

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

Public expenditure has been used as a means of using fiscal policy in several countries to arrive at development, Economic growth, economic expansion and economic base transformation.

From a historical perspective, the relationship between public expenditure and economic growth has created a broad discussion within economic literature. Discussions mainly include the role of government in economic development and how this role can be accomplished in the most efficient way. The relationship between public expenditure and economic growth is one of the most discussed topics in public finance. The public expenditure is seen to increase productivity, but in the same breath is seen as an obstacle to development due to its funding.

Borrowing to finance public expenditure, the government competes with private equity investors by reducing private investment and pushing the huge burden of external debt. Representatives of neoclassical public expenditure theories emphasize that the government's role in the economy should be least involved in the economy. Representatives of neoclassical public expenditure theories emphasize that the government's role in the economy should be least involved in the economy. The public finances can affect economic growth in many ways.

However, according to the theoretical literature it is possible to highlight some key ways in which public funding affects economic growth, institutional framework (the correct determination of laws and regulations), the tax system and public expenditure (mainly basic expenses or essential, both for justice, education, health, public infrastructure, etc.).

The impact of public expenditure on economic growth by most researchers has no direct effect on economic growth, but its impact on economic growth may be a stimulus to economic growth

through productive public expenditure. The connection between public expenditure and economic growth is one of the most tackled topics in modern times in public finances. Loizides & Vamvoukas (2005) identified two levels of empirical literature on the subject matter. One set of studies has explored the principal causes of growth in the public sector while the other has been directed towards assessing the effects of the general flow of government services on private decision making and, more specifically, on the impact of government spending on long-run economic growth.

Nigerian public spending structure can be widely divided into capital and recurrent spending. Recurring spending is public administration expenditure such as wages, loan interest, maintenance, etc.

Capital expenditure on projects such as highways, airports, education, telecommunications, energy generation, etc. One of the primary objectives of government expenditure is to provide infrastructure services (Taiwo and Abayomi, 2011).

Nigeria has many irregularities and increased government fraud arising from improper planning and execution of public finances there by leading to collapse in the economy as banks were in constant closure from the crises in the internal and external economic activities. Some of the challenges that caused this are indiscipline, corruption and lack of accountability which is the trademark of the Nigerian society resulting to decrease in growth and development.

Evidences from Nigeria show that the total government expenditure in terms of capital and recurrent expenditure have continued to rise in the last three decades. Over time, spending on defence, internal security, education, health, agriculture, construction, transportation, and communication is increasing. For instance, government total recurrent expenditure increased from N4,846.70 million in 1981 to N36,219.60 million in 1990 and further

to N461,600.00 in 2000 and later to N3,310,343.38 in 2010, while government capital expenditure rose from N6,567.00 million in 1981 to N24, 048.60 million in 1990. Capital expenditure stood at N239, 450.90million and N883,874.50 million in 2000 and 2010 respectively and by 2011, it was N1,934,524.20 (CentralBank of Nigeria Statistical Bulletin, 2012).

Specifically, however, it has been noted that the significant challenge facing the Nigerian economy is the volatile macroeconomic environment driven mainly by inner trade shocks and country's high dependence on oil export income. Over time, various oil price developments in the world oil market has led to instability in fiscal stance and has been transmitted to the rest of the economy, with negative implications for in particular the real exchange rate and growth performance (Akanniwo, 2013). Moreover, the essential qualities of inter-governmental relations or rather lack of skilful and effective interaction and coalition among the different tiers of government has contributed to the growing mal position of fiscal priorities as resources have increasingly permeated to trivial macroeconomic quests. (Ezeabasili, 2013).

## **1.2 Statement of the Problem**

The relationship between government expenditure and economic growth is continually generating arguments among scholars in the global world. Government performs two functions – protection (and security) and provision of certain public goods (Abdullahi, 2000 and Yousif, 2000; Nurudeen and Usman, 2010). In a bid to score cheap popularity and ensure that they continue to remain in power, politicians and government official sometimes increases expenditure and investment in unproductive project or product that can be produced more effectively by private sector. Thus, government activity sometimes produces misallocation of

resource and blocks the growth of national output. Besides, there is increasing need to provide both internal and external security for the people and the nation.

There is a growing trend in the multiple parts of capital spending (i.e. defence, agriculture, transport and communication, education and health) between 1977 and 2007. Unfortunately, rising government expenditure has not translated to meaningful growth and development, as Nigeria ranks among the poorest countries in the world. In addition, many Nigerians have continued to wallow in abject poverty, while more than 50 percent live on less than \$2 per day (Nurudeen and Usman, 2010).

In conjunction with this, dilapidated infrastructure (particularly roads and energy supply) has resulted in many sectors collapsing, including high unemployment. In addition, macroeconomic indicators such as equilibrium of payments, import bonds, inflation rate, exchange rate, and national savings show that Nigeria has not fared well over the past few years. The nature of inter-governmental relations or rather lack of coordination and alignment among the different tiers of government has contributed to the growing misplacement of fiscal priorities as resources have increasingly filtered or diverted to trivial macroeconomic pursuits (Ezeabasili, 2013).

Mixed findings have been obtained from several research using different steps to explore the effect of public spending on economic growth in Nigeria. For instance, Nnamdi (2013) in his study of government expenditure on the economy of Nigeria from 1980 to 2011 using (OLS) found a positive impact whereas Egbetunde and Fasanya (2013) discovered a adverse connection in their research of economic growth public expenditure (1970-2010), using bound test (ARDL). Consequently, the persistence of these issues despite government attempts, combined with the inconclusive discussion, made it necessary to further explore the effect on economic growth of public spending (using both aggregated and disaggregated government spending) (one of the

main indices of macroeconomic performance) which earlier studies did not capture. Hence, the motivation for this study.

### **1.3 Objective of the Study**

The broad object use of this study is to appraise the relationship between public expenditure and economic growth over the years (1980-2018).

The particular goals are:

- i To examine the effect of government spending on Nigeria's economic growth.
- ii To analyze the effect on economic growth of public capital expenditure.
- iii To explore the impact on economic growth of government recurring spending

### **1.4 Research Question**

Based on the statement of problem and the objectives of the study, the research questions to be answered in the course of this study are:

- i. How does the change in public expenditure affect economic growth in Nigeria?
- ii. Is there any impact of public capital expenditure on economic growth?
- iii. Is there any effect of public recurrent expenditure on economic growth?

### **1.5 Research Hypotheses**

To re-enforce the research objectives and questions, the following hypotheses are formulated for the study:

**H<sub>10</sub>**: There is no significant relationship between public expenditure and economic growth in Nigeria.

**H<sub>11</sub>**: A significant relationship exists between public expenditure and economic growth in Nigeria.

**H<sub>20</sub>**: There is no impact of public capital expenditure on economic growth.

**H2<sub>1</sub>**: There is impact of public capital expenditure on economic growth.

**H3<sub>0</sub>**: There is no significant effect of public recurrent expenditure on economic growth

**H3<sub>1</sub>**: There is significant effect of public recurrent expenditure on economic growth.

### **1.6 Scope of the Study**

This study centers on the relationship between public expenditure and economic growth in Nigeria from 1980-2018. The research includes the 38-year period. It is thought that this period is sufficient to capture the effect and the long-term connection between Nigeria's government spending and economic growth.

### **1.7 Significance of Study**

This research is anticipated to strengthen current literature on problems related to the relationship between government spending and economic growth. The study would also facilitate the examination of the effects of government expenditure and economic growth in Nigeria and thus boosting the empirical evidence from Nigeria.

In addition, considering the study's empirical nature, the result of this study would assist policy makers and legislative bodies and policy simulation with regard to the chosen factors examined in the research. The result obtained from the study would be of benefit to institutions, and education analysts in examining the effect of government expenditure on economic growth. It would also be useful in enhancing public discussion given the shortage of empirical researchers in these areas from growing economies like Nigeria.

Finally, it will add value to the available literature on the areas of study while also providing a platform for other researchers who may want to further this study.

## **1.8 Organization of the Study**

This research is split into five chapters. Chapter one talks on the study context. Chapter one talks about background of the study, statement of the problem, objectives of the study, research questions and hypotheses, scope, significance and organization of the study. Chapter two reviews relevant literature such as theoretical review, empirical review, the gap or gaps in the literature. Chapter three discusses the methodology used in the research. The theories and the examples that support the research. Chapter four discusses result presentation, data analysis and interpretation of data with the correspondent tables and sources. Chapter five discusses the summary, conclusion and policy recommendation.

## **1.9 Definition of Terms**

**Capital expenditure:** refers to expenditure on fixed assets such as highways, schools, hospitals, construction, plants, equipment, etc. The benefits of which are durable and lasting for several years.

**Current expenditure:** Current expenditure: refers to wage and wage, supply and service expenditure, rent, pension, interest payment, payment of social security. These are widely regarded as consumer products whose advantages are consumed in each financial year.

**Economic growth:** means a rise in an financial variable, which usually persists over time. Real or nominal GDP may be the variable involved.

**Economic model:** A simplified picture of reality representing an economic situation.

**Economic policy:** Course of action intended to correct or avoid a problem.

**Economic resources:** Economic resources: land, labor, capital and business used in the manufacture of products and services.

**Expanding economy:** An economy in which the net domestic investment is greater than zero.

**Fiscal policy:** the use of government spending and taxation to impact the economy.

**Government spending:** public spending at any stage. It consists of spending on real goods, and services purchased from outside suppliers; spending on employment in state services such as administration, Defense and education ; transfer payment expenditure to retirees ; community services expenditure ; financial services expenditure.; spending on economic services.

