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An Empirical Analysis of the Structure and Growth of Federal Government Expenditure in Nigeria.

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Abstract
This study attempts to examine empirically the structure and growth of federal government expenditure in Nigeria. Since 1970, the federal government expenditure has continued to grow; prompting argument as to what is responsible for the continuing growth in the structure of government expenditure. Plethora of factors have been identified as possible factors causing government expenditure growth, hence the need to conduct an investigation to ascertain this for Nigeria. Time series data for the period 1970 to 2009, was used in the study. The ordinary least squares (OLS) regression technique was employed as the main method of data estimation. The results obtained revealed that factors such as fiscal deficit, Gross Domestic product, Government revenue and debt servicing are some of the factors causing growth in the government expenditure in Nigeria for the reference period. It is therefore recommended that government should maintain sound fiscal discipline, prevent double-digit inflation, and ensure productive use of revenue and increasing productivity to help reduce government expenditure growth in Nigeria.
Keywords: Federal government expenditure, Government revenue, GDP, OLS, Fiscal deficit.
JEL Classification: B22, C22, F65, H53**.**

1. INTRODUCTION

The problem of determining the structure and growth of public expenditure has occupied the attention of researchers and theorists over several decades. Historically, public expenditure could be rightly argued to be continuously increasing overtime in almost every country. The concept of public expenditure is used to refer to the expenses, which the government incurs for its own maintenance and also for the society and economy as a whole (Bhatia, 1977 and Edame, 2001).

Government spending has accounted for a rising proportion of national income in the twentieth century. This applies to most countries regardless of their level of economic development (Lindaver and Valenchik, 1992). Wagner (1893), on the basis of empirical findings came up with a view that there was a long-run tendency for state activities to grow relative to the growth in national income. According to Kusi (1997), the conventional interpretation of Wagner's law implies a continuous relative expansion of public spending as a consequence of the development process. Wagner explained that as a society becomes industrialized, the set of social, commercial and legal relationships within it become more complex. Wagner (1893) reasoned that many public outputs are income elastic so that as development progresses and per capita income increases, demand for them increases by a larger percentage. As argued by Ezirim and Ofurum (2003), the size of a government and in some cases of the country has been measured in terms of the total spending of the particular government or country. Among them are Wagner's law of increasing state activities, Wiseman-peacock hypothesis, critical limit hypothesis, Lerianthan hypothesis, differential productivity hypothesis and the relative price hypothesis. A critical look at these theories will reveal a Plethora of factors that are said to determine the growth of public expenditure. Some of these factors are inflation, total revenue of the country, total debt over-hang and debt service or burden ratio, per capital income or output of the country, and strategic transfers from Federal government to the state government (Ezirim et al, 2008). Others include population growth, urbanization effect, and taxation. In Nigeria empirical evidence has shown that total federal government expenditure was 903.90 million representing 17.4% of the GDP. By 1980, it rose to 14,968.50 million, representing 29.5% of the GDP and by 1990; the total federal government expenditure was 60,268.20 million, representing 12.16 of the total GDP. Empirical evidence further shows that as at 2008, the total expenditure by the federal government was 30, 78, 300.00 million, representing 12.8% of GDP. From the above empirical evidence, federal government expenditure has continued to grow over the years. (CBN, 2009).Therefore, given these causal factors, the study specifically attempts to examine the structure and growth of federal government expenditure in Nigeria for the period 1970-2008. The study is organized into five parts as follows: Part one is the introduction. Two presents the literature review and the theoretical framework. Three presents the research methodology and model, Specification, presentation and analysis of empirical results is the focus of part four, while five concludes the study.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This section reviews the theories of public expenditure. Theories of public expenditure are traditionally classified into economic, bureaucratic and political. In this study, a broad review of the theories has been carried out since no single theory can explain all the issues involved in the study.

WAGNER'S LAW OF INCREASING STATE ACTIVITIES

This law was propounded by a German Economist named Adolph Wagner (1835-1917). The law posits that there are inherent tendencies for the activities of different layers of government to increase both intensively and extensively. The theories assume the existence of a functional relationship between the growth of an economy and the government sector grows faster than the economy. It emphasizes long-term forces rather than short term changes in public expenditure (Wagner 1911). It is also agreed, through empirical evidence that all kinds of governments, irrespective of their levels have indicated the same tendency of increasing public expenditures, with the pace of increase being different for different branches of government (Lin 1995). Wagner's law is applicable to modern progressive governments that are interested in expanding the public sector of the benefit of the general populace. However, it does not provide any precise quantitative relationship between the extents to which public expenditure would increase and the time taken was not fixed because his study was based on historical experience.

