EFFECT OF FEDERAL GOVERNMENT CAPITAL EXPENDITURE ON THE NIGERIAN ECONOMIC GROWTH

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DECLARATION

I hereby declare that this dissertation is my original work and has not been previously presented wholly or in part for the award of other degrees.

JOHN, Momotimi Samuel

Signature…… Date…….

CERTIFICATION

We the undersigned, certify that this research dissertation titled Effect of Federal Government Capital Expenditure on the Nigerian Economic Growth (1985-2014): An Empirical Review is the original work of the candidate and has been fully supervised, and found worthy of acceptance in partial fulfillment of the award of Master of Science (M.Sc) Degree in Banking and Finance.

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DEDICATION

This work is dedicated to Almighty Jehovah who has given me the wisdom and strength to accomplish this degree and my family members.

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ABSTRACT

This study examined the of Federal Government Capital Expenditure on the Nigerian Economic Growth for the period 1985-2014. The major objective of the study is to analyze the effect of Federal Government Capital Expenditure in Administration, Economic services, Social Community services and Transfer on the Nigerian Economic Growth. Time series data sourced from Central Bank of Nigerian Statistical Bulletin was used. The research design adopted was the ex-post facto. The analysis was carried out using multiple regression approach. Results of the analysis showed that Nigeria federal government capital expenditure in administration, economic services, social community services and transfers has significant positive effect on the Nigerian economic growth during the study Period. The Nigeria federal government capital expenditures in administration and social community services had a positive relationship with GDP while the federal government capital expenditure in economic services and transfers have negative relationship with GDP. The study concluded that the federal government capital expenditure in administration, economic services, social community services and transfers have effect on the economic growth in Nigeria. Consequently, the study recommended more allocation of budgeted expenditures to the federal government capital expenditures in economic services, transfers, social community services and administration. The efficiency and effectiveness of these allocations should be adopted for better performance of these sectors for sustained economic growth. The study contributed to the knowledge through modeling Government Capital Expenditure and Nigerian Economic Growth and also provided literature to the field of Public, Banking and Finance.

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CHAPTER ONE

1.0 Introduction

1.1 Background of the Study

The expenditures executed by the Federal Government play a critical role in the operation of all economies activities. It refers to expenses incurred by the government for the statutory maintenance and provision of public welfare, goods, services and works needed to foster or promote economic growth and improve the well being of its citizens in the society. Federal Government expenditures are majorly categorized into expenditures on administration, economic service, social service, transfers and others which have both capital and recurrent components. Capital expenditure refers to the amount spent in the acquisition of fixed (productive) assets (whose useful life extends beyond the accounting or fiscal year), as well as expenditure incurred in the upgrade/ improvement of existing fixed assets such as lands, building, roads, machines and equipment, etc., including intangible assets. Federal Government Expenditure in research also falls within these components of these expenditures.

Capital expenditure is usually seen as expenditure creating future benefits, as there could be some lags between when it is incurred and when it takes effect on the economy.

Recurrent expenditure on the other hand refers to expenditure on purchase of goods and services, wages and salaries, operations as well as current grants and subsidies (usually classified as transfer payments). Recurrent expenditure, excluding transfer payments, is also referred to as government final consumption expenditure.

The annual budget spells out the direction of the expected expenditure, as it contains details of the proposed expenditure for each year, though the actual expenditures may differ from the budget figures due, for example, to extra-budgetary expenditures or allocations during the course of the fiscal year. Oziengbe (2013) suggested that government expenditure is a major component of national income as seen in the expenditure approach to measuring national income: ($Y = C+I+\mathbf{G}+(X - M)$). It implies that government expenditure (G) is a key determinant of the size of the economy and of economic growth. However, it could act as a two-edged sword: It could significantly boost aggregate output, especially in developing countries where there are massive market failures and poverty traps, and it could also have adverse consequences such as unintended inflation and boom-bust cycles (Wang and Wen, 2013). The effectiveness of government expenditure in expanding the economy and fostering rapid economic growth depends on whether it is productive or

unproductive. All things being equal, productive government expenditure would have positive effect on the economy, while unproductive expenditure would have the reverse effect.

The issue of the relationship between government capital expenditure and economic growth has been discussed extensively. Oyinlola and Akinnibosun (2013) have carefully traced back theoretical foundation of this relationship to the days of such scholars like Wagner (1883) and Keynes (1936). While Barro (1990) suggests that government spending on investment and productive activities should add positively to economic growth whereas government consumption spending is anticipated to be growth-retarding. The major problem with this statement of reasoning stems from the unlikely difficulty associated with the empirical determination of which particular items of expenditure should be labeled as investment and others as consumption.

Generally, most governments all over the world embark on public expenditure to stimulate the economy. They believe the economy cannot grow unless with government intervention and government expenditures are instrument for controlling the economy. Scholars have argued that public expenditures on socio-economic and physical infrastructure enhance economic growth. Okoro (2013), for instance, has argued that government expenditure on education and health increases the productivity of labour and by extension increases the

growth of national output. Again, expenditures on infrastructure like roads, communications, and power reduce production costs which in turn increase private sector investment and profitability, and by extension enhance economic growth (Okoro, 2013).

In the past years, it has been an unhealthy state for the federal government taking full charge of its capital expenditure in the economy. The challenges faced by both the federal and state government in recent years have being the issue of finances to execute their expenditures. Infrastructures, social amenities, health, education are prescribed to be the major capital expenditure expected to be taken and maintained by the federal government which are supposed to serve as a return to the federal government purse for more execution of projects through its capital expenditure components. Many have investigated on the effectiveness of government expenditure on the Nigerian economy but yet to actualize the single fact that capital expenditure by the federal government have been on the decline and neglect in the past years and yet to profound a suitable ideal on how this demise could be sorted out for the growth of the Nigerian economy.

1.2 Statement of the Problem

The achievement of sustainable economic growth conveys to the citizens, is a privilege of an improved standard of a living, high level of literacy and employment, improved healthcare and infrastructure, including adequate protection of life and property within the domain. It is known fact that all these involve a whole lot of processes, just as no amount of economic growth can be achieved without commensurate conscious efforts on the part of individuals, government and its agencies.

While some societies prefer to pursue such initiatives through private-oriented (market mechanism) programmes, some others may go for government efforts with others caught in between the two. (It is however, instructive to note that there is a strong division in opinion as to whether government expenditure helps or hinders economic growth). Advocates of bigger government argue that government programmes provide valuable "public goods" such as education and infrastructure. It is also their claim that increases in government spending can bolster economic growth by making more money available to individuals.

On the other side of the divide, however, are those who contend that government's big spending undermines economic growth by transferring additional resources from the productive sector of the economy to the government, which uses them less efficiently.

In fact, there have been quite a number of studies all trying to determine the effects of capital expenditure on economic growth. At the international arena, these include the works of Folster and Henrekson (1999), where they argued that the relationship is negative; Agell (1999), response is that it is not significant; Kneller (1998) contend that rising deficits tend to have an adverse effect on growth in Organization for Economic Cooperation and Development (OECD) countries while Baro (1990), is of the view that to the extent that public services are considered an input to production, a positive linkage arises between the size of government and economic growth. Kweka and Morrissey (2010) have summarized these divergent views thus: while numerous studies have been conducted, no consistent evidence exists for a significant relationship between public spending and growth, in a positive or negative direction.

The consensus between Kweka and Morrissey (2010) and Tullock (1989) is that the actual relationship between public spending and growth is far from being understood and therefore calls for more empirical research. The above view has further been amplified by Fan and Rao (2013) as they lend their support thus: many developing countries are currently undergoing substantial macroeconomic adjustments. It is not clear how such programs are affecting government expenditure and hence long-term economic growth and poverty

reduction. Fan and Rao (2013) emphasize more on this thus: it is important to monitor trends in the levels and composition of government expenditures, and assess the causes of change over time. It is even more important to analyze the relative contribution of various expenditures to production growth and poverty reduction, as this will provide important information for more efficient targeting of these limited and often declining financial resources in future.

Therefore, in the last decade Nigeria has metamorphosed from the level of Billions in naira to trillions in naira on the expenditure side of the budget. The effects of this expenditure are largely unnoticeable on the citizenry (Muretola, 2011).

Although, this problem of cross-sectional analysis appears to have been addressed by the study conducted on budget and public expenditure across Nigerian states by Eboh, Amakom and Oduh (2014) its greatest pitfall lies with the fact that it concentrated on selected states of Nigeria and again appear to be more of a study on expenditure/revenue sources that the effect of public expenditure on economic growth. Hence Eboh, Amakom et al (2014) have this to say: However, the functional distribution of capital budget estimates is generally aligned to economic and social services, it is not clear how and to what extent public spending leads to concrete effective results in human, social and economic growth. Additional research is needed to find out whether and:

how budgets and public spending have translated to public goods and services and the extent to which they impact upon the investment climate in the states. It will suffice therefore, that this observation by Eboh et al (2014), is not only limited to the relationship between public expenditure and economic growth in Nigeria, but has actually ascended a general out-look just as Tullock (1989) and Kweka and Morrissey re-echo.

Empirically, while a positive and significant relationship between government spending and economy growth have been established, there are much significant negative or no relationship between an increase in government expenditure and economic growth. That is; the actual relationship between public spending and growth is far from being understood and therefore call for more empirical research. Following these mixed finding, the study is to find out what effect federal government capital expenditure has on economic growth over the period under review.

1.3 The Research Questions

Following the problem discussed above, we consider the following research questions relevant for the study.

i. How Federal Government Capital Expenditure on Administration have an effect on Economic growth in Nigeria?

ii. How Federal Government Capital Expenditure on Economic service have an effect on Economic growth in Nigeria?

iii. How Federal Government Capital Expenditure on Social Community service have an effect on Economic growth in Nigeria?

iv. How Federal Government Capital Expenditure on Transfers have an effect on Economic growth in Nigeria?

1.4 Objectives of the Study

The general objective of this study is to determine the effect of Federal Government capital expenditure on the Economic growth in Nigeria.

The specific objectives are to:

i. Determine the effect of Federal Government Capital Expenditure in Administration on the Economic growth in Nigeria.

ii. Determine the effect of Federal Government Capital Expenditure in Economic service on the Economic growth in Nigeria.

iii. Determine the effect of Federal Government Capital Expenditure in Social Community service on the Economic growth in Nigeria.

iv. Determine the effect of Federal Government Capital Expenditure in Transfers on the Economic growth in Nigeria.

