**TITLE PAGE**

**IMPACT OF PUBLIC SPENDING ON POVERTY IN NIGERIA**

**BY**

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**APPROVAL PAGE**

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**DEDICATION**

This work is dedicated to my wonderful parents, Sir Fidelis Ajani, Lady Kate Ajani, my siblings, Nkechi Ajani, Chinwe Ajani, and Chukwudubem Ajani, and to all those who contributed immensely through my academic pursuit. I give my sincere gratitude to you all.

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**ABSTRACT**

This research was carried out in other to find out the impact of public spending on Poverty in Nigeria. Annual data on Government Capital Expenditure, Government Recurrent Expenditure, Gross Fixed Capital Formation and Poverty were collected from the National Bureau of Statistics, Nigeria and the Central Bank of Nigeria covering the period of 1981-2015. The results indicated that Government Recurrent Expenditure did not significantly impact poverty in Nigeria while Government Capital Expenditure and Gross Fixed Capital Formation the proxy for private sector investment significantly impacted on Poverty in Nigeria during the period under review. The researcher recommends that policy directed towards an increment in Government Capital Expenditure and Gross Fixed Capital Formation to further reduce poverty rates be implemented. The researcher also recommends significant increase in Government spending on recurrent goods together with proper implementation devices to straighten the pathway towards poverty rate reduction in Nigeria. This would lead to significant reduction in poverty rates, breech the inequality gaps, reducing unemployment and stimulate economic growth and development.

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# CHAPTER ONE

## 1.0 INTRODUCTION

## 1.1 Background of the Study

Nigeria, popularly referred to as the giant of Africa because of her endowments and riches in both human and natural resources, and also her affiliation with many powerful economies of the world, is still faced with one of the most challenging global problems –poverty.

Nigeria is still classified as economically retarded in terms of general social welfare. Over the years, it is evident that Nigeria has experienced some level of economic growth, but as a result of mismanagement of resources amongst other ills, poverty continues to thrive in the economy.

Over the years, public spending has been allocated into different sectors of the economy. Thus this has led to an increase in total budgetary allocation per annum. Despite this, there has minimal positive impact on poverty and inequality in the country; hence the galloping widening of the gap between the rich and poor which stifles the quest of the poor towards self-actualization and improved living standards (since a vast majority of them have very little funds).

According to French Economist, Esther Duflo, poverty can be controlled or even eradicated with the right policies. “All it takes is for politicians to translate research into action” implementing programs that have been shown to work.

According to Amartya Sen (1981), poverty analysis should focus on individuals’ potential to function rather than the results the individuals obtain from function. Hence government’s spending towards human capital development is one of the paths towards poverty reduction.

British Economist Keynes asserts that public spending should be increased when private spending and investment are insufficient. He explains that current spending which is expenditure on wages and raw materials and capital spending which involves physical assets likes roads, bridges, hospitals buildings and equipment go a long way toward bettering the society.

Public spending as a “tool” for suppressing poverty in Nigeria has been a very challenging issue majorly because of several political and societal vices inherent in the society. Vices like: misallocation of resources, embezzlement of funds, with corruption as the bedrock of all. This has been the key driver and propagator of poverty in Nigeria.

Government or public spending through subsidies and the likes, is primarily aimed at stimulating economic growth through harnessing and empowering members of the society regardless of the existing notion – corruption. Government or public spending is imperative to mitigating poverty in Nigeria.

## 1.2 Statement of the Problem

Government Expenditure is a major component of national income. This means it is very crucial to ascertaining economic growth and development in a nation. Government expenditure or public spending is important tools geared at helping members of society attain some substantial level of stability (social welfare). For example, public spending through agricultural subsidies help encourage commercial farming. In spite of this, a vast majority of people doubt the impact of public spending due to the political ills, since the poverty rates has not reduced significantly.

Despite the discrepancies, public spending still remains a very promising tool towards reducing the rate of poverty in Nigeria. Consequently, this study seeks to ascertain the impact of public spending on poverty in Nigeria.

## 1.3 Objective of the Study

The objective of this study is to ascertain the impact of public spending on poverty in Nigeria from 1981-2015

The specific objectives are:

* To determine the relationship between public spending and poverty in Nigeria
* To ascertain the impact of public spending on poverty in Nigeria

## 1.4 Research Questions

Based on the objective of this study, the study intends to ask the following questions:

* What is the relationship between public spending and the poverty in Nigeria?
* What is the impact of public spending on poverty in Nigeria?

## 1.5 Research Hypothesis

The researcher has formulated these hypotheses as a guide to this study.

H01: There is no significant relationship between public spending and poverty in Nigeria

H02: Public spending has no significant impact on poverty in Nigeria

## 1.6 Significance of the Study

Results of this study will be beneficial to individuals, firms, industries, researchers, the government and its parastatals; and also international organizations. Members of the society will have a better view and understanding of the role of public spending and its relation to poverty. Government will also be exposed to the flaws hindering poverty rate reduction and procure better policies with good implementation.

## 1.7 Scope of the Study

This research seeks to evaluate the impact of public spending on poverty in Nigeria. The scope of this study will cover the periods of 1981-2015.

##  1.8 Limitation of the study

In this research, some of the factors which affected the researcher were: time, finance, collection of data and gathering of relevant materials. The data collected is Secondary data sourced from the National Bureau of Statistics, Nigeria; The Central Bank of Nigeria.

## 1.9 Definition of Terms

* **Poverty:** is a state or condition in which an individual or society lacks the financial resources and necessities to enjoy a minimum living standard and well-being that is generally accepted in society.
* **Absolute poverty:** a condition characterized by severe deprivation of basic human needs including food, water, sanitation, shelter, clothing, health, education.
* **Relative poverty:** a standard which is measured in terms of the society in which an individual lives and which therefore differs between countries and overtime.
* **Poverty line:** the minimum level of income deemed adequate in a particular country.
* **Poverty trap**: a state where poverty tends to persist due to self-reinforcing mechanism.
* **Public spending:** refers to the money or funds spent by the government on public services and other state controlled operations, projects and investments
* **Budget:** is an estimation of revenue and expenses over a specific future period of time which is compiled and re-evaluated on a periodic basis.
* **Economic growth**: is an increase in the output that an economy produces over a period of time, the minimum being two consecutive quarters.
* **Economic development**: can be defined as efforts that seek to improve the economic wellbeing and quality of life for a community by creating or retaining jobs and supporting or giving incomes and the tax base.

