NIGERIAN JOURNAL OF ACCOUNTING RESEARCH
A Publication of The Department of Accounting,
Ahmadu Bello University, Zaria-Nigeria
Vol. 2, Number 1 , June, 2015
https://njar.org.ng/

IMPACT OF GOVERNMENT EXPENDITURE ON THE ECONOMIC GROWTH IN NIGERIA

Hussaini Bala
Department of Accounting, Kaduna State University, Kaduna Nigeria
+2348036943413
hussainumi2013@gmail.com

Bilkisu Kabir Farouk
Department of Economics, Nigerian Defense Academy, Kaduna- Nigeria
Billykis45"yahoo.com
+2348182969385

Abubakar Audi
Department of Accounting, Ahmadu Bello University, Zaria
Kaduna State, Nigeria
Tel: +2348033690990

Abstract

The study made an attempt to find the impact of public expenditure on the growth of the Nigerian economy. It covers the period of 1980 – 2014. A unit root test was conducted to improve the validity of statistical inferences before running for Ordinary Least Square (OLS). The findings of the study revealed that there is a positive significant relationship between Government expenditure and GDP while Capital Expenditure showed a negative significant relationship with GDP. However, recurrent expenditure was found to be positive but statically insignificant with GDP. In line with the above findings, the study recommended that Government should ensure that capital expenditure and recurrent expenditure are properly managed in a manner that it will raise the nation's production capacity.

Keywords: Government Expenditure, Capital Expenditure Recurrent Expenditure and Gross Domestic Product

1.1 Introduction

The link between government expenditure and economic growth has remained a thing of great consideration among different scholars. Government via its expenditures performs the functions of protection and provision of certain public goods. The protection functions consist of creation of rules or laws and enforcement via the various agencies which leads to the reduction of crime in the society, protection of life and properties and national boundaries. The public goods consider roads, education, health, power, communication and water etc. These expenditures could either be capital expenditures which deal with long term financial obligation on infrastructures, while recurrent expenditures deal with amount expended on administrative grounds by the government. Some scholars argue that increase in government expenditure on socio-economic and physical infrastructures encourage economic growth. For instance, where much is focused on education and health, the required labor force for the economy is made available. Likewise expenditure on physical infrastructures like roads, power, communication and water etc can reduce production cost, enhance equitable distribution of finished goods, improved employment and private participation in the economy leading to an economic boom. On that expansion of government expenditure contributes to economic growth. Different views exist though, with a view that an increase in expenditure might lead to increase in taxation and borrowing. The higher the tax imposed the lower the income available for households to meet their needs, likewise cost of production will increase leading to reduced investment and profitability of ventures. Then also the high cost of financing debt whether locally or internationally. At times selfishness and poor planning through non acceptance to continue to execute projects inherited from previous administration and execution of irrelevant project leads to higher expenditure. Large government expenditure might have negative impact on the economic growth. The provision of infrastructures and services to meet the demands businesses, household and many others has remained the major challenge to a developing economy like Nigeria. Government expenditure in Nigeria is always on the increase due to huge revenue generated from the sales of crude oil and other sources leading to high expectations by the citizenry. The level of increase of government revenue from oil revenue and non-oil revenues including borrowing from internal and external sources has significantly affected the level of government expenditure in Nigeria over the years under review, which has never been commensurate to the ideal status of an economy expected. The mismatch between the performance of the Nigerian economy and massive increase in government total expenditure over the years raises a critical question on its role in promoting economic growth and development. Some authors

contend that the link between public expenditure and economic growth is weak while others report varying degree of causality relationship in Nigeria. The question which arises therefore is what is the relative contribution of capital expenditure and recurrent expenditure on economic growth in Nigeria? This thesis aims at investigating the impact of government expenditure (recurrent expenditure and capital expenditure) on economic growth in Nigeria.

The size of government expenditure and it effect on the long-term economic growth and vice versa has been an issue on the floor for many decades. According to Dumet (1990) economic growth is an increase in real per capita gross national product (GNP). In Nigeria, the government expenditure has continued to rise due to receipts from oil revenue (Petroleum profit tax and royalties) and non oil revenue (company income tax, custom and excise duties, value added tax [VAT] and others) (CBN Statistical Bulletin, 2012). And increased demand for public (utilities) goods like roads, communication, power, education and health. Besides, there is an increasing need to provide both internal and external security for the people and the nation.

Available statistics show that total government expenditure (capital and recurrent) and its components have continued to rise in the last few decades under review. For instance, government recurrent expenditure in 1970 was₦716.1 million, in1980 was ₦4.8 billion, 1990 was ₦39.2 billion, 2003 to 2007 was₦1trillion to ₦1.6 trillion, 2010 ₦3.3 trillion and ₦2.4 trillion in 2013. On the other hand, government capital expenditure in 1970 was ₦187.8 million, 1980 as ₦10.2 billion, 1990 was ₦24 billion, 1999 was ₦489 billion, 2000 was 239.4 billion, 2009 was ₦1.1 trillion, 2010 was ₦883.9 billion while 2013 was ₦1.5 trillion.

Unfortunately, rising government expenditure has not translated to meaningful growth and development, as Nigeria ranks among the poorest countries of the world. In addition, many Nigerians have continued to wallow in abject poverty, while more than 60.9% of over 163 million population poor. The Business Day Newspaper of Tuesday 14 February, 2012 reported that the percentage of Nigerians living in abject poverty – those who can afford only the bare essentials of food, shelter and clothing – rose to 60.9% in 2010 as compared to 54.7% in 2004. Although the Nigerian economy is projected to be growing, poverty is likely to get worse as the gap between the rich and the poor continues to widen. Couple with this, is dilapidated infrastructure (especially roads and power supply) that has led to the collapse of many industries, including high level of unemployment. Moreover, macroeconomic indicators like balance of payments, imports obligations, inflation rates, exchange rate, and national savings reveal that Nigeria has not fared well in the last couple of decades under review.

The rising debt profile of Nigeria is on the increase after the Paris Club cancelled the external debt of $35.9 billion in 2004 which represented 64.3% of the GDP, with the internal debt at $10.3, the figures have increased in recent years. The 2011 debt profile stood at $5.67 billion being external and $42.23 billion internally, representing 21% of the GDP surpassing the 11.8% of the debt to GDP standing in 2006. As it is the Debt Management Office says Nigeria needs a debt $25 billion dollars for 2015 fiscal year. Given the issues raised above, this research seeks to examine the impact of government expenditure on economic growth in Nigeria using GDP as dependent variable, and recurrent expenditure, capital expenditure and other controlling variables such as import, export, foreign direct investment to examine the impact of government expenditure on economic growth in Nigeria.