WISEMAN - PEACOCK HYPOTHESIS

Wiseman - peacock Hypothesis emphasizes the recurrent of abnormal situations, which cause sizable jumps in public expenditure and revenue. Accordingly, Public expenditure cannot and should not be expected to increase in a smooth and continuous manner, but in jerks or a step- like fashion to accommodate special needs, such as natural disasters, wars, epidemics, etc. These at once create the need for increased public expenditure, which the existing public revenue cannot meet. The movement from the order level of taxation to a new and higher level is the displacement effects. Sometimes, the government and the people may jointly review the revenue position against the required increase in public expenditure. In this way, the old public expenditure and revenue levels get stabilized at a new level until another disturbance occurs to cause displacement effect. Since each major disturbance makes the government to take over a larger proportion of the total national economic activities, the net results is the concentration effect. The Wiseman-peacock hypothesis is still a description of a particular tendency and does not isolate all relevant causes at work. In many developing countries, the state is deliberately trying to increase its activities through various tax efforts. The relevance of this hypothesis in most countries needs verification (Udoh, etal. 2007).

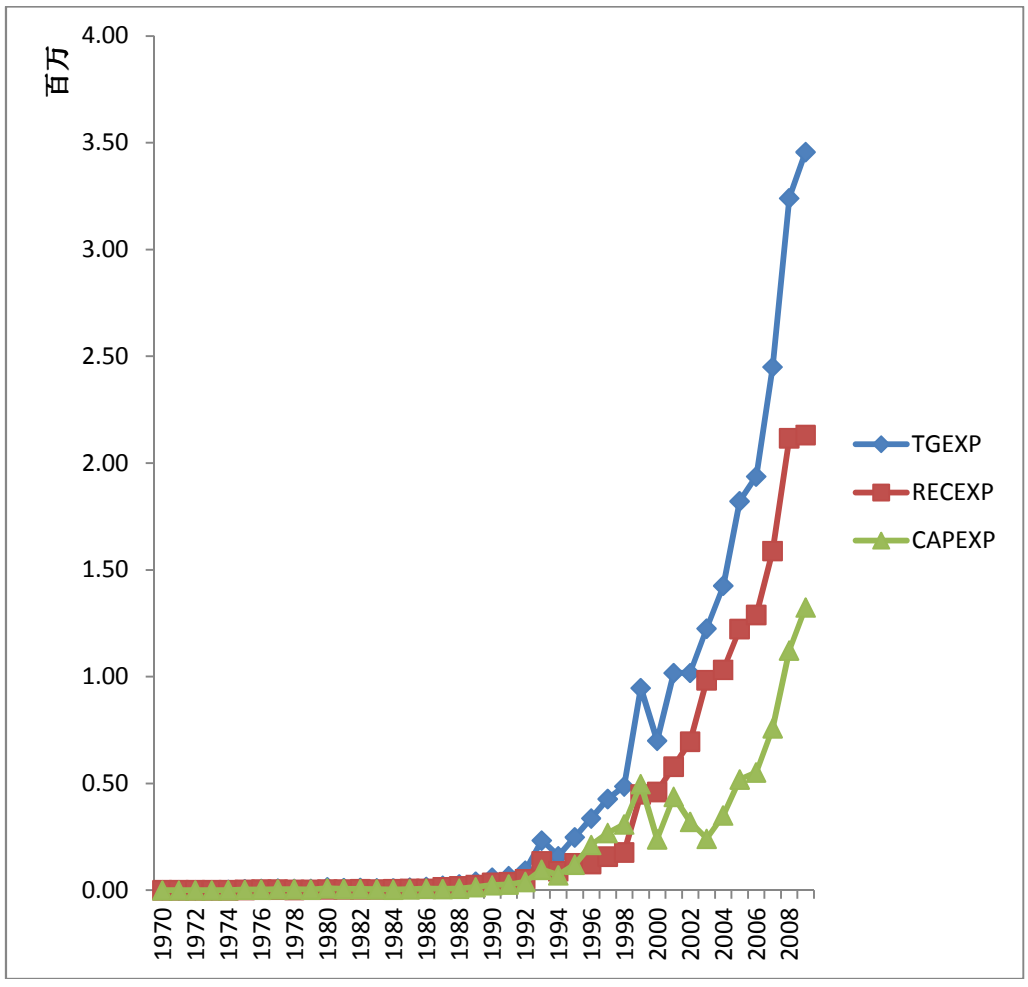
The literature analyzing federal government expenditure has focused on explaining the size of public sector or one of its components separately. Income is singled out as the first and foremost of all the government expenditure functions and is said to be almost always with a positive elasticity. Thus, in defense and public order and security it increase the resources for providing protection, while at the same time raising the cost of an attack (Murdoch and Sandler, 1984,1985, 1990, Okamura 1991, Pradhan and Ravallion, 1998, and Sezgin, 2000). In merit goods- health, education and housing, a wide range of studies find elasticities greater than one, revealing their luxury good nature (New house, 1977, 1987, Leo, 1986, Gardtham et al 1992, Falch and Rattso, Hitiris, 1999, Snyder