# CHAPTER TWO

## 2.0 LITERATURE REVIEW

## CONCEPTUAL LITERATURE

This section examines relevant related literature works on the impact of public spending on poverty in Nigeria. A vast majority of economists and researchers believe and attest to the existent of a relationship between public spending and poverty alleviation where government allocates funds to schemes and projects, public goods, etc., to help mitigate the level of poverty inherent in societies.

The spending of government on public goods and the aforementioned go a long way towards poverty and this attaining economic growth and development in a nation.

## 2.1 Theoretical Literature

## 2.1.1 Theories of Poverty

#### Neoclassical Theory

Neoclassical theory stresses the role of the unequal initial endowments of talents, skills and capital which determine productivity of an individual in generating poverty with a market-based competitive economic system. Market failures such as externalities, moral hazard and adverse selection, as well as incomplete information are also viewed as aggravators of poverty (Davis, 2007). Uncertainty may play a major role in causing poverty because people in poverty are more vulnerable to shocks to well-being (e.g. recessions, sickness, family breakdown).

By virtue of the Second Welfare Theorem of welfare theory, according to which a Pareto-Efficient allocation can be attained post-redistribution provided that is conducted optimally- redistributive policies aimed at reducing inequality can be efficiency-neutral. Akin to the classical view, neoclassical economists typically agree that in most practical situations a goal of full income equality, for instance, cannot be attained without incurring too high a cost in efficiency terms.

#### Human Capital Theory

The core of orthodox economic theory relies on the assumptions of perfect competition and market equilibrium entailing a strong relationship between wages and marginal productivity. The demand side of labour markets is thought to be determined by a number of characteristics or skills of workers can supply.

The importance of the skills of workers gave more rise to the emergence and spread of human capital theory. One shred of neoclassical economics focuses on people’s choices in relation to education training and mobility (as determinants of human capital) to explain differences in incomes, though still with little or no references to the role played by economic institutions and societal norms.

Lydall (1968) argued that it is the variation in the combination of intelligence, environment and education at the individual level that can account for most of the variation in the distribution of personal earnings.

The policy prescription from the human-capital view as regards poverty is that, though individuals’ income cannot ultimately be fully equalized due to differences in ability, increase in spending on the education of the poor and less privileged to great extent would improve their abilities and income earnings.

Furthermore, health is a primary component of individuals’ stock of human capital, and hence influences the incidence of poverty. The health status is akin to their skill set in causing poverty; poor levels of health, like poor skill sets, imply a reduced likelihood of finding work or leads to zero chances of being able to work; and a higher probability of ending up in poverty (Reinstadler and Ray, 2010). Even if individuals in dangerous health conditions manage to participate in the labour market, they are often less likely to gather the abilities required for high paid jobs, this makes them eligible for only low paying jobs that reflect their relatively lower marginal productivity (Buddelmeyer and Cai, 2009). Thus, income poverty may cause poor health due to factors such as malnutrition and less access to medical services as well as the possibility that the experience of poverty induces behavior contrary to health.

#### Keynesian Theory

Keynesian theory revolves about the idea that not only market distortions but also broad underdevelopment, in its multiple facets, cause poverty. Hence Keynesians suggest growth can promote economic development and thus relieve poverty, thereby further justifying government intervention at the macroeconomic level via fiscal and monetary policy, mainly to tackle involuntary unemployment.

In a typically liberal approach (Sach, 2005) the main signs of underdevelopment in a country or region include poor levels of human capital (health, skills and education), business capital (machinery and buildings), infrastructure (transport, power and sanitation), natural capital (viable land), public institutional capital (rule of law and security), and knowledge capital (technical know-how needed to raise productivity). Keynes believed that market forces can promote economic development, which was in turn perceived to be the single most important tool against poverty.

Keynes embraced the significance of education. Emphasis in the promotion of this crucial aspect of human capital was on the promotion of human capital accumulation through investment in public education. Therefore, the role of government in the economy takes center stage. It is argued that government intervention against poverty is needed in a wide range of economic issues, from tackling involuntary unemployment to promoting human capital accumulation and through investment in public education, which can both encourage economic growth via the multipliers and tackle poverty through the development of abilities it entails.

From the set of macroeconomic variables that Keynes and the new Keynesians stress, aggregate investment, with its positive effect in employment emerges as the key element in generating the type of growth that permits poverty relief. If entrepreneurial investment is low, in turn it raises unemployment and poverty rates among suppliers of labour. It is suggested that government revenue raised via taxes or bond issue, should be funneled to public investment.

The focus on public spending to attain the complementary goals of economic growth, employment and poverty reduction is strongest in certain crucial sectors that are considered to be strategic in the sense that they exhibit the highest multiplier effects. Furthermore, if a growing economy manages to stimulate job growth in a way that reduces poverty, such growth is appealing.

## 2.1.2 Theory of Public Spending/ Expenditure

Public spending mirrors the policy choices of States. When States decide upon which goods and services to procure and the quantities and qualities in which they will be produced, public spending reflects the costs of undertaking these policies. Public spending has registered spurring increase overtime in most countries.

#### Wagner’s Law

Adolph Wagner a German economist in the 19th century who made his law of Increasing State Activities on historical facts, primarily of Germany, which mirrored the growing importance of government activities and spending as an inevitable feature of a “progressive” state. He tried to establish a direct link between economic development and growth and the relevant size of public sector and consequently public expenditure.

According to Wagner, there is an inherent tendency for the activities of different layers of a government (e.g. central and state governments) to increase both intensively and extensively. Prevailing public spending reflects the requirement of a given historical situation. Any change in the public expenditure reflects the underlying changes in the economic structure and development. He justified public spending in terms of objective criteria, such as population or transportation needs.

Wagner’s Law was based upon historical facts. It was applicable only to progressive governments which were interested in expanding public sector of the economy for its overall benefits. This general tendency of expanding state activities had a definite long term trend, though in the short run, financial difficulties come in its way. But in the long run the desire for development of a progressive people will always overcome these financial difficulties (Musgrave and Peacock 1958).

## 2.2 EMPIRICAL LITERATURE REVIEW

According to Odior (2014) reallocating government expenditure particularly to education sectors will in the long run lead to substantial growth of the economy (which has the largest measured returns to growth and poverty reduction) increase in welfare and decreases in poverty. Additional investments in education can have very favourable impacts on poverty. It was found to have the largest impact on poverty reduction as well as a significant impact on productivity and on per capita income. In other words, investments in education could be regarded as a dominant strategy.