The main objective of this study is to determine influence of government expenditure on the economic growth in Nigerian. It was therefore hypothesized that government expenditure has no impact on the economic growth in Nigeria

2.1 Literature Review and Theoretical Framework

2.2 Review of Empirical Studies

There are many studies on the role of government spending in the long-term growth of national economies. However, there exists no consistent evidence for significant relationship between public expenditure and economic growth, in positive or negative direction. Results and evidence about the effects of government expenditure or spending on economic growth differ by country or region, analytical method employed and the classification of public expenditures.

There are various studies regarding the growth effects of spending based on the experiences of a set of developed countries. Alexandra (1990) applied OLS method for sample of 13 Organization for Economic Cooperation and Development (OECD) countries panel (1959-84). The result shows that growth of government spending and inflation has significant negative impact on growth

Gannon (2003) explored the rational for governments' investments into science and technologies. Gannon posits that "if you want to harvest in autumn, you need to sow in spring. This ancient saying holds true not only for agriculture, but for all economic activities". When we changed the scenario from agriculture to economic growth in terms of employment level, per capita income, export, etc. the sowing can be viewed in terms of private and public investments. In the

context of the present scenario, sowing refers to investment in research and development as a percentage of the GDP. It is argued that the higher the level of investment in science and technology as the percentage of the GDP, the higher the level of economic growth. Gregorious and Ghosh (2007) made use of the heterogeneous panel data to study the impact of government expenditure on economic growth. Their results suggest that countries with large government expenditure tend to experience higher economic growth.

Olorunfemi, (2008) studied the direction and strength of the relationship between public investment and economic growth in Nigeria, using time series data from 1975 to 2004 and observed that public expenditure impacted positively on economic growth and that there was no link between gross fixed capital formation and Gross Domestic Product. He averred that from disaggregated analysis, the result reveal that only 37.1% of government expenditure is devoted to capital expenditure while 62.9% share is to current expenditure

Backgrounder (2008) studied why government expenditure does not stimulate economic growth. In this study, he considered the myth of government spending to stimulate growth. He argued that the more government spending is, the higher the level of taxation from the public and therefore the more transfer payment are made. He argued that increasing productivity requires increasing material capital and human capital. Improved functioning of the market is another important ingredient that stimulates growth and productivity.

Liu and Hsu and Younis (2008) examined the causal relationship between GDP and public expenditure for the US data during the period 1947-2002. The causality results revealed that total government expenditure causes growth of GDP. On the other hand, growth of GDP does not cause expansion of government expenditure. Moreover, the estimation results indicated that public expenditure raises the US economic growth. The authors concluded that, judging from the causality test Keynesian hypothesis exerts more influence than the Wagner's law in US.

Cooray (2009) studied the impact of government expenditure on economic growth. The study makes use of the neoclassical production function. It incorporates not only the size of government but the quality of governance. The study uses generalized moment method (GMM). The size of the government is measured based on the size of government expenditure. The quality of governance is based on the quality of decision-making paradigm. The study makes use of 71

countries. The study demonstrates that both the size and the quality of governance have impact on the level of economic growth.

Gemmell and Kneller (2001) provide empirical evidence on the impact economy of fiscal policy on long run growth for European economy. Their study required that at least two of the taxation/expenditure/deficit effects must be examined simultaneously and they employ panel and time series econometric techniques, including dealing with the endogeneity of fiscal policy. Their broad conclusions are: Some public investment spending impacts positively on growth and consumption and social security spending have zero or negative growth effects.

Mitchell (2005) evaluated the impact of government spending on economic performance in developed countries. He assessed the international evidence, reviewed the latest academic research and 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 to economic performance.

Albatel (2000) studied the relationship between government expenditure and economic growth in Saudi Arabia. He classified government expenditure into investment (GI), government expenditure (GE) and government consumption (GC). Using the error correction method (VEC model), he demonstrated that both government investment (GI) and government expenditure (GE) have significant impact on economic growth in Saudi Arabia but government consumption expenditure does not have a significant impact on economic growth during the period of 1964 to 1995.

Nurudeen and Usman (2010) studied government expenditure and economic growth in Nigeria using data from 1977 to 2007. They made use of time-series methods of stationary test and the ordinary regression methods using error correction (ECM). The variables used for the study were real recurrent expenditure (TREC), real capital expenditure (capital expenditure divided by consumer price index, CPI), real expenditure on defense (DEF), real expenditure on agriculture (AGR), real expenditure on education (EDU), real expenditure on transport and communication (TRACO), the overall fiscal balance (FISBA) and the inflation rate (IFN). The result of the study shows that economic growth is negative related to total recurrent expenditure (TREC), total capital expenditure (TCAP), education (EDU) and the overall fiscal balance (FISBA). The study shows that economic growth was positively related to transport and

communication (TRACO). The ECM shows that it takes on average a period of six (6) months to recover from short term disequilibrium.

Osborn, Haque and Bose (2003) examined the impact of government expenditure on a panel of thirty developing countries spanning the period of 1970s to 1980s. The study was based on sectoral studies. The study demonstrated that recurrent expenditure does not exert stimuli on economic growth but capital expenditure on education does exert reasonable stimuli on economic growth.

Hussain, Mohammed, Akram and Lai (2009) studied the empirical evidence of crowding-in or crowding-out in Pakistan. The study made use stationary test, co-integration and error correction mechanism hits investigation. The study demonstrated that recurrent expenditure on defense and debt servicing has a crowding-out effect. Expenditure on infrastructures, health and use covered the period of 1975 to 2008. Landau (1986) applying OLS sample panel of 27 LDCs, found that government consumption expenditure has a negative on economic growth.

Usman, Mobolaji, Kilishi, Yaru and Yakubu (2011) examine and analyze the impact of the composition of public expenditure on economic growth in Nigeria. The study uses time series data for the period 1970 – 2008. The study made use of aggregate production function based on Barro (1990) and Roma (1986). The econometric method used is vector error correction (VEC) model. The result shows that government expenditure on administration, education, transport and communication have negative impact on economic growth. However, expenditure on health and other services and FDI expenditures have positive impact on economic growth.

Taiwo and Agbatogun (2011) seek to examine the implications of government spending from 1980 – 2009. The econometric method used is the error correction model (ECM). The results show that total capital expenditure, inflation rate, degree of openness and recurrent government revenue are statistically significant in explaining growth while total recurrent expenditure and exchange rate are statistically insignificant. That total capital expenditure, degree of openness and current government revenue has positive impact on economic growth. Inflation has a depressing effect on the level of economic growth.

