis accepted. On the contrary, the p-value for fiscal deficit is insignificant at 5% level of significance, an indication that fiscal deficit have no significant effect on money supply thus necessitating the acceptance of the null hypothesis and rejection of the alternate hypothesis.

Hypothesis Four

H_0: Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on inflationary level.

H_1: Recurrent expenditure, capital expenditure and fiscal deficit have significant effect on inflationary level.

Table 49: Test of Hypothesis Four

Estimated Model	f-statistic	P-value	Decision
INFL → REXP + CEXP + FSD			
REXP	0.92129	0.3443	Accept H_0 and Reject H_1
CEXP	1.96665	0.1704	Accept H_0 and Reject H_1
FSD	0.32587	0.5721	Accept H_0 and Reject H_1

Source: Granger Causality Output in Table 45

From the causality output in Table 49, it is vivid that recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on inflationary level owing the fact that the p-values of 0.3443, 0.1704 and 0.5721 are higher than 0.05. Therefore, the hull hypothesis that recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on inflationary level is accepted, and the alternate hypothesis rejected.

Hypothesis Five

H_0: Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on interest rate.

H_1: Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on interest rate.

Table 50: Test of Hypothesis

Estimated Model	f-statistic	P-value	Decision
INTR → REXP + CEXP + FSD			
REXP	0.33966	0.5641	Accept H_0 and Reject H_1
CEXP	0.19316	0.6633	Accept H_0 and Reject H_1
FSD	0.27160	0.6059	Accept H_0 and Reject H_1

Source: Granger Causality Output in Table 45

Looking at the causality outcome in Table 50, the p-value of 0.5641 for recurrent expenditure, 0.6633 for capital expenditure and 0.6059 for fiscal deficit are greater than 0.05. As a result, recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on interest rate. Consequently, the null hypothesis that recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on interest rate is accepted, while the alternate hypothesis is rejected.

Hypothesis Six

H_0: Recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on exchange rate.

H_1: Recurrent expenditure, capital expenditure and fiscal deficit have significant effect on exchange rate.

Table 51: Test of Hypothesis Six

Estimated Model	f-statistic	P-value	Decision
EXR → REXP + CEXP + FSD			
REXP	1.38329	0.2482	Accept H_0 and Reject H_1
CEXP	0.31932	0.5760	Accept H_0 and Reject H_1
FSD	2.31635	0.1378	Accept H_0 and Reject H_1

Source: Granger Causality Output in Table 45

Table 51 reveals that recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on exchange rate as the p-values of 0.2482, 0.5760 and 0.1378 are higher than 0.05. Subsequently, the hull hypothesis that recurrent expenditure, capital expenditure and fiscal deficit have no significant effect on exchange rate would not be rejected but the alternate hypothesis is rejected.

4.12 Discussion of Findings

The revelation of the ARDL results is the presence of a long run relationship between fiscal policy tools: recurrent, capital expenditure and fiscal deficit and macroeconomic variables of real gross domestic product, industrial development, money supply and exchange rate. This is an insinuation that the performance of these macroeconomic variables in the long run is dependent on the pattern of government fiscal policy. This could be attributed to the rudimentary stage of development in the financial system were resource mobilization is dependent on the banking which is often short to achieve development in these macroeconomic fundamentals.

The ARDL relationship between real gross domestic product and fiscal policy tools indicates that recurrent and capital expenditure have negative relationship with real gross domestic product. This is in line with the neoclassical theory that fiscal policy no matter the measure does not propel economic growth. Fiscal deficit had a significant positive relationship with real gross domestic product. The negative relationship between recurrent and capital expenditure would be owed to the issue of corruption by politician and those in the helm of affair that embezzle or siphon funds allocated for public spending by the government. This finding is in line with the previous studies of Adigwe, Anyanwu and Udeh (2016), Osuala and Ebieri (2014), Falade and Folorunso (2015) and Nwankwo, Kalu and Chiekezie (2017). However, the positive association between the two components of government expenditure as reported by Babalola (2015), Audu (2012), Ismail (2011), Tagkalakis (2013), Agu, Idike, Okwor and Ugwunta (2014) would not be verified. From Table 45, capital expenditure having significant effect on real gross domestic product further affirms the results of Adigwe, Anyanwu and Udeh (2016), Nwankwo, Kalu and Chiekezie (2017) and Falade and Folorunso (2015).

Industrial development is not affected by government fiscal policy programmes over the years as this sector lack the infrastructure to contribute to the growth of the economy. The poor performance of the industrial sector signals the over dependence of the country on foreign goods and services for her consumptions. Recurrent and capital expenditure were found to have insignificant negative relationship with industrial development on one side, while on the other hand, industrial development insignificantly and positively related with fiscal deficit. This would be that the perceived increases in the

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Nigeria real gross domestic product propels the government to constantly seek fiscal deficit as a way of increasing the quantum of money in circulation in the economy.

Money supply was significantly influenced by variation in recurrent and capital expenditure. This is a support of the theoretical postulation that once government increases spending, the level of money in circulation is bound to rise. This would lead to high inflation or rise in interest rate especially if the Central Bank of Nigeria does not use monetary policy to compliment the discretionary fiscal policy of the government. Fiscal deficit was observe to be propelling the level of money in circulation as a unit rise in fiscal deficit result in a corresponding appreciation in money supply which is statistically significant. This is true that in developing countries, government resort to fiscal deficit to accelerate the pace of economic development accompanied by upsurge in money supply. This finding is in line with Kosimbei (2009), Bakare (2011), Hoang (2014), Lozano (2008), Milo (2016), Zuze (2012) and Umeora and Ikeora (2016) among other studies.

Inflation rate is not affected by fiscal policy instruments: recurrent, capital expenditure and fiscal deficit. This shows that the high level of inflation in Nigeria is empirically not as a result of government fiscal policy. Nevertheless, the ARDL result in Table 30 reveal the presence of an insignificant positive relationship between recurrent expenditure, fiscal deficit and inflation, while a negative insignificant relationship was found between inflation and capital expenditure. The negative association between fiscal deficit and inflation agrees with the findings of Nwakoby, Okaro and Ananwude (2016), Dockery, Ezeabasili and Herbert (2012) and Twari, Bolat

and Kocbulut (2015), whereas the positive linkage between is in line with Nwakoby (2016), Umeora (2013), Oladipo and Akinbobola (2011) and Egbulonu and Wobilor (2016).

