Fiscal Policy Impact on Macroeconomic Aggregates: Period of Stable versus Unstable Democracy in Nigeria

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Abstract

The fiscal policy regime in Nigeria could be described to have passed through two periods based on the political history of Nigeria. We have experienced the period of stable democracy and the period of unstable democracy. This paper compared the impact of fiscal policy on the key macroeconomic aggregates in Nigeria during the period of stable versus unstable democracy using time series data from 1961-2011. The period from 1961 to 1999 are defined as the period of unstable democracy while the period from 1999 to 2011 are defined as the period of stable democracy. We tested the variables for unit root and cointegration and finally estimated the LAG/VEC models. The LAG model only establishes significant difference on exchange rate but no significant difference was found on output, financial market development, inflation and private consumption. However, the VEC model confirmed that there exists a significant difference on financial market development, exchange rate and inflation but found no significant difference for output and private consumption. We compared the performance of the two models and found that VEC model performed better than the LAG model. The findings therefore based on VEC model indicate that there is no significant difference in the fiscal policy impact on output and private consumption during the period of stable and unstable democracy. The implication is high unemployment and poverty rates which may degenerate into further crisis and aggravate the insecurity position in the country.

Introduction

The research into the fiscal policy impact on economic growth has gained prominence since the inception of Keynes and the Keynesian economics. The inefficiency
in the workings of the market system which is a justification of the market failure argument necessitated or called for government intervention in the management of the economy. Empirical evidences are mixed on the impact of fiscal policy on growth. Some says it has positive impact while some says the impact is negative on growth. Also, to some, fiscal policy has neutral effect on growth. Despite different fiscal regimes experienced in Nigeria, the country is still confronted with a lot of challenges which have attributed to the gross mismanagement of public funds (Okemini and Urata, 2008). High level of corruption and ineffective economic policies has also been highlighted as fundamental to the nation’s economic woes (Gbosi, 2007). Many of the problems have been traced to military intervention in politics. The military institution has been blamed extensively for the long period of underperformance of the nation’s economy. The frequent interference from the military has not allowed democracy to work. Onoh (2007) traced the problem to lack of integration of macroeconomic plans and the absence of harmonization and coordination of fiscal policy. Anyanwu (2007) traced the problem to the use of inappropriate and ineffective policy. Amadi et al, (2006) associated the problem with imprudent public spending, weak sectoral linkages and social economic maladies. Nigeria, a resource-blessed nation has almost turned a resource-cursed country due to her inability to efficiently manage her resource wealth both human and material resources. On this note (Ogbole, 2010) observed that, despite many frequently changing fiscal, monetary and other macroeconomic policies, Nigeria has not been able to harness her economic potentials for rapid economic development. The Keynesian economics believes that fiscal policy has positive impact on growth. Since the nation’s independence, fiscal policy has been used along with other policies to drive the Nigerian economy to the path of glory. Although, there have been many studies addressing fiscal policy impact on growth, in the first instance, the findings are mixed. Asides, studies have not fully explored the differential impact of fiscal policy on the economy over the period of stable and unstable democracy. The period of 1961-1998 could be regarded as period of unstable democracy in Nigeria as the period witnessed an unprecedented number of military coups. The intensity of military interference during this period made it unstable for democracy to thrive. The period of 1999 to 2011 has been regarded as the period of stable democracy. The period has
witnessed no military coup d’ètats giving democracy a breeding space to thrive in Nigeria. It is no doubt that fiscal policy impact on macroeconomic aggregates significantly difference between the period of stable and unstable democracy. The following hypothesis is drawn:

**Null hypothesis:** There is no significant difference in the fiscal policy impact on macroeconomic aggregates between periods of stable and unstable democracy

**Alternative hypothesis:** There is significant difference in the fiscal policy impact on macroeconomic aggregates between periods of stable and unstable democracy.

The rest of this paper is organized as follows: Section 2 discusses the theoretical and empirical literature regarding fiscal policy impact on macroeconomic aggregates. Section 3 presents the data and the econometric methodology, Section 4 discusses the empirical results while section 5 concludes.