Oluwatobi and Ogunrinola (2011) examined the relationship between human capital development effort of government and economic growth in Nigeria. Specifically the study seeks to establish the impact of government recurrent and

capital expenditures on education and health in Nigeria on economic growth in Nigeria. The study made use of aggregate production function. The time-series data used for the analysis covered the period 1970 – 2006. The study makes use of error correction model (ECM) of regression analysis. The results of the study show that physical capital and government recurrent expenditure on human capital have positive impact on economic growth. However, government capital expenditure on human capital development has negative impact on economic growth in Nigeria.

Omitogun and Ayinla (2007) examine empirically the contribution of fiscal policy in the achievement of sustainable economic growth in Nigeria. Using Solow (1956) growth model, the study uses ordinary least-square (OLS) regression method. The study found out that fiscal policy has not been effective in promoting economic growth in Nigeria.

Taiwo, and Abayomi (2011) examine the trends as well as the effects of government spending on the growth rate of the real GDP in Nigeria for the period of 1970 - 2008, using the time-series methodology of unit root test, cointegration and ordinary least square (OLS) analysis. The real GDP was used as the dependent variable while government capital and recurrent expenditures were used as independent variables. The results show that both recurrent and capital expenditures exhibited significant and positive relationship on the real GDP.

Maku, (2009) examines the link between government spending and economic growth in Nigeria for the period 1970–2006, using Ram (1986) model. The study classifies government expenditure into human capital investment, government investment on consumption spending at absolute level (total spending). Private investment was included in the model as explanatory variable, apart from government expenditure. The study made use of time-series method of unit root test, co integration and error correction (VEC) methods. The results reveal that all the explanatory variables (government investment on human capital, consumption and investment in other areas as well as private investment) do not explain economic growth in Nigeria.

Olapade and Olupade (2010) assesses how fiscal and monetary policies influence economic growth in Nigeria, using trend analysis involving government recurrent expenditure and government capital expenditure as well as ordinary least square (OLS) regression analysis the results show that recurrent expenditure exhibit growth overtime while capital expenditure did not.

Arpaia and Turrini (2007) analyzed both short-run and long-run relations between government expenditures and potential output in European union (EU) countries using pooled mean group (PMG) estimation for the times series 1970-2003. The study establishes that the hypothesis of common long time elasticity between cyclically adjusted primary expenditure and potential output close to unity has been accepted. This means that government expenditure affects the level of output positively. It also establishes that the impact of government expenditure on output growth is more in countries that are trying to catch up with the developed countries.

Adesoye, Maku and Atanda (2010) examine the link between government spending and economic growth in Nigeria for the period of 1977-2006 using time series data and following Ram (1986) model. The study used real GDP as the dependent variable and the private investment, human capital and consumption spending as independent variable. The empirical results show that, private and public investments have insignificant effect on economic growth. It also reveals that GDP, private investment, human capital investment, government investment and consumption spending have not maintained uniform pattern since 1977-2006.

Samimi and Habibian (2011) estimate the impact of government expenditure on economic growth in developing countries, using a panel data of 17 developing countries, covering a times-series period of 1990-2007, and random effect model. The study establishes that government consumption expenditure significantly depresses economic growth while trade openness and government investment have positive but insignificant effect on economic growth.

Loto (2011) investigate the growth effect of government expenditure on economic growth in Nigeria over the period of 1980-2008, focusing on sectorial expenditures. The sectors include security, health, education, transportation/communication and agriculture. Johansson co-integration technique of regression analysis was used. The result depict that expenditures on health, national security, transportation/communication were positively related to economic growth. Expenditure on agriculture in the short-run was not significant. Education also shows negative relationship.

Bose et al (2003) examined the growth effect of government expenditure for a panel of thirty developing countries over the decades of the 1970s and 1980s, with a particular focus on sectorial expenditures. Their methodology explicitly recognizes the role of the government budget constraint and the possible biases arising from omitted variables. Their primary results are twofold. Firstly, the

share of government capital expenditure in GDP is positively and significantly correlated with economic growth, but recurrent expenditure is significant. Secondly, at the sectoral level, government investment and total expenditures on education are the only outlays that are significantly associated with growth one the budget constraint and omitted variables are taken in to consideration.

2.3 Theoretical Framework

There are basically two main economic growth models that are relevant in economics up to date. These are: the neoclassical growth theory and the new growth theory. The neoclassical theory holds that economic growth is dependent on accumulation of production factors of labor, capital and also technological growth. The theory laid a particular emphasis on capital accumulation. The theory holds that a country that accumulate capital more rapidly will grow faster than the one whose accumulation is slower (Blanchard, 2011).

The neoclassical growth model, as developed by Solow (1956) and Swan (1956) popularly known as Solow-Swan (1956) growth model, assumes that the productivity of the production inputs of capital and labor are subject to diminishing returns. As such, as a country accumulates more capital inputs, the marginal product of capital (MPC) will reduce. This means that a country with abundant capital will have a lower growth rate than a country which is poor in capital. As such, countries with lower capital per head will grow much faster as they accumulate capital than capital rich countries. This suggests the theory of countries converging as they develop, as richer countries grow slower while poorer countries grow faster.

As economic growth continues, some countries which are leading the growth process will attain the stationary state or steady state of growth where the growth rate in population will be equal the growth rate in capital and this will be equal to the growth rate in output. Thus the growth rate will come to a halt in those countries. The only remedy which the neoclassical model identified is improvement in technology. This will increase the productivity of capital and its marginal productivity will shift to a new level. When we state this in terms of production possibility curve (PPC) or frontier, the PPC will shift outwards making it possible to achieve a higher level of output, increase the per capital output and income levels. But the neoclassical model identified technology as exogenous variable that comes accidentally and it is not internally determined and this earns the model the name of exogenous model.

The exogenous model as it stands has a lot of predictive fallacies which economists were not too comfortable with. One, the idea that countries will grow and reach the point of saturation does not agree with the real world. Countries like

USA, Japan, France, Germany, to name but a few of them. Second, poorer countries are not growing faster that develop countries as the endogenous growth theory will tend to suggest. This is another serious defect inherent in the theorist's predictive power. Thirdly and lastly, technology is not acquired accidentally as the theory made us to believe. Experience from Japan, South Korea, Singapore,Taiwan, Hong Kong, and more recently, China, Indonesia, Thailand, Malaysia and India have shown that technology can only be acquired by countries that strive to achieve it. It is, therefore, endogenous in an economic system (Sweezey and MCconaghy, 2011).Because of the poor predictive power of the neoclassical or the exogenous growth model economists work hard to endogenous the growth model.The endogenous growth theory holds that economic growth is primarily the result of internal forces within the economy as opposed to outside forces (Romer, 1994). The endogenous growth theory also states that both positive externalities and spillover effects of knowledge-based economy contribute to economic growth. The endogenous growth also holds that the long-run growth rate of an economy is a function of government policy measures: subsidy on basic research, the quality of education, tax breaks, public provision of quality infrastructural facilities, and cash grants (Sweezey and McConaghy, 2011).