**Gross Domestic Product (GDP):** refers to the value of cash of products and services generated in an economy over a period of time regardless of the individual.

**Growth model:** Model of growth: It is a streamlined scheme used to boost certain elements of the real economy.

**Growth rate:** An economic variable's proportional or percentage rate of increase over a unit period, usually one year.

**Neo-classical economics:** price levels may generate short-term macroeconomic instability, the economy is stable in the long-run due to price and wage flexibility at the full employment rate of national production.

**Poverty:** Inability to afford an appropriate consumption level.

**Price level:** the weighted average of prices paid for an economy's final products and services.

**Rate of interest:** Prices paid for cash use or capital use.

**Transfer expenditures:** refers to pension expenditure, subsidies, debt interest, disaster aid packages, etc. Transfers are seen as resource redistribution among people in society, with funds flowing through the government industry as intermediaries.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

The impacts of government activities on different economic activities have received different views and thoughts. In Economics, various school of thought have down played or shown critical importance of the government expenditure on economic growth.

The classical philosophical system delivers a little importance of government activities to economic growth, recommending a market system where the invisibility of price will always provide answers to the key problem of an economy and thereby adjusting economic variables or phenomenon to push economic growth forward through the efficient allocative characteristics of the price system.

Moreover, the emphasis on individuals taking charge of means of production and other economic activities would serve as a growth engine. However, during the great depression of the 1930s, it was observed that the camp of the classicalist was unable to take the economy of the world out of recession even in the face of favorable economic variable that could stimulate investment such as fall in interest rate but investment remained on the low side. There came a new doctrine called the Keynesian school of thought which stressed the importance of government expenditure as a tool to stimulating aggregate demand. In this general theory (1929) of money, unemployment and interest rate, Keynes stressed the importance of a discretionary fiscal policy in enhancing aggregate demand. In all, the importance of government activities cannot be undermined in the process of economic growth and development. Citing the Rostow's stages of economic growth (1952), one of the five stages Rostow's stated from is historical analysis of economics growth process among nations he observed was the stage of the "pre-condition for takeoff", which he

stated that one of the characteristics of this stage is a definite Government to basically create laws and regulation upon which activities can take off.

As stated earlier, the basic aim of the public sector as part of the macro-economic unit is the provision of necessary government services to the public which are often failures of the market system. The provisions of these services have a relationship with economic growth. From the inception of the government institution, the government has been spending huge sum of money to provide services like security, public roads, education, health care and so on, but the connection between government spending and economic growth has not been established. This scenario has continued to generate a theoretical and empirical division among academics.

The Keynesian, classical and Wagnerian are the main school of thought at the theoretical stage. The Keynesians suggest that government spending is a real instrument for financial activity improvement, hence growth. Classical schools of thought refute excessive government spending against the Keynesian, based on the reality that public is less effective in conducting economic, operations than the private sector. Again, they asserted that excessive government spending, particularly when funded through taxation and government borrowing, distorts financial activity because enhanced taxation in an effort to finance government spending decreases consumer revenue and aggregate demand, as this diminishes the economy's general efficiency. The Wagnerian school of thought believes that higher domestic production incites government spending.

The increase in government spending's effect on unemployment follows the same pattern as that of the economic growth effect of government spending. At the theoretical level, the classicalist believes that given the existence of the market force of the market system that will all be full employment. According to the supply law, supply will always generate its own demand. The

Keynesian believe for full employment to be reached the government must manage the economy in such a way that he uses it discretionary fiscal policy to remove the cyclical unemployment caused by the fluctuation in aggregate demand and also the notation that wage rate is also sticky downward. In reality the empirical result has also show the mix result of government expenditure on unemployment. A case is the Nigeria economy, despite the rising trend in government expenditure in Nigeria; it is paradoxical and worrisome to note that the social economic indicators showed dim images. Although the level of economic development was spectacular from 2000 to 2011 (with an average development of 6.4%) ; the rate of unemployment rose (from 1.8% in 1995 to 23.9%) in 2011 (Annual report of the CBN for different years years); about 66 million of the Nigerians population lack access to portable water (WHO/UNICEF cited in Okpi, 2012); The death rate is estimated at around 630 deaths/100,000 live births (WDI, 2012) and a coefficient of 48.83 (WDI, 2012). The above indicators obviously represent a declining poverty rate, which has also certainly increased (from 54.4 percent in 2004 to 71.5 in 2011 (NBS, 2012).

The paradoxical scenario in Nigeria between increasing government spending and social economic indicators (particularly unemployment rate and poverty rate) makes it unclear, on the one side, about the precise connection between government spending and unemployment rate and, on the other, between government spending and poverty rate. Although, empirical literature on this issue have produced inconclusive results (Holden and Spearman, 2013), the issue is even more worrisome as this problem has received little or no attention from prior indigenous research. Most of the indigenous government spending research concentrated on the link between government spending and economic growth. (Uma et al, 2013; Onakoya and Somoye, 2013; Bakare, 2012; Nworji et al. 2012; Taiwo and Agbatogun, 2012). The examination of this

problem therefore becomes relevant because rising levels of unemployment and poverty can have important adverse social and economic implications -making reforms more difficult, constraining economic growth, undermining social cohesion and stability, derailing various ongoing policy reforms (Lin et al.,2008) and the long-term desire of the country to achieve enhanced domestic growth is undermined. Therefore, without the utmost and urgent attention to this problem, it is dubious how the Nigerian government hopes to achieve the country's objective of becoming one of the top 20 markets by 2020 as well as attaining the MDG of halving poverty by 2015. In order to appreciate the literature review done in this chapter, the process of this review is structured by first looking at the conceptual definition, follow the trends of the variables pertaining to the study, then the theoretical review upon which the study is based and finally, empirical review to show previous finding of researcher relating to the study.

## **2.2 Conceptual Review**

### **2.2.1 An Overview of the Public Expenditure**

Public expenditure is also known as government expenditure. Public expenditure refers to the expense which government incurs in the performance of its operation (Lensink and Morrissey, 2006). Public spending could be widely categorized into recurrent spending and capital spending, according to Nwaeze, Njoku and Nwaeze (2014). Recurrent spending is money spent on periodic public tasks, such as wages from staff, administrators, operating vital services, maintaining infrastructure and other associated activities. Capital expenditure involves spending on the purchase of permanent objects, such as houses, highways, bridges and other associated projects (Nwaeze, 2010). Abu and Abdullahi(2010)It was noted that some scientists argued that the rise in the pattern of government spending had a beneficial effect on socio-economic development. Some, however, did not endorse this statement. Government spending is the autonomous

variable of this research in its classification as recurrent and capital spending. Some, however, did not endorse this statement. Government spending is the independent variable of this research in its classification as recurrent and capital spending. Recurring spending and capital spending are used as proxies for government spending on this note.

The analysis of public expenditure in Nigeria for the past years to the present year has shown one trend of an upward rise from billions of Naira in the 20<sup>th</sup> century into the beginning of the 21<sup>st</sup> century. However, this has been due to so many factors which include the continuous increase in the size of the government in terms of its personnel and the structure of the government. Furthermore, issue of infrastructural investment, security in recent times has seen to all, contributed to the increase in government expenditure in Nigeria. As at 2005, the Nigeria government expenditure stopped at 1.3trillion Naira which included the sum of recurrent expenditure which stood at N 1.2 trillion and capital expenditure at N445.59 billion, by 2006 the government had increased it by 41.96% which included the increase of both recurrent and capital expenditure of N1.3trillion and N542.53 billion respectively. In 2008, the total government expenditure stood at N4.44 trillion which was an increase of over 200%. However, this increase could be attributed to the increase in capital expenditure of over 155% compared to capital expenditure in 2005. One of the major reasons for this could be the fiscal frame of the Jonathan administration which investment in infrastructure was key in putting the Nigeria economy among the 20-best economies in the world and more importantly create an enabling business environment. In addition, the complex of the expenditure change with expenditure on security also account for a large percentage in government no thanks to the continued Increasing insurgency and terrorism in the North, a portion of the nation that has spread almost to different parts of the nation. Currently, given the Nigeria approved budget, the total government

expenditure stood at N7.3 trillion about 20.4 percent increase over the 2016 total government expenditure that stood at N6.1 trillion. One obvious trend is that between the periods of 2007 to 2017 the Nigerian government expenditure grows on the average of 19.79%(NBS, 2017).

### **2.2.2 An Overview of Nigeria Economic Growth**

Growth Economic growth is the rise in the market value of a country's products and services over a period of time (IMF, 2012). The economic growth rate is the geometric annual rate of GDP growth between first and last year over a certain period of time.

Nigeria is a middle income, mixed economy and emerging market, with economic, service, communications and entertainment growing industries. As of 2011, it is ranked 30th in the globe in terms of GDP, and it is emerging. Although presently underperforming manufacturing, it is the third largest producer of products and services for the West African area. Economic reforms of the previous decade, previously hindered by years of mismanagement, have placed Nigeria back on track to realize its financial potential, in 2011. Nigerian GDP has more than doubled in purchasing power parity from \$170.7 billion in 2005 to \$413.4. Although estimates of the size of the informal sector (not included in the official figure) are nearer to \$520 billion in real figures. Accordingly, GDP per capita increased from \$1200 per capita in 2005 to an estimated \$2,600 per capita in 2011 (again, with the incorporation of the informal sector, GDP per capita is estimated to hover around \$3,500 per capita). It is the biggest economy in the region of West Africa, Africa's 3rd biggest economy (behind South Africa and Egypt), and on track to become one of the world's 20 largest economies by 2025. Due to some sound financial management measures and vast economic reforms, the economy was lively as national production growth was robust and broad-based in 2010. The real Gross Domestic Product (GDP), measured in 1990 basic prices grew by 7.9 per cent, compared with 7.0 percent in 2009. Growth in 2010 was mainly

ascribed to non-oil sector production performance, which rose by 8.5% complimented by a substantial rise in oil sector production.

