Fiscal Policy Behaviour and Domestic Financial Market Stability: Agenda for Stabilization in Nigeria

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Abstract

This paper set out to investigate the impact of adjustments in fiscal policy tools on the stability of domestic financial market activities. The paper sampled four fiscal policy measures (Government Capital Expenditure, Government Re-current Expenditure, Tax revenue and Total Debt) for the period 1981 to 2014 and regressed them on the interest rate in the domestic financial market. Descriptive statistic and Augmented Dicky Fuller unit root test where used to evaluate the behaviour of the rate of change time series Nigerian data, while co-integration mechanism, Granger causality test and GARCH technique was employed for analyses. The findings revealed the following: (1) Government Capital and Recurrent Expenditure as well as Tax revenue occupy critical place in causing financial stability in the domestic financial market in Nigeria. ***(2)*** *increase in Government Capital Expenditure and Government Re-current Expenditure stabilizes the activities in the domestic financial market through reduction in Interest rate, whereas increase in Tax Revenue and Total Debt causes swings in the activities in the domestic financial market by increasing Interest rate. (3) In the long run, Government Capital Expenditure, Government Re-current Expenditure, Tax revenue and Total Debt show evidence of capacity to stabilize the activities in the domestic financial market. The study posit that adjustments in fiscal policy behaviour impacts significantly on the stability of the domestic financial market in Nigeria both in the short and the long-run. Based on the findings, it is recommended that fiscal policies should be appropriately articulated and efficiently manipulated in order to significantly improve stability in domestic financial markets.*

Keywords: risk, Stability, interest rate, fiscal policy, tax revenue, domestic market, GARCH.

1.0 Introduction

Concern over the adjustments or manipulations in the fiscal policy of an economy is rooted in the traditional but vital functions of the policy in the economic growth and stability process, particularly, the stabilization of the price of financial assets in the domestic financial market. The functions include providing consumption and investable funds at reasonably stable prices, avoiding fluctuations in the economy that will results to reduction in savings, low investment, job losses as well as business failures, especially in the context of rapidly expanding government spending, rising debt burden and increasing taxes characteristic of a developing economy. Domestic financial market stability is conceptualized as a situation where an economy is devoid of shocks, fluctuations and volatility in the price of financial assets in the domestic financial market.Fiscal policy is viewed as the totality of government efforts aimed at raising funds (Revenue and borrowing) and the disbursement of such funds (Expenditure) in order to achieve stability in the price of money. Fiscal policy behaviour concerns itself with the management of the economy using the instrumentality of the budgetary mechanism. According to Nwinee and Torbira (2012), fiscal policy measure is the means by which a government adjusts its level of spending and revenue generation in order to monitor and influence the country's economy in terms of stability and growth. Fiscal policy behaviour therefore denotes how government manipulates fiscal policy instruments to achieve desired economic objectives of stability (Kunst, 2006). The behaviour could be either expansionary or contractionary.

Domestic financial market stability measures as used in this study, refer to the criteria or gauge by which economic shocks, fluctuations and volatility are estimated or evaluated and managed. It is proxy by interest rate which captured the prices of financial assets or money in the domestic financial market. We adopt Interest rates (on bonds and treasury bills) as surrogates for the dependent variable, these represent shocks in the domestic financial market. However, changes in Federal Government capital expenditure, Federal Government recurrent expenditure, Tax revenue, and Total debt are used as proxy for fiscal policy behaviour). In investigating fiscal dynamics one is expected to adopt the two set of behaviours of fiscal policy (expansionary and contractionary), hence, to capture the two, we apply the rate of change approach to the data. Fiscal policy behaviour can assume either expansionary or contractionary stance (Nwinee and Torbira, 2012). Expansionary fiscal policy represent an increase in government expenditure and/or reduction in tax rates resulting in increased aggregate demand and output, whereas contractionary fiscal policy deals with a reduction in government expenditure and/or an increase in tax rates resulting in reduced aggregate demand and output which helps to stabilize the economy (CFA, 2006). The effort to stabilize the activities

in the domestic financial market could boost savings, increase investment and drive accelerated economic growth and development. Against this background, the Nigerian domestic financial market had been visibly lagging since the 1990s. This is evidenced by rapidly escalating prices of financial assets despite substantial inflow of foreign funds through borrowing and vanishing outflows from the domestic financial market occasioned by debt servicing and money laundering.

The nexus between Fiscal policy behaviour and financial stability measures has attracted considerable attention in the recent past (Emmanuel, 2013). The connectivity draws heavily from whether the fiscal policy measures are expansionary or contractionary (Nwinee and Torbira, 2012); CFA (2006) and Jhingan (2006). Empirics suggest that findings and conclusions of past studies are divided along these two lines, for instance the studies of Fatas and Mihov (2000); Hall (2009); De Paula and De Castro Pires (2013); Nakamura and Steinsson (2014), and Osuala (2014) support expansionary fiscal policy, as a mechanism for enhancing economic performance and financial stability, whereas those of (Capet 2004); and Romer and Romer (2013) support contractionary fiscal policy as a tool for ensuring economic and financial stability. It is therefore important that the nature , extent and the direction of this connectivity be clearly understood and the trend possibly revealed. The secrets of the processes governing these trends, we postulate, can be best revealed by Macro level study of the structural behavior of fiscal policy operations that impinge upon the prices of financial assets in the domestic financial market. The basic question is: To what extent does changes in federal Government capital expenditure, federal Government recurrent expenditure, Tax revenue and Total debt explain changes in Interest rate in Nigeria? The purpose of this paper therefore, is to investigate the relationship between fiscal policy behaviour and Stability in the domestic financial market in Nigeria. Put differently, this paper set out to investigate the influence of changes in Federal Government Capital Expenditure, changes in federal Government Recurrent expenditure, Tax Revenue adjustments and changes in Total debt on Interest rate movements in Nigeria. The utility of this exercise lies in the fact that it will be of benefit to financial analyst, practitioners in the finance sector, and researchers alike. The remaining part of this paper discusses the theoretical, conceptual and empirical review of literature on the subject matter in section two, while section three houses the method of the study. Section four present the data, empirical analysis and Discussion of findings while section five discusses the Concluding remarks.

2.1 Theoretical Postulates

The relationship between fiscal policy and domestic financial market stability draws heavily from the Keynesian theories of fiscal policy and theory of Interest rate.

2.1.1 Keynesian Theory of Fiscal policy

The underlying principle of the Keynesian theory is based on the fact that when an economy is in a recession the government, as a matter of policy, should intervene by increasing its spending while reducing tax, thus increasing aggregate demand. Budget deficit (expansionary policy) is therefore postulated by the Keynesian economist as a quick route out of economic recession, since it is believed that the market mechanism does not adjust quickly to stabilize the economy, Nwinee and Torbira (2012). The Keynesian or activist economists emphasizes deliberate changes in monetary and fiscal policy in order to stimulate demand during periods of economic recession and to also exercise restraint during periods of inflationary boom. This, they argue, will bring about economic stability, CFA (2006). This denotes a situation where there is a shift in the IS curve or aggregate demand from AD1 to AD2, thus, restoring the economy to a natural level of real GDP or full employment. Therefore the significance of fiscal policy as conceptualized by Keynes denotes government activities and programmes aimed at correcting either deflation or inflation. It is an activist approach to economic management. The modern approach to fiscal policy called functional finance, first mentioned by Keynes and later developed by Lerner, encapsulates all the roles played by government to control the economy through taxes and expenditures and, ultimately to correct fluctuations in the financial market. This is achieved through the use of budgetary stance of budget deficit, budget surplus or balanced budget, Sri Abdulkareem (2011).

2.1.2 Counter cyclical and pro-cyclical Fiscal Policy

Counter cyclical policy deals with policies undertaken by government to manage fluctuations in business cycles. That is periods of economic booms or depressions. Counter cyclical policy helps governments attain economic stability by making adjustments in spending and taxes to correct observed fluctuations. During depression spending is increased and taxes reduced. On the other hand during economic boom taxes are increased, borrowing and spending are reduced to bring about stability, Sri Abdulkareem (2011). Pro-cyclical policy on the other hand tends to reinforce the business cycle rather than counter it. It increases the swings and shocks in the business cycle rather than stabilizing or reversing it like the countercyclical policy. According to Papaioannou et al (2013) pro-cyclical problems are driven mainly by the inability of government to rightly assess market risk and macroeconomic forecasting. Woo (2005) posits that there

is no consensus on how to measure the cyclicality of fiscal policy, and argued however, that a positive B0 coefficient is indicative of pro-cyclicality of fiscal policy whereas a negative value implies countercyclical behaviour.

