

Impact of Expanding Economic Activities on Government Expenditure in Nigeria

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Abstract: *The main focus of this study is to investigate the impact of expansion in economic growth on government expenditure in Nigeria covering the periods 1970 to 2012. Gross Domestic Product (GDP) was used as a proxy for economic growth, and the GDP time series was decomposed using the partial sum approach in order to achieve asymmetry in the variable. The asymmetric ARDL estimation technique was appropriately employed in this study. The findings of this study revealed that expansion in economic growth has significant impact on government expenditure in Nigeria. The study further provided evidence of long-run causality from boom/expansion in economic growth to government expenditure in Nigeria but could not support any evidence of short-run causality. The researcher recommended among others, that Governments in Nigeria should give more impetus to policies that will guarantee sustainable economic growth.*

Keywords: *Economic growth, Government expenditure, Asymmetric ARDL, Long-run Causality, and Short-run Causality.*

I. Introduction

Government expenditure no doubt exerts enormous influence on economic growth, however, the growing size of government activities resulting from expanding economic developments, functions and responsibilities, especially in developing economics have far reaching implication on economic growth. Stimulating economic growth through increasing government activities will increase revenue for the government through taxes and will further stimulate government expenditure. This scenario of increasing government activities appear to have impactful effects on economic activities in these economics. This thinking seems to be driving the spending-revenue hypothesis that dominates public finance literatures. The spending-revenue hypothesis states that changes in government expenditure drives changes in government revenue, thus, suggesting that causality runs from government spending to government revenue.

However, it is insightful to note that changes in economic activities drives changes in government revenue which in turn drives changes in government expenditure, hence it is called revenue-spending hypothesis. Growth in economic activities imply growth in the employment of productive resources in the economy, this brings about increasing output, indicative of increase in income, which leads to corresponding increase in government revenue resulting from taxes, the increase in revenue further stimulates government spending. Based on this background, the postulates of this hypothesis argued that increase in government revenues through taxes drive increases in government spending (Friedman 1978, Buchanan & Wagner 1978, Barro 1990, Eita and Mbazima 2008, Sobhee 2004, Buchanan 1960).

It is also arguable that increasing government expenditure aimed at meeting the increasing need for social overheads, in turn, increases productive capacity. For instance, government spending on health, education, roads, railways, aviation, power, communication, increase productivity and enhances income. Increase in income on the other hand, stimulates savings and in turn stimulates investment and capital formation. It is this apparent increase in economic activities resulting from increasing income that provides the basis for increase in government revenues.

Although, Wagner established in his law of increasing public expenditure as cited by Musgrave (1989:P114) that the increase in government expenditure is both extensive and intensive, that the government undertakes new functions in the interest of the economy, the purpose of the government activities is to meet the economic needs of the people, and the expansion and intensification of government functions and activities lead to increase in government expenditure. Peacock and Wiseman (1979) collaborated Wagner's law. They basically further concluded that "the rise in public expenditure greatly depends on revenue collection, over the years, economic development results in substantial revenue to the governments, this enables increase public expenditure".

Since rise in public expenditure greatly depends on revenue collection, and revenue collection depends on the level of economic activities it therefore follows that government expenditure depends on the level of economic activities. While economic growth is mostly treated as symmetric this study intend to decompose this

variable into boom/expansion in economic growth and depression in economic activities and then examines the relationship between expansion in economic activities and government expenditure in Nigeria.

The Nigerian economy had actually witnessed massive expansion with great intensity over the year, the annual National budget had metamorphosed from billions of Naira to trillions of Naira, even though the effects of these budgets remain largely unnoticed and a mirage, the impact on the standard of living of the citizenry remain insignificantly different from zero. The gross domestic product (GDP) had risen for 19,422.0 Naira in 1970 to 40,5844,099.94 naira in 2012, while total government expenditure had risen from 1130.1 naira in 1970 to 4,605,319,72 naira in 2012, over the years, empirical studies are in agreement that positive relationship exist between government expenditure and economic growth, but have mixed findings on the existence of causality and also on the direction of causality running from government expenditure to economic growth and or from economic growth to government expenditure. Previous studies have treated economic growth in relation to government expenditures as symmetric, while in fact growth rate per annual is very much asymmetry having low times and high times (depression and boom periods) within a year, indicative of bad news and good news. How then does government expenditure adjust to changes in boom or depression in economic activities in Nigeria?