1.5 Statement of Hypotheses

The hypotheses formulated from the research questions in order to adequately evaluate the effect of capital expenditure on the economic growth in Nigeria are stated in the null hypotheses as follows;

Ho_1: Federal Government Capital Expenditure on Administration (CEAD) has no effect on the Gross Domestic Product (GDP) of Nigeria.

Ho_2: Federal Government Capital Expenditure on Economic service (CEES) has no effect on the Gross Domestic Product (GDP) of Nigeria.

Ho_3: Federal Government Capital Expenditure on Social Community (CESC) has no effect on the Gross Domestic Product (GDP) of Nigeria.

Ho_4: Federal Government Capital Expenditure on Transfers (CETR) has no effect on the Gross Domestic Product (GDP) of Nigeria.

1.6 Scope of the Study

This study principally examines the effect of federal government capital expenditure component on the economic growth in Nigeria. It covers data under capital expenditure components which are administration, economic service, social community service and transfer while the Gross Domestic Product (GDP) under the economic growth of Nigeria. It covers a period of thirty years (1985-2014). These indicators are identified as capital expenditure undertaken by the Federal Government.

1.7 Significance of the study

The flurry of discussions generated by the effect of capital expenditure on Nigerian economic growth has continued to soar high. Such capital expenditure effect on economic growth remains a highly contentious debate. In fact, scholars have continued to claim varying implications for different economies, all depending on the analytical tool in use as well as region and mode of capital expenditure classification. All these, have yielded no concrete result for any country specific policy formulation. On this strength therefore, this study on Nigeria was useful in a number of ways to policy makers. One, for the first time, the study was able to identify the variables that constitute federal capital expenditure and their effect on Nigerian economic growth. Given the fact that no two countries are structurally the same, any foray into specific country problem, will no doubt be far more informative to all and policy makers in particular than cross-section studies. Secondly, the study presents a sound premise for policy making. This is particularly so because, the findings no doubt, arise from sound empirical evidence from Nigerian experience.

The study equally stands to provoke more interest in the areas of capital expenditure and economic growth. Thus, researchers and other knowledge-seekers are here presented fertile ground for broadening their knowledge. It is expected that this study consolidated existing literature on the issues

surrounding the relationship between capital expenditure and Nigerian economic growth.

1.8 Limitations of the Study

Experience has shown that studies of this nature pose some teething problems. These range from data sourcing problems, time to adequate funding.

i. **Inadequate information**: The difficulty with gathering the necessary data for the study is better appreciated than imagined. As such, many visits to the internet and other places of interest like the Central Bank of Nigeria (CBN), National Bureau for Statistics (NBS), as well as the numerous discussions demands on the part of any researcher.

ii. **Finance**: Inadequate financing of the numerous efforts in data generation, especially during internet sourcing of materials is a major source of concern. However, the researcher uses the best that is available.

1.9 Definition of Terms

Public expenditure (PE): Public expenditure is the spending of public income by government to provide social, political and economic infrastructures that will grow and provide higher standard of living for its citizens.

Recurrent expenditure (RE): Recurrent expenditure is the outlays that are

necessary to maintain existing levels of government services.

Capital expenditure (CE): Capital expenditure is the expenditure created to accommodate resources meant for the accusation of capital assets and facilities of long term nature.

Economic growth: This is the percentage rate of increase in gross domestic product. It captures the change in value of goods and services produce in a given economy for a specific period of time. It will be calculated as a percentage rate of change of the GDP

Capital Expenditure on Administration: it is the total outlays budgeted annually for fixed assets and other major expenditure in the administration of the economy channeled on General Administration, Defence, Internal security and National Assembly.

Capital Expenditure on Economic Service: it is capital expenditure that deals with procurement or purchases of fixed assets and other infrastructures in the Agricultural sector, Construction sector, Transportation and Communication sector. Capital expenditure through this service is channeled to other economic services.

Capital Expenditure on Social Community Service: it is the total capital expenditure estimated on Education sector, Health sector and other social community service. It is used in the purchase of infrastructural

equipments into these sectors for their services.

Capital Expenditure on Transfers: it is the federal government capital expenditure on managing debts services. The capital expenditure is distributed to public debt servicing, pension and gratuities, contingencies or subventions.

1.10 Organization of the Study

This study is organized into five chapters. In chapter one, the study looked at the background of the study, statement of the problem, research questions, objective of the study. It also contain, research hypothesis, scope of the study, significance of the study, limitation of the study, and definition of terms and summary. Chapter two of this study contains literature Review, the Theoretical, Empirical Review, and a summary of the literature. In chapter three it follows introduction, research design, method of data collection, and the methodology employed to study the model of the effect of government expenditure on gross domestic product (GDP) growth by estimating a GDP function to show the impact of various public expenditure of the economic to GDP growth in percentage. In chapter four it dwell on data presentation and statistical analysis of data and discussion of result thereof, while chapter five summarize and conclude the study and proffers recommendation respectively.

1.11 Summary

This chapter presents an overview into the understanding of this research study. It is organize into the following major headings, background of the study, statement of the problem, objective of the study. It also contains research question, research hypothesis, scope of the study, significance of the study, limitation of the study, and definition of terms

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Every economy is expected to perform public expenditure in providing those infrastructures that are financially convenient for individuals and private sectors to embark for the citizens of its economy consumption or utilization. It is in this chapter that the concept of public expenditure which are divided into two viz; capital expenditure and recurrent expenditure of which the federal and state government of any economy perform such form of expenditure annually. The context of this chapter covered conceptual, theoretical and empirical review on the Nigerian federal capital expenditure on the growth of its economy.

2.1 Conceptual Review

2.1.1 Historical Perspective

Historically, the work of Adam Smith (Wealth of Nations, written 1776) stated four justifiable reasons for government allocation activities and they are;

a. The duty of protecting the society from violence and invasion by other independent societies-national defense.
b. The duty of protecting every member of society from the injustice or oppression of every other member of the society – the obligation of

establishing an administration of justice which provides law and order within the society, so that the market economy may function.

c. The duty of establishing and maintaining highly beneficial public institutions and public works which are of such a nature that the profit they could earn would never repay the expense to any individual or small number of individuals to provide them. Therefore, funds for their provision may never be adequate.

d. The duty of meeting the expenses necessary for support of the sovereign which vary depending on the political structure (Smith 1913).

It would, therefore, be seen that even though Adam Smith has been seen as an apostle of minimal governmental activity, he never support outright ban of public sector activities.

In the history of Nigerian public expenditure, the federal government over the years has its statutory responsibilities to provide infrastructures, securities, welfare and job creation to its citizens. The provision of these expenditures has posed some relevance between the military and democratic era.

Nurudeen and Usman (2010) asserted that, in Nigeria, federal government expenditure has continued to rise due to the huge receipts from production and sales of crude oil, and the increased demand for public (utilities) goods like roads, communication, power, education and health. Besides, there is

increasing need to provide both internal and external security for the people and the nation. Available statistics show that total government expenditure (capital and recurrent) and its components have continued to rise in the last three decades. For instance, federal government total recurrent expenditure increased from ₦7.58 Billion in 1985 to ₦36.22 Billion in 1990 and further to ₦127.63 Billion in 1995. It grew to ₦461.60 Billion, ₦3,109.44 Trillion and ₦2,530.34 Trillion in 2000, 2010 and 2014, respectively (see appendix 1). In the same manner, composition of government recurrent expenditure shows that expenditure on defense, internal security, education, health, agriculture, construction, and transport and communication increased during the period under review (see appendix 1). Moreover, federal government capital expenditure rose from ₦ 5.46 Billion in 1985 to ₦24.05 Billion in 1990 and further to ₦121.14Billion in 1995. The value of capital expenditure stood at ₦239.45 Billion, ₦883.87 Billion and ₦957.30 Billion in 2000, 2010 and 2014, respectively (see appendix 2). Furthermore, the various components of capital expenditure (that is, defense, agriculture, transport and communication, education and health) also show a rising trend between 1985 and 2014 (see appendix 2).

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 US$1 per day. Couple with this, is dilapidated infrastructure (especially roads and power supply) that has led to the collapse of many industries, including high level of unemployment. Moreover, macroeconomic indicators like balance of payments, import obligations, inflation rate, exchange rate, and national savings reveal that Nigeria has not fared well in the last sixteen (16) years.

2.1.2 Public Expenditure

This is the spending of public income by government to provide social, political and economic infrastructures that will grow and provide higher standard of living for its citizens.

Osiegbu, Onuorah and Nnamdi (2010) posited that public expenditure is an offshoot of the inevitable loophole that is inherent in either of political systems (capitalism and communism) that is practice all over the world. A communist state makes public expenditure mandatory as the public sector commands all the productive resources available in such a country.

Public expenditure in Nigeria is more often necessitated by the failure of capitalist system to harmonized and bridge the gap between the rich and the poor. The extreme competitive nature of the market system results in

externalities that without the presence of the public sector may result to chaos and disorder. Furthermore, public should fill vacuum if the society must continue to grow.

The public sector is needed to provide social, formidable political and legal structure to ensure good behaviour. The federal government should provide economic infrastructure for sustainable growth, ensure good health and better education facilities and above all; to provide employment and security for its citizen.

All these requires huge amount of capital and human resources that cannot be provided by individuals or corporate bodies alone in a market system where selfish interest reigns supreme.

2.1.3 Public Expenditure And Economic Growth

Governments all over the world are statutorily saddled with the responsibility of providing the enabling environment for a private sector led economic growth. But the case of Africa is quite different, as one of the critical Indices of under-development has remained a very weak private sector. This has led to the unfortunate situation where the government has remained the major financier of the economy.

Economic growth of a country is a process by which country advances from one economic condition to a higher and more prolonged one that is also more desirable and sustainable one. This high condition is characterized by both quantitative and qualitative increase in the availability of goods and services, aimed at increasing the living standard of the people.

On the other hand government expenditure can be seen as the expenses, which the government incurs for its own maintenance, for the benefit of the society, the economy, external bodies and for other countries. It is simply government spending from revenues derived from taxes, exports, grants, aids and other sources. Anyafo (1996), in a more elaborate form defined government (public) expenditure to consist of the following.

a) Expenditure incurred either directly or in forms of subsidies on the provision of goods and services by government ministries and departments.
b) All transfer payments by government ministries and departments on cost centers that do not attract my corresponding transfer of real resources and;
c) Capital expenditures by government parastatals.