and Yackovlev, 2000 and Hesmati, 2001, Calyer (1988), McGure et al (1993), Gertham et al (1994),Hansen and King(1996), Fernandez and Rogerson `(1997) Dimatteo and Dimatteo (1998) and Lopez-Casanovas and Saez (2001) contend that this outcome may be due to the mission of variables, failure to utilize the cross-section variation, the possibility of spurious relations and the absence of regional disaggregation of spending. Thus, Manning, et al (1987), Gbesemete and Gertham (1992), Gertham et al (1994), Murthy and Ukpoloson (1997), Borge and Rattso (1995), Fernandez and Rogerson (1997) Dimatteo and Dimatteo (1998) and Lopez-Casanovas and Seaz (2001) find an elasticity that is lower or not significantly different from unity. Similarly, Tait and Heller (1982), Randolph et al (1996), Fay (2000) find that spending on economic services, including those relating to transport and communications responds primarily and directly to per capital income changes. (Tait and Heller, 1982: Concialdi, 1999).Baumol (1967), Okamura (1991) find an unexpected positive elasticity for defense. Gardtham, et al (1992) does not find a significant effect of the ratio purchasing power standard (PPS) for health and GDP on per capita health spending. As for education expenditure, many studies agree on the fact that it is inelastic (Rubinfeld and Shapio, 1989; Aronson and Wikstron, 1996; Falch and Rattso, 1997; Dahlberg and Jacob, 2000, and Ahlin and Johansson, 2001).(Murdoch and Sandler, 1985, Murdoch and Sandler 1990, Gardtham et al 1992; Randolph et al 1996, Falch and Rattso, 1999, Fay, 2000, and Heshmati 2001), (Curie and Yellowitz, 2000).Thus, Marlow and Shiers (1999) suggest that in respect of spending connected with public order and security and defense, the bulk of illegal actions are committed by individuals between 18-25 years old.(Heller et al, 1986; Hageman and Nicoleti, 1989, Murthy and Ukpolo, 1994, Dimatteo and Dimatteo, 1998, Hitiris, 1999, Curie and Yellowitz, 2000, and Lopez-Casanovas and Saez, 2001). Marlow and Shiers (1999) and Ahlin and Johansson (2001)Poterba (1997), Fernandez and Rogerson (1997), Marlow and Sheirs (1999) and Painter and Bac (2001),Falch and Rattso (1997), Hicks and Kubixh (1984), Smith (1989),