2.1.3 Theory of Interest Rate

The Keynesian liquidity preference theory states that interest rate is the reward for parting with money for a specified time. In other words, interest rate is determined by the demand for and supply of money. The demand for money as a determinant of interest rate is hinged on transactional motive, precautionary motive and speculative motive. Though there are criticisms concerning the liquidity theory of interest rate branding it as inadequate and misleading, and inconsistent to say the least, we find that it has some advantages over the loanable fund theory, in that, the liquidity theory deals with the determinate system, it concern stock analysis and is more realistic, Jhingan (2006). When a country's interest rate increases it causes the currency value to appreciate and vice versa. So for the purpose of this study, it is expected that a rise in interest rate will trigger a corresponding appreciation in the value of Naira.

2.2 Conceptual Framework

The concept mapping for this study which provides the link between the variables implicated in the study (fiscal policy and financial market stability measures) and form the basis for the researcher's modelling in this study is ancored on the Keynes and Ricardian opinions. The Keynesian economists postulate that fluctuations in aggregate demand for financial ssets are the major source of instability or volatility in the domestic financial market. The demand for financial assets are perceived to be influenced by the structure and behaviour of the country's fiscal policy. Therefore to maintain stability in the domestic financial market, a proper synchrony and timing of fiscal policy tools(expansionary or contractionary) must be employed to maintain the demand for financial assets such that the demand for should equal the supply of such assets leading to optimal levels of output and employment, (Kunst (2005), CFA (2006), and Onoh (2007). Hence, the link between fiscal policy and domestic financial market stability find their convergence in the proper timing, synchronization and application of the fiscal policy tools, through the use of functional finance and automatic stabilizers.

According to Colander (2001), Rode (2012) and Odionye and Uma (2013) when governments pursue an expansionary fiscal policy (deficit), it increases the disposable income of households and increases interest rate. Expansionary fiscal and monetary policies cause a decrease or increase in interest rate and income in the short run but are ineffective in the long run. According to Mohanty (2012), the impact of fiscal deficit on inflation depends on whether the private sector is Ricardian or non-Ricardian. In a Ricardian world, fiscal deficits and debt have no consequences on interest rates, however, in a non-Ricardian world changes in fiscal deficits can lead to changes in interest rates. Adopting the non-Ricardian approach, we can postulate that adjustments in the activities in the domestic financial market captured by interest rate are positive functions of adjustments in fiscal policy measures and presented in the following mathematical form model:

INTR =f(GCEXP, GREXP,TAXREV, TDEBT)……..(1)

2.3 Empirical Review

Saunders (1989) investigated the effect of budget deficits on interest rates and inflation rate using the long run and causality testing method. The result revealed that budget deficits and nominal short term interest rate did not correlate. There is a long run effect and a unidirectional flow from budget deficits to long term interest rate. The study reported that there is crowding out effect in the long run since capital formation decreased when interest rate rises. The study concluded that budget deficits lead to long run changes in real resource allocation in the U.S. economy. Easterly and Schmidt- Hebbel (1993) investigated the influence of fiscal deficits on macroeconomic performance in developing countries. Using data from 10 developing countries they found strong evidence that money financing leads to higher real interest rates in the long run, and repressed the financial markets. Blanchard and Perotti (1999) examined the changing effects of shocks in government spending and taxes on economic activity in the United States using a mixed structural Vector autoregression /event study approach. They found that the relationship between government spending shocks and economic performance were positive, whereas that of tax was negative. However the two exhibited small impacts. Woodford (2000) posited that price stability was a function of both monetary policy rule and fiscal policy rule. The study examined the role of fiscal policy on inflation determination under a non-Richardian regime, by analyzing the bond-price regime of the 1940s. It was reported that a combination of Taylor rule on monetary policy and fiscal policy would be appropriate. De-Castro (2003) examined the effects of fiscal policy on interest rate, investment, output, and prices in Spain using the Vector Auto regression approach. He found that fiscal shocks on Gross domestic product, Private consumption, Private Investment, Interest rates and prices, were small but significant. Perotti (2004) examined the effect of fiscal policy on Gross domestic product, Inflation and interest rates in

5 Developed countries, using structural Vector Auto Regression approach. The result showed a small effect of fiscal policy on Gross domestic product; also tax cuts does not work faster or effectively than increase in spending, and that, spending fluctuations and tax cuts on Gross domestic product becomes weaker in the long-run.

Chaudhary and Shabbir (2005) investigated the Macroeconomic Impacts of Budget Deficit on Pakistan's Foreign Sector. The result showed that money supply correlated positively with foreign reserves, bank credit and government borrowing, meaning that deficit financing was negatively correlated with interest rate. They therefore concluded that fiscal and monetary policy are important in determining economic stability in the foreign sector of the economy. Dai and Philippon (2006) examined the effects of fiscal policy on interest rates and the factors that drive the dynamics of the yield curve. They employed an empirical macro-finance model using two structures including structural restrictions. These enabled them to determine fiscal policy shocks, and its effects on the prices of bonds of different maturities. The result of the study showed that Government deficits affect long term interest rates in the short run, such that a 1% increase in deficit to Gross domestic product leads 10-year rate to increase by 35 basis points after 3 years. Kirchner (2007) examined Fiscal Policy and Interest Rates in Australia and argued that Fiscal policy does not seem plausible in the determination of Australian interest rates in recent years, because as a small open economy, with an open capital account, the interest rates are largely determined by international shocks, which is expected to absolve any contribution from changes in federal budget balance and government and national savings. Terzi (2007) examined both theoretical and empirical evidence on the relationship between public deficits and interest rates in the U.S. and Europe. He found that there was no empirical evidence of relationship between deficits and interest rates in the U.S. and Europe. He argued that reducing deficit does not result in economic stability and growth, and that, every such effort was self-defeating unless business investment increases. Obi and Nurudeen (2008); examined the effect of fiscal deficit and government debt on interest rate in Nigeria using vector Autoregression method. They found that interest rate was positively correlated with fiscal deficit. They therefore recommended that government should increase its revenue base and avoid unnecessary spending and, where necessary such spending should be channelled into productive activities so as to stabilize the economy.

Claeys Moreno and Surinach (2008) measured the degree of integration of Government bond markets, using spatial modeling techniques to capture the effect of spillover on the financial markets. The study found that there was no significant crowding out effect on domestic interest rates. Alesina and Ardagna (2009) investigated the response of Economic Co-operations to fiscal policy stimuli using simple regression analysis in Developed countries from 1970 to 2007. Their findings revealed that Fiscal stimuli based upon tax cuts were more likely to increase growth than those based upon spending increases, and that, fiscal adjustments based upon spending cuts without tax increases were more likely to reduce deficits and debt. They also found that adjustments on the spending side rather than on the tax side were less likely to create recession and by extension increase the price of money. Baunsgaard and Symansky (2009); examined how to enhance automatic stabilizers without increasing the size of government spending. They distinguished between permanent changes in the parameters of the tax and expenditure system (e.g., changes in tax progressivity) that will enhance the traditional automatic stabilizer, and temporary changes triggered by certain economic developments (e.g., tax measures targeted at credit and liquidity constrained households, triggered during a severe downturn). They argued that permanent change in tax parameters was preferable, except with some exceptions, as they can be implemented with lower disruptions in other fiscal policy goals (e.g., economic efficiency). They recommended that countries should also avoid introducing procyclical policies as a result of fiscal rules because it would offset the effect of existing automatic stabilizers. Javid and Arif (2009); examined the dynamic effects of changes in government spending in Pakistan's economy for the period 1971–2008, using Vector Autoregression model to analyze the data. They found that consumption and output were negatively correlated with innovation in government spending, and that interest rates increased in the face of expansionary fiscal spending while the real exchange rate appreciated in response to the rise in government spending. Their findings aligned with that of Mundell-Fleming model of Dornbush (1980) and Favero (2007). Debrun and Kapoor (2010) examined the empirical link between fiscal policy and macroeconomic stability. Analyzing data from 20 organizations for economic cooperation in developed countries using ordinary least square, panel regression and two stage least square on parsimonious models, they found strong support for the view that fiscal stabilization operates mainly through automatic stabilizers and that fiscal policies are linked with cyclical conditions.