In most countries of Africa, the compelling need for increased growth has led to ever increasing government spending, which most a times out-strips real and/or potential revenues. This has created public expenditure trends that look expansionary (deficit spending). However, the extent to which this expansionary expenditure profile of government has translated into real socio-economic development has remained an unresolved issue in most countries. In Nigeria, for instance, the country's expenditure budget has increased from N38.766 billion in 1991 to N101.201 billion in 1992 (161% increase), to N155.2 billion in 1995 (53% increase), to N 1,302.6 billion in 2004 (739%). From the above, the expenditure profile of the country increased by over 3260%, from its size of N38.766 billion in 1991 to N1, 302.6 billion in 2004.

Despite this phenomenal growth in public expenditure, Adimmadu (2013) is identified the following economic problems that need to be challenged in order to evolve an economic order. These include:

a) Unemployment
b) Low Industrial capacity performance

c) Heavy stuck of finished goods

d) Heavy Import Intensity

e) Growing unstable price level

f) Debt over-hang and

g) The naira depreciation and an exchange rate policy that places a non-convertible local currency like the naira at a disadvantage.

2.1.4 CAPITAL EXPENDITURE AND EFFICIENT PROVISION OF PUBLIC GOODS

Musgrave and Musgrave (2006) have tried to examine what constitutes public goods or even private goods. Accordingly, there are pure public goods and impure public goods. Pure public goods possess both attributes of non-rivalry and non excludability, meaning that once the good is provided, the additional resource cost of another person consuming the good is zero. Also, the consumption of a good is no excludable when it is either very expensive or impossible to prevent anyone from consuming the good if they are not willing to pay for it (Rosen, 2008). By the same token, while impure public good can be collectively

consumed, its consumption at the same time is contingence upon payment. For pure private good however, its consumption is both excludable and contingent upon payment while still upholding the rivalry clause.

Every economy has virtually witnessed the scarcity of resources in the face of mounting economic problems. These economic problems include being able to determine if the country's resources are actually fully utilized for achievement of full employment. There is equally then, problem of finding out the type of commodities to produce and in what quantity, what method of production to adopt, just as it is again necessary to determine whether the country is recording the desired level of economic growth. The basic issues different governments desiring to achieve considerable levels of economic welfare for their citizenry therefore can be categorized into three, viz-a-viz, the allocation, and distribution and stabilization problems. While, the allocation function refers to assignment of roles between public and private sectors, the distribution function, however focuses on the need to share incomes and resource to promote national unity and equity. The federal government again is engaged in the

stabilization function when it ensures social, economic and monetary stability (Jimoh, 2013).

However, Akujuobi (2010) has noted that though for efficiency, the private sector seems to be better positioned to carry out the above states functions, through the market mechanism, the presence of public still looms large even in the most democratic of all nations, the reason for this range from historical to economic considerations. Therefore, it is expected that capital expenditure undertaken by the federal government must provide the necessary infrastructure which cannot be undertaken by corporate bodies, so as to create public goods satisfaction, securities and low cost of production for corporate bodies.

2.1.5 THE PROBLEM OF INADEQUATE ECONOMIC GROWTH

In addition to the fact that pure market economy fails to assure full employment without inflation, there is no evidence that it will automatically tend to achieve a satisfactory rate of economic growth. The forces that achieve economic growth require a significant dose of both economic and non-economic variables.

Quantitative expansion of productive resources, particularly capital, and qualitative improvement of resources are essential for the maintenance of a satisfactory and sustainable growth rate. In addition, political stability, especially in developing economies like Nigeria, plays a big role in economic growth. The role of investment need not be over-emphasized as it not only continues its short-run function of utilizing the savings generated at full-employment equilibrium in the economy, but it also involves the long-run problem of absorbing the incremental output resulting from net additions to the nation's capital stock. As a matter of fact, if the economy is to grow steadily, it must have a continually rising level of production capacity and this does not come automatically. In line with this, Fischer (1993) finds that a stable macroeconomic environment is conducive to sustained growth. He has evidence that high inflation, large budget deficits and exchange rate mismanagement impede growth and, therefore should not be left unattended to. Also, while studying Argentina, Carallo and Mondino (1996) stated that among other things, macro-economic instability contributed to slow economic growth in the country, especially in its earlier period of economic life.

The problem of inadequate economic growth in Nigeria is borne down to the inability of the federal government capital expenditure due process and implementation of most capital expenditure project such as inability for provision of constant power supply to enable corporate bodies provide affordable goods and services, road construction to enable convenient transportations, employment to multiply tax revenue services which aggregate towards the growth of the economy.

2.1.6 CAPITAL EXPENDITURE AS A FISCAL POLICY INSTRUMENT FOR ECONOMY STABILIZATION IN NIGERIA

Fiscal policy instruments may be grouped into two-the automatic fiscal stabilizers and the discretional fiscal stabilizers. While the automatic fiscal stabilizers are built into the budgetary structure as automatic responses of a counter-cyclical nature, discretional fiscal stabilizers consist of adhoc discretionary policy strategies directed towards a current, aggregate, malfunction in the economy. In Nigeria, personal income tax and corporation income tax are the primary automatic fiscal stabilizers. Each of them

automatically responds in a counter-cyclical manner to undesirable changes in aggregate economic performance, shown by changes in national income. For example, when the tax revenue paid out of the private sector increases more rapidly than national income, the tax income becomes greater at higher incomes levels. As a result, private sector purchasing power reduces when full employment and a possible threat of inflation are approached. On the other hand, Herber (1979) observes that when national income declines in a recession, tax revenue declines more rapidly than the decline in national income. The resultant net increase in private sector purchasing power would tend to provide a 'cushion" for the cyclical downturn of the economy.

The discretional fiscal stabilizers on the other hand are measures taken against certain economic events which are not desired at any particular time or period of time. It would be observed that such events have already taken place the discretional fiscal measures are like drugs applied to solve the problems, after adequate .diagnosis of the actual problems have been made. The instruments of fiscal policy whether automatic or discretional, are

implemented through budgetary procedures of taxation and expenditure.

In Nigeria such adhoc policies or discretional measures involve changes in tax rates or tax bases, adoption or deletion of a tax and deliberate changes in government spending. They are rationally directed toward the improvement of the aggregate performance of the economy in terms of such important objectives as full employment and price stability.

The federal government and its economic agencies have failed to realize the efficiency of capital expenditure as a fiscal policy instrument in stabilizing the economy. The employment of more capital expenditure on projects will stimulate businesses, market activities and government activities which will generate revenue for the federal government in executing more capital project. The challenges facing the federal government fiscal policies decision is the avocation of more budgeted funds into recurrent expenditure while the capital expenditure budget suffers lack of finances.

2.1.7 CAPITAL EXPENDITURE

Capital expenditure are budgeted expenses incurred by the government of any economy to ensure the certainty of projects execution which are of economic benefit to the government, citizens and economy of the country. The federal government capital expenditure over time has covered major infrastructures in the economic which includes; construction and rehabilitation of federal roads, fixed assets for the administration of the federal government running of its activities, agriculture equipments, power supply, industrialization for economic services, building of hospitals, schools and social amenities for social community services, payment of debts owed locally and internationally by the government to liquidate its debts obligations as transfers. All these expenditures are categorized as major expenditure which only the federal governments will solely take responsibility in ensuring that these facilities and services are being provided for the growth of its economy.

Osiegbu et al (2010) posited that the federal government capital expenditure is another means of stimulating the economic growth of Nigeria by means of its fiscal policies consideration. When the federal government seems to boost the economy activities, it

executes projects through the approved budgeted funds meant for its capital expenditure for that year. In other words, it is termed the “federal government capital expenditure fiscal year policy”; since it is possesses the characteristics and role of fiscal policy towards the growth of an economy then federal government capital expenditure should be a fundamental element of economic variables which could characterize the well being of productivity within the Nigerian economy.

2.1.8 CAPITAL EXPENDITURE GROWTH

Capital expenditure growth is the rising expenditure undertaking by the federal government on capital projects for the production of economic growth in a country. An increasing capital expenditure is expected to contribute to growing Gross Domestic Product Growth Rate (GDPGR).

Osiegbu, Onuorha et al (2010) asserted that total federal government capital expenditure rose from ₦5.46 Billion or 4.06% of GDP in 1985 to ₦121.14 Billion or 4.17% of GDP in 1995 and rose higher to ₦519.47 Billion or 3.56% in 2005. It rose higher from ₦519.47 Billion or 3.56% in 2005 to ₦957.30 Billion or 11.08% in 2014. This trend was largely explained by the pattern

of federal government capital expenditure on economic service sector in general but specifically, the increase largely accounted for the outlay on transfer payments, administration and economic service but there was a decline in the social and community service in 2009 (seen appendix 2).

A functional breakdown of federal government capital expenditure showed that outlay on transfer payments rose by 2.21% in 2005 to 4.76% in 2006 then fell down to 3.03% in 2007 and a further drop to 1.80% in 2008 explaining low rate of debt borrowings to the Nigerian economy. This transfer payments rose in 2009 by 18.23% with a difference of 16.43% which was as a result of federal government capital expenditure on dredging of River Niger, construction of the East-West road, massive importation of fertilizer products. The transfer payments dropped again to 6.75% in 2010 as a result of change in governance in the federal government system while in 2011 and 2012, it rose to 22.59% and 30.39% respectively due to the high level of insecurity in the North-East part of Nigeria. But in 2013 and 2014, the transfer payments declined negatively to -2.29% and -4.41% respectively

which explains that the federal government did participate fully in the capital expenditure implementation in the Nigerian economy.

2.1.8.1 IMPACT OF FEDERAL GOVERNMENT CAPITAL EXPENDITURE ON PRODUCTION

Federal Government capital expenditures are usually directed at enhancing production. In addition to doing this they also influence the pattern of production and composition of output. According to Anyafo (1996), when suitable capital expenditure programme is designed by government it also results in the diversion of resources from undesirable areas to more deserving ones.