**Review of theoretical and empirical Literature**

The Keynesian school of thought argues that fiscal policy accelerates economic growth. To Keynes, public expenditure is an exogenous factor and a policy instrument for increasing national output. Consequently, Keynes and the Keynesians believe that fiscal policy has significant impact on the economy. However, the neoclassical growth model of Solow (1956), or its version in optimal growth formalized by Cass (1965) and Koopmans (1965) following previous evidence in Ramsey (1928), leaves little place for fiscal policy impact on economic growth. Long-term economic growth is zero, thus government decisions are ineffective in the long-run. Moreover, they at best leave unchanged the short-run growth rate or equilibrium levels of different macroeconomic variables, without any possibility for positive effects. This school of thought shared the view that fiscal policy has no impact on economic growth. According to Dornbusch and Fischer (1990), increased government expenditure or reduction in taxation tends to push the economy out of a recession while reduction in government spending or increased taxation slows down a boom. On the basis of this argument, Kia (2006) conducted a study on fiscal policy impact on inflation for the Iranian economy, the study found that fiscal policy is very effective in Iran to fight inflation as the increase in the real government expenditure as well as deficits
cause inflation, but if the changes are unanticipated, reverse is the case. Moshi and Kilindo (1999) conducted a study on “The impact of government policy on macroeconomic variables: A case study of private investment in Tanzania”. The results obtained led to the conclusions that fiscal policy exerts positive and significant influence on private investment spending in Tanzania. Ekpo (1994), Amin (1998), Devarajan et al. (1996), Fluente (1997), Kneller et al. (1999), Bose et al. (2003) and Aregbeyen (2007) confirmed that fiscal policy has positive impact on growth. Based on the work of Saunders (2006), for the British economy, we can infer that fiscal policy does not significantly influence economic growth in the United Kingdom. Ogbole et al (2011) conducted a study on the comparative analysis of the impact of fiscal policy on economic growth in Nigeria during regulated and deregulated periods. They found significant difference in the fiscal policy impact between regulated and deregulated periods. Their finding suggests that fiscal policy impacts positively on economic growth.

Based on the empirical survey of the literature on fiscal policy and economic performance, there is no particular study focusing on fiscal policy impact on macroeconomic aggregates during the period of stable and unstable democracy in Nigeria, hence this study.

**Data and Econometric Methodology**

The study used time series data. The data covering variables such as government expenditure expressed in log form was used to proxy fiscal policy, consumer price index expressed in log form was used to proxy inflation, real GDP expressed in log form was used to proxy economic growth, money stock as a share of GDP was used to proxy financial development. Others include exchange rate and private consumption. Also included is the dummy variable having value of one (1) for period of stable democracy and zero for period of unstable democracy. The data came from the Central Bank of Nigeria (CBN) statistical bulletin and World Development Indicators 2012 edition.

The study specified a non-conventional growth model with dummy variable included with the value of one (1) for the period of stable democracy and value of zero (0) for the period of unstable democracy.
The functional form of the model is given by the following:

\[ Y^G = f(M2PCGDP, EXCRATE, CPI, PCE, GEXP, DY) \]  
(1)

\[ M2PCGDP = f(Y^G, EXCRATE, CPI, PCE, GEXP, DY) \]  
(2)

\[ EXCRATE = f(Y^G, M2PCGDP, CPI, PCE, GEXP, DY) \]  
(3)

\[ CPI = f(Y^G, M2PCGDP, EXCRATE, PCE, GEXP, DY) \]  
(4)

\[ PCE = f(Y^G, M2PCGDP, EXCRATE, CPI, GEXP, DY) \]  
(5)