The Nigerian economy's performance was mixed in 2011. Real GDP growth slowed to 7.4 percent in 2011 from 8.0 percent in 2010, driven mainly by crop, wholesale, retail, and telecommunications industries, which accounted for 28.0 percent, 28.8 percent, and 21.4 percent, respectively, of actual GDP development over the year. Government revenue increased from N6,362.56 billion in 2010 to N9,987.63 billion in 2011, driven by favorable price trends for crude oil on the global oil market. Overall, developments in the external sector of the economy were favourable in 2011, compared with 2010. However, current economic indicator is on a down trend with GDP growth between the last quartile of 2016 into the second quartile of 2017 hovering around -2% to 2 percent clearly signifying the current state of recession in the economy, this state as witness another dimension to unemployment in Nigeria where firms now lays off professional personnel add to the previous number of unemployment and the firms themselves either closing up or downsizing production or activities (NBS, 2017).

## **2.3 Theoretical Review**

### **2.3.1 Wagner's Law of Increased Government Activities**

Wagner's Law was named after the German political economist Adolph Wagner (1835-1917), who, after empirical analysis of Western Europe at the end of the 19th century, developed a "law of increasing state activity." He asserted that growth in government is a function of enhanced industrialization and economic growth. Wagner indicated that as a nation's real income per capita rises, the share of public spending in full spending rises during the industrialization phase. The law quoted that "The emergence of contemporary industrial society will result in enhanced political pressure for social progress and enhanced allowance by industry for social

consideration. Wagner (1893) intended three focal points to boost government spending. First, public sector activity will substitute private sector activity during the industrialization phase. State functions like administrative and protective functions will increase. Secondly, governments required to provide cultural and welfare facilities such as government health, education, pension insurance, food subsidies, support for natural disasters, preservation of the environment and other welfare functions. Third, enhanced industrialization will bring about technological change and the monopolization of big companies. Governments will have to compensate for these impacts by offering products through budgetary means that are social and worthy. Generally speaking, Wagner's Law focuses on the nexus between the size of the economy and the size of the public-sector provided goods and services and postulates that the latter grows at a faster pace than the former during the process of industrialization and urbanization. This reflects the increasing expansion of government activities that complement or substitute for private activities. Specifically, Wagner attributed the growth of the public sector to higher expenditures in area such as enforcing contracts and regulatory activities (necessitated by a higher demand for government intervention in an economy with new layers of externalities and interdependencies), income elastic "cultural and welfare" programs, and public long-term investment and infrastructure projects as well as managing and financing natural monopolies (Wagner 1835-1917).

The implication of this theory is that as progressive nations industrialize, the share of the public sector in the national economy grows continually. This necessitates an increase in State expenditure because of the demand for social activities of the state, administrative and protective actions, and welfare functions. Socio-politically speaking, the state social functions expand overtime: retirement insurance, natural disaster aid (either internal or external), environmental



protection programs, among others. Economically it is marked by advancement in science and technology and consequently the increase of state assignments into science, technology and various investment projects (Wagner 1835-1917). Finally, as implied in the Wagner's theory, the state resorts to government's loans for covering contingencies and thus the sum of government debt and interest increases as debt service expenditure increases. Another implication of this is that the increased division of labor would be accompanied by the development of new technological processes which would lead to the growth of monopolies in the private sector. In Wagner's view, private sector monopolies would not adequately consider the social needs of society as a whole and would therefore need to be replaced by public corporations. Further, if private sector companies became too large, the economy would become unstable because problems for individual companies would become problems for society as a whole.

Finally, government would need to expand to provide social benefits and services which Wagner saw as not open to economic evaluation (Wagner 1835-1917).

### **2.3.2 Peacock Wise Man's Model**

In 1961, based on their research of public spending in England, Peacock and Wiseman gave rise to salient shaft of light about the nature of the rise in public spending. Peacock and Wiseman (1967) proposed that public spending development does not take place in the same manner as Wagner theorized. Peacock and Wiseman choose the political proposals rather than the organic state where it is considered that government likes to spend cash, individuals do not like increasing taxation, and individuals vote for ever-increasing social services.

Ideas about desirable public spending and taxation boundaries may diverge, but these may be reduced by large-scale disturbances, such as major wars. These disturbances will trigger displacement effects, shifting government income and public spending to new rates, according to

Peacock and Wiseman. Government will fall short of income and tax revision will take place upwards. Citizens will initially give rise to disappointment but will later accept the judgment in moments of crisis. A fresh level of "tax tolerance" will occur. There will be a new level of "tax tolerance". Individuals will now accept new, earlier believed intolerable rates of taxation. In addition, the public expect the state to cure the economy and adjust to the fresh social concepts, or else the insurrection impact will occur. The period of displacement was regarded by Peacock and Wiseman as decreasing obstacles protecting local autonomy and increasing concentration authority over central government public expenditure. The function of state operations tends to grow bigger and bigger during the process of centralizing public expenditure. This can be referred to the concentration process of increasing public sector activities.

In short, the theory focused on raising public spending from a social-political view, as revenue rises, government spending will increase.

### **2.3.3 Musgrave Theory of Public Expenditure Growth**

This theory was propounded by Musgrave as he found changes in the income elasticity of demand for public services in three ranges of per capita income. He posits that at low levels of per capita income, demand for public services tends to be very low, this is so because according to him such income is devoted to satisfying primary needs and that when per capita income starts to rise above these levels of low income, the demand for services supplied by the public sector such as health, education and transport starts to rise, thereby forcing government to increase expenditure on them. He observes that at the high levels of per capita income, typical of developed economics, the rate of public sector growth tends to fall as the more basic wants are being satisfied (Musgrave, 1969). Musgrave and Musgrave (1989) opined that as progressive nations industrialize, the share of the public sector in national economy grows continually. The

theory states that there is a functional relationship between the growth of an economy and the growth of the government activities; So the government sector is growing more rapidly than the economy (Musgrave, 1969). Consequently, all types of government, regardless of their level of intent (peaceful or war), and size, indicate the same inclination to increase public spending. In other words, Wagner's law states that, as per capita income of an economy grows, the relative size of public expenditure grows; the relative size of public expenditure grows along with it. As the economy grows, there will be increase in the number of urban centers, with the associated social vices such as crime, which require the intervention of the government, to reduce such activities to the barest minimum. Large urban centers also require internal security, to maintain law and order. These interventions by the government have cost, leading to increase in public expenditure in the economy.

This theory implies that growth in government capital outlay can translate into positive economic growth as well bring about growth in recurrent government spending. However, growth in government recurrent expenditure does not bring about significant growth in the economy. This also implies that the causal effect of economic growth on government capital spending is more significant when compared with government recurrent expenditure.

#### **2.3.4 The Keynesian and Classicalist School of Thought**

The classical economists believe that the government intervention brings more harm than good to an economy most of these operations should be carried out by the private sector. Adam Smith (1776) championed much in his *Welfare of Nations* on the "laissez-faire" economy where the motivation for profit was to be the primary cause of economic development. According to the classical dichotomy, a rise in the total quantity of cash results in a proportionate rise in all cash rates, without any change in resource allocation or the level of real GDP, known as money

neutrality. It is always at full employment, the wage rate and the interest rate are self-adjusted and as a matter of fact, the budget should always balance as savings is always equal to investment. Since they believe that the economy was always at its full employment level, their objective was certainly not growth.

Following the Great Depression of 1929-30 the classical economists who opposed public interventions asserted that powerful unions prevented salary flexibility, leading to elevated unemployment. On the other side, the Keynesians supported public action to correct shortcomings in the economy. In 1936, the "General Theory of Employment, Interest and Money" by John Maynard Keynes (1883-1946) criticized classical economists for placing too much emphasis on the long-term. According to Keynes, "in the long run we're all dead." Keynes thought that depression as a short-term cure required public interference. Increasing saving will not help but spending. Government will increase public spending giving individuals, purchasing power and producers will produce more, creating more employment. This is the multiplier effect showing causality to national income from public spending. Keynes categorized public spending as an exogenous variable that, instead of an endogenous phenomenon, can generate economic growth. Hereby, Keynes thought the government's role to be essential as it could prevent depression by raising aggregate demand and thus turning the economy back on track again by the multiplier effect. It is an instrument that brings stability in the short term, but it must be done with caution, as too much public spending leads to inflationary circumstances. while too little of it leads to unemployment (Keynes, 1930).

### **2.3.5 The Solow's Theory**

Robert Solow and T.W. Swan introduced the Solow's model in 1956 (Solow, 1956). Their model is also known as Solow-Swan model or simply Solow model. In the Solows model, other equal

factors saving / investment and population development rates are significant determinants of economic growth. Higher savings / investment rates result in higher capital accumulation per employee and hence higher production per employee. and hence more output per worker. On the other hand, high population growth has a negative effect on economic growth simply because a higher fraction of saving in High population growth must be achieved in order to maintain a constant capital-labor ratio. In the absence of technological change and innovation, an increase in capital per worker would not be matched by a proportional increase in output per worker because of reduced yields. The deepening of capital would therefore reduce the rate of return on investment(Barro, 1990).