Looney and Mehay (1990) state that the budget process has a significant impact on military spending. (Gardtham et al, 1994; Murthy and Ukpolo 1994, Randolph et al, 1996, Falch and Rattso, 1997, Mongelli, 1997, Clements et al, 1998, Falch and Rattso, 1999, Marlow and Shiers, 1999, Snder and Yackoveler, 2000, lopez-casanoovas and Seaz, 2001, and Heshmati,2001). Pointed out that in the framework of the median voter model, a rise in the proportion of young people will generate pressure by their parents for increase in public spending on education. Lastly, institutional factors affect social security spending, sometimes to the extent of being as important as income (Hicks and Swank, 1992 and Alesiana 1999).Indeed, Heller and Diamond (1990) and Clements et al (1998) find that the significance of the other functions increases the magnitude of economic services and of social security spending. Likewise, Looney (1997) claims that defense and public infrastructures spending are competitors, whilst Marlow and Sheirs (1999) shows that expenditure on education is complementary to that on defense and public order and security. (Looney and Mehay, 1990; Murdoch and Sandler, 1990; Randolph et al 1996; Falch and Rattso, 1997; Marlow and Sheirs (1999) Snyder and Yackoveler, 2000, and Painter and Bac, 2001, Lindert, 1996, Perotti, 1996, Curie and Yellowitz, 2000, Pradham and Ravillion, 1998, Snyder and Yackoveler, 2000, and Moane and Walkastein, 2001), (Gardtham et al 1994, Murphy and Ukpolo, 1994, Pradham and Ravillion 1998 and Dimatteo and Dimatteo, 1998).Lastly, the defense spending of both allies and enemies affects each country's military budget. Singh and Sahni (1984) use the Granger causality test to determine the causality direction between national income and public expenditure in India. Total (aggregate) as well as disaggregate expenditure data for the period of 1950-1981 were used. Abizadeh and Yousfl (1998) use South Korea data to test Wagner's law. They first conducted grander type causality tests, and then estimate a growth equation by using annual data for the period of 1961-1992.Arisari et al (1997) attempt to determine the direction of causality between government expenditure and national income for three African countries; Ghana, Kenya, and South Africa, using standard Granger testing procedures and the Holmes- Hutton (1990) causality test, which is a modified version of the Granger test. In the case of Nigeria, Aighkhan (1996) investigated the impact of federal government size (measured as expenditure share of GDP) on economic growth between 1960 and 1993 with focus on the effects of the structural adjustment programmes (SAP) introduced in July, 1986. The OLS regression analysis of a simple growth equation was estimated and argumented with the standard Granger causality testing approach. Empirical estimates from Aigbokhan study reported a bi-directional causality between government total expenditure and national income. Using the angle Granger two step procedures and standard causality Test, Essien (1997) found that the variables (public spending and real income) were not cointegrated and hence could not establish a long run relationship. In addition, causality tests performed on his models confirmed that public expenditure does not cause growth in income and there was no feedback mechanism. Edame (2009) using a Switching regression analysis on public expenditure on infrastructure and economic growth in Nigeria between 1970-2006, found that public expenditure was higher during the democratic regimes than the period of military rule. For turkey, using aggregate data over the period 1950-1990, Demirbas (1999), Halicioglu (2003) also for turkey for the period 1960-2000 did not as well support the empirical validity of Wagner's law. Arghyrou (1999), investigated the existence and nature of long run relationships between Greek national income and four categories of public expenditure. His result suggests that there exists a positive long-run relationship between GDP on the one hand, and public expenditure and productive public consumption on the other, with causality running both ways. There appears to be no long- run relationship between GDP and public sector personnel expenditure; and GDP and public debt services expenditure. In a cross- country study, channg et al, (2004) following Mann's (1980) study, empirically (using annual time series data) five different versions of Wagner's law for ten countries of Asia: South Korea, Taiwan, and Thailand and seven industrialized countries: Australia, Canada, Japan, New Zealand, USA, the United Kingdom and South Africa. Unidirectional Granger causality is found running from income to government spending for the newly industrialized countries of South Korea and Taiwan, and the industrialized countries of Japan, the United Kingdom, and the united state of America, supporting Wagner's hypothesis for these countries. For the remaining countries in the study: Australia, Canada, New Zealand, South Africa and Thailand no casual relationship between income and government spending is found. Islam (2001) in his re examination of Wagner's hypothesis for the USA found that the relative size of government and real gross national product per capita are cointegrated by using Johansen- Juselius cointegration approach.