The exact linear form of the model is expressed as

\[ LY_t^G = \beta_0 + \beta_1 M2PCGDP_t + \beta_2 EXCRATE_t + \beta_3 LPCI_t + \beta_4 PCE_t + \beta_5 LGEXP_t + \beta_6 DY_t \]  
(6)

\[ M2PCGDP_t = \beta_7 + \beta_8 LY_t^G + \beta_9 EXCRATE_t + \beta_10 LPCI_t + \beta_11 LGEXP_t + \beta_12 DY_t \]  
(7)

\[ EXCRATE_t = \beta_13 + \beta_14 LY_t^G + \beta_15 M2PCGDP_t + \beta_16 LPCI_t + \beta_17 PCE_t + \beta_18 LGEXP_t + \beta_19 DY_t \]  
(8)

\[ LPCI_t = \beta_20 + \beta_21 LY_t^G + \beta_22 M2PCGDP_t + \beta_23 EXCRATE_t + \beta_24 PCE_t + \beta_25 LGEXP_t + \beta_26 DY_t \]  
(9)

\[ LPCE_t = \beta_27 + \beta_28 LY_t^G + \beta_29 M2PCGDP_t + \beta_30 EXCRATE_t + \beta_31 LPCI_t + \beta_32 LGEXP_t + \beta_33 DY_t \]  
(10)

Expressing equation (6) in stochastic form, we have

\[ LY_t^G = \beta_0 + \beta_1 M2PCGDP_t + \beta_2 EXCRATE_t + \beta_3 LPCI_t + \beta_4 PCE_t + \beta_5 LGEXP_t + \beta_6 DY_t + U_{1t} \]  
(11)

\[ M2PCGDP_t = \beta_7 + \beta_8 LY_t^G + \beta_9 EXCRATE_t + \beta_10 LPCI_t + \beta_11 LGEXP_t + \beta_12 DY_t + U_{2t} \]  
(12)

\[ EXCRATE_t = \beta_13 + \beta_14 LY_t^G + \beta_15 M2PCGDP_t + \beta_16 LPCI_t + \beta_17 PCE_t + \beta_18 LGEXP_t + \beta_19 DY_t + U_{3t} \]  
(13)
\[ LCP_{t} = \beta_{20} + \beta_{21}L_{t}^G + \beta_{22}M2PC_{t}GDP_{t} + \beta_{23}EXC_{t}RAT_{E_{t}} + \beta_{24}PCE_{t} \\
+ \beta_{25}LGEXP_{t} + \beta_{26}DY_{t} + U_{4t} \]  
\[ LPCE_{t} = \beta_{27} + \beta_{28}L_{t}^G + \beta_{29}M2PC_{t}GDP_{t} + \beta_{30}EXC_{t}RAT_{E_{t}} + \beta_{31}LCP_{t} \\
+ \beta_{32}LGEXP_{t} + \beta_{33}DY_{t} + U_{5t} \]  

Where

\[ L_{t}^G = real\ GDP\ expressed\ in\ log\ form,\]  
\[ LGEXP_{t} = government\ expenditure\ expressed\ in\ log\ form\]  
\[ M2PC_{t}GDP_{t} = money\ stock\ as\ a\ percentage\ of\ GDP\]  
\[ LCP_{t} = consumer\ price\ index\ expressed\ in\ log\ form\]  
\[ PCE_{t} = private\ consumption\ expenditure\ expressed\ in\ log\ form\]  
\[ DY_{t} = dummy\ variable\]  
\[ t = time\ period.\]  

Expressing equations (11) – (15) using the lag model with each dependent variable at first differences, we have