Baldacci and Kumar (2010) study the impact of fiscal deficits and public debt on long-term interest rates in 31 advanced and emerging market economies for the period 1980 to 2008. Capturing country-specific factors, the findings revealed that higher deficits and public debt led to significant increase in long-term interest rates, but the magnitude depended on initial fiscal, institutional and other structural conditions, as well as spillovers from global financial markets. They posit that large fiscal deficits and public debts are likely to put pressures on bond yields in many advanced economies, especially in the medium term. Chuku (2010) used quarterly data to determine the nature

and extent of interaction between monetary and fiscal policy in Nigeria for the period 1970-2008. Employing the vector autoregression model on quarterly data, the simulated generalized impulse-response graphs generated from the vector autoregression estimation provided evidence of a non-Ricardian fiscal policy in Nigeria. The authuor analyzed the relationship using State-space model, and Markov-switching to estimate the time-varying parameters of the relationship. He found that the relationship between monetary and fiscal policies in Nigeria were counteractive during the period (1980-1994). The results shows evidence of fiscal dominance in the interactions between monetary and fiscal policies in Nigeria, therefore inflation was as a result of fiscal problems and not lack of monetary control. Ezeabasili and Mojekwu (2011) investigated the effect of fiscal deficit on nominal interest rate in Nigeria. They employed cointegration and structural analysis techniques in analyzing the data and found that fiscal deficit was positively and significantly related with interest rate. They concluded that large deficit causes higher interest rates, and also that, money supply was negatively related with interest rate while government expenditure was positively associated with interest rate in the short run. The study recommended that government should use bonds to finance budget deficit instead of monetary financing.

Farajova (2011) investigated the relationship between budget deficit and macroeconomic fundamentals using data from Azerbaijan. He applied Autoregressive Distributed Lag, Cointegration in conjunction with Granger causality tests to test for evidence in the long and short run dynamics between the variables. The study found evidence of causality running from current account, real interest rate, Gross domestic product, inflation and exchange rate to budget deficit. The study also found evidence of short-run Granger causal effects running from current account and real interest rate to budget deficit and a rather weak causal effect from inflation to budget deficit, but did not find any short–run causality between interest rate and budget deficit. Isiaka et al (2011) examined the impact of fiscal and monetary policies on the economic activities in Nigeria. They employed multiple regression method to analyze the data and found that recurrent expenditure, capital expenditure, taxes and money supply did not significantly explain changes in the level of economic activities. Dell Erba and Sola (2011) investigated the long term effect of fiscal policy on interest rates using real time-data set of macro-economic and fiscal variables in a panel of 17 Organization of Economic Cooperation in Developed countries for the period 1989-2009, and controlled for cross sectional data using a Factor Augmented Panel. The result showed that interest rates are mostly influenced by global factors especially aggregate monetary and fiscal factors, and that the level of expected public debt had a positive correlation with interest rates. They also found that the effect of fiscal policy on interest rates in large economics were modest, while those of low initial financial integration economics were strong. Chakraborty (2012) examined whether fiscal deficit determines interest rate in India. He used data for the period 2006 to 2011, and analyzed it using asymmetric Vector auto regression method. The result showed that the rate of interest is affected by fiscal deficit. It was also discovered that fiscal deficit does not cause financial crowding out in the short and long run.

Claro and Soto (2012) examined the evolution of Chile's public debt, and its implications for the management of the country's monetary policy. They found that, the predictability of fiscal policy and better coordination between the government and the central bank ensured that the debt policy of the fiscal operators did not pose any challenge for the conduct of monetary policy. They further stated that the positive net asset position enabled the central bank to meet its price and financial stability objectives in spite of a negative equity position. Montoro et al (2012) analyzed how fiscal policy has affected monetary policy in the emerging market economies. They found that most emerging market economies have pursued countercyclical fiscal and monetary policy over the past decade, with little evidence of fiscal dominance, in contrast to earlier periods. They argued that their result suggested that stronger fiscal positions are weakly associated with lower equilibrium real interest rates, and smaller deficits with lower inflation, and that, overall improvements in fiscal policy in emerging market economies appear to have increased the effectiveness of monetary policy. Medee and Nenbee (2012) examined fiscal deficits and inflation in Nigeria for the period 1980 to 2010. They employed the Ordinary Least Square estimation method of multiple regressions in establishing which among inflation rate and interest rate impacted on fiscal deficit. They found that both inflation rates and interest rates were rightly signed with fiscal deficit and that, inflation rates impacted on fiscal deficits while interest rate did not. They posit that the inability of interest rates to impact on fiscal deficit could be due to unstable macroeconomic policy environment, corruption, and other factors.

Emmanuel (2013) investigated the relationship between the Government Deficit Spending and selected macroeconomic variables such as Gross Domestic Product (GDP), Exchange Rate, Inflation, Money Supply and Lending Interest Rate, for the period 1970 to 2011. He adopted the Ordinary Least Squares technique to analyze the relationships. The study found that Government Deficit Spending has positive significant relationship with gross domestic product and, Government Deficit Spending also has positive significant relationship with Exchange Rate, Inflation, and Money Supply. He also found that Government Deficit has negative significant relationship with Lending Interest Rate and most likely crowd-out the private sector by raising the cost of funds. He therefore recommended that further research should be done to establish other variables that are affected by government deficit

spending. Odionye and Uma (2013) examined the relationship between budget deficit and interest rate in Nigeria using Vector Error Correction model for the period of 1970:1-2010:4. The long run co-integrating equation suggested that budget deficit has 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. The evidence from Johansen co-integration result indicated that there is a long run relationship between budget deficit and interest rate.

Ramzan et al (2013) examined the Impact of Budget Deficit on Economic Growth in Pakistan for the period, 1980 to 2010. Time Series data were used, the ordinary least square Regression technique and Pearson Correlation test were employed in analyzing the data using SPSS Package. The result revealed that gross domestic product and inflation were normally distributed, while Investment, domestic credit and budget deficit were positively skewed. It showed that there was a non-linear relationship between Gross domestic product, inflation and investment, but the relationship that exist between Gross domestic product, budget deficit and domestic credit was linear. Chukwu et al (2014) studied budget deficit and macroeconomic performance in Nigeria, 1970-2012. They used four macroeconomic performance variables; Gross domestic product, Inflation, Unemployment and balance of payment as a function of budget deficit, interest rate and nominal exchange rate. Using ordinary least square and cointegration to analyze time series data, they found that budget deficit had significant impact on GDP in Nigeria. The study also revealed the relationship between budget deficit, interest rate and exchange rate was positive and weak, but no relationship with inflation. The study concluded that there was a long-run relationship between budget deficit and the selected macroeconomic variables except inflation.

3.0 Method of the Study

This study adopts the hypothetico-deductive research design in conjunction with econometric procedure. We sampled four fiscal policy measures (Government Capital Expenditure, Government Re-current Expenditure, Tax revenue and Total Debt) for the period 1981 to 2014 and regressed them on the interest rate in the domestic financial market. Descriptive statistic and Augmented Dicky Fuller unit root test where used to analyse the behaviour of the rate of change time series Nigerian data, while the co-integration mechanism was employed to test the existence of long run relationship between and among the explained and explanatory variables. Granger causality test is used to examine the direction of causality between the dependent and independent variables. The reason for conducting this test is that it enables one to know whether the independent variables can actually cause variations in the dependent variable or vice versa. To capture the extent to which variations in the explanatory variables can account for the adjustments in the explained variable, we employed the GARCH technique.

Operationally, Interest rate is conceptualized as the nominal rate of interest on federal government bonds and treasury bills. It measures shocks in the domestic financial market. Federal Government Capital Expenditure measures the spending of federal government on relatively permanent assets or its maintenance. Federal Government Recurrent Expenditure measures the spending of federal government on operating and administrative costs which are used up within a short period , usually one year. Tax revenue refer to the total revenue accruing from taxes as an aspect of fiscal policy. Total debt measures the totality of federal government borrowing (both internally and externally). It captures the revenue sourced to finance expansionary fiscal policy.

