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Political economy of fiscal deficits in a democracy

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Abstract

Studies on the impact of political considerations and gimmickry on the fiscal policy process in developing countries have largely been underappreciated and lacking. Therefore, this study set out to investigate how political actions impact fiscal deficits in Nigeria. The study employed descriptive and quantitative techniques using the Herfindahl index-based composition and turnover of the legislative and executive seats per party as well as that controlled by the ruling party. The results showed the prevalence of fiscal illusion among a significant proportion of voters; and that political considerations exert a significant impact on the implementation of fiscal deficits in Nigeria. Budgetary institutions were found to exert an insignificant impact on the fiscal policy process. Revitalization of the country's budgetary institutions and a reorientation and refocusing of media organizations to ensure objectivity in the reportage of government activities is recommended.

JEL classifications: D72; E62

Keywords: Political economy; Fiscal deficit; Turnover of legislative houses

1. Introduction

Prior to the 1970s, the choice of fiscal policy stance was assumed to be largely determined by economic factors alone. However, with the emergence of the institutional school of thought, economists have increasingly paid more attention to the non-economic determinants of fiscal policy. In particular, the increased persistence of fiscal deficits and continued low rates of growth in developing countries since the late 1970s have resulted in an increase in the attention paid to the impact of political and institutional factors.

In general, fiscal deficits occur where government commits itself to spending more than it earns as revenue. Wosowei (2013) on the other hand defines deficit as the total amount of debt or financial resources required by government to meet its expenditure requirements. It could be the excess of government spending inclusive of loans net payment, over its non-debt capital earnings, and revenue earnings. The main motivation for the implementation of fiscal deficits lies in its role as an instrument for macroeconomic stabilization and income redistribution (Antwi et al., 2013).

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1.1. The problem

However, the fundamental problem surrounding political gimmickry on fiscal deficit is that in spite of their perceived benefits, most economists are of the belief that deficits are harmful and potentially disastrous (Ball and Mankiw, 1995). For instance, Odhiambo et al. (2013) observed that based on the inconsistent results of recent studies, the adequacy of fiscal deficits as a growth and development promoting policy tool is questionable. Buscemi and Yallwe (2012) hold that most empirical researches on the effects of fiscal deficits indicate the existence of adverse implications on the economy. Easterly and Schmidt-Hebbel (1993) also argued that a significant part of the economic problems-such as unsustainable debts, high inflation, low levels of investment and economic growth-experienced by developing countries since the 1980s have been attributed to the sustenance of fiscal deficits.

The persistence of deficits in developing, and developed countries, in spite of the above-mentioned costs, has been explained by the argument that political factors generally outweigh economic considerations in the budgetary process (Agundu et al., 2013). Further explanation for this is provided by the public choice theory which posits that the maximization of self interest is one of the main motivations of politicians. As such, politicians will implement deficits when it suits them, irrespective of the potential costs of doing so.

In Nigeria, the continued persistence of deficits in the face of high levels of poverty, unemployment, and regionally unbalanced development has resulted in increased concern as to the degree of adherence to sound economic principles in the formulation and implementation of the country's fiscal policy. In this regard Ojong and Owui (2013) have observed that political considerations are the main reasons for the implementation of fiscal deficits in the country. Such concerns have also been reinforced by the non-variance of the emoluments of members of the executive and legislative arms of government despite the increased suffering of the average Nigerian as a result of the decline in the country's revenue earning from the sale of crude oil. Added to this is the usual scramble by otherwise insensitive politicians to provide infrastructural facilities and other transfer payments to their constituencies during election periods, which has reinforced the belief that the orientation of government expenditure is largely dictated by political considerations.

1.2. The objectives

However, in view of the forgoing, the specific objective of the study is to attempt to provide empirical evidence on this subject matter through the investigation of the correlation between the activities of politicians in both legislative and executive arms of government, and the implementation of fiscal deficits in Nigeria. In doing this the hypotheses is tested to ascertain the plausibility of the objective. The result from which, is very relevant and apt to a nascent democracy like Nigeria. This contribution to literature is one that brings to bear the extent to which political considerations can influence the implementation of fiscal deficits in Nigeria. The study is divided into five sections: the introduction, review of literature and theoretical underpinnings, empirical analysis of data, conclusion and policy recommendations.

2. Review of literature and theoretical underpinnings

2.1. Review of literature

Political economy is concerned with the effect of political forces on economic policies and the consequent impacts on economic outcomes. The interest in political economy is a product of the failure of reforms in developing countries in spite of the myriad alternatives which are available. An example of this is the failure of developing countries, especially those in sub-Saharan Africa to achieve the objectives of structural reforms as contained in the Structural Adjustment Programs (SAPs) which were implemented in the 1980s and 1990s. In Nigeria, the failure of macroeconomic policy is reflected in the continued lack of diversification of the economy and the continued dependence on the petroleum sector as the main source of foreign exchange earnings and government revenue. The aforementioned failure of conventional economic policies in achieving macroeconomic objectives has resulted in increased attention on the impact of other factors such as political considerations on economic outcomes.