The new theory or as it is sometimes referred to as endogenous growth theory was developed by a group of economists who were dissatisfied with the exogenous growth model developed by the neoclassical economists Solow (1956)and Swan(1956) because of its main assumption that the growth rate of the economy is caused by technical change and the technical change is caused by factors which are determined outside the economy. These economists are Romer(1986), Lucas (1988), and Rebelo (1991). Their works are based on the earlier works of Arrow (1962) andUzawa (1965). The models of endogenous growth model, as stated earlier, dropped the idea of technical changeand in place of it emphasized on investment in human capital which it emphasizes that it significantly contributes to spillover effects on the economy thereby reducing diminishing returns to physical capital accumulation (Barro and Sala-I-Martin, 2004).

The endogenous model assumes that there is a constant marginal product of capital (MPC) at aggregate level. This does not mean that a large firm will necessarily be more efficient than a small firm. This is because at the microeconomic level the theory of diminishing MPC still applies. This implies that it is still possible to construct a theory of endogenous growth model based on the theory of perfect competition. However, the model of endogenous growth theory is always constructed based on the theory of imperfect competition based

on monopoly power. The model is always constructed with an assumption of two sectors in the economy: (i) final output producing sector, and research and development (R & D) sector. The R & D sector is assumed to develop ideas which are sold to the sector producing the final goods. The model also assumed that the R & D sector is a monopoly sector which produces goods and sold at a profit to the final goods producing sector and the profits are usually reinvested (Barro and sala-i-Martin, 2004).

The implication of endogenous growth model is that policies that embrace trade openness, competition, change, and innovation will stimulate economic growth. On the other hand policies that restrict or protect firms or favor existing firms will be growth retarding rather than growth enhancing.(Barr and Sala-i-Martin, 2004).

This study selects the endogenous growth model as the relevant theoretical framework. The reason is that the endogenous growth model is more realistic. The endogenous model says that economic growth is dependent on what the country is doing. The theory states that for a country to develop, it has to make the right decisions in terms of policy frameworks by making the necessary sacrifices: subsidizing basic research, investing in producing quality human capital, providing infrastructural facilities to enhance manufacturing activities, since this stimulates exports, having good institutions, among others. This means that the Nigerian government can stimulate economic growth through its policies.

3.1 Research Methodology and Theoretical Framework

The study adopts correlational research design and makes use of time-series data from 1993 to 2013. The data are obtained from statistical bulletin of the Central Bank of Nigeria (CBN, 2014); since the study involves time series analysis, the study made use of time-series. A unit root test, co-integration and error correction methods were used to improve the validity of statistical inferences. In essence, the study is an empirical study designed to show how government expenditures, which are classified into recurrent and capital expenditure.

Secondary source is used in this study. The data was extracted from the Central Bank of Nigeria (CBN) Statistical bulletin. The figures of both capital and recurrent expenditures and the GDP are extracted from CBN Statistical Bulletin (2014). The technique employed in the study is multiple regression. A unit Root Test was conducted before running the ordinary least square (OLS). E-Views 8 was used to run the result from the multiple regression models.

3.2 Model Specification

The model employ for this study is as identified thus:

GDP = F (GEXP, GCEXP GREXP) … (1)
Where
GDP = Gross Domestic Product (Dependent
Variable)
GEXP = Government Expenditures (Independent variable)
GCEXP= Government Capital Expenditures (Independent variable)
GREXP = Government Recurrent Expenditures (Independent variable)
In a linear function, it is represented as follows: is represented as follows:
$GDP = \beta 0 + \beta_1 GEXP + \beta_2 GCEXP + \beta_3 GREXP + \varepsilon_t$ … (2)
Where: β_0 = Constant term, β_1 = Regression
Coefficient of GEXP, β_2 = Regression coefficient of
GCEXP, β3= Regression Coefficient of GREXP, and ε_t = Error Term.
For usual statistical reasons the above model
Will be transformed intoeconometrics form as specified below:
$GDP = \beta 0_t + \beta_1 GEXP_t + B_2 GCEXP_t + \beta 2 LGREXP_t + + \varepsilon_t$. . . (3)

4.1 Results and Discussion

4.2 Introduction

This chapter presents, analyzes and interprets the results and findings of the study. The study also presents and interprets the results of the line graphs on the different series. Unit root test results and Regression result using Ordinary Least Square (OLS).

4.3 Stochastic Properties of the Data

To proceed with the test, the study examined the plot of each series to see whether there is a trend or not. A trend variable is necessary in the Augmented Dickey Fuller Test ADF regression, if trends are present in the series. For the purpose of this studies both trends and intercept are present in a series, for that a trend and an intercept are included in testing for unit roots.

4.4 Trend Analysis of the Series

At the onset, trend analysis is employed here to show the interplay between the GDP and government expenditure indicators proxy by government expenditure (GE), capital expenditure (CE) and revenue expenditure (RE). From the appendix, it is clear that all the series exhibit trend. Some completely trended upward i.e. GDP, while some exhibit both upward and downward trend i.e. GE, CE and RE.

4.5 Unit Root Tests

Before the application of a standard econometric technique, it is required that variables should be stationary. As such, the study carries out the stationary test on the variables of interest using the Augmented Dickey Fuller Test (ADF) tests. This is done in order to improve the validity and reliability of statistical inferences as Non-stationary series usually result to the phenomenon of spurious regression results. The following is the results of the ADF

Table 4.1: Unit Root Results

	Level	**First Difference**	
	ADF	**ADF**	**Stationary at**
GDP	**3.7260*** ** (-3.6537)		**Level**
GE	**-3.4220** ** *{-2.9604}*		**Level**
CE	**3.7211** *{-3.6998}*		**Level**
RE	**-1.9812** *{-3.6701}*	**-8.5954*** ** *{-3.6616}*	**I(1)**

The bold figures are the tests statistics. Those enclosed in parenthesis-{ } are the critical values at 5% level, (***),(**),(*) indicates significance at 1%, 5% and 10% level.

It is important to note that in conducting the unit root test, the included trend and intercept, as the graphical plots of the series suggest. The result of the ADF indicates that three variables GDP, GE and CE are stationary at levels. The study therefore, rejects the first two null hypotheses and concludes that there is no of unit root at levels. Then the remaining variable RE is not stationary at level. It was finally differenced once after which it became stationary. The study therefore, concludes that the variables- GDP GE CE are stationary at levels at 1%, 5% and 1% respectively. While RE is integrated of order one, I (1) at 5% level of significance. The GDP as the proxy for the dependent variable, and LNNI from the proxies of capital market indicators are stationary at 1% level of significance. This can be observed from the ADF test statistics of GDP 3.7260 as against the test critical values of 3.6. Also from the table 4.1 it can deduce that GE and CE are stationary at 1% levels of significance this can be clearly seen from the ADF test statistics of 3.4220and 3.7211 as against their test critical values of 2.6904 and 3.6998 respectively. The details of the result are shown in the appendix.