3.1 The Model

In line with the opinion of Hazel and Norton (1986); quoted in Medee and Nenbee (2012); our nominated models provide logical template to sort out complicated chains of cause and effect, and influence between the fiscal policy and financial stability variables interacting in the economy. Since the models have a logical and consistent framework, they provide the analyst and policy makers with valuable economic representation of the sector and a laboratory for testing ideas and policy proposals. This creation or representations of reality is based on the connectivity postulated by the theories discussed earlier in the study. As such, we can hypothesize that adjustments in the activities in the domestic financial market captured by interest rate are positive functions of adjustments in fiscal policy measures. This is expressed mathematically in the functional form as:

Functional form

$INTR_t = f(GCEXP_t, GREXP_t, TAXREV_t, TDEBT_t$----------(1)

Transforming equation (1) in to an econometric form linerly gives:

Econometric Model

$INTR_t=\beta_0+\beta_1 GCEXP_t+\beta_2 GREXP_{t+}\beta_3 TAXREV_{t+}\beta_4 TDEBT_t+E_t$----------(2)

Recasting the above model (2) into log linear form, we have:

$LnINTR_t = a_0+a_1 LnGCEXP_t+a_2 LnGREXP_t+a_3 LnTAXREV_t+a_4 LnTDEBT_t+E_t$----------(3)

$a_0>0$, $a_1>0$, $a_2>0$, $a_3>0$, $a_4>0$

Where:

Ln = Log linear
INTR = Interest Rate (on bonds and treasury bills)
GCEXP = Federal Government Capital Expenditure
GREXP = Federal Government Recurrent Expenditure
TAXREV = Federal Government Tax Revenue
TDEBT = Federal Government Total Debt (Internal and External borrowing)
a_0 = Constant; a_1, a_2, a_3, a_4 = Slopes; E_t = Error Term

3.2 Augmented Dickey-Fuller (ADF)

Given that most of the financial-economic time series contain unit roots caused by the stochastic trends, we investigate the stationarity of the variables, since non stationarity could lead to spurious regression results. Therefore, variance and covariance of data series change over time. In view of this, we employ Augmented Dickey-Fuller (ADF) (1981) technique to check whether the time series of the data employed in this study are free from the presence of unit roots. The ADF test is based on the following regression model:

$(1-L)x_t = a + b_0x_{t-1} + \sum_{j-1}^{k} b_j (1-L)x_{t-j} + \mu_t$----------(4)

Where: x is the series being tested;L represents the lag operator ; μ represents the stochastic error term; K represents the number of lagged differences.

3.3 Johansen Co-integration

The Johansen co-integration Test accounts for long-run relationships between the fiscal policy measures and financial stability variables. The Johansen's cointegration framework for multivariate analysis is expressed in model (5) below as:

$$\Delta Y_t = \lambda y_{t-k} + T_I \Delta y_{t-I} + T_2 \Delta y_{t-2} + - - - + T_k - I\Delta y_t - (k-1) + u_t - - - -(5)$$

Where

$$\lambda = \left(\sum_{i=1}^{k} \beta_i\right) - I_g \; and \; T_i = \left(\sum_{i=I}^{i} \beta_i\right) - I_g$$

3.4 Granger Causality

Granger causality test is used to examine the direction of causality between the dependent and independent variables. Causality means the impact of one variable on another. The rationale for conducting this test is that it enables one to know whether the independent variables can actually cause variations in the dependent variable or vice versa. Two variables may correlate without one causing changes in the other. Thus, Granger causality test helps in adequate specification of models. The test technique is based on the following two equations:

$(1-L)y_t = \lambda_0 + \sum_{j=1}^{p} \lambda_j (1-L)y_{t-1} + \sum_{i=1}^{q} \lambda_i {}^{(1-L)} X_{t-1} + W_t$----------(6)

$(1-L)X_t = b_0 + \sum_{j=1}^{n} b_j (1-L)X_{t-1} + \sum_{i=1}^{m} b_i(1-L)y_{t-1} + V_t$----------(7)

Where: W_t and V_t are serially independent random vectors with zero mean and finite covariance matrix.

Each of the equations indicates that in a system, each variable expressed in first difference is regressed on its own previous values and the previous values of its causal variable. This reveals the extent to which the current value of the

variable can be explained by its own past value and to check whether by adding the lagged values of another variable could improve the robustness of the explanatory power.

The hypotheses tested under this technique are:

H_0: x does not Granger-cause y or y does not Granger-cause x

H_1: x Granger-causes y or y Granger-causes x

These hypotheses are tested based on the standard F-tests. The null hypothesis is rejected on the condition that the observed F-statistic is larger than the critical F-statistic. In such case, one variable is influenced by the action of another variable (Keshefi, 2008)

4.0 Data, Results and Implication

4.1 Data Presentation

Given that we are to measure fiscal policy behaviour and stability in the domestic financial market, the absolute values of our variables may not capture the adjustments in these variables. So, we convert the data from their absolute form into the rate of change data. These are presented in table 4.1 and 4.2 respectively.

Table 4.1 Data on the absolute values of the dependent and independent variables in the study.

Year	INTR	INFL	EXCHR	GCEXP	GREXP	TAXREV	TDEBT
1981	7.75	20.81	0.61	6.567	4.85	13,290.50	13.5238
1982	10.25	7.7	0.67	6.4172	5.51	11,433.70	23.827
1983	10	23.21	0.72	4.8857	4.75	10,508.70	32.7991
1984	12.5	17.82	0.76	4.1001	5.83	11,253.30	40.4808
1985	9.25	7.44	0.89	5.4647	7.58	15,050.40	45.2497
1986	10.5	5.72	2.02	8.5268	7.70	12,595.80	69.8911
1987	17.5	11.29	4.02	6.3725	15.65	25,380.60	137.5782
1988	16.5	54.51	4.54	8.3401	19.41	27,596.70	180.9859
1989	26.8	50.47	7.39	15.0341	25.99	53,870.40	287.4433
1990	25.5	7.36	8.04	24.0486	36.22	98,102.40	382.7075
1991	20.01	13.01	9.91	28.3409	38.24	100,991.60	444.6525
1992	29.8	44.59	17.3	39.7633	53.03	190,453.20	722.2258
1993	18.32	57.17	22.05	54.5018	136.73	192,769.40	906.9808
1994	21	57.03	21.89	70.9183	89.97	201,910.80	1056.396
1995	20.18	72.84	21.89	121.1383	127.63	459,987.30	1194.6
1996	19.74	29.27	21.89	212.9263	124.49	523,597.00	1037.296
1997	13.54	8.53	21.89	269.6517	158.56	582,811.10	1097.683
1998	18.29	10	21.89	309.0156	178.10	463,608.80	1193.847
1999	21.32	6.62	92.69	498.0276	449.66	949,187.90	3372.181
2000	17.98	6.93	102.11	239.4509	461.60	1,906,159.70	3995.634
2001	18.29	18.87	111.94	438.6965	579.30	2,231,600.00	4193.271
2002	24.85	12.88	120.97	321.3781	696.80	1,731,837.50	5098.886
2003	20.71	14.03	129.36	241.6883	984.30	2,575,095.90	5808.009
2004	19.18	15	133.5	351.25	1,110.64	3,920,500.00	6260.595
2005	17.95	17.86	132.15	519.47	1,321.23	5,547,500.00	4220.979
2006	17.26	8.24	128.65	552.3858	1,390.10	5,965,101.90	2204.721
2007	16.94	5.38	125.83	759.2812	1,589.27	5,715,600.00	2608.519
2008	15.14	11.58	118.57	960.8901	2,117.36	7,866,590.10	2843.564
2009	18.99	11.54	148.88	1152.797	2,127.97	4,844,592.34	3818.467
2010	17.59	13.72	150.3	883.8745	3,109.44	7,303,671.55	5241.657
2011	16.02	10.84	153.86	918.5489	3,314.44	11,116,800.74	6519.65
2012	16.79	12.22	157.5	874.84	3,325.16	10,654,700.00	7564.431
2013	16.72	8.48	157.31	1108.386	3,689.08	9,759,800.00	8492.559
2014	16.55	8.06	158.55	2681.076	2,530.34	10,721,569.06	9535.54

Source: CBN Statistical Bulletin

Table 4.2: Data on rate of change in dependent and independent variables implicated in the study.