In the same vain, interest rate is not significantly affected by recurrent, capital expenditure and fiscal deficit. This is an indication that the high cost of capital/interest rate charged by deposit money banks in extending loans and advances is in no way influenced by fiscal policy tools of the government: recurrent, capital expenditure and fiscal deficit. This supports the study of Mukhtar and Zakaria (2008), Bayat, Kayhan and Senturk (2012), Chakraborty (2012) but rejected the outcome of the research of Noula (2012) and Asamoah (2016). Again, recurrent expenditure and fiscal deficit have positive insignificant relationship with interest rate, whereas capital expenditure is negatively linked with interest rate. The positive relationship between fiscal deficit and interest rate affirms the results of Bonga-Bonga (2012), Laubach (2003), Pandit (2003), Putri, Kuncoro and Sebayang (2015) and Saher and Herbert (2010), while the result of Nkalu (2015) on the negative association between interest rate and fiscal deficit was refuted.

Exchange rate is not affected by government fiscal policy owing to the absent of causal relationship between recurrent expenditure, capital expenditure, fiscal deficit and exchange rate. This is to say that deterioration in exchange rate cannot be empirically attributed to fiscal policy practice of the Nigerian government even when the level of external debt contracted from foreign organizations/countries are increasing on yearly basis. This is in agreement with Saysombath and Kyophilavong (2013) that government fiscal policy does not have any significant effect on exchange rate but contradicts

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Afonso and Sousa (2012) who portrayed that fiscal deficit has significant effect on exchange rate in USA, UK, Germany and Italy. Exchange rate has significant positive relationship with government capital expenditure but insignificant positive relationship with recurrent expenditure. The positive linkage between exchange rate and government confirms the result of but contrary to Parsley and Wei (2014), Giorgio, Nistico and Traficante (2016) and Gulcan and Bilman (2005) that a one standard exogenous fiscal stimulus at home produces a real exchange appreciation. Fiscal deficit has negative and significant relationship with exchange rate. This implies that servicing of external debt obligation results in more foreign currency leaving the country, which in turn lead to depreciation of the local currency (Naira) against other countries of the world. This is based on the fact that Nigeria is an import dependent country thus requiring more forex for importation.

Industrial development, inflation, interest rate, exchange rate and real gross domestic product is in tandem with the neoclassical assumption that macroeconomic fundamentals would in no away affected by government fiscal policy. The theory argue that the use of fiscal policy by the government to boost aggregate demand is uncalled for as it crowd out private sector investments. Besides, pushing up the level of aggregate demand outside the outmost intent of the citizen is bound to result in inflation which in no small way defeat the government anticipated benefits of expansionary fiscal policy.

4.13   A Priori Expectation

In line with the theoretical postulation regarding fiscal policy influence on macroeconomic variables in developing countries as stated in chapter three, Table 52 – 57 dispel the observed signs of the fiscal policy instruments on selected macroeconomic variables in line with the Neoclassical assumptions.

Table 52: Real Gross Domestic Product

Independent Variables	Supposed Signs	Observed Signs	Remarks
REXP	-	-	Agreed
CEXP	-	-	Agreed
FD	-	+	Disagreed

Source: OLS Regression Results in Table 27

Table 53: Industrial Development

Independent Variables	Supposed Signs	Observed Signs	Remarks
GREXP	-	-	Agreed
GCEXP	-	-	Agreed
FD	-	+	Disagreed

Source: OLS Regression Results in Table 28

Table 54: Money Supply

Independent Variables	Supposed Signs	Observed Signs	Remarks
GREXP	+	+	Agreed
GCEXP	+	+	Agreed
FD	+	+	Agreed

Source: OLS Regression Results in Table 29

Table 55: Inflationary Level

Independent Variables	Supposed Signs	Observed Signs	Remarks
GREXP	+	+	Agreed
GCEXP	+	-	Disagreed
FD	+	+	Agreed

Source: OLS Regression Results in Table 30

Table 56: Interest Rate

Independent Variables	Supposed Signs	Observed Signs	Remarks
GREXP	-	-	Agreed
GCEXP	-	+	Disagreed
FD	+	-	Disagreed

Source: OLS Regression Results in Table 31

Table 57: Exchange Rate

Independent Variables	Supposed Signs	Observed Signs	Remarks
GREXP	+	+	Agreed
GCEXP	+	+	Agreed
FD	-	-	Agreed

Source: OLS Regression Results in Table 32

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1   Summary of Findings

The effect of Nigerian government fiscal policy through recurrent, capital expenditure and fiscal deficit was ascertained on selected macroeconomic variables of real gross domestic product, industrial development, money supply, inflationary trend, interest rate and exchange rate. The result from the study dispelled the following:

1. Capital expenditure and fiscal deficit have significant effect on real gross domestic product, while recurrent expenditure has no significant effect on real gross domestic product.

2. Recurrent, capital expenditure and fiscal deficit have no significant effect on index of industrial production. Recurrent and capital expenditure negatively relate with index of industrial production, while index of industrial production associates positively with fiscal deficit.

3. Recurrent and capital expenditure have significant effect on money supply, while fiscal deficit has no significant effect on money supply. Money supply has positive relationship with recurrent, capital expenditure and fiscal deficit.

4. Recurrent, capital expenditure and fiscal deficit have no significant effect on inflationary level in Nigeria. Recurrent expenditure and fiscal deficit have positive relationship with inflation, while capital expenditure revealed a negative relationship with inflation.

5. Recurrent, capital expenditure and fiscal deficit have no significant effect on interest rate. Capital expenditure has positive relationship with interest

rate, whereas recurrent expenditure and fiscal deficit unveiled a negative relationship.

6. Recurrent, capital expenditure and fiscal deficit have no significant effect on exchange rate. Exchange rate was negatively related to fiscal deficit but positively associated with recurrent and capital expenditure pattern of the government.