2.1.8.2 IMPACT OF FEDERAL GOVERNMENT CAPITAL EXPENDITURE ON THE CIRCULAR FLOW OF INCOME

Federal Government capital expenditure helps to restore to the income circular flow monies taken away through tax. Part of federal government capital expenditure, according to Anyafo (1996) goes to individuals as transfer payment (pension and gratuities). As the recipients of this money spend, it goes back into

the income stream. When it goes to the income stream it is utilized to acquire factor inputs and other items needed by government. Again, the money paid out by government for factors of production also flows back into the income circular flow, without delays. On the other hand, the expenditure of government on goods by businesses was the resultant effect of enabling the firms to release money into the income circular flow through the acquisition of factor inputs. From the above therefore, government expenditure helps to restore the purchasing power to the level before the generation of revenue through tax given the equality of the tax revenue and government expenditure (balanced budget).

2.1.9 REASONS FOR INCREASING FEDERAL GOVERNMENT CAPITAL EXPENDITURE IN NIGERIA

The reasons for increasing government expenditure, especially in Nigeria are many and they include:

A. Inflation: Inflationary pressures have the tendency of adversely resulting in increased government

expenditures that reflect rise in the rice factors inputs and goods and services.

B. **Increase in National debt:** When there is an increase in national debt the Nigerian federal government resort to borrowing at increased cost of borrowing or repaying.

C. **Increase in Population:** The recent trend of increase in the population of Nigeria has the tendency of leading to an increased demand for all items which will make the federal government capital government to increase also.

D. **Provision of Infrastructure:** In Nigeria, the provision of infrastructural facilities is done at great expenditures. These infrastructures include road, dams, irrigation projects, communication networks, pipe borne water, electricity, etc; this will also lead to the federal government increasing its capital expenditure.

E. **Encouragement of Agricultural development:** The growing need to provide food to the Nigerian commercial commodity markets has led to federal government capital expenditure increase in investments in agriculture.

F. **Need for Industrial Growth:** There is great need for industrialization in Nigeria, thus leading to higher federal government capital expenditures in those key sectors that stimulate the economic growth of the country.

2.1.10 PROCEDURES FOR FEDERAL GOVERNMENT CAPITAL EXPENDITURES

The government in the ordinary course of its work incurs certain expenses for the provision of goods and services to the citizens. According to Lee and Johnson (1980), the government does not simply get money and spend it. The processes for the expenditure ways follow defined sequence, which has been standardized to have every procedural detail. The procedures generally depend on whether the expenditure is from current or capital budgets. The financial instructions (Regulations) and budget implementation guidelines, among other tools are specifically set out to formulate the procedures for federal government capital expenditure. The procedure for federal government capital expenditure includes (but not restricted to) the following:

Budget Preparation:

(i) Dispatch of call circulars to ministries and government departments

(ii) Constitution of budget committee by ministries and government departments.

(iii) Preparation of the draft budget, and its presentation and defence at the budget department (commission / bureau)

(iv) Presentation of the draft budget (by the president) to the legislature for approval, after some amendments, where necessary.

(v) Accenting of the approved budget by the President

B. Authorization of the Budget

A. Issuance of warrants for:

i. Statutory Expenditure and

ii. Appropriated Expenditure.

A. Payments, for both below the line and above the – line expenditure that are executed through appropriate payment vouchers.

B. Monitoring, of all payment to ensure compliance.

2.11 CONCEPTUAL FRAMEWORK

The physical size of a country, the size of the population, and its level of personal income per capita are important determinant of its economic potential and major factor differentiating from one developing economy to another economy. The question of whether or not capital expenditure stimulating economic growth has dominated theoretical and empirical debate for a long time. Some viewpoint believes that federal government involvement in economy activities is expected be a pro-growth, but some opposing view holds that federal government operations are inherently inefficient, bureaucratic and therefore cumbersome, rather than promotes growth in the economy, while some studies still are of the view that federal government capital expenditure is an indeterminate of economic growth (Ighodaro and Okiakhi; 2010).

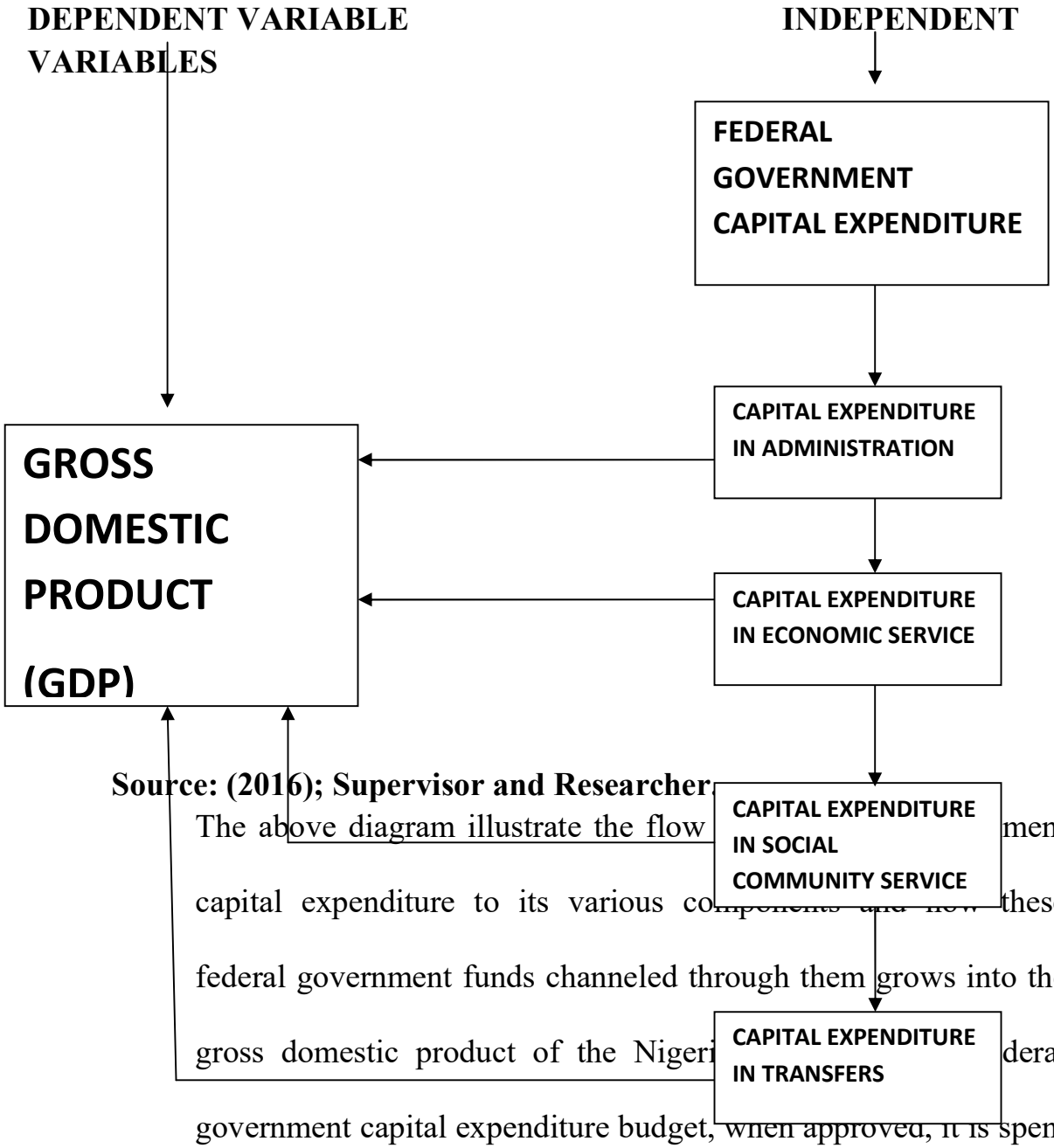
The concept of federal government expenditure on the economy is directed to the offering of capital expenditures on unaffordable

projects to stimulate public and private goods and services for its citizens' satisfaction.

Udoka and Ayingang (2015) posited that federal government capital expenditure components are categorized into administration, economic service, social community service and transfers which are fundamental in directing public funds into the major and minor sectors of the Nigerian economy.

The framework designed for the study as a guide for the model specification is derived from Oziengbe (2013);

THE FRAMEWORK OF THE FEDERAL GOVERNMENT CAPITAL EXPENDITURE TO THE NIGERIAN ECONOMIC GROWTH



Source: (2016); Supervisor and Researcher

The above diagram illustrate the flow ment capital expenditure to its various components and how these federal government funds channeled through them grows into the gross domestic product of the Nigeri deral government capital expenditure budget, when approved, it is spent on road construction, health, education, debt servicing, industry and commerce, agriculture etc through administration, economic service, social community service and transfers. It is through these

channels that these funds are executed into these sectors for production of public and private goods and services for the fulfillment of its citizens.

These components of federal government capital expenditures are explained as follows;

Administration: Federal government capital expenditure on administration are the amount spent to purchase long-term assets such as furniture, motor vehicles etc. In the government administration, ₦53.28 Billion was spent in 2000, increased to ₦137.77 Billion in 2004 and further increase in 2009 by ₦291.66 Billion. It had a 150% increase in 2014 when it amounted to ₦1,049.27 Trillion.

Economic Service: The services in agriculture and natural resources, mining, housing etc (see appendix 2) has shown that in 2000, the expenditure was ₦111.41 Billion, increased by 2.5% to ₦167.72 in 2004. The consistent supply of capital expenditure budget led to a 10.6% increase of ₦506.01Billion and decreased in 2014 to ₦181.83 Billion which identified the inconsistent supply of funds to these sectors.

Social and Community Service: The federal government capital expenditure was ₦27.97 Billion in 2000, it increased to ₦30.03 Billion and had a 103% increase in 2009 which amounted to ₦144.93 Billion. It was consistent in its allocation to the amount of ₦615.34 in 2014 providing sufficient funds to education and health sector.

Transfer: The federal government capital expenditure in transfer for 2000 was ₦46.70 Billion. It saw a decrease in the capital expenditure for transfer in 2004 amounting to ₦15.73 Billion which was a result of "debt forgiveness" by the International Monetary Fund (IMF) and World Bank. It rose drastically in 2009 to ₦210.20 Billion as a result of capital infrastructure actualized by the federal government through external financing. In 2014, the amount increased more by 110% (₦834.62 Billion) which was as a result of the federal government capital expenditure channeled into security and welfare of the economy.