The major objective of this study is to estimate the impact of economic growth rate on government expenditure using asymmetric ARDL approach. While the specific objectives of this study include:

- ✓ To estimate the impact of expanding economic growth on government expenditure
- ✓ To determine the existence and nature of causality running between expanding economic activities and government expenditure.

II. Conceptual Framework

2.1 Government Expenditure: This is the acquisition by governments of goods and services for current consumption to directly satisfy the individual or collective needs of the society, referred to as government consumption expenditure, while government acquisition of goods and service intended to create future benefits in referred to as government investment expenditure (government gross capital formation). All governments' acquisitions (government consumption expenditure plus government investment expenditure) are classified total government expenditure.

Government expenditure can be financed by borrowing, printing of new money, taxes or revenues from government direct investments. However, in developing economics like Nigeria, the bulk of government revenues come from proceeds of governments direct investments even though some the government investments are supposed to be subsidized. This presupposes that while it is not in doubt that governments spending stimulates economic growth, economic growth on the other hand stimulates government spending as changes in economic growth rate determines change in revenues accruable to the government upon which spending is based.

2.2 Government Expenditure and Production: Government expenditure on socially desirable goods or services increases productive capacity. Government expenditure on education, health, good housing, communication and transportation services increases productivity and therefore, income. Rising income also means rising savings and subsequently stimulates investment and gross capital formation.

Also governments' expenditure through tax cuts and subsidies is an effective instrument to stimulate investment on a particular industry, thus stimulating overall growth in productivity in the economy.

2.3 Government Expenditure and Consumption: Government spending enhances redistribution of income in favour of low income earners in the economy. It improves the capacity of low income earners to consume. Government spending stimulates economic activities and therefore stimulates consumption in the economy.

2.4 Government Spending and Macroeconomic Stability: Macroeconomic instability takes the form of depression, recession and inflation. Government expenditure is used as a tool to control instability in an economy. Government spending has proved effective over years for stimulating effective demand and subsequently getting out of depression. Government spending is also amenable to controlling inflation and deflation, by reducing government spending during inflation and increasing government spending during deflation, thus bringing about price stability in the economy.

2.5 Economic growth and Government Expenditure: No doubt, the bulk of government revenues come from proceeds from government direct, investments in Nigeria, while printing of new money and taxes have

remain major components of government revenues in Nigeria, revenues from governments direct investments have dominated governments revenue streams in Nigeria. This phenomenon explains fluctuations in government expenditure over the years in Nigeria. The periods of oil boom for instance, witnessed reckless spending by governments at all levels in Nigeria, while the period of world oil price glut as it persists till date saw many states governments enable to pay salaries thus, economic growth stimulates government spending.

2.6 Theoretical Framework

Wagner's law of Increasing State Activity: Named after the German economist, Adolph Wagner based on his studies; first on German economy and then other countries, analyzing trends in the growth of public sector come to the conclusion that for any country the public expenditure rises constantly. Hence Wagner's law states that "as the economy develops over time, the activities of functions of the government increase". According to Adolph Wagner cite in strategistng.blogspot.com (2013) "comprehensive comparisons of different countries and different times show that among progressive peoples (societies), with which alone we are concerned; an increase regularly takes place in the activity of both the central government and local governments constantly undertake new functions, while they perform both old and new function more efficiently and more completely. In this way economic needs of the people to an increasing extent and in a more satisfactory fashion are satisfied by the central and local governments". Thus, Wagner's law can be summarized as follows: (a) in progressive societies, the activities of governments increase on a regular basis. (b) Government activities increase extensively and in intensity (c) The government undertake new functions in the interest of the society, performing both old and new functions more efficiently and comprehensively than before, (d) the expansion and intensity of government function leads to increase in public expenditure.

Peacock –Wiseman Hypothesis

Peacock and Wiseman conducted a study based on Wagner's law and found out that Wagner's law is still valid. In furtherance to that they concluded that (1) the rise in public expenditure collection over the years, economic development results in substantial revenue to the governments, this enable to increase public expenditure". (ii) There exists a big gap between the expectations of the people about public expenditure and the tolerance level of taxation. Therefore, governments cannot ignore the demands, made by people regarding various services, especially, when the revenue collection is increasing at constant rate of taxation. (iii) They also stated that further increases the tax rates, and enlarges the tax structure to generate more funds to meet the increase in defence expenditure. After the war, the new tax rates and tax structures may remain the same, as people get used to them. Therefore, increase in revenue results in rise in government expenditure.