In highlighting the impact of politics on economic outcomes, Adams (2000) argued that political influences largely determine the choice, timing and implementation of policy reforms in developing countries. On the other hand, Pasten and Cover (2010) posited that the simultaneous occurrence of political instability and fiscal crisis is a common theme among developing countries. In a similar vein, Eslava (2011) observed that inferences from political economy indicate that the emergence of deficits is due to conflicts of interest between different regions and social groups with respect to the allocation of public funds which results in overspending. Haggard and Kaufman (1990) argued that "macroeconomic stability is most precarious, where the party system is fragmented or polarized, reinforcing social and economic cleavage among contending groups and exacerbating political instability".

On the empirical front, the results of several studies confirm the impact of political factors on the conduct and outcomes of macroeconomic policies. Haggard and Kaufman (1990) found that the type of regime in a country has an impact on the ability of government to implement stabilization policies and the outcomes of such actions in the economy. This confirms the difficulties fledgling democracies encounter in managing high rates of inflation. A study by Alesina et al. (1998) in nineteen OECD countries found no evidence of a fall in popularity at the polls. The study found that governments concentrating on the reduction of expenditure are usually rewarded at the polls. Furthermore, cabinets which are willing to reduce wage bills and transfers – some of the most politically charged components of government expenditure – did not lose out at the polls. This was explained by the argument of voter fiscal prudence which results in their endorsement of tight fiscal policies. Finally, the study found no evidence that the implementation of a loose fiscal policy implies a longer political tenure. Governments which cut deficits are not usually replaced. Based on the results of their study Ura and Socker (2011) concluded that voters reaction to fiscal deficits increases the political cost of a reduction of expenditure.

Another study by Edwards and Tabellini (1991) found that political polarization and instability results in myopia which is an incentive to policy makers to engage in excessive borrowing; the burden of which is left to future governments. Political conflicts also increase the probability of the implementation of deficits by governments as a result of their fear of the popular reactions to adjustment policies such as currency devaluations.

The impact of the political dominance exerted by a particular party on the capacity to implement fiscal deficits was examined by Khemani (2002). The study found that in India, states whose leadership was in the same party as the ruling party maintained higher fiscal deficits. Deficits were found to be 10% larger in states affiliated to the party at the centre than in non-affiliated states. Deficits were observed to be larger in affiliated states where the ruling party had a small number of seats at the legislative houses. Deficits of affiliated states were found to be "entirely financed by greater loans from the central government, as opposed to other forms of market debt". It was thus concluded that political considerations do impact on the distribution of deficits among states.

With respect to Nigeria, findings of Ocheni et al. (2013) revealed that the political influence on the budgets of local governments, which results in irrational and highly biased budget formulation and implementation processes, has resulted in the misuse and mismanagement of the finances of local governments in Nigeria. It was further observed that local government finances are inadequate because of the prevalence of conscious mismanagement due to unsuspected "financial padding" which is a key component of local government politics in the country.

In general, while the political underpinning of fiscal deficits has received significant attention in developed countries, very little has been done with regards to developing countries such as Nigeria. The need for such an investigation is largely based on the relatively large size of the government in developing countries and the lack of transparency which generally characterizes the formulation and implementation of macroeconomic policies. As such, this study is carried out to contribute to the existing knowledge on this subject matter.

2.2. *Theoretical underpinnings*

Several theories have been formulated to explain the impact of political considerations on macroeconomic outcomes. The theoretical anchor for this study is eclectic. The study makes use of a combination of the elite and group models, Rogoff and Siebert's political budget cycle model, as well as the model developed by Pasten and Cover (2010) which is based on the existence of uncertainty. They posited that "as long as the probability of remaining in office between elections is less than one; the deficit will be trend-driven rather than cyclical, thereby increasing the probability of a sovereign debt crisis. Furthermore, in order to investigate the possibility of the existence of fiscal illusion and its impact on the government's ability to implement fiscal deficits, the study makes use of the fiscal illusion theory which posits that the factors which weaken the government expenditure-tax link distort the general appreciation of the benefits and costs of the services of government which can result in an inefficient allocation of resources. Fiscal illusion is associated with budget deficits which skews the voters' assessment of the true cost of government activities (Ura and Socker, 2011). Among these, the elite-mass and group models are the most prominent.

2.2.1. The elite-mass model

The elite-mass model divides the members of a society into two segments: those with power and those without power. Those with power include politicians and public administrators. The model is based on the premise that the elite make social policies and govern the masses in an environment characterized by apathy and distorted information. The opinions of the masses are also largely shaped by this group of persons. The elite are characterised by their higher levels of education, incomes and higher status. The masses lack the knowledge necessary to make policies and are fully aware of this. According to the model, the prevailing policies are usually a reflection of the values and preferences of the ruling elite, and are meant to preserve the status quo. Changes in public policy are not revolutionary but rather incremental. The model views public officials as merely persons responsible for implementing the policy decisions of the elite (California State University Long Beach, n.d.; Public Administration the One, 2012).