\[ \Delta L_{t}^G = \beta_{34} + \beta_{35}L_{t}^G(-1) + \beta_{36}M2PC_{t}GDP_{t}(-1) + \beta_{37}EXC_{t}RAT_{E_{t}}(-1) \\
+ \beta_{38}LCP_{t}(-1) + \beta_{39}LPCE_{t}(-1) + \beta_{40}LGEXP_{t} + \beta_{41}DY_{t} + U_{6t} \]  
\[ \Delta M2PC_{t}GDP_{t} = \beta_{42} + \beta_{43}L_{t}^G(-1) + \beta_{44}M2PC_{t}GDP_{t}(-1) + \beta_{45}EXC_{t}RAT_{E_{t}}(-1) \\
+ \beta_{46}LCP_{t}(-1) + \beta_{47}LPCE_{t}(-1) + \beta_{48}LGEXP_{t} + \beta_{49}DY_{t} + U_{7t} \]  
\[ \Delta EXC_{t}RAT_{E_{t}} = \beta_{50} + \beta_{51}L_{t}^G(-1) + \beta_{52}M2PC_{t}GDP_{t}(-1) + \beta_{53}EXC_{t}RAT_{E_{t}}(-1) \\
+ \beta_{54}LCP_{t}(-1) + \beta_{55}LPCE_{t} + \beta_{56}LGEXP_{t} + \beta_{57}DY_{t} + U_{8t} \]  
\[ \Delta LCP_{t} = \beta_{58} + \beta_{59}L_{t}^G(-1) + \beta_{60}M2PC_{t}GDP_{t}(-1) + \beta_{61}EXC_{t}RAT_{E_{t}}(-1) \\
+ \beta_{62}LCP_{t}(-1) + \beta_{63}LPCE_{t} + \beta_{64}LGEXP_{t} + \beta_{65}DY_{t} + U_{9t} \]  
\[ \Delta LPCE_{t} = \beta_{66} + \beta_{67}L_{t}^G(-1) + \beta_{68}M2PC_{t}GDP_{t}(-1) + \beta_{69}EXC_{t}RAT_{E_{t}}(-1) \\
+ \beta_{70}LCP_{t}(-1) + \beta_{71}LPCE_{t} + \beta_{72}LGEXP_{t} + \beta_{73}DY_{t} + U_{10t} \]  

Regression involving non-stationary time series are said to be spurious especially if the group of I(1) variables used in such regression are found to be non-cointegrated. However, when there is evidence of cointegration, it becomes necessary to introduce the error correction terms which captures the long-run information. The VEC model thus is
constructed as

\[
\Delta L Y^G_t = \lambda_0 + \phi_1 ECM_{t-1}^1 + \sum_{j=1}^{m} \alpha_{1t} L Y^G_{t-j} + \sum_{j=1}^{m} \alpha_{2t} M2PC GDP_{t-j} + \\
\sum_{j=1}^{m} \alpha_{3t} EXCRATE_{t-j} + \sum_{j=1}^{m} \alpha_{4t} L CPI_{t-j} + \sum_{j=1}^{m} \alpha_{5t} LPCE_{t-j} + \\
\alpha_{6t} G CEXP_t + \alpha_{7t} D Y_t + \epsilon_{1t} \quad (21)
\]

\[
\Delta M2PC GDP_t = \lambda_1 + \phi_2 ECM^2_{t-1} + \sum_{j=1}^{m} \alpha_{8t} L Y^G_{t-j} + \sum_{j=1}^{m} \alpha_{9t} M2PC GDP_{t-j} + \\
\sum_{j=1}^{m} \alpha_{10t} EXCRATE_{t-j} + \sum_{j=1}^{m} \alpha_{11t} L CPI_{t-j} + \sum_{j=1}^{m} \alpha_{12t} LPCE_{t-j} + \\
\alpha_{13t} G CEXP_t + \alpha_{14t} D Y_t + \epsilon_{2t} \quad (22)
\]

\[
\Delta EXCRATE_t = \lambda_2 + \phi_3 ECM^3_{t-1} + \sum_{j=1}^{m} \alpha_{15t} L Y^G_{t-j} + \sum_{j=1}^{m} \alpha_{16t} M2PC GDP_{t-j} + \\
\sum_{j=1}^{m} \alpha_{17t} EXCRATE_{t-j} + \sum_{j=1}^{m} \alpha_{18t} L CPI_{t-j} + \sum_{j=1}^{m} \alpha_{19t} LPCE_{t-j} + \\
\alpha_{20t} G CEXP_t + \alpha_{21t} D Y_t + \epsilon_{3t} \quad (23)
\]