2.1 TRENDS IN PUBLIC EXPENDITURE IN NIGERIA.

Table 1 of the appendix presents the trends in the federal government recurrent, capital and total expenditures from 1970-2008. From the table 1 of the appendix, federal government expenditures have continued to be on the rise since 1970. Statistical evidence has shown that total federal government expenditure, had stood at ₦903.9 million naira in 1970. This increased further from ₦997.2 million in 1971 to ₦5942.6 million naira in 1975 before reaching the of ₦14968.5 million naira in 1980. The increase in federal government expenditure during this period was due to largely to increased revenue from the oil boom of the period. Another factor was the reconstruction effort of the government after the civil war. About ₦11413.7 million in 1981, it

increased to ₦13041.1million in 1985, ₦16223.7 million in 1986, and then to ₦60268.2 million in 1990, increase in public expenditure during this period was largely attributed to increased government activities following austerity measures implemented by the federal government. The trend continued on the increase from 1991 to 2000. In 1991, total government expenditure was ₦66584.4 million, ₦248.768.1 million in 1995 and ₦701, 059.4 million in 2000. Meanwhile, the total federal government expenditure was ₦1018.2 billion in 2002, ₦1822.1 million in 2005, ₦2450.9 billion in 2007 and ₦3240, 820.0 billion in 2008. Table 1 of the appendix also shows the trend in the recurrent expenditure of the federal government of Nigeria for the period 1970 through 2008. As revealed by the table, the federal government recurrent expenditure had also maintained an upward trend. From ₦716.1 million in 1970, the recurrent expenditure rose to ₦2734.9 million in 1975 and trend to ₦4805.2 million in 1980. The upward trend continued into the late 1980s and in 1987 the recurrent federal government expenditure was ₦15646.2 million. The period 1987 through 1999 witnessed very growth of the recurrent expenditure in Nigeria. For instance, the recurrent expenditure rose from ₦15646.2 million to ₦25994.2 million in 1989 and then to ₦136727.1 million in 1993. And by 1999, the recurrent expenditure was ₦449, 662.4 million. By 2000 the recurrent expenditure was ₦461, 608.5 million and by 2005, it rose to ₦1223, 730.0 million and reaching the level ₦2117, 400.0 million in 2008.Table 1 of the appendix further showed the trends in capital expenditure. Just like the total and recurrent expenditures, the capital expenditure also continues to rise from period to period. For instance, in 1970, 1975, 1980 and 1985, the capital expenditure were ₦187.8 million, ₦3207.7 million, ₦10,163.4 million and ₦5464.7 million respectively. The rapid increase in capital expenditure during the period was boosted by the oil boom of the 1970s and the need to reconstruct infrastructures damaged during the civil war. By 1990, the federal government capital expenditure had stood at ₦240.48.6 million. From there it rose sharply to ₦121138.3 million in 1995 and by 2000, the capital expenditure was ₦239, 450.9 million. From ₦241, 68.6 million in 2003, the capital expenditure rose to ₦519, 510.0 million in 2005 before settling at ₦1123458.0 million in 2008 (See Akpan and Edame, 2009).



The line graph above presents trend analysis of total, recurrent and capital federal government expenditure in Nigeria for the period 1970 to 2009. As depicted by the graph, total, recurrent and capital government expenditure increased slowly but steadily from 1970 to 1992 before increasing rapidly. As shown in the graph, total government expenditure rose rapidly from 1993 to 1999 from ₦233806.5 million in 1993 to ₦947, 690.00 million in 1999 before declining sharply to ₦701059.40 million in 2000. And after this temporary decline, total government expenditure resumed again on the increase and rapidly till 2009.

However, unlike total government expenditure, the recurrent expenditure was on the increase throughout the period. On the other hand, an increase in capital expenditure was dotted with few declines. For instance after the initial increase between 1993 and 1999, the capital expenditure fell to ₦239, 450.90 million in 2000. it then rose temporary in 2001 before falling again in 2003 to ₦241,688.30 million. But after 2003, the capital expenditure of the federal g9overnment continued on the increase till 2009.

From the above analysis, we can observe that apart from some few declines in the federal government expenditure in selected years, the general observation is that there has been a continuous increase in federal government expenditures in Nigeria for the period 1970 to 2009.