Nwosa (2014) finds an insignificant impact on poverty rate in Nigeria. He recommends that urgent attention should be given to the national issues of rising unemployment and high poverty as they affect national productivity and living standards of the Nigerian economy. The government should redirect its policy of erecting additional higher institutions to the establishment of employment opportunities in all states which can absorb the graduates from the already existing universities. There is the need for government at the national, state and local levels to engage a nationwide empowerment and training programs for the unemployed and even the undergraduates; and loans with reduced interest rates payable over a long period of time, given to participants with viable and feasible projects.

Ali and Thorbecke (2000) gave a deep analysis of African countries: Nigeria, Ghana, Cote d’ivoire and Uganda; and the evolution of poverty, as well as the characteristics of the less privileged in urban and rural areas. They analyzed the effects of growth and income distribution, the depth and severity of poverty. Hence showed the reactions of poverty to changes in income distribution and found that growth has a bigger effect on poverty in rural areas than in urban areas.

Anyanwu, Adam, Obi, Yelwa (2015) examined human capital development and economic growth in Nigeria. The study covers the period of 1981-2010. Their findings showed a positive impact of human capital development on economic growth.

Owuru and Farayibi (2016) indicate that the rate of government capital expenditures in Nigeria does not reduce the level of poverty in the country; but the value of the level of government recurrent expenditure shows a significant impact on poverty reduction.

Aigbokhan (2000) investigates among other things, changes in Nigeria’s profiles of poverty and welfare as well as the causes of poverty among males and females. Based on national consumer survey data sets for 1985/1986, 1992/1993 and 1996/1997 and a consumption based poverty line, he finds some evidence of increased poverty, in spite of some evidence of some positive real growth. His study suggests that the “trickle down” phenomenon, underlying the view that growth improves poverty and inequality is not borne out by the data sets used in the study. For this he suspects the nature of the growth pursued and the macroeconomic policies that underlie it. He recommends that attention be paid to such areas as policy consistency, rather than reversals; policy consciousness of the need to ensure the use of the main assets owned by the poor; and the provision of socio-economic infrastructural facilities, in view of the widely acknowledged inverse relationship between educational achievement and poverty.

Ogiogio (1995) reported a long-term association between government spending and economic growth with more impact from recurrent spending in the country.

Recent studies suggest that the allocation of public investment for human capital development in many developing countries, however, is often inefficient and inequitable. There is consensus that expansion in the skills knowledge, and capacities of individuals increasing human capital, that it is critical for economic growth and poverty reduction. Education with formal education systems and healthcare plays a key role in creating human capital. Human capital theory predicts that more educated individuals are more productive and good education from childhood enhances cognitive functions and reduces future poverty. Hence, children with better education can be expected to be more productive in the future and receive higher income levels. Also, educated individuals would have more incentives to invest in future education and training, of their children and contribute to the entire society (Suhrcke *et al.*, 2005).

 Also, Fajingbesi and Odusola (1999) found that real government capital spending had a strong positively significant impact on real output whereas real government recurrent spending affected growth mildly in the country.

 Meanwhile, Ighodaro and Oriakhi (2010) reported an economic growth-propelling variable in total government expenditure and its components such as general administration, community and social services.

 On the contrary, Nurudeen and Usman (2010) showed that total capital spending, total recurrent spending, and government spending on education had negative impact on economic growth in the country. However, government spending on health, transport and communication had positive effects.

Nwaeze, Njoku and Nwaeze (2014) investigated the impact of government expenditure on Nigeria’s economic growth (1992-2011). They found that public expenditure on investments and productive activities increases the level and rate of economic activities in the economy. They show that government expenditure has a positive and insignificant impact on the economic growth of Nigeria.

Folorunsho and Olayeni (2006) investigated the increasing effects of public expenditure on economic growth (1970-2003). The investigation revealed a positive relationship between public expenditures and economic growth.

Studies by Aschauer (2000) and tests new classical growth models’ predictions of the complementarity between public and private capital, and find public expenditure to have a positive and statistically significant impact on economic growth. They find that investments in transport and communications and in education have the largest impacts on growth, while the effects of investments in agriculture, health, housing, and industry were statistically insignificant.

Meanwhile, for Jordan, AlBataineh (2012) examined the impact of government expenditure on economic growth over the period 1990 to 2010. The study revealed that aggregate government expenditure impacted positively on GDP growth in the country.

Alshahrani and Alsadiq (2014) empirically examined the effects of several components of government expenditures on economic growth in Saudi Arabia from the period 1969 to 2010. Results from the study showed that healthcare expenditure, public and private investments propelled growth in the country. The study further suggested that government spending on housing could enhance short run production.

Adawo et al (2012) investigated problems pertaining high unemployment rates in Nigeria. The study observed the steady increase in the labour force by 0.3% annually while GDP growth rate increased at 3.5% over 33 years; inferring that Nigeria experienced a futile growth. The study also examined the causes of unemployment in Nigeria: poor infrastructure, non-diversification of the economy, insecurity and poor educational system. Partnership with the private sector and diversification is highly recommended.

Sattar (1993) using a simple growth modeling framework and time series data, however, finds evidence of differential impacts of public spending on the growth performance of developed and developing economies – “favorable for the latter and inconsequential for the former. His study also finds support for the hypothesis that an effective role for the state was directly linked with the state of backwardness of the economy: the more backward, the more critical the role of the state. According to him, since the LDCs suffer many of the “backwardness” syndromes, they seem to require more of the crutches of government support than their developed counterparts.

Kelly (1997) explores the effect of public expenditure on economic growth in a cross-section study of 73 nations covering the period 1970-1989. Based on an econometric model of the relationship between economic growths, public investment generally and particularly public social expenditures, he finds that social expenditures enhance growth by fostering welfare and productivity improvements. His result contradicts a strand of the literature which continues to be dominated by the view that social expenditure is unproductive consumption expenditure which inhibits growth and emphasizes, rather, the importance of the complementarities of public and private actions, especially in developing countries. He argues, that such factors as severe income disparity; asset concentration, the disparate nature of production in the agricultural and industrial sectors, and fragmented financial markets, which characterize many developing countries may warrant substantial public investment programs, which, he stresses, may be decisive for successful private sector activity and, hence economic growth.

Aigbokhan (2000), investigates, among other things, changes in Nigeria’s profiles of poverty and welfare as well as the causes of poverty among males and females. Based on national consumer survey data sets for 1985/1986/1992/1993 and 1996/97 and a consumption-based poverty line (derived by the food energy intake method), he finds some evidence of increased poverty, in spite of some evidence of some positive real growth. His study suggests that the so-called “trickle-down” phenomenon, underlying the view that growth improves poverty (and inequality) is not borne out by the data sets used in the study. For this he suspects the nature of the growth pursued (oil and mining sub-sectors driven) and the macroeconomic policies that underlie it. He therefore recommends that attention be paid to such areas as policy consistency, rather than reversals. Policy Consciousness of the need to ensure the use of the main assets owned by the poor (human capital); and the provision of socio-economic infrastructural facilities, in view of the widely acknowledged inverse relationship between educational achievement and poverty.