Gross Domestic Product (GDP): It is viewed as one of the primary indicator used to gauge the health of a country economy. It represents the total dollar value of all goods and services produced over a specific period of time. It can be seen as the size

of any economy. Usually, it is expressed as comparism to the previous quarter or year for example; if the year to year Gross Domestic Product (GDP) is up to three percent, it means the economy has grown by three percent over the last year. The measurement of GDP is complicated (which is the reason why it is done by the economist) but, in most basic ways, the calculation can be done in one or two methods either by adding up what every individuals earn in the year (Income approach), or by adding up what every individual in a country spends (Expenditure approach). Logically, both approaches are expected to give the same results.

2.2 THEORETICAL REVIEW

A good number of theories have evolved on public expenditure in an effort find predictable, long-term and functional relationship between the relative growth in the public sector and the causative factors. Some of theories are the Wagner's hypothesis (law of increasing government activity) and Wiseman - Peacock hypothesis. According to Anyanwu (1996), they are positive "theories" of public expenditure. Others are the Critical-Limit hypothesis, and the Leviathan Hypothesis etc.

2.2.1 Wagner's Theory

The proponent of the hypothesis, Adolph Wagner was a famous German Political Economist. His work was focused on the inherent tendency of the activities of the various layers of government to increase, intensively and extensively, thus establishing a functional, and cause – and – effect relationship between economic growth and the growth of government activities, with the later growing faster. According to him government, at all times, and in all circumstances, show strong perchance at increasing public expenditure. Therefore, in his opinion social progress constitutes the primary cause of the relative growth in industrializing economies. In an effort to validate this he drew distinction in certain forms of government activities such as:

a. Law and order and,
b. Participation in the material production of economic goods and social products.

He rationalized that government increased expenditure by the compelling need for government to provide certain economic goods requiring large fixed investment outlays which cannot be

provided by private firms on profitable basis. He also identified the provision of subsidies and other welfare measures, and the pressure on these amenities as a result of increasing population, urbanization, rising cost of servicing debt and debt repayments as major stimuli to increased government expenditures. The hypothesis though provides a convenient framework for discussion and further research suffers the following shortcomings:

a. The hypothesis lacks the comprehensive analytical framework to deal with such inter disciplinary phenomena of government expenditure and economic growth.
b. The basis of the hypothesis – organic self – determining theory of the state has lost relevance in most Western nations, thus making its universality of application difficult.
c. The theory did not appreciate the huge influence of war situation in government expenditure. Its focus on long term trend of public economic activity .an tends to

ignore the time pattern or process of government expenditure growth which are very significant.

2.2.2 Wiseman – Peacock Theory

The authors of this hypothesis, Jack Wiseman and Allan Peacock focused their work on the U.K economy. The hypothesis propounded that government expenditure's mode of increment is not smooth and continuous, but appears in jerks and steps, just like fashion. According to them the fiscal activities of the government rise step by step to successive new plateau. When there is depression or other social disorder such as wars the existing public revenue cannot meet the expenditure. From this, therefore, the non-availability of sufficient revenue constrains the expansion of expenditure.

With the presence of forces that increase the expenditure the older level of expenditure and taxation (Revenue) a "displacement effect" is created. It is therefore evident that war and other social disturbances compel the government to review upwards to its revenue position in order to accommodate the increased expenditure. As the people accept to pay new tax (tax tolerance) both the level of revenue and expenditure will rise thereby

producing a new stability, which may be displaced with another disturbance occurrences.

Note should be taken that since the disturbance that precipitin the new increased taxation (revenue) and central government expenditure affect the central government there is an inherent tendency for the central economic activity to grow faster than that of the state and local governments.

2.2.3 The Critical-Limit Theory

The critical-limit hypothesis, credited to Collin Clark (1943), persist that once public expenditure exceeds 25 percent of the total economic activity of any country, inflation should be expected to set in, especially when the country in question operates under a balanced budget. According to the improvement of this hypothesis, the 25 percent is referred as the critical limit and it is therefore, the limit which government activities will exceed to trigger off such incentives as high tax burden etc which ultimately give rise to low level of productivity. The net effect is that even with balanced budget, there would still be a general inflation in the economy that give rise to other related price distortions.

2.2.4 The Leviathan Theory

In the leviathan hypothesis, as propounded by Brennan and Buchanan (1980), government is seen to be caught in the web of interplay with constitutional limitations and striving to maximize government revenue. While the government tries to impose taxes of varying degree and forms, there is however, a constitutional constraint such as the limitations arising from constitutional provision regarding decentralization of both spending and taxing powers between regions that make up the government. According to Aigbokhan (2005), this power of the government into impose and collect taxes seems to be checked b' decentralization of government and by extension, its functions, which all are hampered by the ability and willingness of the tax payers to respond positively. Invariably, one major tenet of this hypothesis is that public expenditure bears a close relationship with fiscal federalism. Thus, it suffices to say therefore, that with intergovernmental transfers public expenditure is enhanced.

2.2.5 Stagflation Theory

Bernice 1930s economic theory generally believed that forces inherent in a market economy or what later came to be known as "invisible hand" would automatically direct it toward a "full

employment equilibrium". However, the pioneering work of Keynes (1936) proves that market economies do not automatically attain an optimal full-employment non-inflationary, aggregate economic equilibrium. Although Keynes agreed that such equilibrium may be possible, more likely situations would be two "sub-optimal equilibriums", with deflationary gap or inflationary gap conditions. It is well known that, given substantial market structural imperfections; there exists market inability to simultaneously attain the objectives of both full employment and price stability. The greater the degree to which one goal is achieved, the lesser the degree to which other would be attained. This situation further helps in the resultant condition of stagflation-the co-existence of both recession and inflation (Musgrave and Musgrave 1982). The state therefore intervenes with policies capable of swaying the situation to what is desired during particular period.

2.3 EMPIRICAL REVIEW

On empirical grounds, there are mixed findings on the impact of government expenditure on growth. Several empirical studies are

country-specific using time series data across several years. Some of these studies are cross-country utilizing panel or cross sectional data. Chih-Hung Liu, Hsu and Younis. (2008) investigated the causal relationship between GDP and public expenditures for US federal government covering the time series data 1974-2002, they found in this study that total expenditures does cause the growth of GDP, which is consistent with the Keynesian theory. However, the growth of GDP does not cause the increase in total public expenditure which is inconsistent with Wagner's law. Mwafaq (2011) investigates the impact of public expenditures on economic growth using a time series data on Jordan for the period 1990-2006 and found that the government expenditure at the aggregate level has positive impact on the growth of GDP which is attuned with the Keynesian's theory. The review of the relationship between fiscal policy and economic growth in three North African countries of Egypt, Morocco and Tunisia by Mansouri (2008) shows positive correlation between the two variables and that 1 percentage rise in public expenditure the real GDP by 1.26 percent in Morocco, 1.15 percent in Tunisia and 0.56 percent in Egypt.

The results also affirmed existence of long-run relationships for all the three countries.

There was a study of about thirty developing countries in 1960 and 1970 by Bose, Haque and Osborn. (2007) focused on sectoral expenditures. Their results of the research which employed the Seemingly Unrelated Regression technique (SURE) reported that the share of government capital expenditure in GDP is positively and significantly correlated with economic growth. Koeda and Kramarenko (2008) evaluated the swift scaling-up of expenditure followed by a quick scaling-down of Azerbaijan government expenditure due to upsurge in the crude oil production. The research which relied on the neoclassical growth model suggests that the sharp variations in the fiscal policy pose significant threat to sustainable growth. The empirical results of similar study of Iran by Khosravi and Karimi (2010) based on autoregressive distributed approach to co-integration between 1960 and 2006 indicated the existence of long-run relationship between economic growth, monetary policy and fiscal policy.

Muritala and Taiwo (2011) examined the trends and effects of government spending on the growth rates of real GDP in Nigeria

between 1970 and 2008 using Ordinary Least Square (OLS) technique. The findings show that there that there is a positive relationship between real GDP as against the recurrent and capital expenditure. In addition, Thirty-two (32) years' time series data from 1977 to 2008 was reviewed by Nurudeen and Usman (2010) in analyzing the impact of government expenditure on economic growth in Nigeria. The study revealed that government total capital expenditure has negative effect on economic growth. Comparing the relative effectiveness of fiscal versus monetary policies on economic growth in Nigeria, Adefeso and Mobolaji (2010) suggest that the effect of monetary policy is dominant than fiscal policy on economic growth in Nigeria. This result was arrived at having utilized annual time series data during the year 1970 to 2007 and considering GDP, broad money (M2), Government expenditures (G.E) and degree of openness (DOP) as key parameters and error correction and co-integration framework. Ighodaro and Okiakhi (2010) examine government expenditure which was disaggregated into general administration, and community and social services in Nigeria using time series data for 46 years ending 2007 and applying the Granger causality test.

The results showed that government expenditure has negative impact of on economic growth.

According to Baro (1990), government spending on investment and productive activities should add positively to economic growth just as such expenditure on consumption goods are considered as agents of negative economic growth. The resolution of which expenditure should be labeled as an investment or consumption expenditure appears to lie with Lin's (1994) assertion that the positive effectives of public expenditure are actually felt when government expenditure is on the provision of public goods and iri1rast infrastructure, social services and targeted intervention covering such areas as export subsidies and so on perhaps, it must have been in line with this reasoning that the Nigerian government favours the categorization of is public expenditure on administration, public expenditure on economic services, public expenditure on social rand community services and public expenditure on transfers, with each of these sectors having some sup-heads (CBN, 2005).

In fact, Lindeauer and Valenchik (1992) have noted that the relationship between government spending and economic growth

should be of importance to the developing countries, particularly because of their over-bloated public expenditure profile and the associated rising deficits. These countries, Lindeauer and Valenchik (1992) further amplified, lack the ability to generate sufficient revenue necessary to support higher levels of expenditure.

However, at the local scene in Nigeria not much appears to have been done in the area of public expenditure. For instance, notable works include the studies of Aigbokham, Imahe and Ailemen (2015) on Education expenditure and Human Capital Development in Nigeria: Any correlation so far?" Ofururn (2015) on the impact of public expenditure on economic growth; a comparative analysis of selected countries (1970- 2002), Adebiyi (2015) on Public Expenditure and Human Capital in Nigeria: An Autoregressive Model" and the study coordinated by Eboh, Amakom and Oduh (2012) on "Budget and Public Expenditure across Nigerian States."