The implications of the elite model are that since the masses are ill-informed, apathetic and thus only able to indirectly influence public policy, thus the democratic process as reflected in popular elections are merely symbolic in the sense that they assist the masses to the established system via political parties and regular voting. In view of this, the only policies that will be given serious attention are those that fall within the range of elite value consensus (California State University Long Beach, n.d.).

2.2.2. The group model

The group model examines the impact of pressure groups on public policy. The model is based on the premise that public policy is determined by a system of pressures and forces, which are constantly acting and reacting to each other. Usually in the legislature and the executive. The interaction among the groups is a key feature of political activities. According to the model, the influence of pressure groups on public policy can be so significant that public policy as conducted by the relevant agencies ends up reflecting their interest as opposed to the general public interest. Policy makers react to the influence of pressure groups by negotiating and compromising among competing demands. “Executives, legislators, and agency heads all put together coalitions from their constituences to push programs through (California State University Long Beach, n.d.).

2.2.3. Rogoff and Siebert political budget cycle (PBC) model

Rogoff and Siebert’s PBC model was developed in 1988. The model is based on the assumption that voters do not know the level of competence of individual politicians. As a result of this, voters can only form their rational expectations using the observable outcomes of a current fiscal policy during elections. According to the model, politicians with both high and low competence will usually attach equal weights on re-election and social welfare. As a result of this, highly competent incumbent politicians will usually show their level of competence by promoting expansionary fiscal policy which will result in pre-election budget deficits. On the other hand, politicians with low levels of competence will usually avoid such actions (Mačkić, 2014).

According to Rogoff and Siebert (as cited in Mačkić, 2014), during electioneering, incumbent politicians, depending on their levels of competence, employ distortive and non-distortive taxes to finance the provision of a well known fixed level of public services. Hence the competence of individual politicians will not be signaled outside the election period. “Voters vote taking into account the increase/decrease of their individual utility functions”. It is assumed that individual voters will prefer highly competent incumbents with the capacity to fund public goods through non-distortive taxes with little effects on their incomes (Mačkić, 2014).

According to Rogoff and Siebert (as cited in Mačkić, 2014), voters receive a signal from incumbent politicians in the form of a non-distortive tax at the beginning of each period. Voters only learn of the second signal, their loss of income, after elections are held. Incumbents are thus able to signal a higher level of competence – via the provision of greater public goods per unit of non-distortive taxes – during election periods via the creation of deficit budgets.

However, while the impact of political considerations on economic outcomes has been significantly studied with respect to developed countries, the review indicates the paucity of studies with respect to the Nigerian economy. This is the issue which this study attempts to address.

3. Methodology

This study uses both descriptive and quantitative methods of analysis in investigating the relationship between political considerations and the implementation of deficit budgets in Nigeria. The quantitative method of analysis is based on the results of the estimation of the time series data from the period 2003 to 2015. These period are periods between intervals of four years where general elections are held in Nigeria. The model is presented thus:

$$\text{FDs} = \beta_0 + \beta_1\ CSP + \beta_2\ CHP + \beta_3\ \text{I}_{\text{ndx}}\text{PR} + \beta_4\ \text{I}_{\text{ndx}}\text{PF} + \beta_5\ \text{CFPR} + U \quad (1)$$

$$\beta_0 > 0,\ \beta_1 > 0,\ \beta_2 > 0,\ \beta_3 > 0,\ \beta_4 > 0 \text{ and } \beta_5 > 0$$

where FDs = fiscal deficits, CSP = composition of the Senate by type of party, CHP = composition of the Federal House of Representatives by type of party, I_{ndx}PR = index of political rights, I_{ndx}PF = index of press freedom, CFPR = CIPA fiscal policy rating, U = stochastic error term.

3.1. Definition of variables

The variables used for the descriptive and quantitative analysis carried out in this study are defined as follows:

Fiscal deficit (FDs): This refers to the excess of government expenditure over its revenue earnings. The data for this variable is derived from the Central Bank of Nigeria Statistical Bulletin.

Turnover in the National Assembly: The National Assembly in Nigeria is the highest legislative body. It comprises the senate, which is the upper chambers and the House of representative, the lower chambers. The turnover in the National Assembly is used as a measure of the willingness of legislators to affirm a deficit budget before and during election years. The turnover of legislators for the respective federal houses is derived through the division of the total number of legislators not re-elected by the total number of legislators in each house, multiplied by 100. The data used for the calculation of this measure is derived from the African Elections Data Base and the Independent National Electoral Commission (INEC) of Nigeria.