\[
\Delta L CPI_t = \lambda_3 + \phi_4 ECM^4_{t-1} + \sum_{j=1}^{m} \alpha_{22t} L Y^G_{t-j} + \\
\sum_{j=1}^{m} \alpha_{23t} M2PC GDP_{t-j} + \sum_{j=1}^{m} \alpha_{24t} EXCRATE_{t-j} + \\
\sum_{j=1}^{m} \alpha_{25t} L CPI_{t-j} + \sum_{j=1}^{m} \alpha_{26t} LPCE_{t-j} \alpha_{27t} G CEXP_t + \alpha_{28t} D Y_t + \\
\epsilon_{4t} \quad (24)
\]

\[
\Delta LPCE_t = \lambda_4 + \phi_5 ECM^5_{t-1} + \sum_{j=1}^{m} \alpha_{29t} L Y^G_{t-j} + \sum_{j=1}^{m} \alpha_{30t} M2PC GDP_{t-j} + \\
\sum_{j=1}^{m} \alpha_{31t} EXCRATE_{t-j} + \sum_{j=1}^{m} \alpha_{32t} L CPI_{t-j} + \\
\sum_{j=1}^{m} \alpha_{33t} LPCE_{t-j} \alpha_{34t} G CEXP_t + \alpha_{35t} D Y_t + \epsilon_{5t} \quad (25)
\]

To test formally for the presence of unit root for each variable in the model, Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests of the type given by regression (26) and (27) were conducted. The ADF test is conducted using the regression equation of the form

\[
\Delta V_t = \varphi_0 + \varphi_1 t + \theta V_{t-1} + \sum_{i=1}^{k} \psi_i \Delta V_{t-i} + \epsilon_{6t} \quad (26)
\]

Where \(\Delta V_t\) are the first differences of the series \(V_t\), \(k\) represents the lag order, \(\epsilon_{6t}\) is a white noise error term and \(t\) stands for time. Phillips-Perron (PP) tests involve
computing the following OLS regression equation of the form

\[ h_t = \psi_0 + \psi_1 t + \rho h_{t-1} + \phi_1 \Delta h_{t-1} + \ldots + \phi_p \Delta h_{t-p} + \epsilon_{7t} \]  

(27)

Where \( h_t \) is the time series under consideration, \( \psi_0 \) is the intercept term, \( \psi_{1t} \) is the time trend and \( \epsilon_{7t} \) is a white noise error term and \( t \) stands for time. The hypotheses of unit-root to be tested are \( (H_0: \rho = 0) \) against \( (H_1: \rho > 0) \)

Both equations 26 and 27 assume that \((V_t, h_t)\) is a particular time series under consideration and that the series is integrated of order, \( d \), denoted by \( I(d) \) if it becomes stationary after differencing \( d \) times.

The emphasis is that if the series is \( I(1) \), it is said to have a unit root or it follows a random walk process. However, taking its first difference makes the series becoming stationary i.e. integrated of order zero \( I(0) \). Naturally the ADF tests were performed by testing \( (H_0: \theta = 0) \) against the one-sided alternative, \( (H_1: \theta > 0) \) in equation 26. It is noteworthy that both equations 26 and 27 incorporated a constant term or intercept \( (\varphi_0, \psi_0) \) with time trend \( (\varphi_{1t}, \psi_{1t}) \). The unit root tests were carried out with intercept term with time trend for each variable. To carry out the unit root test, the ADF and PP statistics were tested against the 5% MacKinnon critical values.

**Empirical results**

The unit root test

The study employed Dickey-Fuller (ADF - Test) as well as Phillips-Perron (PP - Test) to confirm the order of integration of the series. The result of the Augmented Dickey-Fuller unit root test is presented in Table 1. The result from the table shows that all the variables used in this study are non-stationary since the hypothesis of unit root at the level of the variable cannot be rejected at 5% significant level. However they become stationary i.e. an \( I(0) \) process after differencing once indicating that they are integrated of order 1 that is a \( I(1) \) process.
Table 1: Results of unit root test