5.2 Conclusion

As one of the recent research that empirically ascertained the extent that fiscal policy influences macroeconomic performance, this research work determined how selected macroeconomic indicators are affected by changes in Nigerian government fiscal policy tools of recurrent, capital and fiscal deficit. The interaction between fiscal policy pattern of the government and macroeconomic fundamental has received considerable attention from scholar, and the results regarding their nexus remain mixed and inconclusive. The conclusions regarding the three aspect of fiscal policy tools: recurrent, capital and fiscal deficit is in line with theoretical postulation which is, fiscal policy has does not propel economic growth and does not influence macroeconomic fundamentals.

5.3 Recommendations

The findings of this research work resulted in some recommendations which are stated as follows:

1. To engender sustainability in real gross domestic product, government should spend more on capital investments as opposed to recurrent consumption. Government should spend 70% of its expenditure on building more core infrastructures such as streets, highways, airports, mass transit, communication, sewers and water system among others.

2. Government should encourage and maintain spending geared towards development of the industrial sector which is almost dead and simultaneously developing the nation's industrial facilities, in particular, power supply. Virtually, all industries in Nigeria rely on generators for power supply, which increases costs of production and deters their ability to compete with foreign firms.

3. The Central Bank should allow money supply to grow according to the real output of the economy as excess growth of money causes inflationary pressure in case of Nigerian economy. This could be done by using the various monetary policy instruments of open market operation, discount rate mechanism and reserve requirement at its disposal.

4. Fiscal deficit practice by the Nigerian government has cause more liquidity effects and inflationary pressure in the economy. To avoid continuous rise in inflation in the economy, government should strategically reduce it foreign borrowing to financing of our domestic expenditure.

5. The Central Bank of Nigeria over the years has complimented government fiscal policy stance by maintaining its position to raise the monetary policy which affects prime lending rate, to contain government borrowing. Therefore, it is suggested that government should re-focus its attention to employing more of long term debts to ease short term interest rate pressure on the economy.

6. Based on the current exchange rate of Naira against the US Dollar, the Naira would appreciate in value if the Central Bank of Nigeria should continue to supply forex to the market to meet the demand of customers through the deposit money banks.

7. Government should collaborate with the private sector in their fiscal policy decision. This could be realized by issuing executive orders to aid ease of doing business in the country and lays support for local content in public procurement by MDAs. This will support local production to increase employment opportunities, strong, diversified, inclusive and sustained economic growth.

5.4 Contribution to Knowledge

This study has provided new evidence on the real effect of Nigerian fiscal policy tools on macroeconomic development of the economy using up to date data set through the pairwise methodology that is recently been adopted by scholars elsewhere. The review of empirical literature dispelled that in the context of Nigeria, the only fiscal policy tool in studying the nexus between fiscal policy and money supply was fiscal deficit hence, no empirical study based on internet search on the effect of government expenditure (recurrent and capital) on money supply. This study equally adds to knowledge by studying the alleged effect of effect of recurrent and capital expenditure on the growth of money supply through empirical approach without recourse to theoretical or conventional claim. In regard to the discrepancies in literature, this study has shown that the effect of fiscal policy tools of the government depends on the level of development in the financial, macroeconomic environment and political system of the country such study was undertaken. In addition, this study contributes and validated the argument by the neoclassical theory that macroeconomic development of an economy is independent of government fiscal policy.

5.5   Suggestions for Further Research

This study empirical ascertain the effect of Nigerian Fiscal policy tools through recurrent, capital expenditure and fiscal deficit on real gross domestic product, industrial production, money supply, inflationary level, interest rate and exchange rate using only annual time series data. This study can be improved upon by applying disaggregated quarterly or monthly data to enhance the comparability of findings with the result of this present research work.

REFERENCES

Abe, W. (2012, August 31). Nigeria is facing fiscal policies challenges. *Vangaurd Newspaper,* p. 35.

Abdiweli, M. A. (2005). Fiscal policy and economic growth: The effect of fiscal volatility. *Journal of Business & Economics Research, 3*(5), 17-26.

Abubakar, A. B. (2016). Dynamic effects of fiscal policy on output and unemployment in Nigeria: An econometric investigation. *CBN Journal of Applied Statistics, 7*(2), 101-122.

Acha, I. A. & Acha, C. K. (2011). Interest rates in Nigeria: An analytical perspective. *Research Journal of Finance and Accounting, 2*(3), 71-83.

Adigwe, P. K., Anyanwu, F. A. & Udeh, F. (2016). Dynamic effect of government expenditure on nigeria economic growth: Long run propensity and short run adjustments. *Journal of Scientific Research and Reports, 11*(5), 1-19.

Afonso, A. & Sousa, R. M. (2009). The macroeconomic effects of fiscal policy. European Central Bank, working paper series No. 991.

Aghion, P., Hemous, D. & Kharroubi, E. (2009). Credit constraints, cyclical fiscal policy and industry growth. Retrieved from https://www.ssrn.com

Agu, S. U., Idike, A. N., Okwor, I. M. I. & Ugwunta, D. (2014). Fiscal policy and economic growth in Nigeria: emphasis on various components of public expenditure. *Singaporean Journal of Business Economics, and Management Studies, 2*(12), 37-54.

Aisen, A. & Hauner, D. (2008). Budget deficits and interest rates: A fresh perspective. International Monetary Fund, working paper, WP/08/42

Akanni K. A. & Osinowo, O. H. (2013). Effect of fiscal instability on economic growth in Nigeria. *Advances in Economics and Business, 1*(2), 124-133.

Amadeo, K. (2017). Discretionary fiscal policy: How it differs from discretionary monetary policy. Retrieved from https://www.thebalance.com/discretionary-fiscal-policy-3305924.

Andabai, P. W. (2014). Determinants of public policies and the manufacturing sector in Nigeria (1997-2013). *African Research Review, 8*(1), 237-251.

Andolfatto, D. (2005). *Macroeconomic theory and policy.* California, USA: Simon Fraser University press Incorporation.

Anyanwu, F. A., Adigwe, P. K. & Ananwude, A. C. (2017). Real gross domestic growth determinants in an oil revenue dependent country: An assessment of Nigeria's exchange rate and interest rate. *Environmental and Energy Economics, 8*(3), 52-60.