3. RESEARCH METHODOLOGY AND MODEL SPECIFICATION

As defined by Ojameruaye and Oaicheman (2001), model specification involves the definition of the variables to be included in the model, the determination of the mathematical form of the model, and the statement of the theoretical expectation about the parameters of the model. Thus, in examining the structure and growth of federal government expenditure in Nigeria, we capture and include some macroeconomic variables in the model to enable us model the relationship between government expenditure and its determinants. Given these factors, the model for this study is formulated and specified as follows:

TGEXP= f (FISDEF, GDP, INF, GOVREV, DEBSERV)

Where;

TGEXP =Total government expenditure, which is the summation of capital and recurrent expenditures.

FISDEF =Fiscal deficit, which is the difference between government revenue and expenditure. This is also called fiscal balance.

GDP =Gross domestic product, which measures total productivity in Nigeria.

INF =Inflation rate in Nigeria.

GOVEVR = Government revenue, which is the total income earned by the government from different sources.

DEBSTRV = Federal government debt servicing.

MODEL ESTIMATION

Model estimation involves obtaining numerical values (estimates) of the coefficients (parameters) of the model specified in section 3.1 above.

Following from this, the model is expressed in an econometric linear form as follows:

$TGEXP= B_0+B_1 FISDEF + B_2GDP +B_3INF +B_4 GOVREV +B_5 DEBSERV +U$

Where;

B_0 = the intercept of the model

B_1 = the coefficient of FISDEF

B_2 = the coefficient of GDP

B_3 = the coefficient of INF

B_4 = the coefficient of GOVREV

B_5 = the coefficient of DEBSERV

U = stochastic error term

The estimated model above can also be expressed in a log linear form as;

$LOG\ TGEXP= B_0+B_1 \log FISDEF + B_2 \log GDP +B_3 \log INF +B_4 \log GOVREV +B_5 \log DEBSERV +U$

The apriori expectations about the signs of the coefficients of the parameter estimates areas follow.

$B_0>0, B_1>0, B_2>0, B_3>0, B_4>0, B_5>0$

METHODS OF DATA ANALYSIS.

The empirical result of the specified model above is analyzed using the following criteria.

(i) Economic a priori expectation of the coefficients of the parameters that our model conforms to the relevant economic theory.

In other words, it has to do with determining whether the estimates conform to the stated expected signs and magnitude of the parameters as provided by economic theory. For instance, Statistical Criteria (first order test)

This will be used in the study to ascertain the prediction power of the models; whether the parameters

used in the model are statistically significant and to test for the significance of the overall model. The measures used for the statistical test of the model include:

(a) T- statistics: This is used to decide significantly different from zero and vice versa, at a given level of significance before rejecting or accepting the null hypothesis (HO).

(b) R-Squared and Adjusted R-Squared: These are used to measure the goodness of fit of the estimated model. They measure the proportion of the total variation in the dependent variables that is explained by variations in the explanatory variables.

(c) F- Statistics: This is a test for the existence of a significant linear relationship between the independent variables taken together with the dependent variable. The ratio is used to test the overall statistical significance of the estimated model.

(ii) Econometric criteria (second order test):

This has to do with the appropriation of the estimating techniques or estimation of a given model, the available empirical data present and discusses the interpretation of the coefficients and discusses the acceptability of the parameter estimates. The econometric or second order tests of the estimated model are aimed at detecting the possible on the validity of some of the assumption on which the particular econometric method is based.

SOURCE OF DATA COLLECTION

Secondary data were used in this study. The relevant data for this study have been obtained from the Central Bank of Nigeria (CBN) Annual Report and Statement of Accounts, Central Bank of Nigeria Statistical Bulletins of various years, and the World Bank data base.

4. RESULTS PRESENTATION AND ANALYSIS

The empirical results of the estimated model specified in section 3.1 is presented as follows

TGEXP = 19344.51 - 1-232FISDEF + 0.0859GDP + 170.207 INF SE. = (27169.08)
(0.1809) (0.011) (897.475)
t-value (0.712) (-6.812) (7.481) (0.190)

\+ (0.155 GOVREV-0.889DEBSERV $R^2 = 0.990$
(0.043) (0.325) $R^2 = 0.988$
(3.626) (-2.735) F-statistic =657.529
D-W= 1.790

4.2 ANALYSIS OF RESULTS

The estimated results above will be analyzed using three criteria, viz: Economic a prior criteria; statistical criteria and Econometric criteria. The estimated regression line has a positive intercept, represented by the constant term. This means that if we hold all variables constant, there will still be an autonomous increase in government expenditure by 19344.51 billion. The results show that gross domestic product is positively related to the growth in government expenditure. This is consistent with the relevant theories implying a unit increase in gross domestic product which will bring about an increase in government expenditure by 0.085 billion.