4.6 Regression Result

Table 1: OLS Regression Result Shows the impact of Government expenditures, proxied by Government expenditures, Capital expenditure and Recurrent expenditure on Gross Domestic Product (GDP).

Table 4.2 OLS Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GE	50.07205	20.48286	2.444582	0.0204
CE	-71.64866	18.18085	-3.940886	0.0004
RE	-28.99303	23.54575	-1.231349	0.2275

R-squared	0.964852
Adjusted R-squared	0.962584
S.E. of regression	4881.294
Sum squared resid	7.39E+08
F-statistic	105.05
Prob(F-statistic)	0.0000
Durbin-Watson stat	1.6750

Source: E-Views 7
GDP = 50.0720GE -71.6549CE- 28.9903RE

From the above table it can be observed that Government expenditures are positively impacting on GDP. This can be clearly seen from the beta coefficient of 50.07 which significant at 5%. This implies that a unit increase in GE will lead to a proportionate increase in GDP by 50 units. This gives the basis for rejecting the first null hypothesis which presumed that GE has no significant effect on GDP. The result supports the findings of Albatel (2000) he demonstrated that government expenditure (GE) have significant impact on economic growth. In Dandan (2011), the study found that government expenditure at the aggregate level has positive impact on the growth of GDP. Same with Gregarious and Ghosh (2007), where their results suggest that countries with large government expenditure tend to experience higher economic growth.

The model also provides an inverse significant impact between Capital expenditure and GDP. This can be deduced from the above table indicating beta a coefficient of -71.6549 which significant at 1%. This implies that an increase in CE will lead to a decrease in GDP by 72 units. This also provides a basis for rejecting the second null hypothesis which was stated that CE has no significant effect on GDP. The finding is in line with the work of Aschauer(1989) that demonstrated that expenditure on non-military stock of capital (infrastructures) was more productive than the expenditure on military stock and that government expenditure on infrastructures such as roads, bridges, dams, etc, are economic growth stimulating same withAlbatel(2000)government investment (capital expenditure)has significant impact on economic growth. In his own findings, Gannon (2003) posits that "if you want to harvest in autumn, you need to sow in spring. This ancient saying holds true not only for agriculture, but for all economic activities". When we changed the scenario from agriculture to economic growth in terms of employment level, per capita income, export, etc. the sowing can be viewed in terms of private and public investments. In the context of the presen t scenario, sowing refers to investment in research and development as a percentage of the GDP. It is argued that the higher the level of investment in science and technology as the percentage of the GDP, the higher the level of economic growth. Bose et al (2003) said, the share of capital expenditure in GDP is positively and significantly correlated with economic growth

Again, the table revealed negative but insignificant relationship between recurrent expenditure and GDP. This is observable from the beta coefficient of – 28.9903 with p-value of 0.2275.

Finally, the overall, the combined and the overall impact of the repressors- Capital expenditure (Government expenditures Capital expenditure and Recurrent expenditure) on Gross Domestic Product, is shown on the model summary of the regression results. The F-Stat of 115.05 which is significant at 1% (0.0000) reveals that the model is well fitted, while the coefficient of determination R^2 of 96 %, explains the individual variation of the dependent variable (GDP) as a result of the changes in the independent variable. It can be said that, Government expenditures (Government expenditure, Capital expenditure and Recurrent expenditure) have combine predictive power of 96% in impacting on GDP, while the remaining 4% is accounted for by other factors which are not captured in the model.

5.1 Conclusions and Recommendations

It is also established in this study that government capital expenditure stimulates economic growth in Nigeria. The study also concluded that capital and recurrent expenditures do not improve economic growth in Nigeria. As pointed out earlier, the Nigeria economy is characterized by high level of unemployment, persistent macroeconomic instability with the attendant result of growing poverty. Government expenditure as fiscal policy instrument has not been very effective in resolving the macroeconomic challenges as pointed above. Based on these observations, the following recommendations are made: Government should ensure that capital expenditure and recurrent expenditure are properly managed in a manner that it will raise the nation's production capacity. This is my be done by putting the right instruments on ground for regular monitoring and feedback on progresses recorded as far as allocations given out.

Government capital spending which seems to have a long run effect should be given adequate attention by review the policy on its allocation because it seems to be the driving force of developing economies like Nigeria. In this case, careful evaluation of government expenditures between consumption and capital spending has to be considered, so that strict adherence is ensured.

References

Barro, R. J. &Sal;a-i-Martin, X. (2007). Economic Growth, 2nd Edition. New Delhi: Prentice-Hall.

Blanchard, O. (2011). Macroeconomics, Updated Edition; 5th Edition. Boston: Pearson.

Central Bank of Nigeria (CBN) Statistical Bulletin (2014).Retrieved from www.cenbank.org/documents/statbulletin.asp.

Gerschenkron, A. (1962). Economic Backwardness in Historical Perspectives.Cambridge, Mass Belknap press.

Keynes JM (1936). The general theory of employment, interest andmoney. New York: Harcourt, Brace and co

Leonteif, W. (1978) Input-output Econ.omics.New York, Oxford University press.

Mitchell, D. (2005). The Impact of Government Spending on Economic Growth.Heritage Foundation 1831, Washington DC.

Obinna, O. E. (2003) Public Finance, Nsukka, Apand P Press Ltd. 210p

Rostow, W. W. (1960). The Stages of Economic Growth, Cambridge University press.

Samuelson,P. A. and Nordhaus, W. D. (1985). Economics. New York: McGraw-Hill.

Smith, A. (1776) The Wealth of Nations, London.

Tanzi, V. (1994), Public Finance in Developing Country. Edward Elgar Publishing Ltd. England.

Tawny, R. H. (1973).Religion and the Rise of Capitalism. London, Penguin.

Ukwu I. Ukwu (2004),Government; Business and the People: Towards Partnership in Nigeria Development: Delta Publication, Enugu.

Vedder, R. K. &Gallaway, L. E. (1998), Government Size and Economic Growth, Ohio University, Washington, D.C

Adesoye, A. B,;Maku, O. E, Atanda, A. (2010*). Dynamic Analysis of Government Spending and Economic Growth in Nigeria. Journal of Management and Society 1 (2) 27-37.*

Albatel, A. H. (2000). *The Relationship between Government Expenditure and Economic Growth in Saudi Arabia. Journal of Administration 12 (2) 173-191*

Arpaia, A. and Turrini, A. (2008). Government Expenditure and Economic growth in the EU: Long-run Tendencies and Short-term Adjustment, Economic Papers, 300.