Anyanwu, F. A., Ananwude, A. C. & Okoye, T. N. (2017). Exchange rate policy and Nigeria's economic growth: A granger causality impact assessment. *International Journal of Applied Economics, Finance and Accounting, 1*(1), 1-13.

Ardagna, S. (2001). Fiscal policy composition, public debt, and economic activity. *Public Choice, 109*(3-4), 301-325.

Asamoah, L. A. (2016). Fiscal Policy and Lending Rate Nexus in Ghana. Munich Personal RePEc Archive working paper No.80209. Retrieved from https://mpra.ub.uni-muenchen.de/80209/.

Asegehegn, M. W. (2016). *Fiscal policy and economic growth: Empirical evidence from Ethiopia, (*Doctoral Dissertation, Addis Ababa University, Ethiopia).

Asgari, M. A. (2012). The Impact of reducing of budget deficit on the foreign exchange rate. *Journal of Basic and Applied Scientific Research, 2*(12), 13097-13100.

Audu, N. P. (2012). The impact of fiscal policy on the Nigerian economy. *International Review of Social Sciences and Humanities, 4*(1), 142-150.

Auteri, M. & Constantini, M. (2004) Fiscal policy and economic growth: The case of Italian region. *Review of Regional Studies, 34*(1), 72-94.

Awujola, A., Obumneke, E. & Oniore, J. O. (2014). Fiscal deficits and foreign reserves evidence from Nigeria. *International Journal of Economics, Commerce and Management, 2*(10), 1-16.

Babalola, A. I. (2015). Fiscal policy and economic development in Nigeria. *Journal of Economics and Sustainable Development*, *6*(7), 150-160.

Babalola, S. J. & Aminu, U. (2011). Fiscal policy and economic growth relationship in Nigeria. *International Journal of Business and Social Science, 2*(17), 244-249.

Bakare, A. S. (2011). An empirical study of the determinants of money supply growth and its effects on inflation rate in Nigeria. *Journal of Research in International Business and Management, 1*(5), 124-129.

Bakare-Aremu, T. A. & Osobase, A. O. (2015). Effect of fiscal and monetary policies on industrial sector performance- evidence from Nigeria. *Journal of Economics and Sustainable Development, 6*(17), 67-82.

Bayat, T., Kayhan, S. & Senturk, M. (2012). Budget deficits and interest rates: An empirical analysis for Turkey. *Eurasian Journal of Business and Economics, 5*(9), 119-128.

Beetsma, R. (2008). A survey of the effects of discretionary fiscal policy. Lars Calmfors conference on fiscal policy and labour market reforms, organized by the Swedish Fiscal Policy Council in Stockholm, 29th January, 2008.

Blinder, A. S. (2014). *Keynesian economics*. Retrieved from http://www.econlib.org/library/Enc/KeynesianEconomics.html.

Bonga-Bonga, L. (2012). Budget deficit and long-term interest rates in South Africa. *African Journal of Business Management, 6*(11), 3954-3961.

Brasoveanu, L. O. & Brasoveanu, I. (2010). The correlation between fiscal policy and economic growth. Retrieved from https://www.ssrn.com

Bryan, J. L. (2013). The impact of government policy on economic growth. . In Management Faculty Publications. Paper 23. Retrieved from http://vc.bridgew.edu/management_fac/23.

Cavallo, M. (2005). Government employment expenditure and the effects of fiscal policy shocks. Federal Reserve Bank of San Francisco, Working Paper 2005-16.

Castro, F. & Fernández-Caballero, L. (2011). The effects of fiscal shocks on the exchange rate in Spain. Banco De España, Documentos de Trabajo No. 1121.

Castro, V. (2017). The impact of the European Union fiscal rules on economic growth. Warwick economic research papers No. 794.

Chakraborty, L. S. (2012). Interest rate determination in India: empirical evidence on fiscal deficit − interest rate linkages and financial crowding out. Levy Economics Institute, Working Paper No. 744.

Chatterjee, S. & Mursagulov, A. (2012). Fiscal policy and the real exchange rate. A paper presented at the annual meetings of the Society for Computational Economics in Prague and the Karlsruhe Institute of Technology in Germany.

Chen, Y. (2011). A study of budget deficits and interest rates for Japan: Evidence from an extended loanable funds model. *Journal of International and Global Economic Studies, 4*(1), 11-27.

Cheng, G. (2015). Balance sheet effects, foreign reserves and public policies. European Economic Stability Working Paper Series 3.

Chirinko, R. S. & Morris, C. (1999). fiscal policies aimed at spurring capital formation: A framework for analysis. *Federal Reserve Bank of Kansas City, 2*, 60-75.

Claeys, P., Moreno, R. & Suriñach, J. (2008). Fiscal policy and interest rates: The role of financial and economic integration. Research Institute of Applied Economics working Papers 2008/10.

Collignon, S. (2011). fiscal policy rules and the sustainability of public debt in Europe. Retrieved from https://www.ssrn.com.

Dada, M. A. (2013). Composition effects of government expenditure on private consumption and output growth in Nigeria: A single-equation error correction modelling. *Romanian Journal of Fiscal Policy, 2*(7), 18-34.

Dai, Q. & Philippon, T. (2006). Fiscal policy and the term structure of interest rates. Retrieved from https://www.ssrn.com.

Dell'Erba, S. & Sola, S. (2013). Does fiscal policy affect interest rates? Evidence from a factor-augmented panel. International Monetary Fund, WP/13/159.

DeLong, J. B. & Tyson, L. D. (2013). Discretionary fiscal policy as a stabilization policy tool: What do we think now that we did not think in 2007? *Journal of Economic Perspectives, 14*(3), 21-36.

Dockery, E., Ezeabasili, V. N. & Herbert, W. E. (2012). On the relationship between fiscal deficits and inflation: Econometric evidence for Nigeria. *Economics and Finance Review, 2*(7), 17 – 30.

Economic discussion (2017). Top eight objectives of fiscal policy. Retrieved from http://www.economicsdiscussion.net/fiscal-policy/top-8-objectives-of-fiscal-policy/4694.

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.