Musgrave's Development Hypothesis

Musgrave (1969) suggested that the growth of public expenditure is related to the pattern of economic growth and development societies. Thus, three stages in the development process could be identified (i) The early development stage where considerable expenditure is needed on education and infrastructure, and where private saving is unable to finance this necessary expenditure due to paucity of funds, public expenditure must therefore constitute higher proportion of gross capital formation and subsequently total output; (ii) The phase of rapid growth in which there are large increases in private savings and public investment falls proportionally; and (c) high income societies with increased demand for private goods which need complementary public investment. Thus as the society moves into high income stage, there is increasing need for skilled labour which therefore leads to increasing public investment in education. In the same vein, rural-urban migration leads to urban slums. These factors lead to another round of increase in public expenditure in relation to gross national product (GNP); hence Musgrave study of the growth of government expenditure in the United States; 1890 to 1987 revealed that ratio of public expenditures to GNP rose from 6 to 35 percent over nearly ninety year period.

2.3 Empirical Framework

Dada and Adesina (2013) in their study "Empirical Investigation of the Validation of Peacock – Wiseman Hypothesis: Implication for Fiscal Discipline in Nigeria" employed vector error correction model and standard Granger causality test to determine the direction of causality between government expenditure and revenue in Nigeria. They came to the conclusion that unidirectional causality exists between government expenditure and revenue in Nigeria, with the causality running from government expenditure to revenue. Investigating the impact of government expenditure on economic growth in Nigeria, Abu and Abdullah (2010) employed disaggregated data on government expenditure to investigate the relationship between government expenditure and economic growth from the period 1970 to 2008. This study came to the conclusion that total government expenditure and expenditure on Education impact negatively on economic growth in Nigeria, while

on the contrary, government expenditure on transport, communication and health stimulate economic growth in Nigeria.

World Bank's Development Report (1994) reveals that developing countries invest about \$200 billion per year in new infrastructure, representing 4 percent of their national output. This has resulted to radical increase in infrastructure expenditure for transport, power, water, sanitation, telecommunications, and irrigation. The expenditure on infrastructure to meet the growing demands of business, households, and other users is a major challenge in developing countries including Nigeria.

Olorunfemi, (2008) investigated the relationship between public investment and economic growth in Nigeria, using disaggregated data series spanning from 1975 to 2004. Study revealed that Government expenditure impacted positively on economic growth. The study revealed that of the total government expenditure, 62.9% was on current expenditure while 37.1% of total government expenditure was devoted to capital expenditure.

Ram (1988) studied the impact of government expenditure on economic growth using the production function, modelled for both public and private sectors. Using data for 115 countries, the result of study revealed that government expenditure have significant positive impact on economic growth, particular in the developing countries under study.

Mitchell (2005) investigated the impact of government spending on economic growth in developed countries. He assessed the international evidence, reviewed the latest academic research, cited examples of countries that have significantly reduced government spending as a share of national output and analyzed the economic consequences of these reforms. Regardless of the methodology or model employed, he concluded that a large and growing government is not conducive to better economic performance. He further argued that reducing the size of government would lead to higher incomes and improve American's competitiveness.

Junko and Vitali (2008) investigate the impact of government expenditure on economic growth in Azerbaijan because of the temporarily oil production boom (2005) which caused exceptionally large expenditure increase aimed at improving infrastructure and raising incomes. Azerbaijan's total expenditure increased by a cumulative 160 percent in nominal value from 2005 to 2007 (i.e. from 41 percent of non-oil GDP to 74 percent) in their research reference which were made to Nigeria and Saudi Arabia (1970-89) who have also experienced oil boom and increased government expenditure over the years. The study simulated the neo-classical growth model tailored to the Azeri conditions. Their analysis suggested that the evaluated fiscal scenario poses significant risks to growth sustainability and historical experience indicates that the initial growth performance largely depends on the efficiency of scale-up expenditure. The study also sheds light on the risks associated with a sudden scaling-down of expenditure, including the political difficulties to undertake an orderly expenditure reduction strategy without undermining economic growth and the crowding out effects of large government domestic borrowing.