Year	INFL	INTR	EXCHR	GCEXP	GREXP	TAXREV	TDEBT
1981	0	0	0	0	0	0	0
1982	-63	32.26	10.3	-2.28	13.6	-13.97	76.19
1983	201.43	-2.44	7.62	-23.87	-13.72	-8.09	37.66
1984	-23.22	25	5.63	-16.08	22.66	7.09	23.42
1985	-58.25	-26	16.84	33.28	30.01	33.74	11.78
1986	-23.12	13.51	126.01	56.03	1.59	-16.31	54.46
1987	97.38	66.67	99.01	-25.27	103.28	101.5	96.85
1988	382.82	-5.71	12.94	30.88	24.05	8.73	31.55
1989	-7.41	62.42	62.78	80.26	33.93	95.21	58.82
1990	-85.42	-4.85	8.8	59.96	39.34	82.11	33.14
1991	76.77	-21.53	23.26	17.85	5.59	2.95	16.19
1992	242.74	48.93	74.57	40.3	38.67	88.58	62.42
1993	28.21	-38.52	27.46	37.07	157.81	1.22	25.58
1994	-0.24	14.63	-0.73	30.12	-34.19	4.74	16.47
1995	27.72	-3.9	0	70.81	41.85	127.82	13.08
1996	-59.82	-2.18	0	75.77	-2.46	13.83	-13.17
1997	-70.86	-31.41	0	26.64	27.37	11.31	5.82
1998	17.23	35.08	0	14.6	12.32	-20.45	8.76
1999	-33.8	16.57	323.44	61.17	152.48	104.74	182.46
2000	4.68	-15.67	10.16	-51.92	2.65	100.82	18.49
2001	172.29	1.72	9.63	83.21	25.5	17.07	4.95
2002	-31.74	35.87	8.07	-26.74	20.28	-22.39	21.6
2003	8.93	-16.66	6.94	-24.8	41.26	48.69	13.91
2004	6.91	-7.39	3.2	45.33	12.84	52.25	7.79
2005	19.07	-6.41	-1.01	47.89	18.96	41.5	-32.58
2006	-53.86	-3.84	-2.65	6.34	5.21	7.53	-47.77
2007	-34.71	-1.85	-2.19	37.45	14.33	-4.18	18.32
2008	115.24	-10.63	-5.77	26.55	33.23	37.63	9.01
2009	-0.35	25.43	25.56	19.97	0.5	-38.42	34.28
2010	18.89	-7.37	0.95	-23.33	46.12	50.76	37.27
2011	-20.99	-8.93	2.37	3.92	6.59	52.21	24.38
2012	12.73	4.81	2.37	-4.76	0.32	-4.16	16.03
2013	-30.61	-0.42	-0.12	26.7	10.94	-8.4	12.27
2014	-4.95	-1.02	0.79	141.89	-31.41	9.85	12.28

Source: CBN Statistical Bulletin, SEC bulletins and NBS bulletin various issues

4.2 Results and Implications

Table 4.3: Descriptive Statistics of Implicated Variables.

	INTR	GCEXP	GREXP	TAXREV	TDEBT
Mean	17.63853	402.8839	877.5566	2817809.	2666.083
Median	17.77000	240.5696	168.3307	553204.1	1194.223
Maximum	29.80000	2681.076	3689.080	11116801	9535.540
Minimum	7.750000	4.100100	4.750800	10508.70	13.52380
Std. Dev.	4.895781	542.5710	1158.836	3695890.	2766.997
Skewness	0.155327	2.376929	1.209604	1.118682	0.883922
Kurtosis	3.286300	10.12491	3.108164	2.839404	2.683056
Jarque-Bera	0.252837	103.9317	8.307714	7.128081	4.569781
Probability	0.881246	0.000000	0.015704	0.028324	0.101785
Sum	599.7100	13698.05	29836.93	95805518	90646.83
Sum Sq. Dev.	790.9660	9714650.	44315700	4.51E+14	2.53E+08
Observations	34	34	34	34	34

Source: *Author's computation*

From table 4.3 above, the average value of the variables in 34 years are: 17.63853, 402.8839, 877.5566, 2817809, 2666.083 being values for Interest rate, Government capital Expenditure, Government Recurrent Expenditure, Tax Revenue, and Total Debt respectively. The average value for interest rate was achieved in the year 2010, because of the government policy which introduced liberalization in the domestic financial market. The central value for each data series in the model are captured by the median, such that, 17.77000, 240.5696, 168.3307, 553204.1, 1194.223 representing the time series variables Interest rate, Government Capital Expenditure, Government Recurrent Expenditure, Tax Revenue and Total Debt respectively, show a valid measure of the central tendency as the median values capture half of the average values of the model. Tax Revenue has the highest standard deviation, followed by Total Debt. This shows that Tax Revenue and Total Debt are the most volatile of all fiscal policy components, whereas interest rate exhibit moderate volatility in the domestic financial market. All the data in the model are skewed towards the right and close to 0 denoting normality of the model, except for Government Capital expenditure which has a skewness of 2.4. The result indicate that Interest rate and Government Recurrent Expenditure are normally distributed, Inflation is leptokurtic, Government Capital Expenditure, Tax revenue and Total Debt are all platokurtic.

Table 4.4: Unit Root Test Result

Variable	ADF t-statistics	Critical Value 5%			Order of Integration	Prob.
		1%	5%	10%		
D(LOG(INTR))	-4.930930	-3.711457	-2.981038	-2.629906	I(1)	0.0005
D(LOG(GCEXP))	-5.345294	-3.699871	-2.976263	-2.627420	I(1)	0.0002
D(LOG(GREXP))	-6.868418	-3.699871	-2.976263	-2.627420	I(1)	0.0000
D(LOG(TAXREV))	-4.534546	-3.711457	-2.981038	-2.629906	I(1)	0.0014
D(LOG(TDEBT))	-4.031398	-3.699871	-2.976263	-2.627420	I(1)	0.0045

***Source**: Author's computation*

The result of the Unit root tests shows that the absolute values of the augmented Dickey-Fuller tests for all the variables (explanatory and explained) are higher than those of the McKinnon critical values at 5%. This result shows that the variables are stationary at first difference, in the order of 1(1), that is, there is no evidence of trend and unit root properties. We therefore proceed to conduct the long run cointegration test.

Table 4.5: Co-integration analysis

Date: 01/29/16 Time: 21:25				
Sample (adjusted): 1981 2014				
Included observations: 27 after adjustments				
Trend assumption: Linear deterministic trend				
Series: LOG(INTR) LOG(GCEXP) LOG(GREXP) LOG(TAXREV) LOG(TDEBT)				
Lags interval (in first differences): 1 to 1				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.878581	181.9263	125.6154	0.0000
At most 1 *	0.758799	124.9966	95.75366	0.0001
At most 2 *	0.726939	86.59924	69.81889	0.0013
At most 3 *	0.623461	51.55160	47.85613	0.0216
At most 4	0.375587	25.17979	29.79707	0.1551
At most 5	0.227181	12.46433	15.49471	0.1360
At most 6 *	0.184481	5.506136	3.841466	0.0189
Trace test indicates 4 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Following the ADF test, since all the variables are stationary at 1st difference 1(1), the Johansen co-integration test in undertaken and the result presented in table 4.5, the co-integration procedure is performed with linear deterministic trend in the vector Autoregression, and Lag interval of 1 at first difference with the decision rule that if the trace

statistic is larger than the critical value at 5% level of significance it means that there is co-integration. From table 4.5, the values of the trace statistic up to column 4 are found to be greater than the corresponding 5% critical values. This implies that there is the existence of at least 4 co-intergrating vector in the system. The presence of the co-integrating relationship means that the variables share mutual stochastic trend and are linked in a common long-run equilibrium. We therefore posit that the behaviour of the fiscal policy indicators and the movements or adjustments in the stability variables in our models have long-run equilibrium relationship. This implies that fiscal policy behaviour modeled in this study, if properly managed and efficiently manipulated could help stabilize the activities or happenings in the domestic financial markets captured by interest rate in the long-run.

Table 4.6: Granger Causality Test Result

Pairwise Granger Causality Tests			
Date: 01/29/16 Time: 21:31			
Sample: 1981 2014			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
LOG(GCEXP) does not Granger Cause LOG(INTR)	34	3.73790	0.0400
LOG(INTR) does not Granger Cause LOG(GCEXP)		0.76082	0.4792
LOG(GREXP) does not Granger Cause LOG(INTR)	34	3.44519	0.0499
LOG(INTR) does not Granger Cause LOG(GREXP)		5.60226	0.0108
LOG(TAXREV) does not Granger Cause LOG(INTR)	34	4.98820	0.0164
LOG(INTR) does not Granger Cause LOG(TAXREV)		1.38469	0.2714
LOG(TDEBT) does not Granger Cause LOG(INTR)	34	2.48390	0.1065
LOG(INTR) does not Granger Cause LOG(TDEBT)		1.02828	0.3742

Source: Author's computation

We reason that, if there exist stationary of the variables in the models and the subsequent co-integration found among and between the dependent and independent variables then the application of conventional causality technique and the GARCH mechanism are appropriate for our analysis. In Granger causality test, null hypothesis is that there is no causality between two variables. The null hypothesis is rejected if the probability of the F-statistic given in the granger –causality test result is less than 0.05%. Based on this, causality runs from Government capital expenditure to interest rate. This suggest that increase in government capital expenditure could provide conducive investment climate through the provision of essential, social and economic amenities that will stimulate domestic investment. This will in turn raise the demand for investable funds thereby raising the price of credit in the domestic economy.