### **2.3.6 The Endogenous Growth Theory**

The fundamental enhancement of endogenous growth theory compared to prior models is that it explicitly attempts to model technology (that is, looks into the determinants of technology) rather than assuming it to be exogenous. Mostly, economic growth stems from technological progress, which is fundamentally an economic organization's capacity to make more efficient use of its productive resources over time. Much of this capacity stems from the learning method of operating newly built manufacturing equipment in a more productive manner or, more usually, from learning how to deal with fast modifications in the manufacturing structure which industrial progress must imply (Verbeck, 2000).

## **2.4 Determinants of Economic Growth**

Investment is one of the most fundamental determinants of economic growth identified by both neoclassical and endogenous growth models (Barro & Martin 1992). However, in the neoclassical model investment has impact on the transitional period, while the endogenous growth models argue for more permanent effects. The importance attached to investment by these theories has led to an enormous amount of empirical studies examining the relationship between investment and economic growth (Lensink and Morrissey, 2006).

Human capital is also a main source of growth in several endogenous growth models as well as one of the key extensions of the neoclassical growth model. Since the term ‘human capital’ refers principally to workers’ acquisition of skills and know-how through education and training, the majority of studies have measured the human capital quality using education-related proxies (e.g. school enrolment rates, math and Scientific competences etc.). A large number of studies has found evidence suggesting that educated population is key determinant of economic growth. Innovation and Research and Development R&D activities can play a major role in economic progress increasing productivity and growth. This is due to increasing use of technology that enables introduction of new and superior products and processes. This role has been stressed by various endogenous growth models, and the strong relation between innovation/R&D and economic growth has been empirically affirmed by many studies (Hermes and Lensink, 2000).

Economic policies and macroeconomic have also great potential as determinants of economic performance since they can set the framework within which economic growth takes place. Economic policies can influence several aspects of an economy through investment in human capital and infrastructure, improvement of political and legal institutions and so on. Macroeconomic conditions are regarded as necessary but not sufficient conditions for economic

growth (Fischer, 1993). In general, a stable macroeconomic environment may favor growth, especially, through reduction of uncertainty, whereas macroeconomic instability may have a negative impact on growth through its effects on productivity and investment. Several macroeconomic factors that have been identified to impact development include but are not limited to; inflation, fiscal policy, budget deficits and tax burdens (Fischer, 1993).

Openness to trade has been used extensively in the economic growth literature as a major determinant of growth performance. There are sound theoretical reasons for believing that there is a strong and positive link between openness and growth. Openness affects economic growth through several channels such as exploitation of comparative advantage, technology transfer and diffusion of knowledge, increasing scale economies and exposure to competition. Openness is usually measured by the ratio of exports to GDP. Economies that are more open to trade and capital flows have higher GDP per capita and grew faster (Borensztein *et al*, 1998).

Foreign Direct Investment (FDI) plays a crucial role of internationalizing economic activity and it is a primary source of technology transfer and economic growth. This major role is stressed in several models of endogenous growth theory. The empirical literature examining the impact of FDI on growth has provided more-or-less consistent findings affirming a significant positive link between the two (Borensztein *et al*, 1998).

Institutional framework is another factor that influences economic growth. Rodrik (2000) highlights five key institutions (property rights, regulatory institutions, institutions for macroeconomic stabilization, institutions for social insurance and institutions of conflict management), which not only exert direct influence on economic growth, but also affect other determinants of growth such as the physical and human capital, investment, technical changes and the economic growth processes. It is on these grounds that Easterly (2001) argued that none

of the traditional factors would have any impact on economic performance if there had not been developed a stable and trustworthy institutional environment. The most frequently used measures of the quality of institutions in the empirical literature include government repudiation of contracts, risk of expropriation, corruption, property rights, the rule of law and bureaucratic quality (Knack and Keefer, 1995).

There also exist a relationship between political factors and economic growth. Lipset (1959) examined how economic development affects the political regime and established that political instability would increase uncertainty, discouraging investment and eventually hindering economic growth. The degree of democracy is also associated with economic growth, though the relation is much more complex, since democracy may both retard and enhance economic growth depending on the various channels that it passes through (Alesina *et al.*, 1994).

In the recent years a number of researchers have made an effort to measure the quality of the political environment using variables such as political instability, political and civil freedom, and political regimes. Brunetti (1997) distinguishes five categories of appropriate political variables: democracy, stability of government, political violence, political volatility and political subjectivity. Trusting economies are expected to have stronger incentives to innovate, to accumulate physical capital and to exhibit richer human resources, all of which are conducive to economic growth (Knack and Keefer, 1997). Ethnic diversity, in turn, may have a negative impact on growth by reducing trust, increasing polarization and promoting the adoption of policies that have neutral or even negative effects in terms of growth (Easterly and Levine, 1997). Several other social cultural factors have been examined in the literature, such as ethnic composition and fragmentation, language, religion, beliefs, attitudes and social/ethnic conflicts, but their relation to economic growth seems to be indirect and unclear. For instance cultural

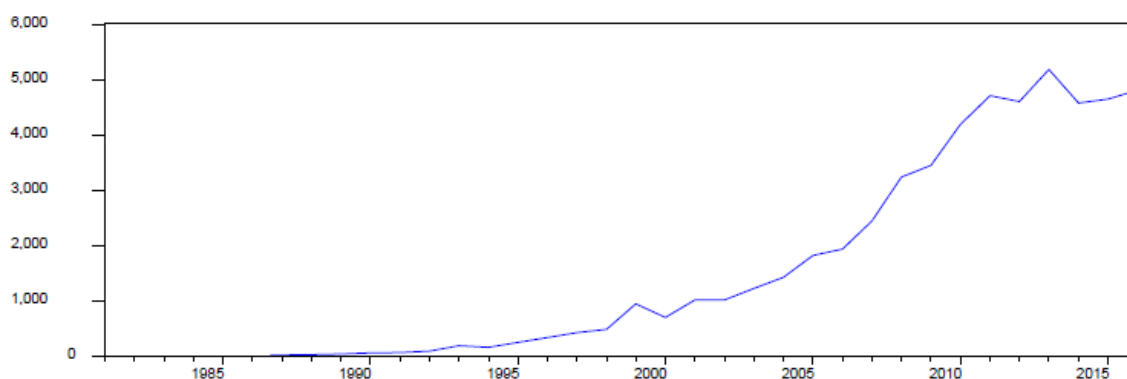


diversity may have a negative impact on growth due to emergence of social uncertainty or even of social conflicts, or a positive effect since it may give rise to a pluralistic environment where cooperation can flourish.

Geographical factors, including absolute latitude values, distances from the equator, land proportion within 100 km from the shoreline, average temperatures and average rainfall, soil quality and disease ecology are known to have impact on the growth rate of an economy (Hall and Jones, 1999). Armstrong and Read (2004) affirms that natural resources, climate, topography and landlockedness have a direct impact on economic growth affecting (agricultural) productivity, economic structure, transport costs and competitiveness.

Many demographic aspects have been related to economic progress. Of those examined, population growth, population density, migration and age distribution, seem to play the major role in economic growth (Kelley and Schmidt, 2000). High population growth, for example, could have a negative impact on economic growth influencing the dependency ratio, investment and saving behavior and quality of human capital. The composition of the population has also important implications for growth. A large working-age population is deemed to be conducive to growth, whereas population with many young and elderly dependents is seen as impediment. Population density, in turn, may be positively linked with economic growth as a result of increased specialization, knowledge diffusion and so on. Migration would affect growth potential of both the sending and receiving countries.

## 2.5 Trends in Public Expenditure in Nigeria Overtime



**Fig 2.1.: Trend in Government Total Expenditure in Nigeria**

**Source: Central Bank of Nigeria Statistical Bulletin**

Government total expenditure is captured as the aggregate of Federal government capital and recurrent expenditure. Government total expenditure has been on the upward trend over the years.

However, since the return to a democratic dispensation in 1999, there has been an increasing divergence between capital and recurrent expenditure, with capital expenditure falling to about a 22 percent share, while recurrent expenditure has risen to about a 78 percent share, as at 2012. The average shares in total government expenditure over the period 1970 to 2012 amount to 42 percent and 58 percent for capital and recurrent expenditure respectively. From N14.82 billion in 1981, government total spending increased N191.23 billion in 1993, N1,426.20 billion in 2004, N2, 450.90 in 2007, N5,185.32 billion in 2013 and decreased to N4, 813.38 billion in 2016. (CBN, 2019).

## 2.6 Empirical Review

Significant study has been done on the effect of government spending on national income, the surveys showed conflicting outcomes based on their findings.

Barro (1990) was one of the oldest authors on the economic growth and development effect of government spending. He expanded current models of development and gave birth to the endogenous growth model incorporating the public sector. Within this frame work he found that Gross National Product (GNP),  $G / Y$  but ultimately each level reaches a peak and decreases thereafter. Devarajan *et al* (1993) assessed the link between the level of public expenditure and growth, they derived conditions under which a change in the composition of expenditure leads to a higher rate of steady-state economic development.

Komain and Brahmasrene (2007) used the Granger causality test to examine the connection between government spending and economic growth in Thailand, resulting in a unidirectional connection as causality ranges from government spending to economic growth.

The outcome, however, suggested an important beneficial impact on economic growth from government spending.

Kalle (2007) used a panel data analysis involving 52 nations from 1971 to 1980 to examine the short-term and long-term impact of fiscal policy on economic growth.