III. Nature and Sources of Data

3.1 This study employed secondary data collected from the following sources; Central bank of Nigeria's statistical bulletin (various issues including 1999, 2006 and 2012 editions); National bureau of statistics' statistical fact sheets; CBN's annual reports (various editions); www.economywatch.com; www.knoema.com; and indexmundi.com. The data series sourced therefrom and used in this study include: Federal Government Total Expenditure (FTE) and Real Gross Domestic Product (RGDP). In order to situate this study appropriately under the purview of asymmetric analysis, the real gross domestic product (as the explanatory variable) was decomposed into expansion in growth (RGDP_P) and contraction in growth (RGDP_M) indicative of asymmetry in the growth rate in economic activities.

3.2 Data Analysis Technique

3.2.1 Model Specification

The empirical model of this study is derived from the theoretical framework specifically of the Wagner's law. Theoretically, the feedback from economic growth to government spending is made explicit in the relationship between increases in economic growth leading to increase in government revenues (through corresponding increase in tax revenues). However, in order to analyze the differential impact of expanding (boom) and contracting economic activities on government expenditure as set out in this study, the point of departure is to transform the variable of interest into positive and negative partial sum. The decomposition of the variable is the most important step. Thus, adopting the asymmetric ARDL (Greenwood-Nimmo and Shin, 2013), this attempts to model the differential impact of expanding and contracting economic activities on government expenditure. The asymmetric ARDL of Greenwood-Nimmo and Shin (2013) is specified as:

$$\Delta y_t = \alpha + \sum_{i=1}^p \lambda_1 y_{t-i} + \sum_{i=0}^q \lambda_2^+ x_{t-i}^+ + \sum_{i=0}^q \lambda_2^- x_{t-i}^- + \sum \theta_j \Delta y_{t-1} + \sum \beta_j^+ \Delta x_{t-1}^+ + \sum \beta_j^- \Delta x_{t-1}^- + \epsilon_t$$

The baseline model to be estimated for this study is first specified in the following functional form as shown below.

$$FTE = f(RGDP_P, RGDP_M) \quad \dots (1)$$

Where: FTE is Federal Government Total Expenditure
 RGDP_P is expansion in economic growth
 RGDP_M is contraction in economic growth

Equation (1) was rewritten in its explicit form as;

$$FTE = \alpha_0 + \alpha_1 RGDP_P + \alpha_2 RGDP_M + \epsilon_t \quad \dots (2)$$

To establish the existence of long run relationship (that is, cointegration) among the variables of the study, the joint (wald) test of the long run coefficients was estimated in order to derive the vital F-statistic needed to conduct the bound test (to establish long run relationship among the variables). The applicable hypothesis is the null hypothesis of no long-run relationship, such as:

$$H_0: \lambda_1 = \lambda_2 = \lambda_3 = \lambda_4 = 0 \text{ (no long-run relationship)}$$

$$H_1: \lambda_1 \neq \lambda_2 \neq \lambda_3 \neq \lambda_4 \neq 0 \text{ (there exist long-run relationship)}$$

If there is a long-run relationship, between the variables, that is, the estimated variables are cointegrated, and the estimated relationship not spurious, then estimated coefficient of the long-run relationship is analyzed and the error correction model may then be estimated. Equation (2) is further expressed in the generalized autoregressive distributed lag (ARDL) model of the form ARDL(p; q₁; q₂; ... q_k). Such that:

$$\beta(L,p)y_t = \sum_{i=1}^k \beta_i(L_i q_i) x_{it} + \beta w_t + \epsilon_t \quad \dots (3)$$

Where

$$\beta(L,p) = 1 - \beta_1 L - \beta_2 L^2 - \dots - \beta_p L^p$$

$$\beta_i(L,q) = 1 + \beta_{i1} L + \beta_{i2} L^2 + \dots + \beta_{iq} L^{q_i}, \text{ for } i = 1, 2, \dots, k \quad \dots (4)$$

Since there is evidence of a long-run relationship among the variables included in Equation (2), the following long-run model will be estimated

$$FTE_t = \alpha + \sum_{i=1}^p \alpha_{1i} FTE_{t-1} + \sum_{i=0}^p \alpha_{2i} RGDP_P_{t-1} + \sum_{i=0}^p \alpha_{3i} RGDP_M_{t-1} + \epsilon_t \quad \dots (5)$$