Aschauer, D. A. (1989).*Is Public Expenditure Productive?Journal of Monetary Economics. 23, 177-200.*

Backgrounder, B. R. (2008). Why Government Spending does not Stimulate Economic Growth. Heritage Foundation America.

Barro, R. J. (1990). *Economic Growth in aCross-section of Countries. Quarterly Journal of Economics, 106(2): 407-443.*

Barro, R. J. (1990). *Government Spending in a Simple Model of Endogenous Growth. Journal of Political Economy, 98(55): 103-125. Doi:10.10861/267726.*

Barro, R. and Sala-i-Martin, X. (1990). "Public Finance in Models of Economic Growth," NBER Working Paper No. 3362

Bleaney, M, Gammell, N, Kneller, R. (2001), *Testing the Endogenous Growth Model: Public Expenditure, Taxation and Growth over the Long-run. The Canadian Journal of Economics. 34(1):36-57.*

Break, G. F. (1982). Issues in Measuring the Level of Government Economic Activities: The American Economic Review, 72 (2) 288-295.

Chih-Hung Liu, and Younis, E. M. (2008).*The Association between Government Expenditure and Economic Growth: Granger Causality Test of U.S.A. Data, 1947-2002, Journal of Public Budgeting and Financial Management, 20 (4), 439-452.*

Cooray, A. V. (2009). Government Expenditure, Governance and Economic Growth. Comparative Economic Studies, 51 (3) 401 – 418.

Folster, S. and Henrekson, M. (2000). " Growth Effects of Government Expenditure and Taxation in Rich Countries", Working Paper Series in Economics and Finance 391, Stockholm School of Economics

Folster, S. and Magnus, H. (1999*). Growth and The Public Sector: A Critique of Critics, European Journal of Political Economy, 15(2):337-358.*

Gannon, F. (2003).Government Rhetoric and their R & D Expenditure. EMBO Reports 4(2), 117 – 120. Doi 10, 1038/SJ: Embor. Embor 746.

Gregoriou, A. &Ghosh, S. (2007). *The Impact of Government Expenditure on Growth: Empirical Evidence from a Heterogeneous Panel. Journal of Economic and Finance..*

Hussain, A; Mohammed, S. D.; Akram, K. and Lai, I. (2009).*Effectiveness of Government expenditure Crowding-in orCrowding-out: Empirical Evidence in the Case of Pakistan.European Journal of Economics, Finance and Administration. 16: 136-142 .*

Krueger, A. O. (1990). *Government Failures in Development: The Journal of Economic Perspectives, 4 (3) 9-23.*

Leach, G. (2002), We are Going the Wrong Way-tax and Spend Fiscal Policy, IoD Policy Paper, London Loto, M. A. (2011). *Impact of Government Sectorial Expenditure on Economic Growth, Journal of Economic and International Finance, 3 (11), 646-652.*

Maku, O. E. (2009). Does Government Spending Spur Economic Growth in Nigeria. Olabisi Onabanjo University, Ago-Iwoye Nigeria MPRA Papa no 17941.

MrinalDatta-Chaudhuri (1990). *Market Failure and Government Failure. The Journal of Economic Perspectives, 4(3): 25-39*.

Nurudeen, A. and Usman, A. (2010).*Government Expenditure and Economic Growth in Nigeria, 1970 – 2008.a Disaggregated Analysis. Business and Economic Journal.2010*

Olopade B.C and Olapade. D.O (2010). "The impact Growth and Development in Developing Countries: Nigeria as a case study.

Olorunfemi, S. (2008). "Public Investment and Economic Growth in Nigeria: An Autoregressive model", *Journal of international Finance and Economics*

Oluwatobi, S. O. and Ogunrinola, I. O. (2011*). Government Expenditure on Human Capital Development: Implications for Economic Growth in Nigeria. Journal of Sustainable Development, 4(3) 77-80 d01:10.5539/jsd.v4n3p72*

Omitogun, O. and Ayinla, T. A. (2007).*Fiscal Policy and Nigerian Economic Growth.Journal of Research in National Development.5(2)*

Osborn, D. R. Haque, M. E; and Bose, N. (2003). Public Expenditure and Economic Growth: A Disaggregated Analysis for Developing Countries.

Ram, R. (1986). Government Size and Economic Growth: A New Framework and Some Evidence from Cross-Section and Time-Series Data: The American Economic Review, 76 (1), 91-203.

Robelo, S. (1991).Longrun Policy Analysis and Long-run Growth. NBER Working Paper No: 3325.

Romer, P. (1996).*Increasing Returns and Long run Growth. Journal of Political Economy: 94(2); 1002-1013.*

Romer, P. (1994).*The Origin of Endogenous Growth: Journal of Economic Perspectives 8 (1), 3-22.*

Rosenstein-Rodan, P. N. (1943). Problems of industrializationof Eastern and Southern Europe, Economic Journal, 53.

Samimi, A. J. (2010) *Government Size and Economic Growth: New Evidence from Some Developing Countries, Journal of Basic and Scientific Research, 1 (2) 118-123.*

Solow, R. M. (1956). *A Contribution to the Theory of Economic Growth: Quarterly Journal of Economic, 70, 65 – 94.*

Swan, T. W. (1956). Economic Growth and Capital Accumulation; Economic Record 32, 334-361.

Sweezey, D. and McConaghy, R. (2011).*Manufacturing Growth*, June, 2013.

Taiwo, A. S., Agbatogun, K. K. (2011). Government Expenditure in Nigeria: A Sine Qua non for Economic Growth and Development. Jorind 9(2): 115 - 162.