Total number of votes by which the ruling party won the presidential election: The total number of votes by which the ruling party wins presidential election is used as a measure of its strength and thus, its ability to implement deficits. The ability of the dominant party to implement deficits is also measured through the use of the relative composition of the federal houses. The data for this variable is derived from the African Elections Data Base and the Independent National Electoral Commission (INEC) of Nigeria.

Control of governorship seats by the party at the centre: The total number of states whose governors are members of the political party at the centre is also used as a measure of the ease with which the dominant party can implement deficits. The data for this variable is derived from the African Elections Data Base and the Independent National Electoral Commission (INEC) of Nigeria.

Relative composition of the Senate and Federal House of Representatives: The relative composition of the Senate and Federal House of Representatives are used as a measure of the degree of monopoly power the ruling party has in the legislature. The derivation of both measures is based on the adaptation of the Herfindahl index. The data for this variable is derived from the African Elections Data Base and the Independent National Electoral Commission (INEC) of Nigeria.

Indexes of political rights (I_{ndx}PR) **and Index press freedom**r (I_{ndx}PF): Furthemore, the indexes of political rights and press freedom are used as measures of the ability of voters to monitor and evaluate the actions of politicians and the consequences of such actions. This is used to test the idea of "fiscal illusion". The data for these variables is derived from knoema.com (retrieved May 2015).

CIPA fiscal policy rating: The CIPA fiscal policy rating is used as a measure of the quality of the budgetary institutions. The data for this variable is derived from the World Bank data base.

4. Empirical analysis

4.1. Descriptive analysis

The descriptive analysis carried out in this study is based on the data presented in Tables 1 and 2. The data shows that the Peoples Democratic Party (PDP) was victorious by a wide margin of votes between the years 2003 and 2011. However, the party lost the 2015 elections to the All Progressive Congress (APC) in 2015 by winning only 44.96% of the votes cast. This indicates that between 1999 and 2003, the PDP leadership would have had a high degree of confidence with regards to their winning the presidential elections. The events leading up to the 2015 revealed a degree

Table 1
Percentage of votes commandeered by the winning party in during the presidential elections (2003–2015).

Political party	2003	2007	2011	2015
PDP	61.94%	69.60%	58.89%	44.96%
Nearest rival(APC)	32.19%	18.66%	31.98%	53.96%

Source: African Elections Data base and INEC (2015).
***PDP means Peoples Democratic Party (it was the ruling political party in Nigeria from 1999 to 2015).
***APC means All Progressive Congress (Nearest rival to the ruling political party).

Table 2
Summary of data on the relevant statistics.

Year	Deficit/GDP[a]	Turnover[b]		No of Governorship Seats won by the Party at the Centre[c]	Dominance of the Federal Legislature by the party at Centre[c]	
		Senate	House of reps		Senate	House of reps
2003	2.3%	71.6%	71.1%	28	76	223
2004	1.51%	–	–	–	–	–
2007	0.57%	78.9%	71.1%	26	87	263
2008	0.20%	–		–	–	–
2011	3.10%	69.7%	72.2%	23	45	123
2012	2.41%	–	–	–	–	–
2015	0.79%	72.5%	63.6%	12	–	–

[a] Central Bank of Nigeria.
[b] Authors' computation based on data derived from the African Elections Data base and INEC.
[c] African Elections Data base and INEC.

of uncertainty on the part of the ruling party with respect to the elections which is reflected in the election results. Based on the data in Table 1, it might be concluded that the main constraints to the implementation of a deficit budget by the executive would be the national legislature and opposition from the governors of the different states in the country. As such, the analysis carried out in this section is based on the impact of political gimmickry on the part of these actors on the implementation of fiscal deficits by the government at the centre.

The main data for the descriptive analysis in this study is presented in Table 2. The data indicates that the deficit-GDP ratio has always been higher during the election years. For instance, the 2003 election year was associated with a deficit-GDP ratio of 2.3%. During this period, the turnover in the Senate and Federal House of Representatives was 71.6 and 71.1%, respectively. This high turnover implies that there would have been a high degree of uncertainty about re-election by incumbent legislators in both houses. As such, legislators would have been very willing to implement a budget deficit. Increased spending associated with the deficit, especially expenditure on capital projects and transfer payments would engender a feeling of well-being among voters and thus, adding to the political goodwill of the incumbents. Again, the ability of the incumbent PDP government to implement deficits would have been further boosted by the fact that the party controlled the majority of the seats (76 and 223 in both houses in 2003). The party also controlled the majority of the governorship seats in the country. However, as would be expected, the deficit-GDP ratio declined in the post-election year to 1.51%.

A similar trend was observed during and after the 2007 elections in Nigeria, with the deficit declining from 0.57% in 2007 to 0.20% in 2008. That year, both federal houses experienced a turnover of 78.9 and 71.1% respectively. The incumbent PDP also controlled 87 and 263 of the seats in both houses, indicating a clear majority which would have facilitated the passing of a deficit during the election year.