The asymmetric ARDL model of Greenwood-Nimmo and Shin (2013) is then specified thus:

$$\Delta FTE_t = \alpha + \lambda_1 FTE_{t-1} + \lambda_2^+ RGDP_P_{t-1}^+ + \lambda_2^- RGDP_P_{t-1}^- + \sum \theta_j \Delta FTE_{t-1} + \sum \beta_j^+ \Delta RGDP_P_{t-1}^+ + \sum \beta_j^- \Delta RGDP_P_{t-1}^- + \epsilon_t$$

$$\alpha_1 > 0, \alpha_2 > 0, \alpha_3 < 0.$$

Where: Δ is the differenced operator.

3.2.2 Model Estimation Technique

The method of estimation used in this study is the Asymmetric Autoregressive Distributed Lag (ARDL) technique. While the operational software used in this study is the E-views, version 7.1. The question of asymmetry in economics is common place and of importance. Good and bad news are everywhere. Here, we want to understand the differential impacts of boom and contracting economic activities on government expenditure. The distinction is important if we want to appropriately respond to and formulate policies to address changes in economic activities. If linearity is assumed in the relationship between income and government spending as in the literature on traditional Wagner's law, symmetric policy response will be expected to be inadequate or to impair the relationship if indeed the assumed linear relationship is appropriate (Olayeni, 2015).

IV. Data Analysis And Discussion Of Findings

4.1 In order to validate the ARDL technique as a suitable method of data analysis in this study, it became imperative to conduct the stationarity test to ensure that there is no I(2) variable, the ADF statistics in table 4.2 in appendix revealed that all variables are I(0) and I(1) variables. The model was further tested for stability using the cumulative sum of recursive residuals (CUSUM) as shown in figure 4.1 in appendix and the model was found to be stable at 5% significance level. To establish the existence of long run relationship between GDP and government expenditure, the joint (Wald) test of the long run coefficients was estimated in order to derive the F- statistic needed to conduct bound test (to establish long run relationship among the variables). The F-

statistic of the joint test of the long run coefficients as in table 4.3 is 15.687 while the upper bound of the Pesaran critical value bounds at 5% is 5.73. Since the value of our F-statistic exceeds the upper bound at 5% levels of significance, we conclude that long run relationship exist between FTE and GDP_P. The long run relationship is further confirmed by the Pesaran bound test for t-statistics, the t-statistics of FTE(-1) is -5.33, while the upper bound of the Pesaran t-statistic table at 5% significant level is -3.50. This result reinforces the conclusion that there is a long run relationship between expanding economic growth (GDP_P) and government expenditure (FTE) in Nigeria. We can also see that the long run multiplier between GDP_P and FTE is $0.31186/-2.162502 = 0.16$, that is, in the long run, a one unit increase in GDP will lead to an increase of 0.16 units in government expenditure.

Table 4.1: OLS Result

Dependent Variable: DFTE				
Method: Least Squares				
Sample (adjusted): 1974 2012				
Included observations: 39 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	24505.86	16898.57	1.450173	0.1574
FTE(-1)	-2.162502	0.405410	-5.334104	0.0000
GDP_P(-1)	0.351186	0.063157	5.560502	0.0000
DFTE(-1)	0.327646	0.303161	1.080767	0.2884
DFTE(-2)	-0.058280	0.171629	-0.339567	0.7365
DGDP_P	0.056865	0.013896	4.092318	0.0003
DGDP_P(-1)	-0.281208	0.057999	-4.848471	0.0000
DGDP_P(-2)	-0.257547	0.054282	-4.744610	0.0000
DGDP_P(-3)	-0.039716	0.049225	-0.806828	0.4261
R-squared	0.890746	Mean dependent var	118045.9	
Adjusted R-squared	0.861612	S.D. dependent var	222651.6	
S.E. of regression	82827.69	Akaike info criterion	25.68609	
Sum squared resid	2.06E+11	Schwarz criterion	26.06999	
Log likelihood	-491.8787	Hannan-Quinn criter.	25.82383	
F-statistic	30.57369	Durbin-Watson stat	1.990271	
Prob(F-statistic)	0.000000			

The residuals series were constructed and the restricted ECM was fitted. The ECM in table 4.5 revealed that expansion in economic growth (GDP_P) at current value, lag one (-1) and lag two(-2) significantly impact on government expenditure in Nigeria at one percent level of significance, while immediate past government expenditure DFTE(-1) impacts on current government expenditure at 10% level of significance.