The findings of Landau (1983), shows that the share of government consumption to GDP reduced economic growth which was consistent with the pro-market view that the growth in government constrains overall economic growth. These findings were robust to varying sample periods, weighting by population and mix of both developed and developing countries (104 countries). The conclusions were germane to growth in per capita output and do not necessarily speak to increases in economic welfare. Economic growth was also found to be positively related to total investment in education.

Landau (1986) extends the analysis to include human and physical capital, political, international conditions as well as a three year lag on government spending in GDP. Government spending was disaggregated to include investment, transfers, education, defense and other government consumption. The results in part mirrored the earlier study in that general government consumption was significant and had a negative influence on growth. Education spending was positive but not significant. It was unclear why lagged variables were included given that the channels through which government influence growth suggest a contemporaneous relationship.

Okoro (2013) examined the impact of public expenditure on economic growth in Nigeria (1981-2011). Government capital expenditure in industries and agriculture will boost the economy’s productivity and employment, with proper management; coupled with an increase in expenditure on rural roads and electricity.

Obi and Obi (2014) studied the impact of education expenditure on economic growth as a means of achieving the desired socio-economic change needed in Nigeria. Time series data from 1981 to 2012 were employed. The Johansen’s co-integration analysis and ordinary least square (OLS) econometric techniques were the statistical tool applied to analyze the relationship between gross domestic product (GDP) and recurrent education expenditure. The result indicated a positive relationship between education expenditure and economic growth, but a long run relationship does not exist over the period under study. The study observed that this puzzle is attributable to labour market distortions, redundancy of the workforce, industrial dispute and job discontinuities as well as leakages in the Nigerian society such as brain drain, among others. It invariably concluded that educational sector in Nigeria has not performed as expected. The half-baked graduates, cultism and the high rate at which people drop-out of schools is alarming. The study therefore suggested total review and overhauling of the education system through efficient use of public resources, good governance, accountability and transparency.

### CHAPTER THREE

## 3.0 METHODOLOGY

## 3.1 METHODOLOGY

This study adopts an econometric research method and attempts to estimate the impact of public spending on poverty in Nigeria. Time Series data will be used in the regression analysis. ADF test will be used to test for existence of unit root, that is, for the existence of non-stationarity in the time series variables. The OLS method of estimation will be used to estimate the coefficients of the independent variables and examine the nature of their relationship with the dependent variable. Multiple regressions will be drawn based on the regression analysis. The research method used in this work is econometrics because it facilitates model specification, parameter estimation and also aids in formulating precise polices.

##  3.2 Theoretical Framework

This study has its foundation on the Keynesian Theory. The Keynesian Model stresses that the role of government intervention against poverty is needed in a wide range of economic issues, from tackling involuntary unemployment to harnessing human capital accumulation through investment in public education and other key sectors; hence economic growth and a fall in poverty rates. The Keynesians affirm that growth can promote economic development and reduce poverty. Hence a justification for government’s intervention through public spending. Keynes supported government’s intervention during the time of great economic turmoil. Among the theories he presented in the “The General Theory” was that economies are chronically unstable and that full employment is only possible with a big incentive from government policy and public spending (investment). Keynes affirmed that it was up to government to employ whatever tools and measures needed to enable the economy reach full employment and hence attain economic growth and development.

## 3.3 Model Specification

An economic model is a representation or depiction of the fundamental features of an economic phenomenon; it is an abstraction of the real world (Fonta, Ichoku, and Anumudu, 2003). The specification of a model is based on the available information or resources relevant to the study in question. This means that the formulation of an economic model is dependent on the available information on the study embedded in standard economic theory and other empirical works or else, the model will be non-hypothetical. Ultimately, this study will build on a multiple regression model and make use of econometric procedure in estimating the relationship between public spending and poverty in Nigeria. Therefore, the functional form of the model is specified as follows:

POV RATE= f (GCEXP, GREXP, GFCF)

The econometric form of the model is as follows:

POV RATE= B0+B1GCEXP+B2GREXP+B3 GFCF +Ui

Where:

POV RATE= The rate of the number of people living in poverty in Nigeria

GCEXP= Government Capital Expenditure

GREXP= Government Recurrent Expenditure

GFCF= Gross Fixed Capital Formation (proxy for private sector investment)

Ui= Error Term which takes care of other random disturbance terms and exogenous variables which are not included in the model

B0= The autonomous or intercept variable of the regression model

B1 B2 and B3= Are the coefficients of the regressors or the parameter estimates of the model.

## 3.4 Method of Evaluation

The estimated result will be evaluated subject to econometric, economic, statistical and criteria.

### 3.4.1 Heteroscedasticity Test

The white heteroscedasticty test was conducted to ascertain whether the variances in the regression model have a common or constant variance error.

If the probability of f-statistics is less than 0.05, we conclude that there is heteroscedasticity in the model inclining that the error term is not constant, if the probability off-statistics is greater than 0.05, we conclude that there is homoscedasticity inclining that the error term is constant.

### 3.4.2 T-Test

It is used for testing the significance. We make use of 5% level of significance with n-k degree of freedom and where necessary, the probability value will be used as a rule of thumb. Where a= 0.05 (n-k), n= number of observation (sample size), k= total number of estimated parameter.

### 3.4.3 F-Test

It is used to test the overall significance of the regression model. It will be used for testing joint impact of the independent variables on the dependent variable except in conjunction with other regressions.

### 3.4.5 Normality

This test was carried out to check whether the error term follows a normal distribution. The normality test adopted was the Jacqua-Bera (JB) test of normality. The JB test of normality is an asymptotic or large sample test and it is based on the OLS residuals and uses the chi-square distribution (Gujarati, 2004).

### 3.4.5 Stationarity Test

Augmented Dickey Fuller (ADF) unit root test was carried out too test the stationarity of the time series. Augmented Dickey-Fuller test was conducted to ascertain whether the variables in the model are stationary or not.

#### Decision Rule:

If the ADF test statistic is greater than the critical value at the prescribed level of significance (5%), the variable is stationary; otherwise, it is not stationary

# 3.5 Data Required and Sources

The data required for this study are secondary data on Poverty, Government Capital Expenditure and Government Recurrent Expenditure ranging from 1981- 2015. The data is extracted from the Central Bank of Nigeria (CBN) Statistical Bulletin, National Bureau of Statistics, Nigeria.