Ekanayake, H. K. J. (2012). The link between fiscal deficit and inflation: Do public sector wages matter?. ASARC Working Paper 2012/14.

Enders, Z., Mu¨ller, G. J. & Scholl, A. (2010). How do fiscal and technology shocks affect real exchange rates? New evidence for the United States. Retrieved from https://www.ssrn.com

Estache, A. & leipziger, D. (2010). Overview: Fiscal policy, distribution, and the ' middle class. Retrieved from https://www.ssrn.com.

Ezejiofor, R. A., Adigwe, P. K. & Echekoba, F. N. (2015). Tax as a fiscal policy and manufacturing company's performance as an engine for economic growth in Nigeria. *European Journal of Business, Economics & Accountancy*, *3*(3),1-12.

Eze, O. R. & Ogiji, F. O. (2013). Impact of fiscal policy on the manufacturing sector output in Nigeria: an error correction analysis. *International Journal of Business and Management Review, 1*(3), 35-55.

Falae, V. (2016). Major cause of inflation in Nigeria. Retrieved from https://www.naij.com/1122627-major-inflation-nigeria-top-5.html#1122627.

Falade, 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.

Faramarzi, A., Avazalipour, M. S., Khaleghi, F. & Hakimipour, N. (2014). Long run impact of government expenditure and tax on liquidity and employment in Iran economy. *IJRRAS, 18*(1), 65-72.

Favero, C. & Giavazzi, F. (2007). Debt and the effects of fiscal policy. Federal Reserve Bank of Bank working paper No. 07-4.

Follette, G. & Lutz, B. (2010). Fiscal policy in the United States: Automatic stabilizers, discretionary fiscal policy actions, and the economy. Retrieved from https://www.ssrn.com.

FRBSF (2002). The role of fiscal policy. *FRBSF Economic Letter, 2002-26,* 1-4.

Georgantopoulos, A. G. & Tsamis, A. D. (2014). The interrelationship between money supply, prices and government expenditures and economic growth: A causality analysis for the case of Cyprus. *International Journal of Economic Sciences and Applied Research, 5*(3), 115-128.

Giorgio, G., Nistico, S. & Traficante, G. (2016). Government spending and the exchange rate. A paper presented at XXII International Conference on Money, Banking and Finance - Rome, December 2013" and at the "55th Annual SIE Conference - Trento, October 2014.

Göndör, M. (2012). Automatic fiscal stabilizers vs. discretionary fiscal policy: Challenges and policy options. The 6th International Days of Statistics and Economics, Prague, September 13-15.

Gründler, K. & Sauerhammer, S. (2016). *Do expectations matter? Reassessing the effect of government spending on key macroeconomic variables in Germany.* Chair of economic order and social policy, discussion paper No. 134.

Gülcan, Y. & Bilman, F. E. (2005). *The effects of budget deficit reduction on exchange rate: evidence from Turkey.* A paper is presented at the 1st International Conference on Business, Management and Economics, Yaşar University, Çeşme, İzmir, June 2005.

Gunasinghe, C. (2014). *Fiscal policy, economic growth and income inequality: A case study on Australia.* Retrieved from https://www.ssrn.com

Hanusch, H., Chakraborty, L. S. & Khurana, S. (2017). Fiscal policy, economic growth and innovation: An empirical analysis of G20 countries. Levy Economics Institute, Working Paper No. 883.

Hristov, A. (2013). The effects of fiscal policy on consumption in good and bad times. Retrieved from https://www.ssrn.com.

Hoang, K. V. (2014). Budget deficit, money growth and inflation: Empirical evidence from Vietnam. Munich Personal RePEc Archive. Retrieved from http://mpra.ub.uni-muenchen.de/54488/.

Howells, P. (2010). The money supply in macroeconomics. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.539.7507&rep=rep1&type=pdf.

Idris, M. & Ahmad, T. S. T. (2017). Tax revenue and macroeconomic growth in Nigeria: A contextual analysis. *Asian Journal of Economics, Business and Accounting, 3*(2), 1-12.

Ihenyen, C. J. & Mieseigha, E. G. (2014). Taxation as an instrument of economic growth (The Nigerian perspective). *Information and Knowledge Management, 4*(12), 49-53.

Ioana-Laura, T. (2015). How do fiscal policy decisions influence business confidence? case study: The manufacturing sector. *Journal of Eastern Europe Research in Business and Economics, 2015,* 1-8.

International Monetary Fund (2015). Can fiscal policy stabilize output? International Monetary Fund working paper series 4, 21-49.

Ismal, R. (2011). Assessing economic growth and fiscal policy in Indonesia. *Journal of Economics and Business, 14*(1), 53-71.

Jahan, S., Mahmud, A. S & Papageorgiou, C. (2014). What is Keynesian economics? Retrieved from http://www.imf.org/external/pubs/ft/fandd/2014/09/pdf/basics.pdf

Jaramillo, L. & Chailloux, A. (2015). It's not all fiscal: effects of income, fiscal policy, and wealth on private consumption. International Monetary Fund WP/15/112.

Jawadi, F., Mallick, S. K. & Sousa, R. M. (2011). *Fiscal policy in Brazil, Russia, India and China.* International Monetary Fund working paper series 19. Retrieved from http://www.eeg.uminho.pt/economia/nipe.

Johannes, T. A. (2005). Fiscal policy and sectoral productivity convergence in Cameroon: Implications for poverty reduction. A paper presented at Macroeconomic Challenges of Low Income Countries, Washington Conference at the IMF on 15th to 16th February 2005.

Joharji, G. A. & Starr, M. A. (2010). Fiscal policy and growth in Saudi Arabia. Retrieved from https://www.ssrn.com

Johnson, R. (2012). *Fiscal deficit, money growth and inflation dynamics in Ghana,* (Doctoral dissertation, Kwame Nkrumah University of Science and Technology, Ghana).

Josten, S. D. (2003). Dynamic fiscal policies, unemployment, and economic growth. University of the Federal Armed Forces Hamburg, discussion paper No. 9.

Kabashi, R. (2015). *Macroeconomic effects of fiscal policy in the European Union, with particular reference to transition countries.* A paper was presented at the conference Public Sector Economics organized by the Institute of Public Finance and Friedrich-Ebert-Stiftung in Zagreb on October 14-15.