The 2011 election year was associated with a relatively high deficit-GDP ratio of 3.10%. This might be explained by the fact that the incumbent PDP expected to have a tougher experience at the polls. This is confirmed by the fact that the PDP won the elections that year by only 58.89% of the votes, with its nearest rival winning 31.98% of the votes cast. Prior to this, the PDP had won more than 61% of the votes cast in the 2003 and 2007 elections. This implies that the elections were quite close. This trend has been confirmed by the just concluded 2015 elections where the PDP lost

Table 3
Regression results.

Variable	C	CSP	CHP	$I_{ndx}PR$	$I_{ndx}PF$	CFR
Coefficient	−1,073,880	−12,119,556	14,850,829	−23,139.4	904.711	22605.35
Std. error	260,009.2	4,357,839	4,803,694	117,530.5	8922.472	92,796.31
t-Statistic	−4.130162*	−2.781093*	3.091544*	−0.19688	0.101397	0.243602
R-squared			0.732082			
Adjusted R-squared			0.598123			
F-statistic			5.464967			
Durbin–Watson stat			1.708933			

Source: authors' computation.
* Implies significance at the 5% level.

out to the APC. The party won only 44.96% of the votes cast. Again, the period would have been characterised by a higher degree of uncertainty in the House of Reps as indicated by the increase in the turnover to 72.2%. The Senate had a lower turnover of 69.7%. The PDP also controlled 23 of the 36 governorship seats prior to the elections which would have enhanced the ability of the incumbent government to implement such a large deficit. However, in line with the trend, during the post-election year, the deficit-GDP ratio declined to 2.41% during the 2012.

In 2015, the deficit-GDP ratio declined to 0.79%. This has been associated with a high turnover in the Senate, with 72.5% of its members not being elected. On the other hand, more members of the House of Representatives won re-election, as is reflected in the decline in the turnover in the house to 63.6% compared to 70.2% in 2007. The incumbent party also lost the presidential ticket, as well as loosing several governorship seats to the opposition APC. The relatively low deficit-GDP ratio in 2015 may be attributed to defection of candidates from the ruling party to other political parties. These defections are connected to failure in internal democracy within the party. Fiscal deficits may also be as a result of the decline in the country's earnings as a result of the continuous fall in the price of crude oil; the increase in the debt burden of most states, and their inability to pay their workers which has put an increased amount of pressure on the federal government; the recent allegations of corruption leveled against the NNPC and the PDP; the general expectation that the incoming government would comprehensively review the past expenditure commitments of the outgoing administration.

The analysis so far carried out is in conformity with the political budget cycles (PBC) model developed by Rogoff and Siebert. Furthermore, the results of the 2011 elections and the conclusions derived from the associated analysis confirm the idea of backward looking agents as prescribed by Pasten and Cover (2010) who observed that "with backward looking agents, the incumbent has an incentive to induce a boom during the period immediately previous to an election without any worry that voters will take into account the possibility of a recession occurring afterwards".

4.2. *Quantitative analysis*

The results of the quantitative analysis carried out in this study are presented in Table 3. The results show that the composition of the Senate has a significant but negative impact on fiscal deficits in Nigeria. From the perspective of the Herfindahl index, the result implies that the more the Senate is dominated by one party, the lower will be the size of the country's' fiscal deficit at any particular point in time. On the other hand, the results indicate that composition of the Federal House of Representatives has a significant and positive impact on fiscal deficits in Nigeria. Again, this means that the more the House of Representatives is dominated by one particular party, the larger will be the size of the country's fiscal deficit.

On the other hand, the results in Table 3 also indicate that the index of press freedom ($I_{ndx}PF$) and political rights ($I_{ndx}PR$) do not have a significant impact on fiscal deficit in Nigeria. This implies that an increase in the level of press freedom in Nigeria does not have any significant impact on the implementation of fiscal deficits by politicians seeking to gain votes during election periods. Conclusively, in spite of the increase in the coverage of national economic and political issues by the press, Nigerian voters are generally apathetic with regards to the fiscal policy process. The index of political freedom has a positive and insignificant impact on fiscal deficits in Nigeria. The implication of this finding is that despite the improvement in their political rights, the average Nigerian voter pays little attention to the future consequences of the fiscal actions of an incumbent government. Both results support the idea of "fiscal illusion" and

Table 4
Result of diagnosis tests.

Name of test	Test statistics	P-value of the test statistics	Remark
Heteroscedasticity test: white	0.70936	0.7265	No heteroscedasticity
Breusch–Godfrey serial correlation LM test	0.179318	0.8360	No serial correlation
Ramsey RESET test (test for specification errors)	0.099224	0.7599	No specification errors
Jarque–Bera (normality test)	1.094695	0.578482	The estimated residual is normally distributed

Table 5
Heteroskedasticity test: white.