<table>
<thead>
<tr>
<th>Variable</th>
<th>ADF-TEST</th>
<th>PP-TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LEVEL</td>
<td>1ST Difference</td>
</tr>
<tr>
<td>LRGDP</td>
<td>P&gt;0.05</td>
<td>P&lt;0.05</td>
</tr>
<tr>
<td>M2DIVGDP</td>
<td>P&gt;0.05</td>
<td>P&lt;0.05</td>
</tr>
<tr>
<td>EXCRATE</td>
<td>P&gt;0.05</td>
<td>P&lt;0.05</td>
</tr>
<tr>
<td>LCPI</td>
<td>P&gt;0.1</td>
<td>P&lt;0.1</td>
</tr>
<tr>
<td>LPC</td>
<td>P&gt;0.05</td>
<td>P&lt;0.05</td>
</tr>
</tbody>
</table>

Test of cointegration

The result of the Johansen cointegration test is presented in Table 2. The two maximum likelihood ratio statistics provide evidence of cointegration. The trace statistic confirmed one cointegrating vector while the Max-Eigen statistic confirmed two cointegrating relationships since the hypothesis of no cointegration could be rejected at 5% level of significance. This result suggests that there is long-run relationship between the dependent variables and all the underlying explanatory variables. This implies that, in the long-run, the dependent variables can be efficiently predicted using the underlying explanatory variables. Thus, the study estimates the vector error correction model as an alternative to the LAG model to determine the impact of fiscal policy on macroeconomic aggregates during the period of stable versus unstable democracy.

The LAG model

Based on the LAG model, as presented in the results in Table 3, we reject the hypothesis of no significant difference in fiscal policy impact between the period of stable and unstable democracy only on exchange rate (t=11.07; p<0.05).
This implies that the fiscal policy impact on exchange rate during the period of stable democracy differs significantly from that obtained during the period of unstable democracy. However, there was no significant difference in the fiscal policy impact on real output, private consumption, inflation and financial market development. The result also revealed that fiscal policy has positive impact on real output, private consumption and financial market development but induced exchange rate and inflation.

Table 2: Results of cointegration test

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>Alternative hypothesis</th>
<th>( \chi ) Trace</th>
<th>5% critical value</th>
</tr>
</thead>
<tbody>
<tr>
<td>( r = 0 )</td>
<td>( r \geq 1 )</td>
<td>118.11</td>
<td>95.75</td>
</tr>
<tr>
<td>( r \leq 1 )</td>
<td>( r = 2 )</td>
<td>63.61</td>
<td>69.82</td>
</tr>
<tr>
<td>( r \leq 2 )</td>
<td>( r = 3 )</td>
<td>27.46</td>
<td>47.86</td>
</tr>
<tr>
<td>( r \leq 3 )</td>
<td>( r = 4 )</td>
<td>14.62</td>
<td>29.80</td>
</tr>
<tr>
<td>( r \leq 4 )</td>
<td>( r = 5 )</td>
<td>7.13</td>
<td>15.49</td>
</tr>
<tr>
<td>( r \leq 5 )</td>
<td>( r = 6 )</td>
<td>1.20</td>
<td>3.84</td>
</tr>
</tbody>
</table>

The VEC model

Based on the result of the VEC model, we reject the hypothesis of no significant difference in fiscal policy impact between period of stable and unstable democracy on three macroeconomic aggregates namely financial market development (\( t=3.08; p<0.05 \)), exchange rate (\( t=2.53; p<0.05 \)) and inflation (\( t=3.97; p<0.05 \)). However, the VEC model cannot reject this hypothesis on real output and private consumption.
To know which of the two models performed better, we examined some of the useful statistics as shown in the result presented in Table 3a and Table 3b. For output, in the LAG model, t is not significant, $R^2$ is low, F is not significant. In the VEC model, t is not significant, $R^2$ is very low, F is not significant. For financial market development, in the LAG model, t is not significant, $R^2$ is low, F is not significant. In the VEC model, t is significant, $R^2$ is higher, F is not significant. For exchange rate, in the LAG model, t is significant, $R^2$ is high, F is significant. In the VEC model, t is significant, $R^2$ is higher, F is significant. For inflation, in the LAG model, t is not significant, $R^2$ is fairly high, F is significant. In the VEC model, t is significant, $R^2$ is higher, F is significant. For private consumption, in the LAG model, t is not significant, $R^2$ is low, F is significant. In the VEC model, t is not significant, $R^2$ is low, F is not significant. On this note the VEC model is said to have performed better than the LAG model. The study therefore draws conclusion based on the result obtained from the VEC model.