Bi-directional causality runs between Government Recurrent Expenditure and interest rate in the sense that an increase in government Recurrent spending Granger-cause increase in interest rate, while a rise in interest rate also Granger cause increase in government recurrent spending. This suggest that an increase in government recurrent spending could raise (money supply) the amount of money in circulation, boost economic activities and open the economy for more investments. These may attract or motivate investors to borrow more for investment purposes, leading to an increase in the demand for loanable fund and consequently a rise in the price of money or credit (interest rate). The investment boom occasioned by the boost in economic activities could increase government revenue through tax and in turn increase government recurrent spending to meet the nominated objectives of the state. Uni-directional causality runs from Tax Revenue to Interest Rate. This suggest that an increase in Government Taxes could reduce disposable income to households thereby adversely affecting savings and the intermediation process of the domestic financial markets. The reduction in savings could lead to a fall in the availably of loanable funds. This could raise the price of money or credit (Interest Rate) in the economy.

Table 4.7: GARCH Result on Interest Rate

Dependent Variable: LOG(INTR)				
Method: ML - ARCH (Marquardt) - Normal distribution				
Date: 01/29/16 Time: 22:23				
Sample: 1981 2014				
Included observations: 29				
Convergence achieved after 25 iterations				
Presample variance: backcast (parameter = 0.7)				
GARCH = C(5) + C(6)*RESID(-1)^2 + C(7)*GARCH(-1)				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
LOG(GCEXP)	-0.157033	0.088492	-1.774544	0.0760
LOG(GREXP)	-0.384100	0.069862	-5.497990	0.0000
LOG(TAXREV)	0.282040	0.046020	6.128592	0.0000
LOG(TDEBT)	0.280800	0.080067	3.507074	0.0005
	Variance Equation			
C	0.003157	0.008586	0.367654	0.7131
RESID(-1)^2	-0.269705	0.302637	-0.891183	0.3728
GARCH(-1)	1.142946	0.475385	2.404253	0.0162
R-squared	0.568130	Mean dependent var		2.922451
Adjusted R-squared	0.480306	S.D. dependent var		0.204192
S.E. of regression	0.184869	Akaike info criterion		-0.437639
Sum squared resid	0.854415	Schwarz criterion		-0.107602
Log likelihood	13.34577	Hannan-Quinn criter.		-0.334276
Durbin-Watson stat	1.647683			

***Source**: Author's computation*

Given that our study is aimed at investigating the responses of financial stability measures in the domestic market to fiscal policy behaviour, we deem it appropriate to employ GARCH dynamic equation estimates in order to capture the behaviour- movement or changes in the independent variables and how that could lead to changes in the stability variables-interest rate. Using the maximum likelihood estimate, the conditional mean equation with relation to interest rate changes, the resut shows that changes in Government capital expenditure (GCEXP) exhibits negative and insignificant (P-value of 0.07) relationship with interest rate at 5% level of significance to the extent that a 1% change in government capital expenditure could lead to about 16% reduction in interest rate. This suggest that an increase in government expenditure on capital project could increase the level of money supply in the economy, raising the amount of money in circulation, thereby reducing the interest rate or price of credit in the domestic financial market.

Changes in government recurrent expenditure also shows a negative but statistically significant relationship with interest rate to the extent that a 1% increase in government recurrent expenditure could lead to about 38% reduction in the interest rate or price of credit in the domestic financial market. This also support that government recurrent spending will increase the volume of money in circulation thereby reducing the price of money (interest rate), as such, government recurrent expenditure is a strong tool for manipulating the price of money in the economy. Changes in Tax Revenue as fiscal policy indicator exhibit positive and significant relationship with interest rate, to the extent that a 1% positive change in Tax Revenue could lead to about 28% increase in interest rate. This could be so because an increase in tax revenue to the government could reduce the amount of disposable income available to the citizens, reduce personal savings and reduce the amount of money in circulation, raise the scarcity of loanable funds, thereby increasing the price of money or cost of credit (interest rate) in the economy.

Changes in Government Total Debt report positive and strong relationship with interest rate such that a percentage positive change in government total debt could result in about 28% increase in the price of money in the economy. This suggest that should a large portion of government total debt be sourced from the domestic financial market (domestic debt), this will increase the pressure or competition between private investors and government for the available loanable funds in the domestic financial market and will crowd-out the private investors while the government collects a large portion of the fund as loans. The resultant effect will be an increase in the price of money since the demand for money will be higher than the supply of money in the economy leading to a rise in interest rate.

5.0 Concluding Remarks

The causality results in this study reveal that there is unidirectional causality flowing from Government Capital Expenditure to Interest Rate and from Tax Revenue to Interest rate. It also shows evidence of bi-directional causality between Government Re-current Expenditure and interest rate. These imply that Government Capital and Recurrent Expenditure as well as Tax revenue occupy critical place in finanacial stability considerations in the domestic financial market in Nigeria. GARCH findings shows that Government Capital Expenditure and Government Re-current Expenditure stabilizes the activities in the domestic financial market through reduction in Interest rate, whereas Tax Revenue and Total Debt causes swings in the activities in the domestic financial market by increasing Interest rate. In the long run, the findings indicate that Government Capital Expenditure, Government Re-current Expenditure, Tax revenue and Total Debt show evidence of capacity to stabilize the activities in the domestic financial market when appropriately articulated and efficiently manipulated. From the foregoing, this study concludes that adjustments in fiscal policy behaviour impacts significantly on the stability of the domestic financial market in Nigeria both in the short and the long-run.

5.1 Recommendations

To ensure that government capital expenditure help to reduce exchange rate, we recommend strict fiscal and budgetary discipline that will increase the productive capacity of the economy, stimulate investment and domestic production, earn or conserve foreign exchange thereby reducing the exchange rate. Given that the relationship between tax revenue and inflation rate is not in line with theoretical expectation. We hereby recommend that the managers of the Nigerian economy should formulate and implement appropriate tax policies that will reduce disposable income and in turn reduce inflation rate in the economy.

References

Abata, M.A., Kehinde, J.S. and Bolarinwa, S. A. (2012). Fiscal/monetary policy and economic growth in Nigeria: A theoretical exploration. *International Journal of Academic Research in Economics and Management Sciences*, Vol. 1, No.5, September.

Abba, U.E. (2007). Public finance and government budgeting in Nigeria.

Adnan,S., Bukhari, H.A.S. & Khan, S. U. (2008). Does volatility in government borrowing lead to higher inflation? Evidence from Pakistan. *Journal of Applied Economic Sciences*, Vol. 3, No. 3, pg. 187.

Afonso, A. & Jalles, J.T. (2012). Fiscal volatility, financial crises and growth. W*orking Paper* No. WP 06/2012/DE/UECE.

Akitoby, B.,Clements, Gupta, S. & Inchauste, G. (2004). The cyclical and long term behavior of government expenditure in developing countries. *IMF Working paper* No. WP/04/202.

Alesina, A. F. & Ardagna, S. (2009). Large changes in fiscal policy: Taxes versus spending. *NBER Working Paper* No. 15438 October, Revised January 2010.

Ali, F. (2015). An analysis of the relationship between budget deficit, interest rate and inflation in Pakistan. *http/:www.Young Economist Initiation, accessed on 25/8/15*.

Ames, B., Brown, W., Devarajan, S. & Izquierdo, A. (2002). A Source book for poverty reduction strategies: Volume 2, *Macroeconomic and Sectoral Approaches. The International Bank for Reconstruction and Development*, The World Bank ,1818 H Street, NW Washington, DC 20433.

Andres, J., Ballabriga, F. & Valles, J. (2002). Non-Richardian fiscal policy in an open monetary union. *Economic Paper of European Commission*, ECFIN/229/02-EN.

Anyanwu, A. (2000). *Research Methodology in Business and Social Science*. Owerri, Nigeria: Canun Publishers Nigeria Limited.

Apere, T.O. & Karimo, T.M. (2014). Monetary policy effectiveness, output growth and inflation in Nigeria. *International Journal of Economics, Finance and Management.* Vol. 3, No. 6, October.

Araújo,C. H., Azevedo, C. & Costa, S.(2012). Fiscal consolidation and macroeconomic challenges in Brazil. *BIS Papers No. 67, Bank for International Settlements*.

Arce, O. (2007). Price determinancy under non-Ricardian fiscal strategies. *A Working Paper of Spanish Central Bank*, No. 0741, 2007.

Awe, A. A & Funlayo, A. K. (2014). The short and long-run implications of budget deficit on economic growth in Nigeria (1980-2011). *Canadian Social Science*, Vol. 10, No. 5, pp. 201-205, DOI:10.3968/4517.

Awe, A.A. & Shina ,O.S. (2012). The nexus between budget deficit and inflation in the Nigerian Economy (1980 – 2009). *Research Journal of Finance and Accounting*, Vol. 3, No. 10.