Table 4.5: Error Correction Model

Dependent Variable: DFTE				
Method: Least Squares				
Sample (adjusted): 1974 2012				
Included observations: 39 after adjustments				
DFTE = C(1)+C(2)*DGDP_P+C(3)*DGDP_P(-3)+C(4)*DFTE(-1)+C(5)*DGDP_P(-2)+C(6)*DGDP_P(-1)+C(7)*ECM(-1)				
	Coefficient	Std. Error	t-Statistic	Prob.
C	-4.85E-10	15826.76	-3.06E-14	1.0000
DGDP_P	0.057784	0.010109	5.716121	0.0000
DGDP_P(-3)	-0.046595	0.040900	-1.139250	0.2631
DFTE(-1)	0.400122	0.207923	1.924380	0.0632
DGDP_P(-2)	-0.262799	0.043772	-6.003856	0.0000
DGDP_P(-1)	-0.285560	0.049476	-5.771647	0.0000
ECM(-1)	-0.227552	0.345696	-0.658243	0.0000
R-squared	0.890326	Mean dependent var	118045.9	
Adjusted R-squared	0.869762	S.D. dependent var	222651.6	

S.E. of regression	80351.54	Akaike info criterion	25.58736
Sum squared resid	2.07E+11	Schwarz criterion	25.88595
Log likelihood	-491.9535	Hannan-Quinn criter.	25.69449
F-statistic	43.29568	Durbin-Watson stat	2.016626
Prob(F-statistic)	0.000000		

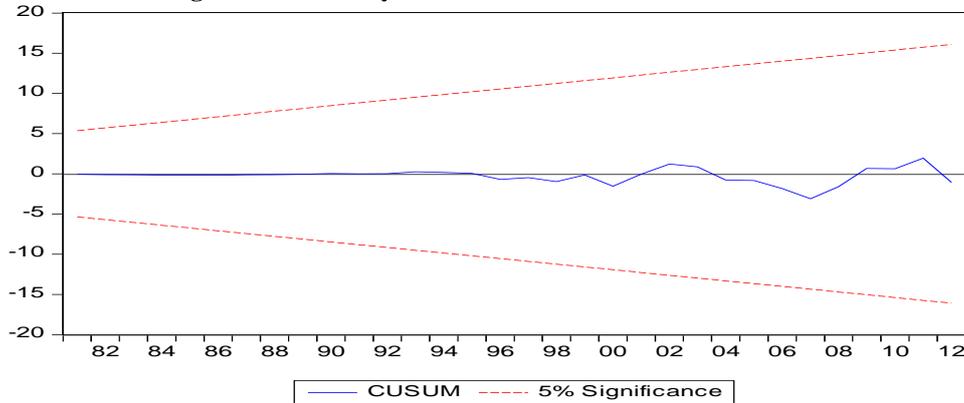
The coefficient of the error correction term, ECM, is rightly signed (that is, negative) and very significance at 1%. The magnitude of this coefficient implies that 23% of any disequilibrium between government expenditure and expansion in economic growth is corrected for within one year.

Table 4.6: TEST FOR SERIAL CORRELATION

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	2.478859	Prob. F(2,30)	0.1008
Obs*R-squared	5.530997	Prob. Chi-Square(2)	0.0629

The error correction model was tested for serial correlation as shown in the table 4.6 above, which revealed that the model is serially independent. Also to ensure that the model is dynamically stable, the cumulative sum of recursive residuals (CUSUM) test was conducted and the result revealed that the model is dynamically stable as shown in figure 4.2 below.

Figure 4.2: Stability Test of the Error Correction Model



Although there exist an evidence of long run causality from expanding economic growth (GDP_P) to government expenditure (FTE) in Nigeria as seen in the error correction term (ecm(-1)) of the short run dynamics, there is however no evidence of short run causality running from expanding economic growth to government expenditure, neither were there strong causality running between expanding economic growth and government expenditure in Nigeria as could be seen in tables 4.7 and 4.8 respectively in appendix.