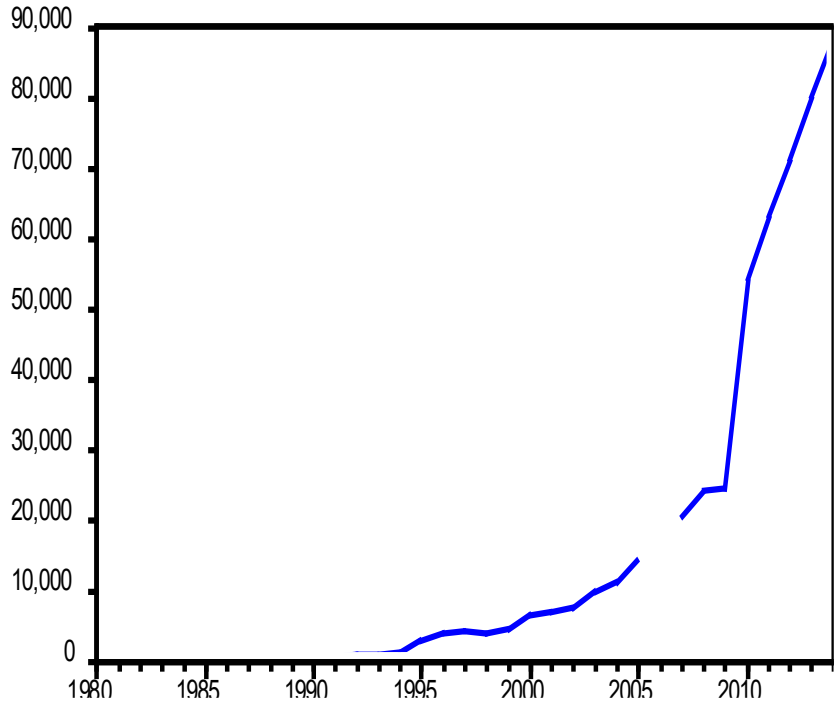
Taiwo, M. and Abayomi T. (2011).*Government Expenditure and Economic Development: Empirical Evidence from Nigeria. European Journal of Business and Management, 3(9): 18-28.*.

Usman, A.; Mobolaji, H. I., Kilishi, A.A., Yaru, M.A. and Yakubu, T. A. (2011).Public Expenditure and Economic Growth in Nigeria. Asian Economic and Financial Review, 1(3):104 – 113.

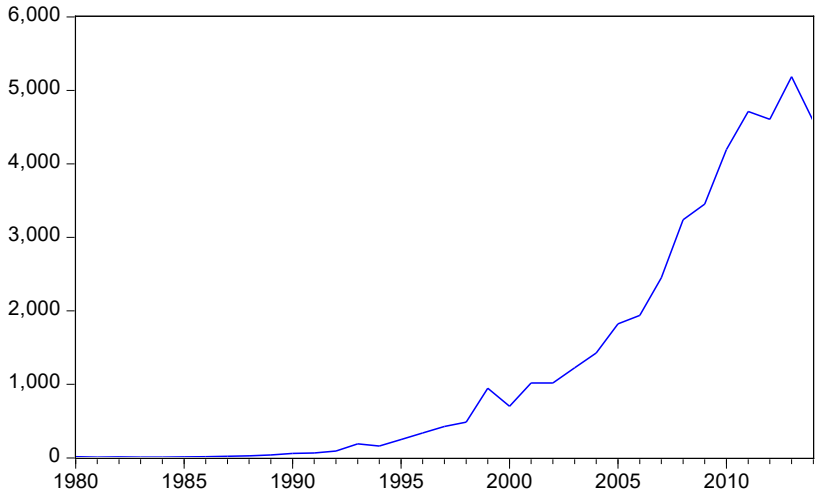
Uzawa.H. (1965).Optimum Technical Change in an Aggregate Model of Economic Growth.*International Economic Review.*6:18-31.

APPENDICES

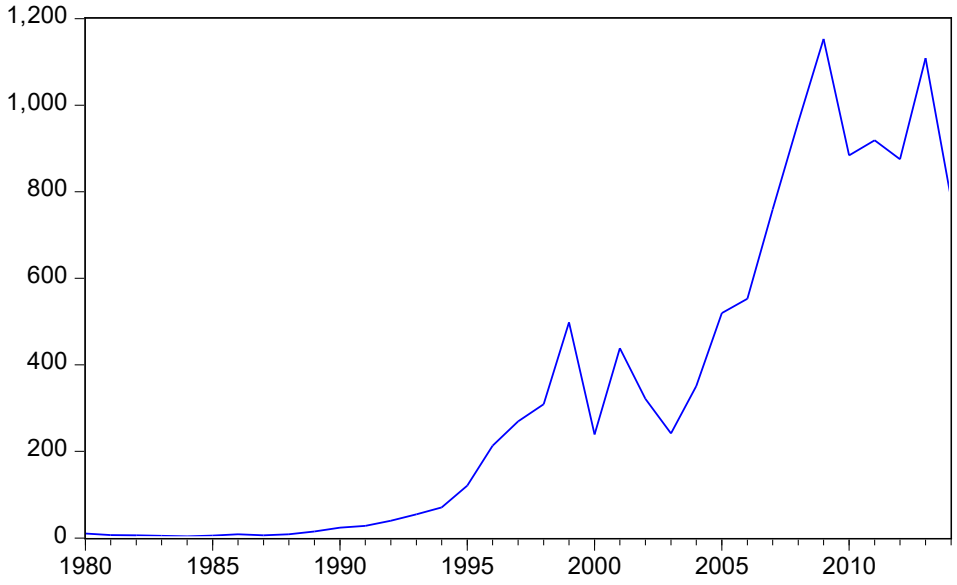
GDP



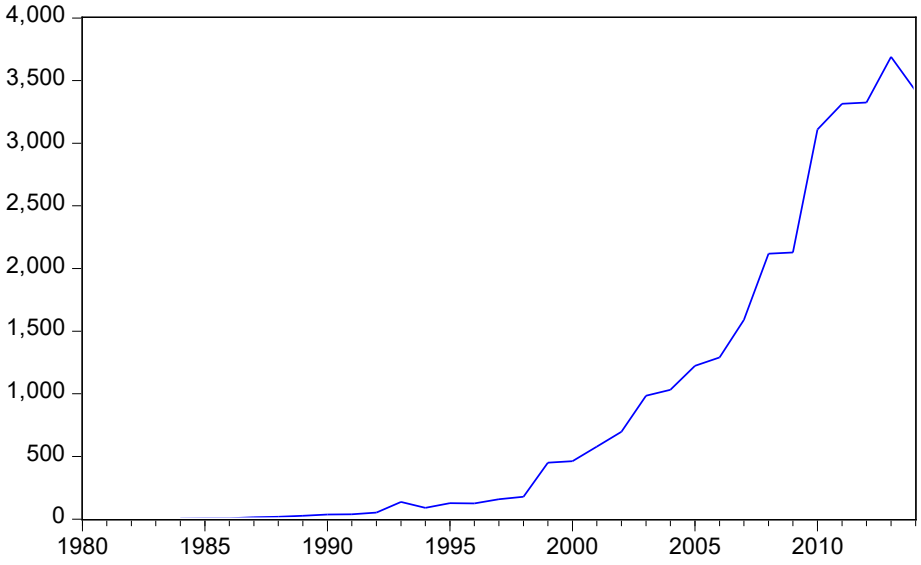
GE



CE


1,200
1,000
800
600
400
200
0
1980
1985
1990
1995
2000
2005
2010

RE


4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
1980
1985
1990
1995
2000
2005
2010