Similarly, the positive coefficient of inflation shows that there is a positive relationship between inflation and growth of public expenditure. This is inline with the relevant economic theory implying that a unit increase in inflation rate will lead to an increase in government expenditure. This conforms to the relevant economic theory showing that a unit increase in government revenue leads to an increase in government expenditure by 0.155 billions other factors held constant. However, the results show that there is a negative relationship between fiscal deficit and growth in government expenditure. This is not consistent with the relevant economic postulates. The relevant economic theory specifies a direct relationship between fiscal deficit and growth in public spending. The results obtained imply that a unit increase in budget deficits brings about a decrease in government expenditure by 1.233 billion.

Lastly, public debt servicing is inversely related to growth in government expenditure. This is also contrary to relevant economic postulates, which specify a direct relationship. The result however, shows that a rise in public debt servicing brings about a fall in the growth of public spending by 0.889 billion, other factors remaining the same. The results obtained shows that the t- statistic value of 2.736 calculated is greater than the critical value of 1.96 at five percent level of significance. We therefore conclude that there is a significant impact of public debt servicing on the growth of government expenditure in Nigeria. From the results obtained the t-statistic value calculated of 3.626 is greater than the critical value of 1.96 at five percent level of significance. We conclude that there is a significant relationship between government revenue and the growth of government expenditure in Nigeria. From the statistical test conducted, the t- statistic value calculated of 7.481 is greater than the critical value of 1.96 at five percent level of significance. We conclude that there is a significant relationship between gross domestic product and the growth of government expenditure in Nigeria.

4.2 DISCUSSION OF MAJOR FINDINGS

From the empirical results obtained, the following findings are made.

(i) The empirical results showed that three variables (GDP, INF, and GOVREV) turned out with the prior expected signs as predicted by the relevant economic theory. The remaining two variables (FISDEF and DEBSERV) turned out with wrong signs.

(ii) The statistical test conducted revealed that four variables (FISDEF, GDP, GOVREV, and DEBSERV) were statistically significant. These results mean that the variables were significant in explaining short run changes in the dependent variable.

(iii) The high value of adjusted R-Squared indicates a high degree of relationship between the dependent variables. The high value of F-Statistic also showed that the overall model is statistically significant. This further confirmed the existence of linear relationship between the dependent variables and the independent variables.

(iv) The economic test conducted using the Durbin- Watson statistic revealed no auto correlation in the model.

5. POLICY RECOMMENDATION

Based on the results obtained and analyzed, the following policy recommendations are made.

(1) The negative effects of fiscal deficit on the growth of government expenditure calls for policy to ensure and sustain strong fiscal discipline excess public spending should be curtailed to prevent excess of expenditure over revenue. The curtailment of such deficit will help reduce the growth in government expenditure.

(2) The positive impact of gross domestic product on government expenditure calls for policy to ensure that output is increased so as to put prices down and reduce public spending.

(3) The positive effects of inflation on the growth of government expenditure showed that inflation is a strong determinant of public expenditure growth in Nigeria. It is therefore important that the government through the monetary authorities should ensure that inflation rate is pursued to a single digit to prevent rising prices.

(4) Similarly, government revenue is positively related to the growth in government expenditure. This positive impact of government revenue calls for policy which will ensure a productive use of revenue. Revenue realized should be productively and decrease growth in public spending.

(5) Finally, the negative impact of debt servicing on the growth of government expenditure revealed that public debt servicing does not lead to increase in public spending in Nigeria. It is therefore recommended that the current low rate debt status be maintained. Also, debts incurred should be meant specifically for productive purposes.

5.1 CONCLUSION

The study attempted to examine empirically the structure and growth of the federal government expenditure in Nigeria for the period 1970 to 2009. Over the years, growth in public expenditure has continued to generate debates in as to what are the determinants of government expenditure growth in Nigeria.