According to this study on Aigbokham, Imahe, et al (2015), there is a correlation between education and economic development. One of the conclusions of this study is that insufficient and

uncertain budgetary allocations to education have no doubt, resulted in the deterioration of its impact on human capital development. Some of the major findings are as follows: -

1. That severe financial and economic constraints affected all levels of education and their capacities to provide services and also the capacities of the students and their families to finance formal education studies;
2. That the shortfalls in manpower supply in the targeted sector-technology teachers, university academic staff, and the inadequate existing avenues for training technology teachers in Nigeria are all frontiers to the fact that education sub-sector has failed in its role in human capital development in Nigeria. The general conclusion from this study by Aigbokhan, et al (2015) is "that the investment expenditure on education did not demonstrate a positive effect on the overall human capital development in Niger. The overwhelming nature of human capital development vis-à-vis the technology

> implications and the socio-economic threats of globalization trends should constitute enough reasons for any nation especially the developing one to feel concerned about the future survival of education"

Accordingly, this report recommends higher and fixed percentages of annual budgetary allocations to be devoted to education while ensuring that such allocations are monitored, disbursements and timely utilization of Educational Trust Funds (ETF) in education sub-sector. Also, the study further recommends the sourcing of both the internal and external education funds as antidotes.

Contributing, Adebiyi (2015) while exploring the impact of public expenditure on human capital in Nigeria, considered government spending on both education and health. The conclusion of this study is that debt service obligations determine human capital expenditure such as education. This study further reports that while public expenditure such as defense spending and debt service obligation shocks in Nigeria appear to reduce health expenditure in the short-rum significantly, nonetheless, they increase education expenditure in the same period.

In fact, this study by Adebiyi (2015) like that of Aigbokhan, et al (2005) was equally notably silent on the education and human capital development to economic development such a study, no doubt, is expected to inform policy makers of the nature of funding to the education and human capital development vis-à-vis the level of expected returns in economic development of Nigeria.

2.3.1 RESEARCH GAP

Perhaps, in swift response to the seeming shortfalls of these two fast studies on capital expenditure in Nigeria, Ofurum (2015) tried to investigate the impact of capital expenditure on economic growth by comparing developed and developing countries. Fan and Rao (2013) assert that the importance of analyzing the relative contributions of various expenditures to production growth and poverty reduction as a basis for information financial resources.

Perhaps, again the greatest pitfall of this study by Ofurum (2015) is the adoption of a cross-sectional approach in preference to a country – specific study. In fact, this approach has been queried by

Kweka and Morissey (2010) and Asiedu (2005). Accordingly these scholar, cast aspersions at the most fundamental basis of cross-sectional studies – the assumption that coefficients are the same for all countries in the sample. Admittedly, no two countries are structurally the same hence Jing credence to the fact that while some factors may be key players in some countries, in some other ones they may be passive or even not there at all.

For instance, a more recent study by Ofurum (2015) equally fell short of recitation. This study by Ofurum (2015) sought to ascertain public expenditure determinants in both developed and developing economies. Of the major high points of this study is that it tried to determine whether these variables that explain public expenditure exert the same level of impact on economic growth among the countries and regions. However, our worry is that there exist differences that may render such variable efforts futile. In this premise therefore, the obvious flaw of past studies (local and international) is that they focused on the impact of total or aggregate expenditure on overall GDP growth.

Though econometric techniques appear to exist in addressing this problem, the fact remains that such techniques are not perfect and

often fail to address specific country's economic problem (Kweka and Morrissey; 2010). It is therefore not surprising that past studies have all reported inconsistent results. This study therefore is an attempt to answer this clarion call and hence fill this yawning gap on the effect of federal government capital expenditure component on Nigerian's economic growth.

2.4 SUMMARY

This chapter discussed studies that were related to public expenditures, capital expenditures and economic growth. The historical perspective reviewed the Nigerian federal government public expenditure since inception and how it has affected the growth of Nigerian economy, the concepts related to capital expenditures components which were administration, economic

services, social community services and transfers and how much the federal government has channeled to the sectors of the economy through these four components. The conceptual framework explained how federal government capital expenditures is channeled towards the economic growth in Nigeria. The stagflation theory was reviewed also with other theories to give a guide on the existing relationship between federal government capital expenditure and the GDP of the Nigerian economy.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter deals with the methods and procedure adopted in data collection and analysis. The chapter is presented under the following heading; research design, sampling procedures and sample size, determination of data collection method, operational measurement of variables and data analysis techniques. However, the basic objective of the methodology employed in this study is to answer the research questions stated and hypotheses postulated.

3.2 RESEARCH DESIGN

A research design is a systematic plan to study a scientific problem; it can be described as a program that guides the researcher in the process of collecting, analyzing and interpreting data. Burns and Grove (2003) defined a research design as a blueprint for conducting a study of maximum control over factors that may interfere with the validity of findings. A research design is basically the overall framework for answering question or testing the research hypothesis. The type of research design adopted in this study is the ex-post facto research design. The ex-post facto research design is used because this study involves an empirical study of the effect of federal government capital expenditure on the Nigerian economic growth.

Furthermore, the research approach taken by any researcher will be a factor of the technique adopted. There are two fundamental approach associated with the quantitative research technique: the inductive and the deductive approach. Deductive approach focuses of testing already formulated theories with a view to accepting or rejecting them through a range of formulated research objectives, questions, and research hypotheses. In this study, the researcher formulated hypotheses and asks questions to

test the theories of economic growth with a view to rejecting or accepting them. Consequently, the deductive research approach is adopted in line with the authors mentioned above. In addition, the researcher is highly objective as much as possible and independent of the variables being observed to establish unbiased results. This means the researcher's approach focuses on positivism philosophy, a term usually associated with deductive approach.

3.3 METHOD OF DATA COLLECTION

Data utilized in this study were derived from secondary source. In achieving this, data were obtained from the central bank of Nigeria bulletins, journals, bank's annual report and account, finance textbooks by different authors in Africa, Asia, America and Europe, magazines, organizations files and internet services. The restriction of the study to secondary data is anchored on the belief that primary data cannot quantitatively show the trends in federal government capital expenditure and gross domestic product of Nigeria from 1985 – 2014.

3.4 MODEL SPECIFICATION

Based on the literatures discussed in the previous chapter, the model for study contain variables attributed in the research objectives, questions and hypotheses are adopted from the study of Oziengbe (2013) and the model specification for the study was modified thus;

GDP = F (CEAD, CEES, CESC, CETR)……1

The linear function in number 1 above shows that GDP is function of federal government capital expenditure in administration, economic service, social community service and transfers. It further tells that the GDP of Nigeria is dependable on federal government capital expenditure on these four independent variables. The linear function was converted into an econometric function as thus;

$GDP = \beta_0 + \beta_1 CEAD + \beta_2 CEES + \beta_3 CESC + \beta_4 CETR + \mu$…..2

Where;

GDP = Gross Domestic Product

CEAD = Federal Government Capital Expenditure on Administration

CEES = Federal Government Capital Expenditure on Economic Service

CESC = Federal Government Capital Expenditure on Social Community Service

CETR = Federal Government Capital Expenditure on Transfer

β_0 = the intercept, the value of y when the independent variables assume zero as value

$\beta_1, \beta_2, \beta_3$= coefficient of the independent variables or parameters

μ = stochastic variable/error term

3.5 TECHNIQUE OF DATA ANALYSIS

The descriptive and inferential statistics were used in this course. The descriptive statistics took care of the tables and figures while the inferential statistics handled the analysis covering the formulated hypotheses. The four hypotheses formulated were tested with a linear regression model with ordinary least square properties. Hence, a multiple regression approach was adopted. The following statistical techniques were used in testing significance of the variables and models, which are;

a. Student T-test: the t-test tested the individual contribution of each explanatory variables and their significance for each formulated hypotheses.

b. F-test: the F-test at 1% or 5% level of significance was used to test each models.

c. R: the coefficient of multiple regressions, explaining the level of relationship between the variables.

d. R^2: the coefficient of determination, which shows the extent the variations in the independent variables have been able to explain the total variable in the each dependent variable.

e. AR^2: the adjusted coefficient of multiple determinations to test the model as a whole.

f. Durbin Watson: the DW tested the level of autocorrelation among the variables in each of the models.

3.6 SUMMARY

This chapter discussed the supplementary in research methodology that is meant to be associated with this research. The typical research design adopted was the inductive or ex-post facto because of its use of existing data for its objectives. The population of this chapter covers the components associated with

government expenditure and economic growth in Nigeria. The population covered four sectors associated with federal government capital expenditure which were on administration, economic service, social community service and transfer. The method of data collection employed was the secondary type on a time series collection and four models were developed to suit the objectives, research questions and hypotheses. The inferential and descriptive statistics were also used and the test statistics recognized in this chapter for its course was the student t-test, f-test, R^2, R, AR^2 and Durbin Watson.

CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This chapter discusses all the sourced data that are presented in tables raging from their efficiency and time series comparism to explain their discrepancy within such time frame. The formulated hypotheses will also be tested and the results will be discussed.