Baldacci, E. & Kumar, S.M. (2010), Fiscal deficits, public debt, and sovereign bond yields. *IMF Working Paper*, WP/10/184, August.

Baridam, D.M. (2001). *Research Methods in Administrative Sciences. 3rd edition*, Sherbrooke Associates, Port Harcourt.

Basic, T. (2007). On fiscal policy effects and mechanisms in serbia. *Economic Analysis and Research Department, National Bank of Serbia*, December.

Baunsgaard, T. (2003). Fiscal policy in Nigeria: Any role for rules? *IMF working paper*, WP/03/155.

Baunsgaard, T.& Symansky, S. A. (2009). Automatic fiscal stabilizers.

Baxter, M. & Alan C. S. (1989). Business cycles and the exchange-rate regime: Some international evidence. *Journal of Monetary Economics*, Vol. 23, pp. 377-400.

Blanchard, O. & Perotti, R. (1999), An empirical characterization of the dynamic effects of changes in government spending and taxes on output. *Working Paper 7269, National Bureau of Economic Research*, 1050 Massachusetts Avenue Cambridge, MA 02138 July.

Blinder, A. S. & Solow, R. M. (1974). *Analytical Foundations of Fiscal Policy*. in: Alan S. Blinder et al., *The Economics of Public Finance* (Brookings Institution, Washington, DC) 3.

Capet, S. (2004). The efficiency of fiscal policies: A survey of literature. CEPII, *Working Paper* No. 11.

Carlstrom, C.T. & Fuerst, T.S. (2000). The Fiscal Theory of the Price Level. *Economic Review*, Vol. 36, No. 1, pp. 22-32.

CBN, (2014). Statistical bulletins, (various issues).

CFA, (2006). Economics and financial statement analysis. *Study manual of the Chartered Financial Analyst Institute, Level 1* (2), USA, 2006.

Chakraborty, L. (2012). Determination of interest rate in India: Empirical evidence on fiscal deficit-interest links and financial crowding out, national institute of public finance and policy. *Working Paper* No. 110, December, New Delhi.

Chaudhary, M.S. & Shabbir, G. (2005). Macroeconomic impacts of budget deficit on Pakistan's foreign sector. *Pakistan Economic and Social Review*, Vol. XLIII, No. 2, pp. 185-198,Winter.

Chude, N.P., & Chude, D.I. (2013). Impact of government expenditure on economic growth in Nigeria. *International Journal of Business and Management Review*, Vol. 1, No. 4, pp. 64-71, December.

Chuku, A.C (2010). Monetary and fiscal policy interactions in Nigeria: An application of a state-space model with Markov-switching. *Journal of Applied Statistics*, Vol. 1, No. 1, pp. 39-51.

Chukwu, S.N., Cookey,A.E., Ajie, H.A., & Uzomba, P.C. (2014). An empirical postmortem into budget deficit and macroeconomic performance in Nigeria, 1970-2012. *Nigerian Journal of Financial Research*, Vol. 9, No.1, pp. 12-29, June.

Claeys, P., Moreno R. & Surinach J. (2008). Fiscal policy and interest rates: the role of financial and economic integration. *Research Institute of Applied Economics*.

Claro, S. & Soto, C. (2012). Macro policies and public debt in Chile. *BIS Papers No. 67, Bank for International Settlements*.

Colander, D.C., (2001). *Economics, Fourth Edition,* McGraw-Hill Irwin, 1221 Avenue of the Americas, New York, NY, 10020.

Cyrus, M. & Elias, K. (2014). Monetary and fiscal policy shocks and economic growth in Kenya: VAR econometric approach. *Journal of World Economic Research*, Vol. 3, No. 6, pp. 95-108.

Dai, Q. & Philippon T. (2006). Fiscal Policy and the Term Structure of Interest Rates. *Seminar paper at Stockholm School of Economics*.

De Paula, L.F., & De Castro Pires, M.C. (2013). The effects of fiscal policy after the global recession: Assessing the evidences. *Brazilian Journal of Political Economy*, 33, Vol. 2, No. 131, pp. 315-321, April-June.

Debrun, X. & Kapoor, R. (2010). Fiscal policy and macroeconomic stability: New evidence and policy implications. *Bank of England Occasional Paper, (*March 25).

Debrun, X. & Tapsola, J.S. (2015). Can fiscal policy stabilize output. fiscal monitor- now is the time: fiscal policies for sustainable growth, pp. 22-48, April, *International Monetary Fund*, Washington, accessed from: *http/www.Researchgate.com*, on 5/9/15.

De-Castro, F. (2003). The macro economic effects of fiscal policy in Spain. *A working paper of the Bank of Spain*.

Dell Erba, S. & Sola, S. (2011). Expected fiscal policy and interest rates in open economy. *Graduate Institute of International Studies, working paper, 07.*

Easterly, W. & Schmidt- Hebbel, k. (1993). Fiscal deficits and macroeconomic performance in developing countries. *The Worldbank Observer*, Vol. 8, No. 2, pp. 211-237, July.

Ebimobowei, *A. (2010).* The relationship between fiscal policy and economic growth in Nigeria (1991-2005). *International Journal of Economic Development Research and Investment,* Vol. *1*, Nos.1-2.

Efobi, U. & Osabuohien, S. E. (2012). Government expenditure in Nigeria: An estimation of tri-theoretical mantras. *Journal of Economic and Social Research*, Vol. 14, No. 2, pp. 27-52.

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

Emmanuel, U.C. (2013). An analysis of the relationship between fiscal deficits and selected macroeconomic variables in Nigeria, 1970 – 2011. *Journal of Business and Management (IOSR-JBM),* Vol. *12, No.* 6, pp. 19-27, Sep. - Oct.

Ezeabasili, V. N & Mojekwu, J.N. (2011). Analysis of fiscal deficits and interest rates in Nigeria. *Journal of Economics and International Finance,* Vol. *3, No.* 4, pp. 236-245, April.

Farajova, K. (2011). Budget deficits and macroeconomic fundamentals. *International Journal of Economic Sciences and Applied Research,* Vol. 4, No. 2, pp. 143, 2011.

Fatas, A., & Mihov, I. (2000). Fiscal policy and business cycles: An empirical investigation. *Journal of International Economics.*

Fischer, S. (1989). The Economics of the Government Budget Constraint. *Working paper, WPS No. 224*, World Bank, May.

Fofack, H. (2001). Fiscal adjustment and growth in sub-saharan Africa: Overview and lessons from the current downturn. *Policy Research Working Paper; no.WPS 5306.* World Bank, Washington DC.

George,G. E, Mindila, R., Nyakwara, S. & Ouma, B.O. (2013). An evaluation of economic strategies in budget deficit reduction in Kenya. *Journal of Economics and Sustainable Development,* Vol. 4, No. 5.

Gujarati, D.N. (2013). *Basic Econometrics.* African Edition, Mcgraw-hill.

Hakkio, C.S., (1996). The effects of budget deficit reduction on the exchange rate. *Economic Review, Third Quarter*.

Hall, R.E. (2009). By how much does GDP rise if government buys more output? *Brookings Papers on Economic Activity*, Fall.

Hasanov, F. (2001). Relationship between inflation and economic growth in Azerbaijani economy: Is there any threshold effect? *Asian Journal of Business and Management Sciences,* Vol.1, No. 1, pp. 01-11.

Isiaka, S.B, Abdulkareem, A. & Mustapha, I.S. (2011). Impact of fiscal and monetary policies on the level of economic activities in Nigeria. LJMS, Vol. 1, No. 2, pg. 0002.

Javid, A.Y. & Arif, U.(2009). Dynamic effects of changes in government spending in Pakistan's economy. *The Pakistan Development Review,* Vol. 48, No. 4 (II), pp. 973–988, Winter.

Jha, S., Mallick, S., Park D., and Quising, P. (2010). Effectiveness of countercyclical fiscal policy: Times series evidence from developing Asia. Asian Development Bank, *Economics Working Paper*, No. 211, August.

Jhingan, M. L.(2006). *Monetary Economics. 6th Edition*, Vindra Publications Ltd, Delhi.

Kendrick, M.S. (1939). Ability to pay theory of taxation. *The American Economic Review*, Vol. *29*, No. 1, pp. 92-101, March.

Kirchner, S. (2007). Fiscal policy and interest rates in Australia. *Policy magazine*, Vol. *23*, No. 3, pp. 11-15, Spring.

Kunst, R. M. (2006). Introduction to macroeconomics. *Lecture notes*.

Leeper, E. M. & Leith, C. (2015). *Inflation Through the Lens of the Fiscal Theory*. Handbook of Macroeconomics, 2: Elsevier Press, April 21.