<table>
<thead>
<tr>
<th>Fiscal policy impact on macro variable</th>
<th>Co-efficient</th>
<th>S.E</th>
<th>t-statistic</th>
<th>Prob</th>
<th>$R^2$</th>
<th>Adj$R^2$</th>
<th>Durbin-Watson</th>
<th>F-statistic (Prob)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGDP</td>
<td>0.24</td>
<td>0.10</td>
<td>2.48</td>
<td>0.02</td>
<td>0.21</td>
<td>0.08</td>
<td>2.10</td>
<td>1.61(0.16)</td>
</tr>
<tr>
<td>DY</td>
<td>-0.19</td>
<td>0.33</td>
<td>0.59</td>
<td>0.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>C</td>
<td>-1.82</td>
<td>6.52</td>
<td>0.28</td>
<td>0.78</td>
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<td></td>
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</tr>
<tr>
<td>M2PCGDP</td>
<td>4.53</td>
<td>4.14</td>
<td>1.10</td>
<td>0.28</td>
<td>0.34</td>
<td>0.23</td>
<td>1.63</td>
<td>3.14(0.01)</td>
</tr>
<tr>
<td>DY</td>
<td>-18.52</td>
<td>13.71</td>
<td>1.35</td>
<td>0.18</td>
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<td></td>
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<tr>
<td>C</td>
<td>-360.75</td>
<td>273.01</td>
<td>1.32</td>
<td>0.19</td>
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<tr>
<td>EXCRATE</td>
<td>1.40</td>
<td>1.71</td>
<td>0.82</td>
<td>0.42</td>
<td>0.82</td>
<td>0.79</td>
<td>1.71</td>
<td>27.65(0.00)</td>
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<td>DY</td>
<td>62.76</td>
<td>5.67</td>
<td>11.07</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>C</td>
<td>149.36</td>
<td>112.95</td>
<td>1.32</td>
<td>1.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INFLATION</td>
<td>0.04</td>
<td>0.03</td>
<td>1.37</td>
<td>0.18</td>
<td>0.53</td>
<td>0.46</td>
<td>1.67</td>
<td>6.88(0.00)</td>
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<td>0.30</td>
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Table 3b: Result of the VEC model

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<th>Fiscal policy impact on macro variable</th>
<th>Coefficient</th>
<th>S.E</th>
<th>t-statistic</th>
<th>R²</th>
<th>AdjR²</th>
<th>F-statistic (Prob)</th>
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Conclusion

The empirical findings presented in this study based on the econometric analysis showed that there is no significant difference in the fiscal policy impact on output and private consumption during the period of stable and unstable democracy. However, a significant difference was found on exchange rate, inflation and financial market development. On the whole, fiscal policy impact on macroeconomic aggregates was found to be positive during the two periods with differential impact on financial market development, inflation and exchange rate. Thus the study concluded that fiscal policy was an important policy tool used to advance the Nigerian economy during the period of stable and unstable democracy and that a significant difference existed on the effectiveness of fiscal policy on financial market development, exchange rate and inflation.
References


Kia, A., (2006). Deficits, debt financing, monetary policy and inflation in developing countries: Internal or external factors? Evidence from Iran,


Appendices

Graphical Presentation of Variables

Appendix 1: Trend in the data series

![Graphs of LOG(AGEXP), LOG(RGDP), M2PCGDP, EXCRATE, LOG(CPI), LOG(FHCEXP)]
Appendix 2: government spending against each of the selected macroeconomic variables (1961-2011)
Appendix 3: VEC Residual Graphs

LOG(RGDP) Residuals

LOG(CPI) Residuals

LOG(FHCEXP) Residuals

LOG(RGDP) Residuals

M2PCGDP Residuals

EXCRATE Residuals

LOG(CPI) Residuals

LOG(FHCEXP) Residuals