Thus, the main purpose of this study was to investigate what factors cause the growth in public expenditure growth in Nigeria.

The empirical results obtained revealed that growth in government expenditure has been caused by fiscal deficit, gross domestic product, government revenue and debt servicing of the federal government. The results showed that these variables were significant in explaining short-run change in government expenditure in Nigeria. Therefore, it is recommended that government should continue to maintain a sound fiscal discipline, prevent double- digit inflation, ensures the productive use of revenue and increasing productivity to help decrease the growth in government expenditures.

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APPENDIX

TABLE 1: TRENDS IN PUBLIC EXPENDITURE IN NIGERIA (1970-2009)

YEAR	TOTAL FEDERAL RECURRENT EXPENDITURE (N'MILLION)	FEDERAL GOVERNMENT CAPITAL EXPENDITURE (N'MILLION)	FEDERAL GOVERNMENT EXPENDITURE (N'MILLION)	GOVERNMENT
1970	903.90	716.10	187,80	
1971	997.20	823.60	173.60	
1972	1,463.60	1,012.30	451.30	
1973	1,529.20	963.50	565.70	
1974	2,7856.70	1,517.10	1,223.50	
1975	5,942.60	2,734.90	3,207.70	
1976	7,856.70	3,819.20	5,004.60	
1977	8,823.80	3,819.20	5,200.00	
1978	8,000.00	2,800.00	5,200.00	
1979	7,406.70	3,187.20	4,219.50	
1980	14,968.50	4,805.20	10,163.30	
1981	11,413,70	4,846.70	6,567.00	
1982	11,923.20	5,506.00	6,417.20	
1983	9,636.50	4,750.80	4,885.70	
1984	9,927.60	5,827.50	4,100.10	
1985	13,041.10	7,576.40	5,464.70	
1986	16,223.70	7,696.90	8,526.80	
1987	22,018.70	15,646.20	6,372.50	
1988	27,749.50	19,409.40	8,340.10	
1989	41,028.30	25,994.20	15,034.10	
1990	60,268.20	36,219.60	24,048.60	
1991	99,584.40	38,243.50	28,340.90	
1992	92,797.42	53,034.10	39,76330	
1993	233,806.50	136,727.10	97,079.40	
1994	160,893.20	89,974.90	70,918.30	
1995	248,768.10	172,629.80	121,138.30	
1996	337,217.60	124,291.30	212,926.30	
1997	428,215.20	158,523.50	269,651.70	
1998	487,113.40	178,097.80	309,015.50	
1999	947,690.00	449,662.40	498, 027.60	
2000	701,059.40	461,608.50	239,450.90	
2001	1,018,025.60	579,329.10	438,696.5O	
2002	1,018,155,80	696,777.70	321,378.10	
2003	1,225,965.9O	984,277.60	241,688.30	
2004	1,426,201.30	1,032,800.00	351,300.00	
2005	1,822,100.00	1,223,700.00	519,500.00	
2006	1,938,002.50	1,290,201.90	552,385.80	
2007	2,450,896.70	1,589,273.70	759,323.00	
2008	3,240,818.50	2,117,362.50	1.123,456.00	
2009	3,456,925.40	2,131,906.00	1,325,019.40	

Source: Central Bank of Nigeria Statistical Bulletin, 2009

REGRESSION RESULT
Dependent variable: TGEXP
Method: Least Squares
Date: 02/28/11 Time 21:03
Sample 1970 2009
Included observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	19344.51	27169.08	0.712005	0.4813
FISDEF	-1.232250	0.180885	-6.812319	0.0000
GDP	0.084811	0.011337	7.480883	0.0000
INF	170.2071	897.4746	0.189651	0.8507
GOVREV	0.154507	0.042615	3.625611	0.0009
DEBSERV	-0.888774	0.324951	-2.735103	0.0098

R-squared	0.989764	Mean dependent var	539627.5
Adjusted R-squared	0.988259	S.D. Dependent var	899937.7
S. E. of regression	97514.30	Akaike info criterion	25.95087
Sum squared resid	3.23E+11	Schwarz criterion	26.20420
Log likelihood	-513.0173	F-statistic	657.5285
Durbin-Watson stat	1.789974	prob(F.statistic)	0.00000

Source: Researchers' Computation,2013.