Kakar, Z. K. (2011). Impact of fiscal variables on economic development of Pakistan. *Romanian Journal of Fiscal Policy, 2*(2), 1-10.

Karras, G. (2011). Exchange-rate regimes and the effectiveness of fiscal policy. *Journal of Economic Integration, 26*(1), 29-44.

Karuhanga, K. W. & Nyirakanani R. (2015). Effects of fiscal policy on conduct and transmission mechanism of monetary policy in Rwanda. A study commissioned by Common Market for Eastern and Southern Africa Monetary Institute. Retrieved from www/http:ssrn.com.

Khan, M. S. & Aziz, G. (2011). Neoclassical Versus Keynesian approach to public policy – The need for synthesis. Munich Personal RePEc Archive. Retrieved from http://mpra.ub.uni-muenchen.de/62856/.

Kharel, R. S. (2016). Modelling and Forecasting Fiscal Policy and Economic Growth in Nepal. *NRB Economic Review, 63*, 1-15.

Kolodko, G. W. (2001). Fiscal policy and capital formation in transition economies. International Monetary Fund, Fiscal Affairs Department working paper No.60.

Kosimbei, G. K. (2009). *Budget deficits and macroeconomic performance in Kenya: an empirical analysis,* (Doctoral Dissertation, Kenyetta University, Kenya).

Kliem, M., Kriwoluzky, A. & Sarferaz, S. (2015). Monetary-fiscal policy interaction and fiscal inflation: A Tale of three countries. Retrieved from http://www.ssrn.com.

Kumar, H. M. S. (2014). Impact of fiscal policy in India – with Reference to automobile industry. *Book of Abstracts, 1*(5), 192-202.

Kuncoro, H. (2012). Credible fiscal policy and exchange rates stabilization. *Journal of Economics and Development Studies, 3*(2), 7-18.

Kuismanen, M. & Kamppi, V. (2009). The effects of fiscal policy on economic activity in Finland. Finland Ministry of Finance, Discussion Papers 1/2009.

Laubach, T. (2003). New evidence on the interest rate effects of budget deficits and debt. Board of Governors of the Federal Reserve System. Retrieved from https://www.ssrn.com

Lima, E., Maka, A. & Pumar, A. (2012). *The effects of fiscal policy and its interactions with monetary policy in Brazil.* Brazilian Ministry of Strategic Affairs working paper No.56/2012.

Lozano, I. & Rodríguez, K. (2009). Assessing the macroeconomic effects of fiscal policy in Colombia. *Barrodores de Economica, 552,* 56-63.

Lozano, I. (2008). Budget deficit, money growth and inflation: Evidence from the Colombian case. Retrieved from https://www.ssrn.com

Macek, R. & Janku, J. (2014). The impact of fiscal policy on economic growth depending on institutional conditions. Retrieved from https://www.ssrn.com.

Makochekanwa, A. (2008). The impact of a budget deficit on inflation in Zimbabwe. Munich Personal RePEc Archive. Retrieved from https://mpra.ub.uni-muenchen.de/24227/.

M'Amanja, D. & Morrissey, O. (2005). Fiscal policy and economic growth in Kenya. Centre for Research in Economic Development and International Trade, University of Nottingham, research paper No. 05/06.

Mang'ang'a, S. R. (2014). *The effect of monetary and fiscal policy on interest rates in Kenya,* (Doctoral Dissertation, University of Nairobi, Kenya).

Marsal, A., Kaszab, L. & Horvath, R. (2015). Fiscal policy and the term structure of interest rates in a DSGE model. Retrieved from https://www.ssrn.com.

McGrattan, E. R. & Ohanian, L. E. (2008). Does neoclassical theory account for the effects of big fiscal shocks? Evidence from World War II. Federal Reserve Bank of Minneapolis Research Department Staff Report 315.

Mencinger, J. (2016). *The impact of the fiscal policy transmission mechanism on economic activity,* (Doctoral Dissertation, University of Ljubljana). Retrieved from http://www.cek.ef.uni-lj.si/doktor/mencinger.pdf.

Mehraraa, M., Masoumibb, M. & Barkhi, F. (2014). The effect of fiscal shock on inflation and economic growth in developing countries. *International Letters of Social and Humanistic Sciences, 41,* 184-191.

Mehrara, M. & Sujoudi, A. (2015). The relationship between money, government spending and inflation in the Iranian economy. *International Letters of Social and Humanistic Sciences, 51,* 89-94.

Milo, P. (2012). The impact of the budget deficit on the currency and inflation in the transition economies. *Journal of Central Banking Theory and Practice, 1,* 25-57.

Monacelli, T. & Perotti, R. (2010). Fiscal policy, the real exchange rate and traded goods. *The Economic Journal, 120,* 437–461.

Morina, K. (2017). Fiscal policy and economic growth: the case of Southeast European countries. *Thesis, 2,* 67-74.

Mountford, A. & Uhlig, H. (2009). What are the effects of fiscal policy shocks? *Journal of Applied Econometrics, 24,* 960–992

Mukhtar, T. & Zakaria, M. (2008). Budget deficits and interest rates: An empirical analysis from Pakistan. *Journal of Economic Corporation, 29*(2), 1-14.

Mukhtar, T. & Zakaria, M. (2010). Budget deficit, money supply and inflation: The case of Pakistan. *Privredna kretanja i ekonomska politika, 122*, 53-67.

Musa, Y., Usman, U. & Zoramawa, A. B. (2014). Relationship between money supply and government revenues in Nigeria. *CBN Journal of Applied Statistics*, *5*(2), 117-136.

Najaf, R. (2015). Impact of fiscal policy shocks on the Indian economy. *Journal of Hotel & Business Management, 5*(2), 1-6.

Nelson, C. R. (2006). Macroeconomics: An introduction. Retrieved from http://faculty.washington.edu/cnelson/Chap11.pdf

Nkalu, C. N. (2015). The effects of budget deficits on selected macroeconomic variables in Nigeria and Ghana (1970 – 2013). *Asian Economic and Social Society, 5*(10), 167-180.