# CHAPTER FOUR

**4.0 PRESENTATION AND ANALYSIS OF RESULT**

The result of the ordinary least square (OLS) regression model was presented in this chapter. The analysis of the result was subjected to econometric tests, economic criteria, and statistical tests. An OLS model was estimated to check the impact of public spending on poverty in Nigeria.

**4.1 ANALYSIS OF UNIT ROOT**

To test for the unit root, we employ Augmented Dickey-Fuller (ADF) test. The results are shown below:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **ADF STAT at LEVEL FORM** | **LAG** | **5%** | **ADF STAT at DIFF FORM** | **5%** | **ORDER OF INT.** |
| LN(POV) | -2.423930 | 1 | -2.951125 | -4.203393 | -2.954021 | 1(2) |
| LN(GCEXP) | -1.080312 | 1 | -2.951125 | -5.907660 | -2.954021 | 1(1) |
| LN(GREXP) | -1.363194 | 1 | -2.951125 | -7.804530 | -2.954021 | 1(1) |
| LN(GFCF) | -0.220496 | 1 | -2.951125 | -3.673274 | -2.954021 | 1(1) |

 The results show that all the variables have unit roots, but have been differenced. This is because the ADF statistics for each of the variables are less than the critical levels at 5%. In other words, the null hypothesis for unit root is accepted for all the variables at level form. On the other hand, the ADF statistics for each of the variables when differenced are higher than their critical values at 5% which implies that the null hypothesis of unit root is rejected.

**4.2 THE IMPACT OF PUBLIC SPENDING ON POVERTY ALLEVIATION IN NIGERIA**.

|  |  |  |  |
| --- | --- | --- | --- |
| **VARIABLE** | **COEFFICIENT** | **STD ERROR** | **T-STAT** |
| C | 5.440611 | O.970670 | 5.605003 |
| LNGCEXP | 0.220424 | 0.058712 | 3.754347 |
| LNGREXP | 0.046192 | 0.060207 | 0.767215 |
| LNGFCF | -0.192368 | 0.097313 | -1.976803 |

**R2**= 0.748578  **F-STAT=**30.76628 **D-W**= 0.773294

**4.3 EVALUATION BASED ON ECONOMIC CRITERIA**

The OLS regression applied the Log Linear Model in order to determine the relative change in the dependent variable from a relative change in each of the explanatory variables.

The result has established a negative and significant relationship between government capital expenditure and poverty.

The result also has established a positive and insignificant relationship between government recurrent expenditure and poverty.

The result also has established a negative and significant relationship between gross fixed capital formation and poverty.

**4.3.1 SUMMARY OF THE SIGNS**

|  |  |  |  |
| --- | --- | --- | --- |
|  **VARIABLE** | **EXPECTED SIGN** | **REALISED SIGN** | **REMARK** |
| LN(GCEXP) | NEGATIVE | NEGATIVE | CONFORMS |
| LN(GREXP) | NEGATIVE | POSITIVE | NOT CONFORM |
| LN(GFCF) | NEGATIVE | NEGATIVE | CONFORMS |

**4.4 EVALUATION BASED ON STATISTICAL CRITERIA**

***Coefficient of Determination R2***

This measures the goodness of fit of the regression model. It shows how the variation in the dependent variable is explained by the explanatory variables. From the table, R2 =0.748578. This implies that about 74% variation in poverty alleviation is explained by the explanatory variables.

***T-test***

This tests the explanatory power of the independent variables; the result shows that the variable government capital expenditure (GCEXP) has a significant impact on poverty alleviation. This is because its absolute t-statistic of 3.754347 is greater than the critical t-statistic of 2.954021 at 5% level of significance. Its coefficient of 0.220424 implies that a percentage increase in government capital expenditure will alleviate poverty (POV) by 0.220424%.

The result shows that the variable government recurrent expenditure (GREXP) has an insignificant impact on poverty alleviation. This is because its absolute t-statistic of 0.767215 is less than the critical t-statistic of 2.954021 at 5% level of significance. Its coefficient of 0.046192 implies that a percentage increase in government recurrent expenditure will alleviate poverty (POV) by 0.046192%.

The result shows that the variable gross fixed capital formation (GFCF) has a significant impact on poverty alleviation. This is because its absolute t-statistic of 1.976803 is less than the critical t-statistic of 2.954021 at 5% level of significance. Its coefficient of 0.192368 implies that a percentage increase in gross fixed capital formation will alleviate poverty (POV) by 0.192368%.

***F-Statistic***

The F-statistic is used to determine the overall significance of the entire variable in the model. The calculated F-statistic is 30.76628 and this implies that the entire variables joined together are significantly different from zero.

**4.5 EVALUATION BASED ON ECONOMETRIC CRITERIA**

***Normality Test***

This test is required to know if the error term is normally distributed. The null hypothesis is that the error term follows normal distribution. For our result, the Jarque-Bera Statistic is 0.955513 and P value as 0.620173. We accept the null hypothesis which implies errors do follow normal distribution.

***Heteroscedasticity Test***

This test is conducted to check if errors have constant variance or not. The null hypothesis is that the errors are homoscedastic (no heteroscedasticity). Note that this test follows a chi square distribution. We compare the estimated chi square statistics with the critical chi-square statistics. From the result obtained ᵡ 2 Cal = 6.275889 is greater than ᵡ 2 critical of 5.112364 which is statistically significant and therefore we reject the null hypothesis and conclude that there is heteroscedasticity.

# CHAPTER FIVE

**5.0SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

5.1 **SUMMARY OF FINDINGS**

This work has studied the impact of public spending on poverty in Nigeria (1981-2015). Public Spending is a major way in which government uses in tackling poverty in order in boost social welfare, reduce inequality gaps, reduce unemployment to the barest minimum; and stimulate economic growth via improved individual productivity. For example, the government could dispatch funds into youth empowerment schemes to help make the young people relevant to themselves and the economy.

Secondary data were used; the source of data included CBN Statistical Bulletin and the NBS Bulletin. In order to achieve the objectives of the study, an econometric model was formulated using the Ordinary Least Square (OLS). In the model Poverty incidence was regressed on Government Capital Expenditure, Government Recurrent Expenditure and Gross Fixed Capital Formation.

The results of this study indicate that government capital expenditure has a significant relationship pertaining poverty alleviation. This implies that Government Recurrent Expenditure does not necessarily poverty in Nigeria.

The result further shows and suggests that Government Capital Expenditure and Gross Fixed Capital Formation has a statistical positive significance on poverty in Nigeria.