4.1 Data Presentation

Table I: NIGERIAN FEDERAL GOVERNMENT CAPITAL EXPENDITURE

Years	Administration (CEAD) ₦'Billion	Economic Service (CEES) ₦'Billion	Social Community Service (CESC) ₦'Billion	Transfers (CETR) ₦'Billion	Total Capital Expenditure ₦'Billion	Gross Domestic Product (GDP) ₦'Billion
1985	0.46	0.89	1.15	2.96	5.46	1,572,732
1986	0.26	1.10	0.66	6.51	8.53	1,823,827
1987	1.82	2.16	0.62	1.78	6.37	1,997,928
1988	1.90	2.13	1.73	2.59	8.34	2,008,829
1989	2.62	3.93	1.84	6.65	15.03	2,821,721
1990	2.92	3.49	2.10	15.55	24.05	2,013,728
1991	3.35	3.15	1.49	20.36	28.34	2,781,942

1992	5.12	2.34	2.13	30.18	39.76	2,352,845
1993	8.08	18.34	3.58	24.50	54.50	2,251,923
1994	8.79	27.10	4.99	30.04	70.92	2,178,427
1995	13.34	43.15	9.22	55.44	121.14	2,371,892
1996	14.86	117.83	8.66	71.58	212.93	2,745,253
1997	49.55	169.61	6.90	43.59	269.65	2,801,973
1998	35.27	200.86	23.37	49.52	309.02	2,708,430
1999	42.74	323.58	17.25	114.46	498.03	3,194,015
2000	53.28	111.51	27.97	46.70	239.45	4,582,127
2001	49.25	259.76	53.34	76.35	438.70	4,725,086
2002	73.58	215.33	32.47	0.00	321.38	6,912,381
2003	87.96	97.98	55.74	0.01	241.69	8,487,032
2004	137.77	167.72	30.03	15.73	351.25	11,411,067
2005	171.57	265.03	71.36	11.50	519.47	14,572,239
2006	185.22	262.21	78.68	26.27	552.39	18,564,595
2007	226.97	358.38	150.90	23.04	759.28	20,657,318
2008	287.10	504.29	152.17	17.33	960.89	24,794,239
2009	291.66	506.01	144.93	210.20	1,152.80	24,794,239
2010	260.20	412.20	151.77	59.70	883.87	33,984,754
2011	231.80	386.40	92.85	207.50	918.55	37,543,655
2012	190.50	321.04	97.40	265.90	874.84	332,169,009
2013	245.03	430.01	123.21	120.07	918.32	366,769,456
2014	255.92	447.87	128.69	124.82	957.30	375,578,356

Source: CBN Statistical Bulletin for 2014

Capital expenditure in the four components (administration, economic service, social community and transfers) has tremendously been in an increasing figure from 2005-2014 as shown in table I above. The capital expenditure in administration dropped in 2010 with an amount of ₦260.20 Billion from ₦291.66 Billion in 2009 and experienced a further decrease in 2011 and 2012 (₦231.80 Billion and ₦190.50 Billion); capital expenditure in economic service also decreased in 2010, 2011 and

2012 (₦412.20 Billion, ₦386.40 Billion and ₦321.04 Billion) consecutively from ₦506.01 Billion in 2009. Capital expenditure in social community service witnessed a decrease in its amount in 2009 with an amount of ₦144.93 Billion from ₦152.17 Billion in 2008 and also in 2011 and 2012 (₦92.85 Billion and ₦97.40 Billion) respectively from ₦151.77 Billion in 2010 when it increased from ₦144.93 Billion in 2009 while capital expenditure in Transfer dropped in 2010 by ₦883.87 Billion from ₦1,152.80 Billion in 2009 which explains the non-payment of public debt servicing and focused on contingencies and pensions for that period. The above table also showed that total capital expenditure in these four components had a constant increase as the federal government increased its budget in capital expenditures to the sectors in the economy.

4.2 DATA ANALYSIS

Table II: PERCENTAGE OF CAPITAL EXPENDITURE COMPONENTS TO GDP

YEARS	CEAD %	CEES %	CESC %	CETR %	GDP %
1985	8.41	16.34	21.12	54.14	11.33
1986	3.11	12.90	7.69	76.31	1.89
1987	28.50	33.89	9.72	27.89	-0.69
1988	22.76	25.52	20.70	31.02	7.58

1989	17.41	26.12	12.27	44.20	7.15
1990	12.14	14.49	8.72	64.65	11.36
1991	11.80	11.10	5.26	71.84	0.01
1992	12.87	5.88	5.36	75.89	2.63
1993	14.83	33.66	6.56	44.95	1.56
1994	12.39	38.22	7.04	42.35	0.78
1995	11.01	35.62	7.61	45.76	2.15
1996	6.98	55.34	4.07	33.62	4.13
1997	18.38	62.90	2.56	16.16	2.89
1998	11.41	65.00	7.56	16.02	2.82
1999	8.58	64.97	3.46	22.98	1.19
2000	22.25	46.57	11.68	19.50	4.89
2001	11.23	59.21	12.16	17.40	4.72
2002	22.89	67.00	10.10	0.00	4.63
2003	36.39	40.54	23.06	0.00	9.57
2004	39.22	47.75	8.56	4.48	6.58
2005	33.03	51.02	13.74	2.21	6.51
2006	33.53	47.47	14.24	4.76	6.03
2007	29.89	47.20	19.87	3.03	6.45
2008	29.88	52.48	15.84	1.80	5.98
2009	25.30	43.89	12.57	18.23	6.96
2010	29.44	46.64	17.17	6.75	7.98
2011	25.24	42.07	10.11	22.59	5.31
2012	21.78	36.70	11.13	30.39	4.21
2013	30.79	58.28	13.21	-2.29	5.49
2014	31.53	59.52	13.36	-4.41	6.22

Source: CBN Statistical Bulletin for 2014

The table above shows the percentage input of the capital expenditure in administration, economic service, social community service and transfers by the Federal government towards the Gross Domestic Product (GDP) in the Nigeria economy for last three decades (1985-2014). The table shows that the federal government capital expenditure had a decreased

percentage in administration 2005, 2007, 2008, 2009, 2011 and 2012 (33.03%, 29.89%, 29.88%, 25.30%, 25.24% and 21.78%) respectively. It explains the poor capital expenditure in administration on internal security and defence throughout those years which contributed poorly to the GDP of the Nigerian economy. Federal government capital expenditure on economic service had its decrease in the years; 2000, 2003, 2006, 2007, 2009, 2011 and 2012 (46.57%, 40.54%, 47.47%, 47.20%, 43.89%, 42.07% and 36.70%) respectively as it explains low capital expenditure by the federal government in the agriculture and construction sectors which includes in the inadequacy of power supply for commercial agricultural services and trade which suppose to contribute to the growth of the Nigerian economy. Capital expenditure by the federal government in social community services experienced a decline in its expenditure in 1996, 1997, 1999, 2002, 2004, 2008, 2009 and 2011 (4.07%, 2.56%, 3.46%, 10.10%, 8.56%, 15.84%, 12.57% and 10.11%) respectively as compared to the preceding years (shown in Table II above) has affected the poor growth in the health and education sector which at those years had inadequate infrastructure in

boosting the services of their activities. In the segment of the transfers through the federal government capital expenditure budgeted; dropped in 1994, 1996, 1997, 1998, 2001, 2002, 2003, 2005, 2007, 2008, 2010, 2013 and 2014 (42.35%, 33.62%, 16.16%, 16.02%, 17.40%, 2.21%, 3.03%, 1.80%, 6.75%, -2.29% and -4.41%) respectively.

4.3 TEST OF HYPOTHESES

Table III: Coefficient Table

Variables	Coefficient (Beta)	Standard Error	T-statistics	P-Value
Constant	-37759.52	25440.15	-1.484249	0.0502
CEAD	377.5510	254.3705	1.484256	0.0502
CEES	377.6024	254.4050	1.484257	0.0502
CESC	377.0663	254.4391	1.485881	0.0498
CETR	377.6006	254.4009	1.484274	0.0502

Dependent Variable: GDP

Source: Researcher's Computation

Table IV: CORRELATION MATRIX

Variables	GDP	CEAD	CEES	CESC	CETR
GDP	1.000000	0.357142	-0.060163	0.712260	-0.260046
CEAD	0.357142	1.000000	0.338464	0.528506	-0.765745
CEES	-0.060163	0.338464	1.000000	-0.043337	-0.840244

CESC	**0.712260**	**0.528506**	**-0.043337**	**1.000000**	**-0.405447**
CETR	**-0.260046**	**-0.765745**	**-0.840244**	**-0.405447**	**1.000000**

Source: Researcher's Computation

The constant value of -37759.52 shows the extension of the independent variables (capital expenditure in administration, economic service, social community service and transfers) to the dependent variable Gross Domestic Product (GDP). The constant result being negative shows that the independence of federal government capital expenditure will not contribute to the growth of the GDP. The independent variables; CEAD, CEES, CESC, CETR have a positive effect on the movement of the dependent variable (GDP). The values of the independent variables; (377.55, 377.6, 378.07 and 377.6) explains that as the values in the independent variables increases so will the value of the dependent variable increases. The correlation matrix results on Table IV above shows that the dependent variable had a positive relationship with CEAD and CESC while a negative relationship with CEES and CETR. The level of relationship existing between the GDP and CEAD is a weak positive correlated relationship (0.357 i.e. 35.7%) while a strong positive relationship with CESC

(0.712 i.e. 71.2%). On the hand, the GDP has a weak negative relationship with CEES and CETR (-0.060 i.e. 6% and -0.26 i.e. 26%). CEAD has a positive relationship (0.338 and 0.529) with CEES and CESC and a negative relationship (-0.766) with CETR respectively, CEES has a positive and negative relationship (-0.043 and -0.84) with CESC and CETR respectively while CESC has a negative relationship (-0.405) with CETR.

HYPOTHESIS ONE:

Ho_1: Federal government capital expenditure on administration (CEAD) has no effect on the Gross Domestic Product (GDP) of Nigeria.

From the above table III, the t-value calculated for CEAD is 1.484256 and significant at 0.0502. This value is within the critical value of 5% (0.05) that is; it is equal to our critical value. Therefore, we reject the null hypothesis stating that Federal government capital expenditure on administration (CEAD) has no effect on the Gross Domestic Product (GDP) and accept the alternate that federal government capital expenditure on

administration (CEAD) has an effect on the Gross Domestic Product (GDP) of Nigeria.

HYPOTHESIS TWO:

Ho_2: Federal government capital expenditure on economic service (CEES) has no effect on the Gross Domestic Product (GDP) of Nigeria.

The t-value calculated for health in the above table is 1.484257 which is positive and significant at 0.0502. This value is within the critical value of 5% (0.05). We, therefore, reject the null hypothesis and accept the alternate hypothesis which states that Federal government capital expenditure on economic service (CEES) has an effect on the Gross Domestic Product (GDP) of Nigeria.

HYPOTHESIS THREE:

Ho_3: Federal government capital expenditure on social community service (CESC) has no effect on the Gross Domestic Product (GDP) of Nigeria.

In the above table III, the t-value of CESC shows a positive value of -1.485881 and it is significant at 0.0498. This value is also below the 5% (0.05) critical value stipulated for this empirical test. Therefore, the null hypothesis is rejected and the alternate

hypothesis stating that Federal government capital expenditure on social community service (CESC) has an effect on the Gross Domestic Product (GDP) of Nigeria will be accepted.