Study results show that the Keynesian principles do not hold because fiscal policy cannot have a notable short-term impact on the economy, but its effect is affirmed in the long term. He found that the expansionary fiscal policy is not good at all for the economy.

Chimobi, (2009), used annual information for the period 1970-2005 to test the direction of causality between public spending and domestic earnings in Nigeria.

The test of cointegration and causality of Granger was used.

First, the data's stationary characteristics and the order of data integration and the Phillip Perron (PP) test were evaluated. He discovered that variables in concentrations were non stationary but in the first difference stationary.

To test the long-run connection between variables, the Johansen Multivariate method to cointegration was implemented. The outcome showed that there was no long-term connection in Nigeria between government spending and national income.

The Granger causality test disclosed that causality exceeds national income from government spending. The outcome has shown that government spending plays a major role in supporting Nigeria's economic growth. Rehman, Iqbal and Siddifi (2010), by implementing Toda & Yamamoto causality test Pakistan for the period 1971-2006, examined the nature and direction of causality in Pakistan between government spending and domestic earning along with multiple chosen part of government spending.

The research discovered a unidirectional causality that runs from GDP to government spending that promotes Wagner's law. Moreover, at disaggregated level, result showed that GDP only caused administrative expenditure while no causality for development spending, debt maintenance and defense expenditure as a whole was discovered; this research did not favor the presence of the Keynesian theory, but at aggregate and disaggregate rates in Pakistan. That is economic growth caused by public expenditure. In the province of Sindh, Pakistan, Rizvi and Shamam (2010) investigated the relationship between government spending and gross provincial product (GPP). The study used data for 30 years (1979-2008) and employed unit root test and cointegration to investigate the order of the relationship and to check the long run relationship respectively which the error correction model (ECM) was used to investigate the short run dynamics. In addition, stimulus response functions (IFS) were also implemented to observe the

economic growth shock of government spending. Result of the study found a long run relationship between development expenditure and economic growth, a unidirectional causality running from GDP to development expenditure was found.

Abu and Abdullahi (2010) demonstrate that total capital, complete recurrent expenditure and government spending on education have a adverse effect on economic growth, while health expenditure, transport and communication expenditure was found to have a positive impact on economic growth.

Alim and Embaye (2011), examined the determinant of real per capita government spending in the republic of south Africa, using annual data for the period between 1960 – 2007. Using multivariate cointegration methods, the writers discovered that government spending per capita per capita revenue, tax shares and salary rates were cointegrated, thus supporting the concept that government spending is not only connected with per capita income and the real price of providing public services as a consequence of salary rates, but also with the fiscal illusion created by budget deficits. Evidence has also shown that external shock has influenced government spending per capita. These external shocks seemed to play a significant role in explaining the dynamics of government spending growth.

Freeman (2001) used new developments in trend cycle decomposition to test Okun's Law for a Panel of ten industrial countries, that Okun's initial estimate of three points for the U.S. for every percent decrease in the unemployment rate now averages the sample countries at just under two points or true GDP development. Pooled estimates for Europe for the remainder of the sample are lower than estimates. He found that the legislation can still prove the impacts of unemployment on GDP. Jaradat (2013) used time series information from 2000 to 2010 to examine the effect of unemployment and inflation on Jordanian GDP. He used the OLS method to estimate his model,

and the result showed that increase in inflation by 0.906% raised GDP by 1%. Furthermore, the findings showed that a 0.697 percent drop in unemployment boosted GDP by 1 percent. He then found that GDP and unemployment have a substantial adverse connection, but there is a powerful favorable connection between GDP and inflation. Abdulrauf (2015) used the Vector Error Correction Model (VECM) to examine the short- and long-term impact of fiscal policy on Nigeria's economic development. using annual data series from 1981 to 2013. His results have shown that government spending is recurring and that government investment has a favorable short-term and long-term effect on economic development, while capital spending has had only a positive short-term effect. Tax revenue was found to have a negative relationship with economic development of Nigeria both in the short run and long run.

## **2.7 Gap in the Literature**

The previous review of literatures focuses on the impact of government expenditure on economic growth from several scholars. Economic theory indicates that reduced rates of public spending on some occasions would boost economic growth while on other occasions ; greater levels of public spending would be more desirable. Also, owing to the fact that several factors contribute to economic growth as stated previously. The proof produced from an empirical view becomes more confusing as a number of research favor one strategy or the other . The results of the few studies that have been carried out in Nigeria have been conflicting. There is therefore a gap in literature as far as a survey is concerned about the impacts of government spending on Nigeria's economic growth. This study therefore seeks to fill this research gap by answering the question of: What is the relationship between government expenditure and economic growth in Nigeria?

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Preamble**

This chapter describes the research method adopted in conducting the research. It presents logical information on the procedure for the collection of data, techniques of data analysis, variable measurement, justification of method and techniques and limitation of the methodology.

#### **3.2 Research Design**

Descriptive studies are usually the best methods for collecting information that will demonstrate relationships and describe the world as it exists. These types of studies are often done before an experiment to know what specific things to manipulate and include in an experiment. Elahi and Dehdashti, (2011) suggest that descriptive studies can answer questions such as “what is” or “what was. Experiments can typically answer “why” or “how.” The focus of this study was to establish the relationships between variables of interest and not the causal effects. It is important to note that just because variables are related, does not necessarily mean that one directly causes the other. This study was descriptive in nature and involved quantitative analysis of data..

#### **3.3 Data Collection Techniques**

Secondary data was used in this study to analyze the effect of government expenditure on economic growth in Nigeria. Arasa (2008) describes secondary data as information that has already been collected for another purpose other than the current purpose of another researcher; he further explains that the data however should be of relevance and utility for the current research. The researcher collected time series data of the gross domestic product, capital expenditure and recurrent expenditure in Nigeria from 1980 to 2018. This type of data was

obtained from government publications such as Central Bank of Nigeria Bulletin as well as publications of international organizations such as WorldBank and International Monetary Fund.

### **3.4 Data Analysis Techniques**

This study addresses three objectives. The first objective is to examine the impact of government expenditure on economic growth in Nigeria; the second is to analyse the impact of public capital expenditure on economic growth while the third objective is to investigate the effect of public recurrent expenditure on economic growth.

The techniques of the data analysis include descriptive analysis especially with the use of trend graph to describe the variable under study over the period reviewed by the study and inferential to show the casual and effect relationship among the variable in this study. From theoretical perspective, the model says that economic growth (GDP) depends on government expenditure disaggregated into capital and recurrent expenditures. This implies that total government expenditure on these services is a composite spending, and that GDP is a weighted disaggregated components of government expenditure, with each weight showing the prospective effect of the respective component on economic growth.

### **3.5 Model Specification**

Granger Causality Test was used to determine whether one time series is useful in forecasting another (Enders, 1995). The VAR equations were used to perform Granger causality tests. The use of cointegration technique allows the study to capture the equilibrium relationship between non-stationary series within a stationary model, following Adam (1998), and Johnston and Dinardo (1997); it also helped to avoid both spurious and inconsistent regression problems, which would occur with the regression of non-stationary data series. It also permits the combination of



the long-run and short-run information in the same model and overcame the problems of losing information that could have occurred from attempts to address non-stationary series through differencing (Adam, 1998). Cointegration technique made it possible to capture the information of non-stationary series without sacrificing the statistical validity of the estimated equation (Stock and Watson, 1988). Two main tests for cointegration, namely Johansen cointegration test which is best in testing a one time series model that were conducted either with trace or with eigen value where the inferences might be a little bit different if either of the methods is used. However, these tests for cointegration assumed that the cointegrating vector is constant during the period of 1980 -2018. In reality, it is possible that the long-run relationship between the underlying variables change (shifts in the cointegrating vector can occur). The reason for this might be technological progress, economic crises, changes in the people's preferences and behavior accordingly; policy or regime alteration, and organizational or institutional developments that might have taken place during is the researcher's period of study. This enhances determination of the respective partial relationships with, and effects on, economic growth during the study period. The weights,  $\lambda_i$  ( $i = 1, 2$ ) are the respective partial effects of the explanatory variables on the explained variable. Thus, the model is linearly expressed as follows:

$$GDP = \lambda_0 + \lambda_1 CAPEX + \lambda_2 RECEX + \mu \dots\dots\dots(1)$$

where  $\lambda_0$  = Intercept of the regression line. It depicts any level of economic growth that at zero government expenditure level.

$\lambda_i$  ( $i = 1, 2$ ) = coefficient or of weights of the components of government expenditure. It is a measure of the effects of the respective components of government expenditure on economic growth.

$\mu$  is stochastic variable to accommodate the influence of other determinants of economic growth not included in the model.

On estimation, the intercept ( $\lambda_0$ ) and slope coefficient  $\lambda$  is are expected, a priori, to have positive sign,  $\lambda_i (i = 0, 1, 2) > 0$ , implying that each component expenditure of the government is expected to correlate positively with economic growth.

The second equation includes creating an endogenous variable of one of the exogenous factors and expressing it as a function of all other factors including instrumental factors. In order to show the impact of capital expenditure on economic growth, equation (2) below is necessary for consideration.

$$\text{CAPEX} = \lambda_0 + \lambda_1 \text{GDP} + \lambda_2 \text{RECEX} + \mu \dots\dots\dots(2)$$

The third equation shows the effect of recurrent expenditure (RECEX) on economic growth.

$$\text{RECEX} = \lambda_0 + \lambda_1 \text{GDP} + \lambda_2 \text{CAPEX} + \mu \dots\dots\dots(3)$$

## CHAPTER FOUR

### RESULTS

#### 4.1 Introduction

The chapter presents the analysis part of the study. The analysis is based on the research objectives where each objective is tackled according to the analysis techniques designed in the methodology.