**5.2 RECOMMENDATIONS**

Based on the findings of this research, the researcher recommends the following:

* Government Capital Expenditure aimed at reducing poverty should be carried out such that, proper implementation with proper checks are done to achieve a significant reduction in the rates of poverty.
* Gross Fixed Capital Formation should be encouraged since it has a significant impact of poverty reduction in Nigeria.
* Government should incentivize individuals through the use of monetary policy in order to increase private sector investments that would reduce the rates of poverty.

**APPENDIX**

|  |  |  |
| --- | --- | --- |
| Dependent Variable: LNPOV |  |  |
| Method: Least Squares |  |  |
| Date: 07/02/18 Time: 11:30 |  |  |
| Sample: 1981 2015 |  |  |
| Included observations: 35 |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| C | 5.440611 | 0.970670 | 5.605003 | 0.0000 |
| LNGCEXP | 0.220424 | 0.058712 | 3.754347 | 0.0007 |
| LNGREXP | 0.046192 | 0.060207 | 0.767215 | 0.4488 |
| LNGFCF | -0.192368 | 0.097313 | -1.976803 | 0.0570 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.748578 |     Mean dependent var | 4.019708 |
| Adjusted R-squared | 0.724247 |     S.D. dependent var | 0.242857 |
| S.E. of regression | 0.127530 |     Akaike info criterion | -1.173725 |
| Sum squared resid | 0.504178 |     Schwarz criterion | -0.995971 |
| Log likelihood | 24.54018 |     Hannan-Quinn criter. | -1.112364 |
| F-statistic | 30.76628 |     Durbin-Watson stat | 0.773294 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |
| --- | --- |
| Null Hypothesis: LNPOV has a unit root |  |
| Exogenous: Constant |  |  |
| Lag Length: 0 (Automatic - based on SIC, maxlag=8) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | t-Statistic |   Prob.\* |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller test statistic | -2.423930 |  0.1430 |
| 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(LNPOV) |  |  |
| Method: Least Squares |  |  |
| Date: 07/05/18 Time: 17:39 |  |  |
| Sample (adjusted): 1982 2015 |  |  |
| Included observations: 34 after adjustments |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| LNPOV(-1) | -0.154355 | 0.063680 | -2.423930 | 0.0212 |
| C | 0.638613 | 0.256300 | 2.491662 | 0.0181 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.155125 |     Mean dependent var | 0.018488 |
| Adjusted R-squared | 0.128723 |     S.D. dependent var | 0.096470 |
| S.E. of regression | 0.090047 |     Akaike info criterion | -1.919940 |
| Sum squared resid | 0.259473 |     Schwarz criterion | -1.830154 |
| Log likelihood | 34.63899 |     Hannan-Quinn criter. | -1.889321 |
| F-statistic | 5.875435 |     Durbin-Watson stat | 1.505236 |
| Prob(F-statistic) | 0.021183 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |
| --- | --- |
| Null Hypothesis: LNGCEXP has a unit root |  |
| Exogenous: Constant |  |  |
| Lag Length: 0 (Automatic - based on SIC, maxlag=8) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | t-Statistic |   Prob.\* |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller test statistic | -1.080312 |  0.7122 |
| 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(LNGCEXP) |  |
| Method: Least Squares |  |  |
| Date: 07/05/18 Time: 17:41 |  |  |
| Sample (adjusted): 1982 2015 |  |  |
| Included observations: 34 after adjustments |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| LNGCEXP(-1) | -0.030683 | 0.028402 | -1.080312 | 0.2881 |
| C | 0.285634 | 0.144032 | 1.983127 | 0.0560 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.035188 |     Mean dependent var | 0.141905 |
| Adjusted R-squared | 0.005037 |     S.D. dependent var | 0.322556 |
| S.E. of regression | 0.321743 |     Akaike info criterion | 0.626895 |
| Sum squared resid | 3.312592 |     Schwarz criterion | 0.716681 |
| Log likelihood | -8.657209 |     Hannan-Quinn criter. | 0.657514 |
| F-statistic | 1.167074 |     Durbin-Watson stat | 2.112715 |
| Prob(F-statistic) | 0.288078 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |
| --- | --- |
| Null Hypothesis: LNGREXP has a unit root |  |
| Exogenous: Constant |  |  |
| Lag Length: 1 (Automatic - based on SIC, maxlag=8) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | t-Statistic |   Prob.\* |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller test statistic | -1.363194 |  0.5880 |
| Test critical values: | 1% level |  | -3.646342 |  |
|  | 5% level |  | -2.954021 |  |
|  | 10% level |  | -2.615817 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| \*MacKinnon (1996) one-sided p-values. |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller Test Equation |  |
| Dependent Variable: D(LNGREXP) |  |
| Method: Least Squares |  |  |
| Date: 07/05/18 Time: 17:44 |  |  |
| Sample (adjusted): 1983 2015 |  |  |
| Included observations: 33 after adjustments |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| LNGREXP(-1) | -0.027898 | 0.020465 | -1.363194 | 0.1830 |
| D(LNGREXP(-1)) | -0.339671 | 0.167894 | -2.023124 | 0.0521 |
| C | 0.414009 | 0.123877 | 3.342105 | 0.0022 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.158281 |     Mean dependent var | 0.198320 |
| Adjusted R-squared | 0.102166 |     S.D. dependent var | 0.270051 |
| S.E. of regression | 0.255885 |     Akaike info criterion | 0.198328 |
| Sum squared resid | 1.964309 |     Schwarz criterion | 0.334374 |
| Log likelihood | -0.272417 |     Hannan-Quinn criter. | 0.244104 |
| F-statistic | 2.820667 |     Durbin-Watson stat | 1.965352 |
| Prob(F-statistic) | 0.075424 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |
| --- | --- |
| Null Hypothesis: LNGFCF has a unit root |  |
| Exogenous: Constant |  |  |
| Lag Length: 0 (Automatic - based on SIC, maxlag=8) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | t-Statistic |   Prob.\* |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller test statistic | -0.220496 |  0.9263 |
| 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(LNGFCF) |  |  |
| Method: Least Squares |  |  |
| Date: 07/05/18 Time: 17:45 |  |  |
| Sample (adjusted): 1982 2015 |  |  |
| Included observations: 34 after adjustments |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| LNGFCF(-1) | -0.003367 | 0.015269 | -0.220496 | 0.8269 |
| C | 0.186328 | 0.215669 | 0.863951 | 0.3940 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.001517 |     Mean dependent var | 0.139126 |
| Adjusted R-squared | -0.029686 |     S.D. dependent var | 0.150659 |
| S.E. of regression | 0.152879 |     Akaike info criterion | -0.861322 |
| Sum squared resid | 0.747901 |     Schwarz criterion | -0.771536 |
| Log likelihood | 16.64247 |     Hannan-Quinn criter. | -0.830702 |
| F-statistic | 0.048618 |     Durbin-Watson stat | 1.188288 |
| Prob(F-statistic) | 0.826886 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |
| --- | --- |
| Null Hypothesis: D(LNPOV) has a unit root |  |
| Exogenous: Constant |  |  |
| Lag Length: 0 (Automatic - based on SIC, maxlag=8) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | t-Statistic |   Prob.\* |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller test statistic | -4.203393 |  0.0024 |
| Test critical values: | 1% level |  | -3.646342 |  |
|  | 5% level |  | -2.954021 |  |