Null Hypothesis: GDP has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		3.726037	1.0000
Test critical values:	1% level	-3.653730	
	5% level	-2.957110	
	10% level	-2.617434	

*MacKinnon (1996) one-sided p-values.
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GDP)
Method: Least Squares
Date: 11/28/15 Time: 12:23
Sample (adjusted): 1981 2014
Included observations: 32 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP(-1)	0.143066	0.038396	3.726037	0.0008
C	772.6484	972.8107	0.794243	0.4333

R-squared	0.316369	Mean dependent var	2592.111
Adjusted R-squared	0.293582	S.D. dependent var	5662.838
S.E. of regression	4759.541	Akaike info criterion	19.83415
Sum squared resid	6.80E+08	Schwarz criterion	19.92576
Log likelihood	-315.3464	Hannan-Quinn criter.	19.86452
F-statistic	13.88335	Durbin-Watson	2.235506

	stat	
Prob(F-statistic)	0.000806	

Null Hypothesis: CE has a unit root
Exogenous: Constant
Lag Length: 7 (Automatic - based on SIC, maxlag=8)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		3.721104	1.0000
Test critical values:	1% level	-3.699871	
	5% level	-2.976263	
	10% level	-2.627420	

*MacKinnon (1996) one-sided p-values.
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(CE)
Method: Least Squares
Date: 11/28/15 Time: 12:28
Sample (adjusted): 1988 2014
Included observations: 27 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CE(-1)	0.603444	0.162168	3.721104	0.0016
D(CE(-1))	-1.449349	0.323553	-4.479483	0.0003
D(CE(-2))	-1.001333	0.315626	-3.172525	0.0053
D(CE(-3))	-0.715316	0.242424	-2.950687	0.0086
D(CE(-4))	-0.499935	0.257421	-1.942092	0.0679
D(CE(-5))	-1.348937	0.347834	-3.878102	0.0011
D(CE(-6))	-1.684300	0.400790	-4.202449	0.0005
D(CE(-7))	-1.167002	0.337947	-3.453212	0.0028
C	64.31249	30.95372	2.077698	0.0523

R-squared	0.634124	Mean dependent var	28.76852

Adjusted R-squared	0.471513	S.D. dependent var	145.9707
S.E. of regression	106.1165	Akaike info criterion	12.42815
Sum squared resid	202692.8	Schwarz criterion	12.86010
Log likelihood	-158.7801	Hannan-Quinn criter.	12.55659
F-statistic	3.899627	Durbin-Watson stat	2.094451
Prob(F-statistic)	0.007857		

Null Hypothesis: RE has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		1.660280	0.9994
Test critical values:	1% level	-3.639407	
	5% level	-2.951125	
	10% level	-2.614300	

*MacKinnon (1996) one-sided p-values.
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RE)
Method: Least Squares
Date: 11/28/15 Time: 12:29
Sample (adjusted): 1981 2014
Included observations: 34 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RE(-1)	0.052872	0.031845	1.660280	0.1066
C	58.33296	43.49104	1.341264	0.1893

R-squared	0.079310	Mean dependent var	100.3759
Adjusted R-squared	0.050538	S.D. dependent var	211.5900
S.E. of regression	206.1740	Akaike info criterion	13.55234
Sum squared resid	1360247.	Schwarz criterion	13.64213

Log likelihood	-228.3898	Hannan-Quinn criter.	13.58296
F-statistic	2.756530	Durbin-Watson stat	2.154234
Prob(F-statistic)	0.106628		

Null Hypothesis: D(RE) has a unit root
Exogenous: Constant
Lag Length: 3 (Automatic - based on SIC, maxlag=8)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.981210	0.2930
Test critical values:	1% level	-3.670170	
	5% level	-2.963972	
	10% level	-2.621007	

*MacKinnon (1996) one-sided p-values.
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RE,2)
Method: Least Squares
Date: 11/28/15 Time: 12:30
Sample (adjusted): 1985 2014
Included observations: 30 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(RE(-1))	-0.516373	0.260635	-1.981210	0.0587
D(RE(-1),2)	-0.504716	0.283441	-1.780674	0.0871
D(RE(-2),2)	-0.036884	0.283815	-0.129957	0.8976
D(RE(-3),2)	0.392859	0.203366	1.931778	0.0648
C	57.79226	45.24966	1.277186	0.2133

R-squared	0.679221	Mean dependent var	-9.085333
Adjusted R-squared	0.627896	S.D. dependent var	309.6005
S.E. of regression	188.8573	Akaike info criterion	13.47087
Sum squared resid	891676.9	Schwarz criterion	13.70441
Log likelihood	-197.0631	Hannan-Quinn criter.	13.54558

F-statistic	13.23381	Durbin-Watson stat	2.010038
Prob(F-statistic)	0.000006		

Null Hypothesis: D(RE,2) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=8)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-8.595464	0.0000
Test critical values:	1% level	-3.661661	
	5% level	-2.960411	
	10% level	-2.619160	

*MacKinnon (1996) one-sided p-values.
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RE,3)
Method: Least Squares
Date: 11/28/15 Time: 12:31
Sample (adjusted): 1984 2014
Included observations: 31 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(RE(-1),2)	-2.657930	0.309225	-8.595464	0.0000
D(RE(-1),3)	0.579126	0.172927	3.348963	0.0023
C	4.105925	35.85757	0.114507	0.9097

R-squared	0.870036	Mean dependent var	-20.45032
Adjusted R-squared	0.860753	S.D. dependent var	534.1749
S.E. of regression	199.3318	Akaike info criterion	13.51958
Sum squared resid	1112528.	Schwarz criterion	13.65836
Log likelihood	-206.5536	Hannan-Quinn criter.	13.56482
F-statistic	93.72218	Durbin-Watson stat	1.593298
Prob(F-statistic)	0.000000		

Dependent Variable: GDP
Method: Least Squares
Date: 11/28/15 Time: 12:48
Sample: 1980 2014
Included observations: 34

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GE	50.07205	20.48286	2.444582	0.0204
CE	-71.64866	18.18085	-3.940886	0.0004
RE	-28.99303	23.54575	-1.231349	0.2275

R-squared	0.964852	Mean dependent var	15018.21
Adjusted R-squared	0.962584	S.D. dependent var	25235.24
S.E. of regression	4881.294	Akaike info criterion	19.90831
Sum squared resid	7.39E+08	Schwarz criterion	20.04298
Log likelihood	-335.4412	Hannan-Quinn criter.	19.95423
Durbin-Watson stat	0.615810		