V. Summary of Major Findings

The econometric investigation of this study offers evidence that there is indeed a significance relationship between expansion in economic growth and government expenditure in Nigeria. Investigation of this study revealed that both the long run and short run dynamic models provided evidence that expansion in economic growth impact significantly on government expenditure, considering the fact that these models were stable and serially independent. Also of important note, is that this study revealed that there exist long run causality from expansion in economic growth to government expenditure, while providing no evidence of short run causality from expansion in economic growth to government expenditure in Nigeria.

VI. Conclusion

The impact of expanding economic growth on government expenditure has been extensively investigated in this study. The application of asymmetric autoregressive distributed lag (ARDL) estimator to a set of dynamic time series data models in investigating the research problem have proved quite intuitive, robust and unequivocally suitable. This study focused mainly on the positive asymmetry in economic growth and its impact on government expenditure. Time series data covering the periods 1970 to 2012 were used for this study. The statistical properties of the data were properly investigated using appropriate econometric techniques. The

findings of this study provided strong evidence that boom in economic activities significantly impact on government expenditure positively in Nigeria.

VII. Recommendations

The researcher recommends:

- That policy decisions on improving economic activities in the economy should be of priority. Impetus must then be given to manufacturing in particular and industrialization in general without leaving out agriculture in order to foster sustainable economic growth which will translate into increase in revenue for the government for which the government will finance her expenditure and possible reduced government deficit that had become the tradition over the years in Nigeria.
- Governments in Nigeria should give more impetus to policies that will guarantee sustainable economic growth.
- Finally, there is need to reverse governments priority on spending decision. Empirical evidence shows that government spending decision occurs prior to the decision to raise revenue in Nigeria (Dada and Adesina, 2013), this is responsible for the rising fiscal deficits in Nigeria, and hence a reversal will mean sustaining economic growth in order to generate more revenue through taxes to meet governments' fiscal obligations.

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Appendix

Table 4.2: Stationarity Test

Unit Root Tests			
Sample: 1970 2012			
Test Type: ADF			
	Level	First	Second
FTE	1.884632	3.898872	-0.932582
GDP_P	5.857435	6.817074	1.644623
GDP_M	0.000000	-6.324555	-7.449832
1% level	-2.621185	-2.622585	-2.625606
5% level	-1.948886	-1.949097	-1.949609
10% level	-1.611932	-1.611824	-1.611593

Table 4.3: Wald Test

Wald Test:			
Equation: Untitled			
Test Statistic	Value	df	Probability
F-statistic	15.68658	(2, 30)	0.0000
Chi-square	31.37315	2	0.0000

Figure 4.1: Stability Test of the OLS Model

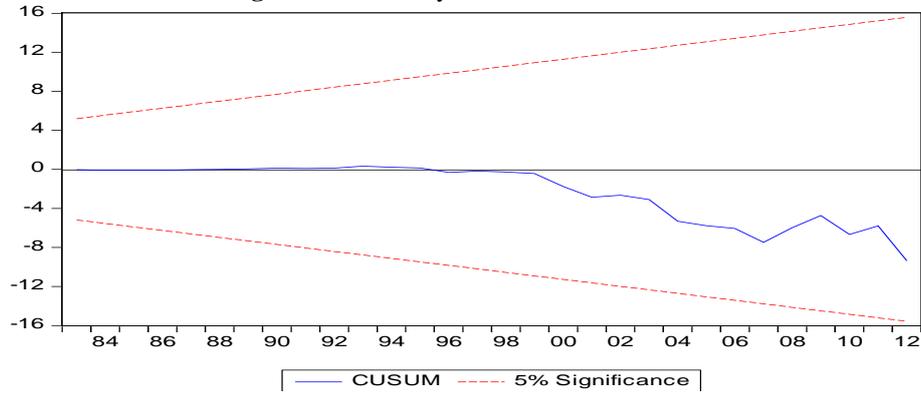


Table 4.7: Short Run Causality Test

Wald Test:			
Equation: Untitled			
Test Statistic	Value	df	Probability
F-statistic	34.00695	(4, 32)	0.0000
Chi-square	136.0278	4	0.0000

Table 4.8: Strong Causality Test

Wald Test:			
Equation: Untitled			
Test Statistic	Value	df	Probability
F-statistic	46.25556	(5, 32)	0.0000
Chi-square	231.2778	5	0.0000