F-statistic	2.719907	Prob. F(5,10)	0.0836
Obs × R-squared	9.220205	Prob. Chi-square(5)	0.1006
Scaled explained SS	5.417744	Prob. Chi-square(5)	0.3670

Test equation:

Dependent variable: $RESID^2$
Method: least squares
Date: 08/21/17 time: 06:41
Sample: 1999 2014
Included observations: 16

Variable	Coefficient	Std. error	t-Statistic	Prob.
C	−6.72E + 09	7.85E + 10	−0.085568	0.9335
CSP^2	2.37E + 12	1.51E + 12	1.568285	0.1479
CHP^2	−2.56E + 12	2.01E + 12	−1.275210	0.2311
PRS^2	9.43E + 08	1.05E + 10	0.090021	0.9300
PFD^2	−2509634.	31,033,285	−0.080869	0.9371
CFR^2	−18607069	1.16E + 10	−0.001605	0.9988

R-squared	0.576263	Mean dependent var	6.00E + 10
Adjusted R-squared	0.364394	S.D. dependent var	1.07E + 11
S.E. of regression	8.56E + 10	Akaike info criterion	53.46456
Sum squared resid	7.33E + 22	Schwarz criterion	53.75428
Log likelihood	−421.7164	Hannan–Quinn criter.	53.47939
F-statistic	2.719907	Durbin–Watson stat	3.285531
Prob(F-statistic)	0.083638		

"ambivalent" attitude of voters as explained by Ura and Socker (2011), and Buscemi and Yallwe (2012). This might explain the inability of voters to see link between the excessive spending during election periods and the relatively tight fiscal policies of the post-election years in Nigeria. As such, these findings corroborate the conclusions derived from the descriptive analysis earlier carried out in this study.

Furthermore, the fiscal policy-rating index is found to have a positive and insignificant impact on fiscal deficits in Nigeria. This implies that fiscal institutions in Nigeria do not have any significant impact on fiscal deficits in Nigeria within the period covered by the study. The results further buttresses the arguments presented in descriptive part of the analysis carried out in this study. The result concludes that the dominance of politicking as opposed to the adherence to sound economic principles in the process of formulating and implementing fiscal policy in Nigeria.

Finally, the R^2 and its adjusted value indicate that the estimated model has a good fit, while the F-statistic result confirms the adequacy of the model used in this study. In a similar vein, the Durbin–Watson statistic indicates that there is no autocorrelation in the model used for this study. However, the validity of this result is based on the post estimation diagnostic tests presented below.

The results of the post estimation diagnostic test for the regression model is presented in Table 4. The results indicate that there is no heteroscedasticity, serial correlation specification errors in the model. This is indicated by the test statistics whose P-values are greater than 0.05 in such case the null hypotheses for the tests are not rejected. Also, the P-value of the Jarque–Bera (Normality) test is greater than 0.05. Meaning that the model estimated residuals are

Table 6
Breusch–Godfrey serial correlation LM test.

F-statistic	0.179318	Prob. F(2,8)	0.8360
Obs × R-squared	13.22381	Prob. Chi-square(2)	0.0013

Test equation

Dependent variable: RESID
Method: least squares
Date: 08/21/17 time: 06:41
Sample: 1999 2014
Included observations: 16
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	−607,934.8	186,157.3	−3.265706	0.0114
CSP	5,158,613.	1,975,396.	2.611433	0.0311
CHP	−3,856,816.	2,044,553.	−1.886386	0.0960
PRS	228,391.1	164,453.0	1.388793	0.2023
PFD	−26,087.59	6944.383	−3.756646	0.0056
CFR	6621.457	166,571.7	0.039751	0.9693
RESID(−1)	−0.747854	0.251483	−2.973773	0.0178
RESID(−2)	−1.577493	0.257927	−6.116040	0.0003

R-squared	0.826488	Mean dependent var	1.49E − 09
Adjusted R-squared	0.674665	S.D. dependent var	252,897.7
S.E. of regression	144,248.2	Akaike info criterion	26.90331
Sum squared resid	1.66E + 11	Schwarz criterion	27.28961
Log likelihood	−207.2265	Hannan–Quinn criter.	26.92309
F-statistic	5.443760	Durbin–Watson stat	2.127718
Prob(F-statistic)	0.014666		