#### 4.2 Summary of the Government Expenditure and GDP for the period 1980-2018

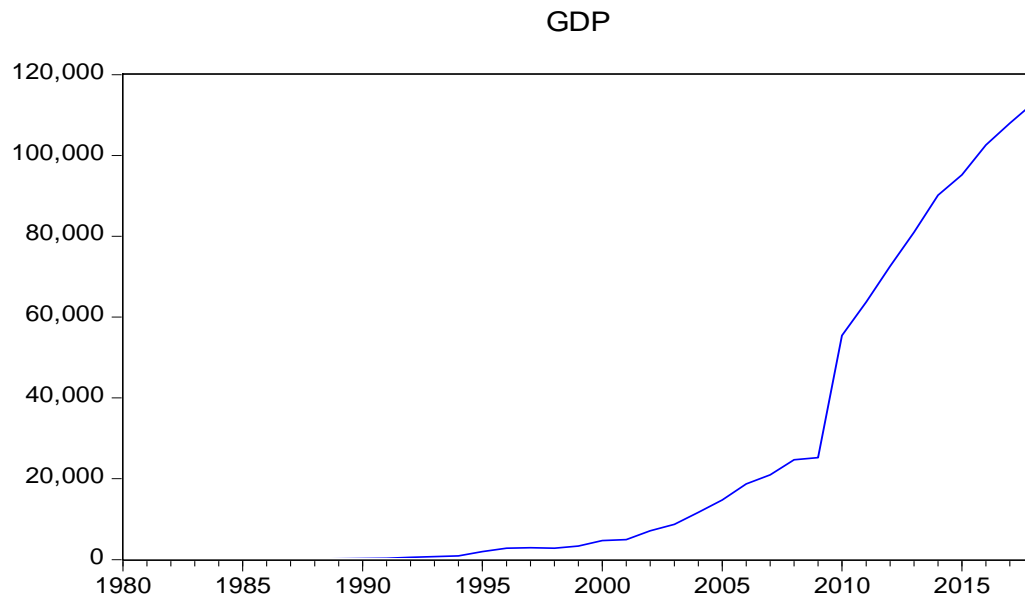
The table 4.1 below presents the descriptive analysis results of the variables of the study. The data collected on the country's economic growth (measured in GDP) and the Government expenditure which is divided in capital expenditure and recurrent expenditure.

	<b>GDP</b>	<b>CAPITAL EXPENDITURE (CAPEX)</b>	<b>RECURRENT EXPENDITURE (RECEX)</b>
Mean	24122.37	474.1467	1148.176
Median	3312.240	269.6500	449.6600
Maximum	113089.0	2873.000	4178.590
Minimum	50.27000	4.100000	4.750000
Std. Dev.	36644.52	623.9011	1400.993
Skewness	1.373326	2.195249	0.885284
Kurtosis	3.298182	8.381774	2.198201

Jarque-Bera	12.40364	78.38993	6.138911
Probability	0.002026	0.000000	0.046446
Sum	940772.5	18491.72	44778.85
Sum Sq. Dev.	5.10E+10	14791600	74585656
Observations	39	39	39

**Table 4.1 Descriptive Analysis of the study variables using E-Views 7.0**

From the table, the mean GDP for the period is 24122.37190 with a standard deviation of 36644.519743. This illustrates that, significant variation in the individual GDP for the years studied was recorded as the standard deviation values varied significantly from the mean GDP value for the years 1980-2018. The government expenditures such as Capital expenditure and Recurrent expenditure from the table can be summarized by the mean values obtained since these values give some standard deviation values which are greater than 1 indicating that the values for the years vary significantly from the mean values obtained. Thus, based on this, capital expenditure for the period has a mean 474.1467 and recurrent expenditure has a mean 11448.1756.



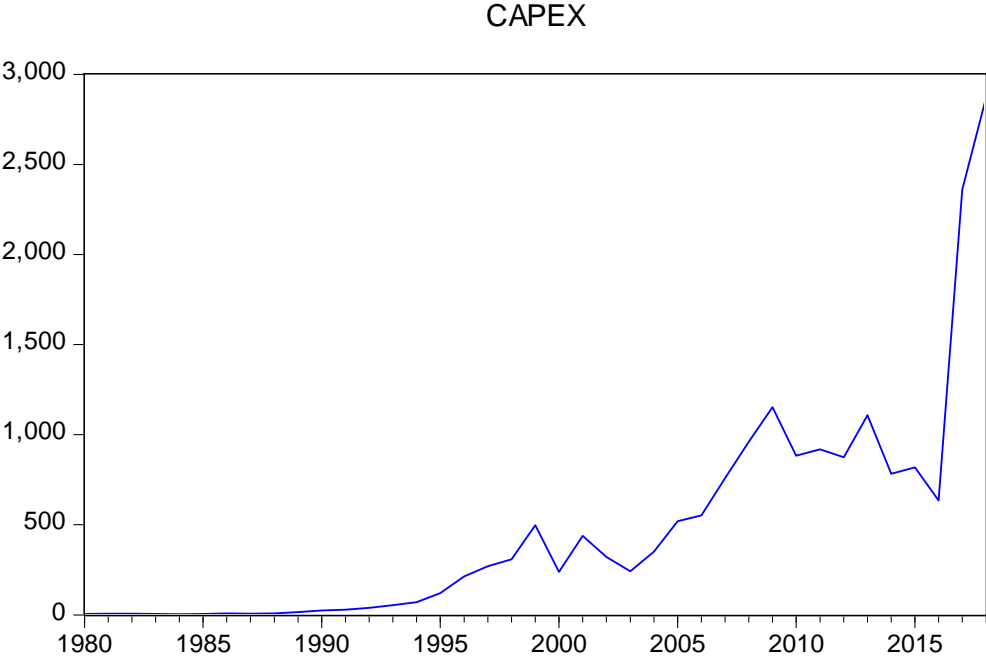
**Figure 4.1: The Trend of Gross Domestic Product for the period between 1980 and 2018**

**(Source: Line Graph result using E-Views 7.0)**

In the figure 4.1 above

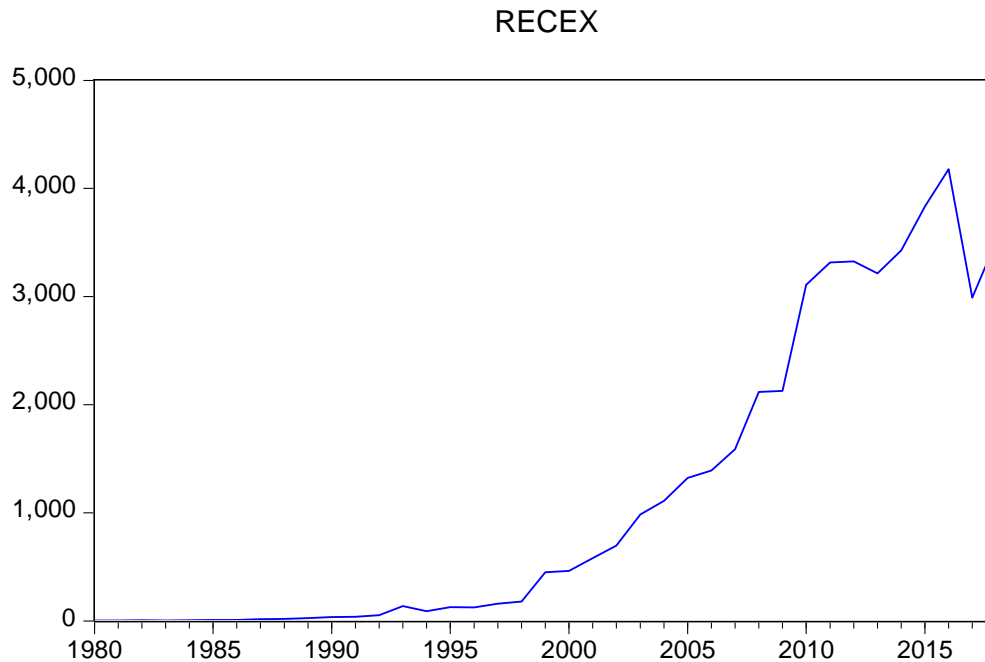
The economy was lively as national production growth was robust and broad in 2010, owing to sound economic governance policies and extensive economic reforms. The actual Gross Domestic Product (GDP), measured in baseline prices in 1990, rose by 7.9% compared to 7.0% in 2009. Growth in 2010 was mainly ascribed to non-oil sector production performance, which rose by 8.5% complimented by a substantial rise in oil sector production. The Nigerian economy's performance was mixed in 2011. Real GDP growth slowed to 7.4 percent in 2011 from 8.0 percent in 2010, driven mainly by crop, wholesale, retail, and telecommunications industries, which accounted for 28.0 percent, 28.8 percent, and 21.4 percent, respectively, of actual GDP development over the year. Government revenue, driven by favorable crude oil price trends on the global oil market, increased from N6 to N9,987.63 billion in 2010 (Salaudeen, 2018) development in the external sector of the economy was favourable in 2011, compared with 2010. However, current economic indicators are on a down trend with

GDP growth between the last quartile of 2016 into the second quartile of 2017 hovering around -2% to 2 percent clearly signifying the current state of recession in the economy, this state as witness another dimension to unemployment in Nigeria where firms now lay off professional personnel add to the previous number of unemployment and the firms themselves either closing up or downsizing production or activities.