Levi, M.D. (2005). *International Finance. 4th Edition*, Routledge, New York.

M'Amanja, D. & Morrissey, O. (2005). Fiscal Policy and economic growth in Kenya. *Credit Research Papers, Centre for Research in Economic Development and International Trade, School of Economics, University of Nottingham*, University Park, Nottingham, NG7 2RD, June, United Kingdom.

Manasse, P. (2006). Pro-cyclical policy: Shocks, rules and institutions- A view for MARS. *IMF working Paper* No. WP/06/27.

Mara E. R, & Dezsi, E. (2011). Fiscal policy impact on inflation volatility in Romania in the economic crisis context. Finance challenges of the future, *13*.

Medee, P. N. & Nenbee, S. G. (2012). The Impact of fiscal deficits on inflation in Nigeria between 1980 and 2012. *International Journal of Economic Development Research and Investment*, Vol. 3, No. 1, April.

Mohamed, K., Mnaranara,E. T., Abdul, T.M., Allieu, K.B. & Chernor, B.M. (2015). An empirical study of macroeconomic policy and economic growth in Sierra Leone. *International Journal of Research (IJR)*, Vol. *2, No. 05*, May.

Mohanty, M. S. (2012). Fiscal policy, public debt and monetary policy in EMEs: An overview. *BIS Papers No. 67, Bank for International Settlements*.

Montoro, C., Takáts, E. & Yetman, J. (2012). Is monetary policy constrained by fiscal policy? *BIS Papers No. 67, Bank for International Settlements*.

Nakamura, E. & Steinsson, J. (2014). Fiscal stimulus in Monetary Union: Evidence from US regions. *American Economic Review 2004*, Vol. 104, No. 3, pp. 753-792.

Neaime, S. (2014). Twin deficits and the sustainability of public debt and exchange rate policies in Lebanon. *Elsevier, Research in International Business and Finance*.

Nurudeen, A. & Usman, A.(2010). Government expenditure and economic growth in Nigeria, 1970-2008: A disaggregated analysis. *Business and Economic Journal*, (BEJ-4), June 18.

Nwinee, B.F. & Torbira, L.L. (2012). *Public Financial Management in Nigeria.* University of Port Harcourt Press, Choba, Nigeria.

Obi, B. & Nurudeen, A. (2008). Do fiscal deficits raise interest rates in Nigeria? A vector autoregression approach. *Journal of Applied Quantitative Methods*, Vol. *4, No.* 3.

Odionye, J.C. & Uma, K. E. (2013). The relationship between budget deficit and interest rate: Evidence from Nigeria. *European Journal of Business and Social Sciences*, Vol. 2, No. 1, pp. 158-167, April.

Okoro, A.S. (2013). Government spending and economic growth in Nigeria, (1980-2011). *Global Journal of Management and Business Research, Economic and Commerce*, Vol. 13, No. 5.

Oladipo, S. O. & Akinbobola, T. O. (2011). Budget deficit and inflation in Nigeria: A causal relationship. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*, Vol. 2, No. 1, pp. 1-8.

Oladipo, S.O, Oseni, I.O, & Babatunde, O.A. (2012). Empirical analysis of twin deficits in Nigeria. *International Journal of Management & Business Studies*, Vol. 2, No. 3 (July-Sept.).

Olagboyega, M.B. (2015). Foreign aids and fiscal behaviour in Nigeria: An impact assessment of deregulations. *IOSR Journal of Economics and Finance (IOSR-JEF)*, Vol. 6, No. 1, Ver. II, pp. 104-113, Jan.-Feb.

Olulu, R.M., Erhieyovwe, & Andrew, U. (2014). Government expenditure and economic growth: The Nigerian experience. *Mediterranean Journal of Social Sciences*, Vol. *5*, No. 10, pp. 89-94, June, MCSER Publishing, Rome-Italy.

Olulu-Briggs, O.V. & Onoh, U.A. (2014). The interplay of government expenditure and the private sector investment on the Nigerian economy (1981-2013). *European Journal of Business and Management*, Vol. 6, No. 35.

Onoh, J.K. (2007). *Dimensions of Nigeria's Monetary and Fiscal policies - Domestic and External.* Astra Meridian Publishers, Aba, Nigeria.

Osuala, A.E., & Jones, E. (2014). Empirical analysis of the impact of fiscal policy on economic growth of Nigeria. *International Journal of Economics and Finance*, Vol. 6, No. 6, pp. 203-211.

Palley, T. I. (2013). *Money, Fiscal Policy, and Iterest Rates: A critique of Modern Monetary Theory*. *http*/www.thomaspalley.com/articles, site accessed on 24/08/15.

Papaioannou, M.G., Park, J., Pihlman, & Van Der Hoorn (2013). Pro-cyclical behaviour of institutional investors during recent financial crisis: Causes, impacts and challenges. *IMF working paper*, WP/13/193, September.

Penati, A. (1983). Expansionary fiscal policy and the exchange rate: A review. *Staff Papers (International Monetary Fund)*, Vol. *30, No.* 3, pp. 542-569, Sept.

Perotti, R. (2004). Estimating the effects of fiscal policy in OECD countries. *European Central Bank, Working Paper* 168, (August).

Rahman, N.H.A. (2012). The relationship between budget deficit and economic growth from Malaysia's perspective: An ARDL approach. *International Conference on Economics, Business Innovation IPEDR*, August), *38*: IACSIT Press, Singapore.

Ramey, A. (2007). Identifying government spending shocks: It's all in the timing. *National Bureau of Economic Research*, University of San Diego, November.

Ramzan, M., Saleem, S. & Butt I.M. (2013). Budget deficit and economic growth: a case study of Pakistan. *interdisciplinary Journal of Contemporary Research in Business, Institute of Interdisciplinary Business Research*, August), *5, No.* 1, pg. 911, May.

Rode, S. (2012). *Advanced Macroeconomics*. http:www. Bookboon. Site accessed on 25/8/15.

Romer, C., & Romer, D. (2013). Short run & long run effects of fiscal austerity. Lecture Notes, Economics 134, University of California.

Saleh, A. S., (2003). The Budget deficit and economic performance: A survey. *University of Wollongong, Economic Working Paper Series.*

Samimi, A.J. & Jamshidbaygi, S. (2011). Budget deficit and inflation: A sensitivity analysis to inflation and money supply in Iran. *Middle-East Journal of Scientific Research,* Vol. 8, No. 1, pp. *257-260, IDOSI Publications.*

Saunders, P.J, (1989). Federal budget deficits, interest rates, and inflation: Their implications for growth. *Eastern Economic Journal*, Vol. 15, No. 3, July - September.

Saysombath, P. & Kyophilavong, P. (2014). An examination of the causal relationship between budget deficit and inflation: A case study of Lao PDR. *Journal of Social and Development Sciences*, Vol. *5, No.* 2, pp. 43-49, June.

Schrartzenstaller, M. (2008). Fiscal policy tools of compensating for inflation. *Australian Economic Quarterly*, *4*.

Sri Abdulkareem, O.C.(2011). *Public Finance*. Study materials for BA economics, University of Calicut, India.

Tagkalakis, A. (2013). Discretionary fiscal policy and economic activity in Greece. *Bank of Greece working paper* No.169.

Tcherneva, P. R. (2011).Fiscal policy effectiveness: essons from the great recession. *Working Paper No. 649, Levy Economics Institute of Bard College,* January.

Tcherneva, P. R. (2012). Inflationary and distributional effects of alternative fiscal policies: An augmented Minskyan – Kaleckian Model. Working paper No. 706, Levy Economics Institute of Bard college.

Terzi, A. (2007). Fiscal deficits in the U.S. and Europe: Revisiting the link with interest rates. *Schartz Centre for Economic Policy Analysis, Working Paper*, No. 4, New York.

Torbira, L.L., (2013). Financial intermediation behaviour of insurance companies and growth in the output level of gross domestic product: Evidence from Nigeria. *Journal of Management Sciences,* Vol. *1, No.* 1, June. A publication of Faculty of Management Sciences, University of Port Harcourt, Nigeria.

Wikipedia, (2015). www.wikipedia.com, site accessed on 25/08/15.

Woo, J. (2005). The Behaviour of fiscal policy: Cyclicality and discretionary fiscal decisions. *Scandinavian Journal of Economics. University of Oslo*, Norway. January 2005.

Woodford, M. (2000). Fiscal requirements for price stability. *Official text of Money, Credit and Banking Lecture, Presented at Ohio State University*, May 1.

www.Statistical Forecasting.com (2006). website accessed on September 4, 2006