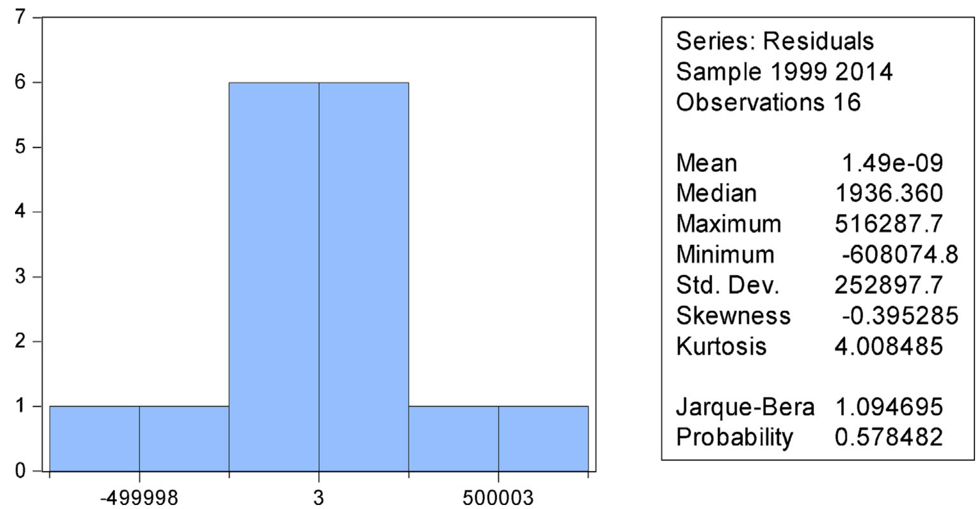

Fig. 1. Graphical summary of test.

normally distributed. These results show that the model used for the study is appropriate and the results therefrom are valid for policy conclusions (Tables 5–7, Fig. 1).

Table 7
Ramsey RESET test.

Equation: UNTITLED
Specification: DFC C CSP CHP PRS PFD CFR
Omitted variables: squares of fitted values

	Value	df	Probability
t-Statistic	0.314998	9	0.7599
F-statistic	0.099224	(1, 9)	0.7599
Likelihood ratio	0.175432	1	0.6753

F-Test summary:

	Sum of Sq.	df	Mean squares
Test SSR	1.05E+10	1	1.05E+10
Restricted SSR	9.59E+11	10	9.59E+10
Unrestricted SSR	9.49E+11	9	1.05E+11

LR test summary:

	Value	df
Restricted LogL	−221.2386	10
Unrestricted LogL	−221.1508	9

Unrestricted test equation:
Dependent variable: DFC
Method: least squares
Date: 08/21/17 time: 06:42
Sample: 1999 2014
Included observations: 16

Variable	Coefficient	Std. error	t-Statistic	Prob.
C	−3,296,195.	6,872,686.	−0.479608	0.6429
CSP	−31,160,764	61,629,656	−0.505613	0.6253
CHP	40,099,456	80,974,882	0.495209	0.6323
PRS	−429,277.2	960,984.7	−0.446706	0.6656
PFD	−2823.233	12,615.87	−0.223784	0.8279
CFR	459,926.9	1,034,859.	0.444434	0.6672
$FITTED^2$	1.47E−06	4.67E−06	0.314998	0.7599

R-squared	0.738416	Mean dependent var	−524,114.1
Adjusted R-squared	0.564027	S.D. dependent var	491,766.2
S.E. of regression	324,704.5	Akaike info criterion	28.51885
Sum squared resid	9.49E+11	Schwarz criterion	28.85686
Log likelihood	−221.1508	Hannan–Quinn criter.	28.53616
F-statistic	4.234304	Durbin–Watson stat	1.869374
Prob(F-statistic)	0.026510		

5. Conclusion and policy implications

The analysis carried out so far in this study has been geared towards the investigation of the political economy of fiscal deficits in a democracy using Nigeria as a case study. The motivation for this stems from the recent criticisms leveled against economists in the country due to the failure of most of the country's macroeconomic policies. The conclusions derivable from the literature reviewed is that while policy actions such as the implementation of fiscal deficits are dependent on economic, political and socio-cultural consideration, political and socio-cultural considerations sometimes outweigh sound economic considerations. The results derived from the study confirm tenability of this conclusion. The results also indicate the existence of "voter apathy and fiscal illusion" among Nigerian voters. In particular, the results of the quantitative analysis revealed that increases in the degree of press freedom which has been achieved since the advent of democracy in the country in 1999 has no significant impact on the ability of the average citizen to assess the cost of government activities, which confirm the existence of "fiscal illusion". This may be the product of several factors among which is the fact that rural dwellers and the urban poor in Nigeria generally have to rely on government owned media houses for information on the activities of government. Such media organizations are usually characterized by a general lack of objectivity and high degree of pro-government bias which may account for the inability of most Nigerians to adequately asses the costs of government actions.

On the other hand, the non-significance of the index of political freedom implies the existence of a certain amount of voter apathy and disinterest in the costs of the actions of the various governments. The results are justified by the low levels of literacy and the general lack of appreciation of the costs of government activities which characterize the residents of rural communities, as well as the urban poor. This segment of the population in view of their high levels of poverty and relatively high levels of illiteracy and semi-illiteracy are generally more interested in the ability of the government in power to satisfy their immediate needs. Furthermore, the insignificance of the fiscal policy rating index further buttresses the argument that the fiscal policy process in Nigeria is highly politicized. This is because it indicates a general inability of the budgetary institutions to ensure the adherence to sound economic principles in the formulation and implementation of fiscal policy in the country.