**Figure 4.2: The Trend of Capital Expenditure for the period between 1980 and 2018**

**(Source: Line Graph result using E-Views 7.0)**



**Figure 4.3: The Trend of Recurrent Expenditure for the period between 1980 and 2018**

**(Source: Line Graph result using E-Views 7.0)**

Trends of government capital and recurrent expenditures in the Nigeria for the past years to the present period as shown above show one obvious feature of an upward increase in government expenditure from billions of naira in the 20<sup>th</sup> century into the early part of the 21<sup>st</sup> century. This rise has been as a result of several factors such population pressure which has led to the increase in government expenditure in the area of providing infrastructure, security for the persistent insurgency in the country and the continuous increase in the size of the government in terms of its personnel and structure. This has led to the higher proportion of recurrent expenditure than capital expenditure which has been advocated for as a vital fiscal for economic growth. As 2005, government expenditure stood at 1.3 trillion Naira which include the sum of recurrent which was standing at N1.2 trillion, which is about 92% of the total government expenditure while capital expenditure takes about 8% that is about N445.6 billion, by the 2006 the government expenditure

had increased by 41.96% which included the increase of both recurrent and capital expenditure of N1.3 trillion and N542.33 billion respect. In 2008, the total government expenditure stood at N4.44 trillion which was an increase of over 200%. However, this increase could be attributed to the increase of capital expenditure of over 155% compared to capital expenditure in 2005 (CBN, 2016).

### 4.3 Correlation Analysis

To understand the association between the variables, the study conducted a correlation analysis which was also tested for the significance at 5% level with a 2-tailed test. The Pearson correlation coefficient was used to test the strength of the association. The results are therefore presented in table 4.2 below.

		Economic Growth
Capital Expenditure (CAPEX)	Pearson Correlation	.818**
	Sig. (2-tailed)	.000
Recurrent Expenditure (RECEX)	Pearson Correlation	.947**
	Sig. (2-tailed)	.000

**Table 4.2 Correlation between the Study Variables**

**(Source: Correlation table using SPSS 23)**

The correlation table gives the associations between the study variables. The strength of the association is based on the Pearson correlation scale where values between 0.0-0.3 indicate a no correlation state, 0.31-0.5 weak correlation, 0.51-0.7 a moderate correlation and a correlation in the interval 0.71 indicates the presence of a strong correlation between the variables. From the table, economic growth has a significant strong correlation with all the independent variables.



The capital expenditure and recurrent expenditure are positively and strongly correlated to the economic growth margin which were indicated by the Pearson correlation coefficient values .818 (.000) and .947 (000) respectively. Testing at 5% significance level, the association was found to be statistically significant as their significance values were all values less than 0.025 which is the critical value at 5% level with a 2-tailed test beyond which the results are statistically insignificant and vice versa. This outcome therefore denies the null hypothesis that the connection between public spending and economic growth in Nigeria is not significant, with the combination of capital and recurrent expenditures showing a relationship between the two variables (dependent and independent variables) thereby accepting the alternative hypothesis.

#### **4.4 Model Test**

To effectively evaluate the effect of Government expenditure on Economic growth, the data was analyzed to determine the statistical characteristics of the time series factors used in the estimation. The principle of these factors is to determine whether or not they are stationary. This is because macroeconomic data often appear to possess stochastic trend that can be removed by differencing the variables

##### **4.4.1 Regression Result**

The multi regression result shows the causal relationship of government expenditure on economic growth with the use of the ordinary least square techniques for estimation as presented and discussed below.

##### **Unit root test**

Examining the properties of the variables is important because if two or more variables in a regression model are not stationary, then the standard errors produced by the regression estimate

would be biased, making the conventional principle used in evaluating the existence of relationship among the variables in the model unreliable (Mahadeva and Robinson, 2004).

In the analysis, the Augmented Dickey Fuller (1981) was employed to test the order of integration of the variables. The unit root test results are presented in table 4.3;

Variable	Coefficient	t-statistics	Level of Integration
GDP	0.005318	0.141117	I(1) Stationary
CAPEX	0.090477	0.242118	I(1) Stationary
RECEX	-0.143477	-1.893188	I(1) Stationary

**Table 4.3: Unit Root Test and test of Stationarity**

**Source: Descriptive statistics result using E-views 7.0**

### **Regression Result**

Dependent Variable: GDP

Method: Least Squares

Date: 05/23/19 Time: 12:43

Sample: 1980 2018

Included observations: 39

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5419.711	2273.661	-2.383694	0.0225
CAPEX	13.30545	4.353910	3.055977	0.0042
RECEX	20.23501	1.938918	10.43624	0.0000

R-squared	0.917930	Mean dependent var	24122.37
Adjusted R-squared	0.913370	S.D. dependent var	36644.52
S.E. of regression	10785.54	Akaike info criterion	21.48360
Sum squared resid	4.19E+09	Schwarz criterion	21.61157
Log likelihood	-415.9303	Hannan-Quinn criter.	21.52952
F-statistic	201.3248	Durbin-Watson stat	0.215629
Prob(F-statistic)	0.000000		

**Table 4.4: Regression Result**

**Source: Regression Result using E-Views 7.0**

The estimated relationship for the model is

$$GDP = \lambda_0 + \lambda_1 CAPEX + \lambda_2 RECEX + \mu$$

**GDP=-5419.711 + 13.30545 CAPEX + 20.23501 RECEX.....(1)**

The model indicates the estimated relationship between Gross Domestic Product proxy for economic growth and Government expenditure (capital and recurrent) as independent variable.

Meanwhile, the both Government expenditure variables follow a prior expectation that is both variables are positively related to economic growth and are significant at 5% level of significant.

The implication of this result is that an increase in Government expenditure can serve as a tool to achieve economic growth.

Dependent Variable: CAPEX

Method: Least Squares

Date: 07/13/19 Time: 07:15

Sample: 1980 2018

Included observations: 39

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Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP	0.015481	0.005066	3.055977	0.0042
RECEX	-0.042777	0.132502	-0.322838	0.7487
C	149.8235	79.62785	1.881547	0.0680

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R-squared	0.670587	Mean dependent var	474.1467
Adjusted R-squared	0.652286	S.D. dependent var	623.9011
S.E. of regression	367.8973	Akaike info criterion	14.72729
Sum squared resid	4872543.	Schwarz criterion	14.85525
Log likelihood	-284.1821	Hannan-Quinn criter.	14.77320
F-statistic	36.64268	Durbin-Watson stat	0.796318
Prob(F-statistic)	0.000000		

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**Table 4.5: Regression Result**

**Source: Regression Result using E-Views 7.0**

The estimated relationship for the model is

$$\text{CAPEX} = \lambda_0 + \lambda_1 \text{GDP} + \lambda_2 \text{RECEX} + \mu \dots \dots \dots (2)$$

$$\text{CAPEX} = -149.823 + 0.015481 \text{GDP} + 0.042777 \text{RECEX} \dots \dots \dots (2)$$

The model indicates the relationship between the Capital Expenditure (CAPEX) as the independent variable and Gross Domestic Growth (GDP) and Recurrent Expenditure (RECEX) as dependent variable.

Dependent Variable: RECEX

Method: Least Squares

Date: 07/13/19 Time: 07:34

Sample: 1980 2018

Included observations: 39

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP	0.037142	0.003559	10.43624	0.0000
CAPEX	-0.067485	0.209036	-0.322838	0.7487
C	284.2083	93.50351	3.039547	0.0044
R-squared	0.896938	Mean dependent var	1148.176	
Adjusted R-squared	0.891212	S.D. dependent var	1400.993	
S.E. of regression	462.0891	Akaike info criterion	15.18320	
Sum squared resid	7686949.	Schwarz criterion	15.31116	
Log likelihood	-293.0723	Hannan-Quinn criter.	15.22911	
F-statistic	156.6521	Durbin-Watson stat	0.322300	

Prob(F-statistic) 0.000000

**Table 4.6: Regression Result**Source: Regression Result using E-Views 7.0

The estimated relationship for the model is

$$RECEX = \lambda_0 + \lambda_1GDP + \lambda_2CAPEX + \mu \dots\dots\dots(3)$$

$$RECEX = -284.2083 + 0.037142GDP + 0.067485CAPEX \dots\dots\dots(3)$$

The model indicates the relationship between the Recurrent Expenditure (RECEX) as the independent variable and Gross Domestic Growth (GDP) and Capital Expenditure (CAPEX) as dependent variable.

**4.4.2 Granger Casualty Tests**

The Granger causality test was conducted within the context of statistical hypothesis test for determining whether the independent variables’ series are useful in forecasting the dependent variable (economic growth).

Pairwise Granger Causality Tests

Date: 05/28/19 Time: 21:01

Sample: 1980 2018

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
CAPEX does not Granger Cause GDP	37	11.2053	0.0002
GDP does not Granger Cause CAPEX		3.98023	0.0286
RECEX does not Granger Cause GDP	37	13.2167	7.E-05
GDP does not Granger Cause RECEX		4.40326	0.0205

RECEX does not Granger Cause			
CAPEX	37	4.68775	0.0164
CAPEX does not Granger Cause RECEX		14.0335	4.E-05

**Table 4.7: Granger Casualty Tests between Economic Growth, Capital expenditure and Recurrent expenditure**

**Source: E-Views 7.0**

The findings revealed that there exists a strong bidirectional causal links between Government Expenditure (Capital and Recurrent) and Economic growth. The null hypothesis that states that there is no short and long run relationship between government expenditure and economic growth in Nigeria is rejected.