Noman, S. S. & Khudri, M. (2015). The effects of monetary and fiscal policies on economic growth in Bangladesh. *ELK Asia Pacific Journal of Finance and Risk Management, 6*(3), 21-34.

Noula, A. G. (2012). Fiscal deficit and nominal interest rate determination in Cameroon: An application of the loan able funds model. *Global Advanced Research Journal of Management and Business Studies*, *1*(1), 6-09.

Nwakoby, C. I. N., Okaro, C. S. & Ananwude, A. C. (2016). Fiscal deficit and inflation in an oil rich exporting country: evidence from Nigeria. *Journal of Policy and Development Studies*, *10*(3), 140-155.

Nwakobi, P. C. (2017). *Fiscal deficit and selected macroeconomic variables in Nigeria: A time series analysis 1981 to 2016.* (Doctoral Dissertation, Enugu State University of Science and Technology).

Nwankwo, D. J., Kalu, C. U. & Chiekezie, M. O. (2017). Fiscal policy-economic growth correlates: Further evidence from Nigeria economy. *International Journal of Academic Research in Business and Social Sciences*, *7*(1), 1-11.

Obayori, J. B. (2016). Fiscal policy and unemployment in Nigeria. *International Journal of Social Sciences and Humanities Invention, 3*(2), 1887-1889.

Odionye, J. C. & Uma, Kalu Ebi (2013). The relationship between budget deficit and interest rate: Evidence from Nigeria. *European Journal of Business and Social Sciences, 2*(1), 158-167.

Ogbole, O. F., Amadi, S. N. & Essi, I. S. (2011). Fiscal policy and economic growth in Nigeria: a granger causality analysis. *American Journal of Social and Management Sciences, 2*(4), 356-359.

Oktaviani, R., Irawan, T. & Anggraeni, L. (2011). The impact of fiscal and monetary policy on industry and Indonesian economy: A computable general equilibrium analysis. Retrieved from https://www.ssrn.com.

Oke, A. (2011). Effect of fiscal policy on Nigerian construction sector. *Journal of Surveying, Construction & Property, 2*(1), 1-11.

Okoye, L. U., Evbuomwan, G. O., Modebe, N. J. & Ezeji, F. N. (2016). Macroeconomic performance and government fiscal deficits - Evidence from Nigeria. Nigerian *Journal of Management Technology & Development, 7*(2), 1-8.

Oladipo, S. O. & Akinbobola, T. O. (2011). Budget deficit and inflation in Nigeria: A causal relationship. *Journal of Emerging Trends in Economics and Management Sciences, 2*(1), 1-8.

Olasunkanmi, O. I. (2013). Fiscal policy and sectoral output in Nigeria: A multivariate cointegration approach. *Journal of Economics and Development Studies, 1*(2), 26-34.

Omojolaibi, J. A., Okenesi, T. P. & Mesagan, E. P. (2016). Fiscal policy and private investment in selected West African countries. *CBN Journal of Applied Statistics, 7*(1b), 277-309.

Osinowo O. H. (2015). Effect of fiscal policy on sectoral output growth in Nigeria. *Advances in Economics and Business, 3*(6), 195-203.

Osuala, A. E. & Ebieri, J. (2014). Empirical analysis of the impact of fiscal policy on economic growth of Nigeria. *International Journal of Economics and Finance, 6*(6), 203-211.

Otto, G. & Ukpere, W. I. (2015). The impact of fiscal policy on inflation in Nigeria. *Risk Governance & Control: Financial Markets & Institutions, 5*(1), 123-132.

Oyedele, T. (2017, October 25). 2017 tax and fiscal policy prospect. *The Guardian,* p.38
.
Ozurumba, B. A. (2012). Fiscal deficits and inflation in Nigeria: The causality approach. *International Journal of Scientific and Technology Research, 1*(8), 6-12.

Ozyasar, H. (2017). How does fiscal policy affect a company? Retrieved from http://smallbusiness.chron.com/fiscal-policy-affect-company-74231.html.

Pandit, R. (2003). The impact of fiscal deficit on long-term nominal interest rate in Nepal. *Economic Review, 52,* 113-133.

Paparas, D., Richter, C. & Paparas, A. (2015). Fiscal policy and economic growth, empirical evidence in European Union. *Turkish Economic Review, 2*(4), 240-268.

Parsley, D. Wei, S. J. (2014). Fiscal policy shocks and real exchange rates. Retrieved from https://www.ssrn.com

Pettinger, T. (2009). Richardian Equivalence. Retrieved from https://www.economicshelp.org/blog/1393/economics/ricardian-equivalence/.

Popa, I. & Codreanu, D. (2010). Fiscal Policy and its role in ensuring economic stability. Munich Personal RePEc Archive. Retrieved from http://mpra.ub.uni-muenchen.de/20820/.

Putri, R. N. S., Kuncoro, H. & Sebayang, K. D. (2015). The impact of fiscal policy credibility on the interest rate: the case of Indonesia. *International Journal of Business, Economics and Law, 8*(3), 1-9.

Ramasamy, R. & Abar, S. K. (2015). Influence of macroeconomic variables on exchange rates. *Journal of Economics, Business and Management, 3*(2), 276-281.

Rehman, Z., Khan, A. U. & Wahid, F. (2016). Measuring the effects of Pakistan's fiscal policy over inflation: An analysis for the period of 1980-2014. *Journal of Managerial Sciences, 9*(2), 244-255.

Reuss, A. (2009). Fiscal policy and "crowding out". Retrieved from http://www.dollarsandsense.org/archives/2009/0509reusskeynespartI.html.

Rother, P. C. (2004). Fiscal policy and inflation volatility. European Central Bank, working paper No. 317.

Sacchi, A. & Salotti, S. (2014). The impact of national fiscal rules on the stabilisation function of fiscal policy. Retrieved from http://www.siecon.org/online/wp-content/uploads/2014/10/Sacchi-Salotti-67.pdf

Salim, N. (2012). *The impact of fiscal policy on particular economic sectors in Turkey and Libya,* (Doctoral Dissertation, Czech University of Life Sciences Prague, Czech Republic). Retrieved from ssrn.com.