In view of the findings, this study makes several recommendations among which are; the need for revitalization of the country's budgetary institutions. This will ensure the reduction in the impact of political considerations on the fiscal process in the country; a high degree of autonomy for state owned media organizations, as well as programs to re-orientate and refocus media organizations in the country so as to ensure objectivity in the coverage of the activities of government.

References

Adams, R.H., 2000. The politics of economic policy reform in developing countries. The World Bank, Policy Research Working Paper No.2443.

Agundu, P.U.C., Akani, W.H., Mpia, M.N., 2013. Economic aggregates, sustainable development and dialectics of deficits in Nigeria. J. Econ. Sustain. Dev. 4 (18), 19—25, Retrieved from http://www.iiste.org.

Alesina, A., Perotti, R., Tavares, J., 1998. The political economy of fiscal adjustments. Brook. Pap. Econ. Activity 1, 197–266.

Antwi, S., Zhao, X., Mills, E.F.E.A., 2013. Consequential effects of budget deficit on economic growth: empirical evidence from Ghana. Int. J. Econ. Financ. 5 (3), 90–101, http://dx.doi.org/10.5539/ijef.v5n3p90.

Ball, L., Mankiw, N.G., 1995. What do budget deficits do? National Bureau of Economic Research Working (NBER) Paper 5263.

Buscemi, A., Yallwe, A.H., 2012. Fiscal deficit, national saving and sustainability of economic growth in emerging economies: a dynamic GMM panel data approach. Int. J. Econ. Financ. Issues 2 (2), 126–140, Retrieved from http://www.econjournals.com.

California State University Long Beach, n.d. Models of public policy making. Retrieved from http://web.csulb.edu/~msaintg/ppa590/models.htm.

Easterly, W., Schmidt-Hebbel, K., 1993. Fiscal deficits and macroeconomic performance in developing countries. World Bank Res. Obs. 8 (2), 211–237.

Edwards, S., Tabellini, G., 1991. The political economy of fiscal policy and inflation in developing countries: An empirical analysis. The World Bank: Policy Research and External Affairs Complex Working Paper No.703.

Eslava, M., 2011. The political economy of fiscal deficits: a survey. J. Econ. Surv. 25 (4), 645–673, http://dx.doi.org/10.1111/j. 1467-6419.2010.00647.x.

Haggard, S., Kaufman, R., 1990. The political economy of inflation and stabilization in middle-income countries. The World Bank: Policy Research and External Affairs Complex Working Paper No. 444.

INEC Nigeria, 2015. Results for 2015 presidential general elections. Retrieved from http://www.inecnigeria.org.

Khemani, S., 2002. Federal politics and budget deficits: Evidence from the states of India. World Bank Policy Research Working Paper 2915. Retrieved from http://econ.worldbank.org.

Odhiambo, S., Momanyi, G., Othuon Lucas, O., Aila, F.O., 2013. The relationship between fiscal deficits and economic growth in Kenya: an empirical investigation. Greener J. Soc. Sci. 3 (6), 306–323, Retrieved from http://www.gjournals.org.

Ojong, C.M., Owui, H., 2013. Effect of budget deficit financing on economic development of the Nigerian economy: 1980–2008. Eur. J. Bus. Manag. 5 (3), 61–84, Retrieved from http://www.iiste.org.

Ocheni, S., Atakpa, M., Nwankwo, B.C., 2013. Analysis of the politics of local government budgeting in Nigeria (1995–2011). Acad. J. Interdiscip. tud. 2 (2), 497–508, http://dx.doi.org/10.5901/ajis.2013.v2n2p497.

Pasten, R., Cover, J.P., 2010. The political economy of unsustainable fiscal deficits. Cuadernos De Economía 47, 169–189.

Public Administration the One, August 27th, 2012. Public policy: Models of policy making and their critique. Process of conceptualization, planning, implementation, monitoring, evaluation and review, and their limitations. State theories and public policy formulation. Retrieved from http://publicadministrationtheone.blogspot.com.ng/2012/08/public-policy-models-of-policy-making_27.html.

Mačkić, V., 2014. Political budget cycles at the municipal level in Croatia. Financ. Theory Pract. 38 (1), 1–35, http://dx.doi.org/10.3326/fintp.38.1.1.
Ura, J.D., Socker, E.M., 2011. The behavioural political economy of budget deficits: how starve the beast policies feed the machine. Forum 9 (2), http://dx.doi.org/10.2202/1540-8884.1430.
Wosowei, E., 2013. Fiscal deficits and macroeconomic aggregates in Nigeria. Kuwait Chapter of Arab. J. Bus. Manag. Rev. 2 (9), 72–82.