#### **4.5 Discussion of the Findings**

The study results indicated that there is a strong and positive correlation between the study variables. Therefore, this indicates that, the government expenditures of Capital and Recurrent expenditures are positively and strongly associated with economic growth. Thus, a positive change that is increase in these expenditures will result to positive impacts on economic performance and its development. The findings also illustrated that, holding other factors constant; the government expenditure (capital and recurrent) which are the independent variables in this study would explain 93% of the variability in economic growth. This indicates that, other factors such as unemployment, fiscal policy etc that are not studied in this study, (determinants of economic growth) account for 7% of its variability.

From the regression analysis, the result shows that capital and recurrent expenditures have positive and significant impact on economic growth.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.1 Introduction

This chapter presents the summary of the study findings, conclusions and the recommendations made based on the results. It also presents the areas for further research as pointed out during the study.

#### 5.2 Summary of Findings

The study covered the period of 1980 to 2018. This study has developed a prudent multiple regression model for the purpose of explaining and analyzing empirically, government expenditure on economic growth in Nigeria. Using the multiple regression analyses to this relation, the study estimated the model which shows the causal relationship between Government expenditure and economic growth.

The study hypothesized a significant importance of government expenditure on Economic growth proxy as Gross Domestic Product. The findings of the research are based on the times series data collected from the Central bank Statistical bulletin and other relevant journal. The outcome is that public spending has a significant effect on Nigeria's economic development.. This provided the justification for the failure to accept the null hypotheses of the study.

#### 5.3 Conclusion

Based on the finding of the research, the study concludes as follow:

- i. Firstly, the study has provided evidence on the casual relationship on explaining and economic growth in light of government expenditure. The study concluded that the variable explaining variation in economic growth which are quite important too.



- ii. Secondly, the study also established that there exists a significant positive relationship between government expenditure and economic growth, implying that well-planned and directed government expenditure toward achieving economic growth can become a viable tool.
- iii. Thirdly, the study showed that the trend in government expenditure does support economic growth in Nigeria indicated by the increase in gross domestic product justified by capital increase and recurring expenditure
- iv. Lastly, the study proved that there is significant short and long run relationship between government expenditure and economic growth through the bidirectional causal links between public spending and Nigerian economic development

#### **5.4 Recommendations**

The research provides the following suggestions, among others, based on the results of the empirical assessment:

- i. Government should increase its expenditure in order to further drive economic growth.
- ii. Government should ensure that adequate budget provision is made for both past and present capital expenditures since they impact the economy positively.
- iii. Government should guarantee that capital expenditure and recurring spending are correctly managed in such a way as to enhance the manufacturing ability of the nation. Therefore, there is need for stronger institutional framework that checks corruption and misappropriation of public fund in the fiscal system.

## **5.5 Limitations of the Study**

The study, though successfully achieved its objectives experienced several drawbacks which acted as limitations to its successful completion. These include the following;

- i. The data used was secondary in nature which was not purposely collected for the current study and therefore it was not easy to access the data from the planned sources which led to untimely research.
- ii. The use of secondary data also which is prone to personal biasness limited the study since the data cannot be adequately reliable due to these personal errors and biasness.
- iii. The literature informing the study was limited with little evidence on local perspective. This therefore affected the review of the trends in the variables studied over the years.
- iv. It was not economical for the researcher to search for data online which was not readily available thus being time and financial resources consuming.
- v. The study also had limited focus on Nigerian Government due to availability of time and data to which could have also been expensive in studying a considerably larger region to include other countries in the same economic group and evaluate their different economical situations.

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## APPENDIX

<b>Year</b>	<b>Gross Domestic Product (GDP)</b>	<b>Capital Expenditure (CAPEX)</b>	<b>Recurrent Expenditure (RECEX)</b>
1980	50.27	4.60	4.81
1981	51.73	6.57	4.85
1982	53.66	6.42	5.51
1983	57.96	4.89	4.75
1984	64.33	4.10	5.83
1985	73.54	5.46	7.58
1986	74.91	8.53	7.70
1987	111.91	6.37	15.65
1988	147.94	8.34	19.41
1989	228.45	15.03	25.99
1990	281.55	24.05	36.22
1991	329.07	28.34	38.24
1992	555.45	39.76	53.03
1993	715.24	54.50	136.73
1994	945.56	70.92	89.97

1995	2008.56	121.14	127.63
1996	2799.04	212.93	124.49
1997	2906.62	269.65	158.56
1998	2816.41	309.02	178.10
1999	3312.24	498.03	449.66
2000	4717.33	239.45	461.60
2001	4909.53	438.70	579.30
2002	7128.20	321.38	696.80
2003	8742.65	241.69	984.30
2004	11673.60	351.25	1110.64
2005	14735.32	519.47	1321.23
2006	18709.79	552.39	1390.10
2007	20940.91	759.28	1589.27
2008	24665.244	960.89	2117.36
2009	25236.06	1152.80	2127.97
2010	55469.35	883.87	3109.44
2011	63713.36	918.55	3314.51

2012	72599.63	874.70	3325.16
2013	81009.96	1108.39	3214.95
2014	90136.98	783.12	3426.94
2015	95177.73	818.35	3831.98
2016	102575.42	634.79	4178.59
2017	107958.00	2361.00	2991.00
2018	113089.00	2873.00	3513.00

Nigerian Microeconomic Indicators from 1980-2018 (Billion Naira)

### Cointegration Analysis

Null Hypothesis: GDP has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	0.141117	0.9966
Test critical values: 1% level	-4.219126	

5% level	-3.533083
10% level	-3.198312

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\*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(GDP)

Method: Least Squares

Date: 05/28/19 Time: 15:55

Sample (adjusted): 1981 2018

Included observations: 38 after adjustments

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Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP(-1)	0.005318	0.037688	0.141117	0.8886
C	-2283.407	1814.325	-1.258543	0.2165
@TREND(1980)	263.7060	115.4840	2.283486	0.0286

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R-squared	0.325218	Mean dependent var	2974.703
Adjusted R-squared	0.286659	S.D. dependent var	5399.788
S.E. of regression	4560.635	Akaike info criterion	19.76397
Sum squared resid	7.28E+08	Schwarz criterion	19.89325
Log likelihood	-372.5154	Hannan-Quinn criter.	19.80997

F-statistic            8.434301      Durbin-Watson stat    1.957139  
 Prob(F-statistic)    0.001024

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Null Hypothesis: CAPEX has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 9 (Automatic - based on SIC, maxlag=9)

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	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	0.242118	0.9972
Test critical values: 1% level	-4.309824	
5% level	-3.574244	
10% level	-3.221728	

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\*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(CAPEX)

Method: Least Squares

Date: 05/28/19    Time: 15:57

Sample (adjusted): 1990 2018

Included observations: 29 after adjustments

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Variable	Coefficient	Std. Error	t-Statistic	Prob.
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CAPEX(-1)	0.090477	0.373691	0.242118	0.8116
D(CAPEX(-1))	-1.181573	0.390001	-3.029671	0.0076
D(CAPEX(-2))	-1.846079	0.384057	-4.806782	0.0002
D(CAPEX(-3))	-2.394656	0.353793	-6.768514	0.0000
D(CAPEX(-4))	-1.465431	0.384807	-3.808227	0.0014
D(CAPEX(-5))	-0.996030	0.313767	-3.174425	0.0055
D(CAPEX(-6))	-1.261302	0.307255	-4.105062	0.0007
D(CAPEX(-7))	-3.083456	0.343101	-8.987018	0.0000
D(CAPEX(-8))	-3.419686	0.544310	-6.282610	0.0000
D(CAPEX(-9))	-2.104723	0.487839	-4.314380	0.0005
C	-490.4691	218.0013	-2.249845	0.0380
@TREND(1980)	47.58403	15.44405	3.081058	0.0068

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R-squared	0.905040	Mean dependent var	98.55069
Adjusted R-squared	0.843595	S.D. dependent var	357.1507
S.E. of regression	141.2462	Akaike info criterion	13.03239
Sum squared resid	339158.2	Schwarz criterion	13.59817
Log likelihood	-176.9696	Hannan-Quinn criter.	13.20958
F-statistic	14.72932	Durbin-Watson stat	2.138927
Prob(F-statistic)	0.000001		

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### Cointegration Analysis

#### E-views 7.0

Null Hypothesis: RECEX has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

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	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.893188	0.6384
Test critical values: 1% level	-4.219126	
5% level	-3.533083	
10% level	-3.198312	

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\*MacKinnon (1996) one-sided p-values.



### Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RECEX)

Method: Least Squares

Date: 05/28/19 Time: 15:55

Sample (adjusted): 1981 2018

Included observations: 38 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RECEX(-1)	-0.143477	0.075786	-1.893188	0.0666
C	-159.2802	123.4926	-1.289795	0.2056
@TREND(1980)	20.89276	9.302370	2.245961	0.0311
R-squared	0.127162	Mean dependent var	92.32079	
Adjusted R-squared	0.077286	S.D. dependent var	298.0223	
S.E. of regression	286.2743	Akaike info criterion	14.22743	
Sum squared resid	2868354.	Schwarz criterion	14.35672	
Log likelihood	-267.3213	Hannan-Quinn criter.	14.27343	
F-statistic	2.549548	Durbin-Watson stat	2.319222	
Prob(F-statistic)	0.092541			

### Cointegration Analysis

E-views 7.0