|  | 10% level |  | -2.615817 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| \*MacKinnon (1996) one-sided p-values. |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller Test Equation |  |
| Dependent Variable: D(LNPOV,2) |  |
| Method: Least Squares |  |  |
| Date: 07/02/18 Time: 11:04 |  |  |
| Sample (adjusted): 1983 2015 |  |  |
| Included observations: 33 after adjustments |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| D(LNPOV(-1)) | -0.773301 | 0.183971 | -4.203393 | 0.0002 |
| C | 0.010448 | 0.017286 | 0.604425 | 0.5500 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.363038 |     Mean dependent var | -0.008161 |
| Adjusted R-squared | 0.342491 |     S.D. dependent var | 0.118377 |
| S.E. of regression | 0.095988 |     Akaike info criterion | -1.790493 |
| Sum squared resid | 0.285625 |     Schwarz criterion | -1.699796 |
| Log likelihood | 31.54314 |     Hannan-Quinn criter. | -1.759976 |
| F-statistic | 17.66851 |     Durbin-Watson stat | 1.811596 |
| Prob(F-statistic) | 0.000207 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |
| --- | --- |
| Null Hypothesis: D(LNGCEXP) has a unit root |  |
| Exogenous: Constant |  |  |
| Lag Length: 0 (Automatic - based on SIC, maxlag=8) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | t-Statistic |   Prob.\* |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller test statistic | -5.907660 |  0.0000 |
| Test critical values: | 1% level |  | -3.646342 |  |
|  | 5% level |  | -2.954021 |  |
|  | 10% level |  | -2.615817 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| \*MacKinnon (1996) one-sided p-values. |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller Test Equation |  |
| Dependent Variable: D(LNGCEXP,2) |  |
| Method: Least Squares |  |  |
| Date: 07/02/18 Time: 11:10 |  |  |
| Sample (adjusted): 1983 2015 |  |  |
| Included observations: 33 after adjustments |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| D(LNGCEXP(-1)) | -1.056526 | 0.178840 | -5.907660 | 0.0000 |
| C | 0.155094 | 0.063161 | 2.455519 | 0.0199 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.529593 |     Mean dependent var | 0.002033 |
| Adjusted R-squared | 0.514419 |     S.D. dependent var | 0.474866 |
| S.E. of regression | 0.330904 |     Akaike info criterion | 0.684714 |
| Sum squared resid | 3.394417 |     Schwarz criterion | 0.775411 |
| Log likelihood | -9.297775 |     Hannan-Quinn criter. | 0.715231 |
| F-statistic | 34.90045 |     Durbin-Watson stat | 1.974144 |
| Prob(F-statistic) | 0.000002 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |
| --- | --- |
| Null Hypothesis: D(LNGREXP) has a unit root |  |
| Exogenous: Constant |  |  |
| Lag Length: 0 (Automatic - based on SIC, maxlag=8) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | t-Statistic |   Prob.\* |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller test statistic | -7.804530 |  0.0000 |
| Test critical values: | 1% level |  | -3.646342 |  |
|  | 5% level |  | -2.954021 |  |
|  | 10% level |  | -2.615817 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| \*MacKinnon (1996) one-sided p-values. |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller Test Equation |  |
| Dependent Variable: D(LNGREXP,2) |  |
| Method: Least Squares |  |  |
| Date: 07/02/18 Time: 11:13 |  |  |
| Sample (adjusted): 1983 2015 |  |  |
| Included observations: 33 after adjustments |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| D(LNGREXP(-1)) | -1.325969 | 0.169897 | -7.804530 | 0.0000 |
| C | 0.263123 | 0.056391 | 4.666093 | 0.0001 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.662716 |     Mean dependent var | -0.000481 |
| Adjusted R-squared | 0.651836 |     S.D. dependent var | 0.439625 |
| S.E. of regression | 0.259403 |     Akaike info criterion | 0.197823 |
| Sum squared resid | 2.085985 |     Schwarz criterion | 0.288520 |
| Log likelihood | -1.264075 |     Hannan-Quinn criter. | 0.228340 |
| F-statistic | 60.91069 |     Durbin-Watson stat | 1.931273 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |
| --- | --- |
| Null Hypothesis: D(LNGFCF) has a unit root |  |
| Exogenous: Constant |  |  |
| Lag Length: 0 (Automatic - based on SIC, maxlag=8) |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | t-Statistic |   Prob.\* |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller test statistic | -3.673274 |  0.0094 |
| Test critical values: | 1% level |  | -3.646342 |  |
|  | 5% level |  | -2.954021 |  |
|  | 10% level |  | -2.615817 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| \*MacKinnon (1996) one-sided p-values. |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Augmented Dickey-Fuller Test Equation |  |
| Dependent Variable: D(LNGFCF,2) |  |
| Method: Least Squares |  |  |
| Date: 07/02/18 Time: 11:15 |  |  |
| Sample (adjusted): 1983 2015 |  |  |
| Included observations: 33 after adjustments |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| D(LNGFCF(-1)) | -0.605184 | 0.164753 | -3.673274 | 0.0009 |
| C | 0.086337 | 0.034004 | 2.539020 | 0.0164 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.303260 |     Mean dependent var | 0.000272 |
| Adjusted R-squared | 0.280785 |     S.D. dependent var | 0.166930 |
| S.E. of regression | 0.141568 |     Akaike info criterion | -1.013384 |
| Sum squared resid | 0.621285 |     Schwarz criterion | -0.922686 |
| Log likelihood | 18.72083 |     Hannan-Quinn criter. | -0.982867 |
| F-statistic | 13.49294 |     Durbin-Watson stat | 2.023045 |
| Prob(F-statistic) | 0.000898 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |
| --- | --- |
| Heteroskedasticity Test: White |  |
|  |  |  |  |  |
|  |  |  |  |  |
| F-statistic | 0.606913 |     Prob. F(9,25) | 0.7794 |
| Obs\*R-squared | 6.275889 |     Prob. Chi-Square(9) | 0.7120 |
| Scaled explained SS | 5.112364 |     Prob. Chi-Square(9) | 0.8244 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Test Equation: |  |  |  |
| Dependent Variable: RESID^2 |  |  |
| Method: Least Squares |  |  |
| Date: 07/05/18 Time: 16:49 |  |  |
| Sample: 1981 2015 |  |  |
| Included observations: 35 |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -2.236823 | 7.713971 | -0.289970 | 0.7742 |
| LNGCEXP^2 | -0.029904 | 0.024019 | -1.245025 | 0.2247 |
| LNGCEXP\*LNGREXP | 0.041706 | 0.037124 | 1.123429 | 0.2719 |
| LNGCEXP\*LNGFCF | 0.016084 | 0.055767 | 0.288415 | 0.7754 |
| LNGCEXP | -0.161930 | 0.551873 | -0.293418 | 0.7716 |
| LNGREXP^2 | -0.019296 | 0.030138 | -0.640248 | 0.5278 |
| LNGREXP\*LNGFCF | 0.004985 | 0.092699 | 0.053772 | 0.9575 |
| LNGREXP | -0.064958 | 0.931781 | -0.069714 | 0.9450 |
| LNGFCF^2 | -0.017916 | 0.075553 | -0.237132 | 0.8145 |
| LNGFCF | 0.401316 | 1.526285 | 0.262937 | 0.7948 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.179311 |     Mean dependent var | 0.014405 |
| Adjusted R-squared | -0.116137 |     S.D. dependent var | 0.021062 |
| S.E. of regression | 0.022252 |     Akaike info criterion | -4.537836 |
| Sum squared resid | 0.012379 |     Schwarz criterion | -4.093451 |
| Log likelihood | 89.41214 |     Hannan-Quinn criter. | -4.384435 |
| F-statistic | 0.606913 |     Durbin-Watson stat | 1.836851 |
| Prob(F-statistic) | 0.779362 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |



 Normality Test



**REFERENCES**

Adelowokan, O. A., Osoba, A. M. (2015). *Global Journal of Management and Business Research:* B Economics and Commerce: Oil Revenue, Government Expenditure and Poverty Rate in Nigeria. ISSN(P) 0975-5853, ISSN(E) 2249-4588, Vol 15(10).

Asian Journal of Economics and Empirical Research (2016): *Impact of Government Expenditure on Economic Growth in Nigeria*: A Disaggregated Analysis. ISSN(E) 2409-2622, ISSN(P) 2518 010X, Vol 3, No 1, 113-121.

Debekeme, B., Briggs, C. A. (2017). *International Journal of Business $ Law Research: Expenditure Pattern and Economic Growth in Nigeria* (1990-2014). ISSN 2360-8986, Vol 5(4), pp 128-136.

Desmond, O. O., Ibe, A., Njoku, C. U., Onuoha, J. I. (2013). *West African Journal of Industrial and Academic Research*: Analysis of Gross Domestic Product (GDP) of Nigeria (1960-2012). Vol 14.

Ebong, F. S., Ogwumike, F. O. (2013). *Journal of Economics and Sustainable Development: Economic Growth and Poverty Reduction in Nigeria*: an empirical investigation. ISSN(P) 2222-1700, ISSN(E) 2222-2855, Vol 4, No 7.

*European Scientific Journal* (2014): Impact of Public Expenditure on the Growth of Nigerian Economy. ISSN(P) 1857-7881, ISSN(E) 1857-7431, Vol 10, No 28.

Iheanacho, E. (2015). *International Journal of Economics $ Management Sciences*: The Contribution of Government Expenditure on Economic Growth of Nigeria- A Disaggregated Approach. ISSN 2162-6359, Vol 5, Iss 5.

Innocent, K. C., Job, M. N., Okeke, A., Aondo, D. C. (2017). *International Journal of Advanced Studies in Economics and Public Sector Management*: Government Expenditure and Human Capital Development in Nigeria: An Auto-Regressive Distributed Lagged Model Approach (ARDL). ISSN(P) 2354-421X. ISSN(E) 2354-4228. Vol 5(1).

Kolawole, B. O. (2016). *Zagreb International Review of Economics $ Business*: Government Spending and Inclusive Growth Relationship in Nigeria: an empirical investigation. Vol 19. No 2, pp 33-56.

Muhammad, A., Haseeb, M., Samsuden, S. (2016). *Journal of Economics $ Sociology:* The Impact of Foreign Remittances on Poverty Alleviation in Nigeria. Vol 9.

National Bureau of Statistics (2005): Poverty Profile for Nigeria

Nelson, C. N. (2016). *Macroeconomics:* *An Introduction:* Keynesian Fiscal Policy and the Multipliers, chapter 11.

Nweke, G. O., Odo, S. I., Anoke, C. I. (2016). *Asian Journal of Economics, Business and Accounting:* Effect of Capital Formation on Economic Growth in Nigeria.

Odior, E. S. O. (2014). *Asian Economic and Financial Review: Government Expenditure on Education and Poverty Reduction:* Implication for achieving the MDGs in Nigeria- A Computable General Equilibrium Micro-Simulation Analysis. Vol 4(2), pp 150-172.

Odo, S. I., Nwachukwu, J. O., Agbi, P. E., Okoro, T. O. (2016). *Asian Research Journal of Arts $ Social Sciences:* Analysis of Government Expenditure and Economic Growth in Nigeria: Application of Cointegration Methodology. Vol 1(4), pp 1-17.

Okulegu, B. E. (2013). *International Journal of Social Sciences and Humanities Reviews*: Government Spendings and Poverty Reduction in Nigeria’s Economic Growth. ISSN: 2276-8645, Vol 4, No 1, Pg. 103-115.

Omari, L. V., Muturi, W. (2016). *Global Journal of Humanities, Social Sciences and Economics*: The Effect of Government Sectoral Expenditure on Poverty Level in Kenya. ISSN(P) 0975-587X, ISSN(E) 2249-460X, Vol 16, Iss 2.

Owuru, J., Adesoji, F. (2016). *Munich Personal Repee Archive:* Examining the Fiscal Policy-Poverty Reduction Nexus in Nigeria. MPRA paper No 74184.

Udoffia, D. T., Godson, J. R. (2016). *Greener Journal of Social Sciences*: The Impact of Federal Government Expenditure on Economic Growth in Nigeria (1981-2014). ISSN 2276-7800, Vol 6(4), pp 92-105.