Saqib, N. & Aggarwal, P. (2017). Impact of fiscal and monetary policy on economic growth in an emerging economy. *International Journal of Applied Business and Economic Research, 15*(4), 475-462.

Saysombath, P. & Kyophilavong, P. (2013). Budget deficit and real exchange rate: Further evidence from co-integration and causality test for in the Lao PDR. *World Applied Sciences Journal (Economic, Finance and Management Outlooks), 28,* 43-51.

Saher, N. & Herbert, M. (2010). Response of long-term interest rate to fiscal imbalance: Evidence from Pakistan. *SBP Research Bulletin, 6*(1), 44-49.

Shevchuk, V. & Kopych, R. (2017). Modelling of fiscal policy effects on agriculture and industry in Ukraine. *Information Systems in Management, 6*(2), 131−142.

Shijaku, G. & Gjokuta, A. (2013). Fiscal policy and economic growth: The case of Albania. Munich Personal RePEc Archive. Retrieved from https://mpra.ub.uni-muenchen.de/79090/.

Sims, E. (2016). *Fiscal policy and Ricardian equivalence, Lecture 2, Week 1. Intermediate macroeconomics,* Retrieved from ssrn.com

Soli, V. O. & Harvey, S. K. (2008). Fiscal policy, private investment and economic growth: The case of Ghana. *Studies in Economics and Finance, 2*(25), 112-130.

Solomon, N. & Wet, W. A. (2004). The effect of a budget deficit on inflation: The case of Tanzania. *SAJEMS NS, 7*(1), 101-116.

Srithongrung, A. & Sánchez-Juárez, I. (2015). Fiscal policies and subnational economic growth in Mexico. *International Journal of Economics and Financial Issues, 5*(1), 11-22.

Srithongrung, A. & Kriz, K. A. (2014). The impact of sub-national fiscal policies on economic growth: A dynamic analysis approach. *Journal of Policy Analysis and Management, 33*(4), 912-928.

Srivyal, V. & Venkata. S. S. (2004). Budget deficits and other macroeconomic variables in India. *Applied Econometrics and International Development, 4-1,* 37-54.

Steger, T. D. (2012). Budget deficits and fiscal policy. Advanced Macroeconomics II lecture note, University of Leipzig, Germany.

Subhani, M. I. (2010). Impact of fiscal policy on the economy of Pakistan. Munich Personal RePEc Archive. Retrieved from https://mpra.ub.uni-muenchen.de/36172/.

Surjaningsih, N., Utari, G. A. D. & Trisnanto, B. (2010). The impact of fiscal policy on the output and inflation. *Bulletin of Monetary Economics and Banking, 4,* 368-392.

Sun newspaper (2017, September 14). Nigeria's declining tax revenue. *The Sun,* p. 26.

Tagkalakis, A. O. (2013). Discretionary fiscal policy and economic activity in Greece. Bank of Greece, Economic Research Department – Special Studies Division. Retrieved from ssrn.com

Tafuro, A. (2015). The effects of fiscal policy on employment: an analysis of the aggregate evidence. Working Papers Department of Economics Ca' Foscari University of Venice No. 03/WP/2015.

Tilahun, S. (2016). *Fiscal Policy, Public Investment and Economic Growth in Ethiopia,* (Doctoral Dissertation Addis Ababa University, Addis Ababa, Ethiopia).

Tiwari, A. K. & Tiwari, A. P. (2014). Fiscal deficit and inflation: An empirical analysis for India. *Romanian Economic Journal, 14*(42), 131-158.

Tiwari, A. K., Bolat, S. & Koçbulut, O. (2015). Revisit the budget deficits and inflation: evidence from time and frequency domain Analyses. *Theoretical Economics Letters, 5,* 357-369.

Tkalec, M. & Vizek, M. (2009). The impact of macroeconomic policies on manufacturing production in Croatia. *Privredna kretanja i ekonomska politika, 121,* 61-92.

Trebicka, B. (2015). Does fiscal policy matters for economic growth? Empirical study of Albanian situation. *Interdisciplinary Journal of Research and Development, 2*(2), 1-12.

Tulip, P. (2014). Fiscal policy and the inflation target. Reserve Bank of Australia, Research Discussion Paper, RDP 2014-02.

Udoka, C. O. & Anyingang, R. A. (2015). The effect of public expenditure on the growth and development of Nigerian economy (1980-2012). *International Review of Management and Business Research, 4*(3), 823-833.

Ugwunta, D. O. (2014). *Effect of fiscal policy on economic growth in sub-Saharan Africa*, (Doctoral Dissertation, University of Nigeria, Nsuka).

Umeora, C. E. (2013). An analysis of the relationship between fiscal deficits and selected macroeconomic variables in Nigeria, 1970 – 2011. *Journal of Business and Management, 12*(6), 19-27.

Umeora, C. E. & Ikeora, E. J. (2016). Effects of government fiscal deficits on money supply in Nigeria, 1970 – 2014. *International Journal for Research in Business, Management and Accounting, 2*(6), 57-67.

United Nations (2007). *Industrial development for the 21st century: Sustainable development perspectives.* Department of Economic and Social Affairs working paper No.376. Retrieved from https://imf.org.

Usman, M. & Miraj-ul-Haq, A. (2017). The growth effectiveness of fiscal and monetary policies: Empirical analysis in the case of Pakistan. Retrieved from https://www.ssrn.com.

Wang, J. C. (2014). The cost of fiscal policy uncertainty: Industry evidence of its impact on the labour market. Retrieved from https://www.ssrn.com

Weil, D. N. (2008). The concise encyclopaedia of economic: Fiscal policy. Retrieved from http://www.econlib.org/library/Enc/FiscalPolicy.html

Wen, Y. (2015). China's industrial revolution: Past, present, future. Retrieved From   https://www.stlouisfed.org/dialogue-with-the-fed/chinas-industrial-revolution-past-present-future.

Zuze, M. (2015). *The relationship between fiscal deficit, money growth and inflation: the case of Zimbabwe,* (Doctoral Dissertation, University of Zimbabwe).

Zonuzi, J. M. & Pourvaladi, M. S. H. & Faraji, N. (2011). The relationship between budget deficit and inflation in Iran. *Iranian Economic Review, 15*(28), 1-17.