HYPOTHESIS FOUR:

Ho_4: Federal government capital expenditure on transfers (CETR) has no significant effect on the Gross Domestic Product (GDP) of Nigeria.

From the above table III, the t-value calculated for CETR is 1.484274 which is positive and it is significant at 0.0502. This value is within the critical value of 5% (0.05) that is; it equals our critical value. Therefore, we reject the null hypothesis stating that Federal government capital expenditure on transfers (CETR) has no effect on the Gross Domestic Product (GDP) of Nigeria and accept the alternate hypothesis stating that Federal government capital expenditure on transfers (CETR) has an effect on the Gross Domestic Product (GDP) of Nigeria.

4.4 Interpretation of Results

Capital expenditure by the Federal government is one of the structured fiscal policies the government can embark upon in order to improve its economic growth over a period of time.

The four independent variables which are federal government capital expenditures on administration, economic services, social community service and transfers were regressed against the dependent variable which is the GDP. The analysis of data showed that there have been increases in federal government capital expenditure in administration, economic services, social community service and transfers from 1985-2013 but a decrease in economic service and transfers in 2014, which could be reviewed from Table I and II above while it witnessed the some fluctuations between 2010-2012 among the four components selected as variables in this study. The statistical results showed that all independent variables have a positive effect on the dependent variable while the correlation result table shows that two independent variables (CEAD and CESC) have a positive relationship with the dependent variable (GDP) while the other two independent variables (CEES and CETR) have a negative relationship with the dependent variable. In the same sequence, four hypotheses were tested using the student t-test for its hypothetical result and was analyzed as follows;

1. Hypothesis one tested if the federal government capital expenditure on administration (CEAD) has no effect on the GDP. The tested result showed that the t-value of 1.484256 was positive and its significant value of 0.0502 was within the critical value of 5% thereby rejecting the null hypothesis and accepting the alternate hypothesis in this test.
2. Hypothesis two formulated that the federal government capital expenditure on economic service (CEES) has no effect on the GDP. The result showed that the t-value had a positive value of 1.484257 and significant value of 0.0502 which is within the critical value of 5%. This led to the decision of accepting the alternate hypothesis.
3. The third hypothesis tested if the Federal government capital expenditure on social community service (CESC) has no significant on the GDP. It revealed in table III that the t-value of the independent variable was 1.485881 which is positive and significant value of 0.0498 was below the 5% critical value therefore led to the acceptance of the alternate hypothesis.

4. The last hypothesis was characterized to check if the Federal government capital expenditure on transfer (CETR) has no effect on the GDP. The result also showed that the independent variable t-value was positive at 1.484274 and its significant value of 0.0502 was also below the 5% critical value which made the research to accept the alternate hypothesis.
5. The value of the model R^2 value is 0.848123 explain the high variation of the independent variables ability to expatiate the total variable in the dependent variable i.e. 84.8% (0.848123) (see appendix 3) is the percentage that explains the dependent variable while 15.2% (0.152) represent a percentage of other variables that was not included in the model to explain the dependent variable while the adjusted R^2 value of 0.675822 (see appendix 3) explains that the level of relationship between the variables is high since its value is above 0.5.
6. The f-statistics of the model is positive (7.581185) and significant at 0.000383 (see appendix 3) which is below

the 1% (0.01) and 5% (0.05) critical level, therefore it means that model is significant to the study.

7. The Durbin Watson (DW) value is at 2.770904 (see appendix 3) which is within the DW critical i.e. 2.00 < DW < 4.00. Since the DW is greater than 2.00 and less than 4.00, it concludes that there is no evidence of autocorrelation among the variables in the model.

4.5 Discussion of Findings

The general objective of this research is to investigate the effect of federal government capital expenditure on the Nigerian economic growth, based on the analysis of data, the following were found out.

The first hypothesis tested that federal government capital expenditure on administration has no effect on the Gross Domestic Product (GDP) of Nigeria. The result reviewed that the independent variable (capital expenditure on administration) have a positive effect on GDP, efficient expenditure on government administration helps to explain 5% of the variance in the growth of the Nigerian GDP. The study revealed that more of federal government capital expenditure on administration will stimulate the economic growth in Nigeria. This supports Eboh, Amakom and Oduh (2012) who found out that budgeted capital expenditure on federal government administration will continually stimulate the growth of the Nigerian economy.

The second hypothesis tested that federal government capital expenditure on economic service has no effect on the Gross Domestic Product (GDP) of Nigeria. The result reviewed that the independent variable (capital expenditure on economic service) have a positive effect on GDP, efficient expenditure on government economic projects helps to explain 5.8% of the variance in the growth of the Nigerian GDP. The study revealed that more of federal government capital expenditure on economic infrastructures will stimulate the economic growth in Nigeria. This supports Adebiyi (2015) who found out that capital expenditure on federal government economic infrastructures will continually stimulate the growth of the Nigerian economy.

The third hypothesis tested that federal government capital expenditure on social community services has no effect on the Gross Domestic Product (GDP) of Nigeria. The result reviewed that the independent variable (capital expenditure on social community services) have a positive effect on GDP, efficient expenditure on government administration helps to explain 5.2% of the variance in the growth of the Nigerian GDP. The study revealed that more of federal government capital expenditure on communities' welfare and projects will stimulate the economic growth in Nigeria. This supports Eboh, Amakom and Oduh (2012) who found out that budgeted capital expenditure on

federal government social community services will continually stimulate the growth of the Nigerian economy.

The fourth hypothesis tested that federal government capital expenditure on transfers has no effect on the Gross Domestic Product (GDP) of Nigeria. The result reviewed that the independent variable (capital expenditure on transfers) have a positive effect on GDP, efficient expenditure on government administration helps to explain 4.5% of the variance in the growth of the Nigerian GDP. The study revealed that more of federal government capital expenditure on transfers will stimulate the economic growth in Nigeria. This supports Aigbokham, Imahe and Ailemen (2015) who found out that budgeted capital expenditure on federal government transfers that decreases external borrowings will continually stimulate the growth of the Nigerian economy.

4.6 Summary

The chapter discusses the data of the variables designed in the model of this research. The data covers Federal government

capital expenditure on administration, economic service, social community service and transfers. Table I revealed that the federal government reduced its capital expenditure on the four variables in 2010, 2011, 2012 and 2014 which affected the sectors in the economy. The analysis of data showed that federal government capital expenditure was spent more on administration, transfers, economic services and social community services respectively making social community service as the least components to the sectors under which is an assumed concern to the federal government. The hypotheses tested were four in number and the null hypotheses of each were rejected identifying that the federal government capital expenditure on administration, economic service, social community service and transfers have an effect on the Gross Domestic Product (GDP). The result of the model summary revealed through the R^2 value of 0.848123 that 84.8% of the independent variables explain the total variable in the dependent variable.

CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Summary of Findings

Nigeria, as one of the fast growing African economy, is faced with economic and political challenges which are identified in the study as its affects the federal government capital expenditures towards job creations, infrastructures and welfare for its citizens. Many studies are yet to seek solutions in solving this demise; this study has therefore analyzed data associated with federal capital expenditure components and economic growth in Nigeria? The solution to problems, objectives and questions poised in the study is for the purpose of empirical findings being asserted and solved in the study. The analysis and statistical interpretation and hypotheses tests discussed; show the significant effect of federal government capital expenditure components on the gross domestic product (GDP) in Nigeria. Therefore, the empirical findings are summarized as

i. The four independent variables (federal government capital expenditure in administration, economic services, social community services and transfer) have an effect on the GDP in Nigeria.

ii. The Gross Domestic Product (GDP) had a positive relationship with federal government capital

expenditure on administration and social community services (see appendix 9) while it had a negative relationship with federal government capital expenditure on economic service and transfers (see appendix 9).

iii. The variables used in the model are significant to the study as the f-statistics (prob.) was at 0.000383 (see appendix 3) which is below 1% and 5% significance level. The variation explaining the dependent variable is high i.e. the R^2 (0.848123) is above 50% while the Durbin Watson results (see appendix 3) proofed that there was no incident of autocorrelation among the variables in the model.

5.2 CONCLUSION

In a literally view, capital expenditure are expected to contribute indirectly to the economic growth of any economy. The Nigerian economy through its fiscal policies have embarked on different capital expenditure in the different sectors of the economy and to this avail, the statistical result of the variables tested in the four hypotheses reveals that there is significant effect of the Federal government capital expenditure on administration, economic

services, social community services and transfers on the Nigeria GDP. These results have shown the effective participation of the federal government capital expenditure to be of high esteem towards the growing and emerging sectors through these components used in the study in the Nigeria economy. The data analysis also proved that the capital expenditure on transfers was low in 2013 and 2014 as compared to the previous year 2012. It is imperative that the Federal government must take a bold step in ensuring that this capital expenditure through these sectors does not decline in their budget in the future. The administration, economic service, social community services and transfers are significant components to the federal government capital expenditures as a fiscal policy geared towards the Nigerian economy growth and if necessary measures are taken to vast the growth in those sectors and the state of infrastructure in the economy to avoid the recession era. The result of federal government capital expenditure on administration and social community services (see appendix 3) have shown that to sustain the rising capital expenditure through these components on fixed assets, investment projects, power, etc will stimulate the growth of

the sectors and the general economy in Nigeria. The negative relationship between the GDP and federal government capital expenditure in economic services and transfers concludes that the federal government reduced its expenditures through these components in the agriculture sector, transportation sector, construction and economic services which are the cause of the weak negative relationship in the correlation result table (see appendix 9).

Conclusively, the study has identified that Federal government capital expenditure has a significant effect the economic growth of the Nigeria economy over the period studied.

5.3 Recommendations

The following recommendations below are suggested as;

a. Federal government Capital expenditure on administration should be maintained in future budget since it has a positive and effective relationship to the economic growth in Nigeria.
b. The Federal government capital expenditure on economic service should increase and channeled

effectively into the education and health sector in Nigeria for economic growth.

c. The federal government capital expenditure on social community service should be maintained in the agriculture, transportation, communication and construction sectors for economic growth in Nigeria.

d. The Federal government should increase its budget on capital expenditure in transfers to service pension funds and debt services in reducing the economy debts so as to increase the GDP of the Nigerian economy.

e. Generally, the Federal government should increase its budget on capital expenditure in order to increase the economy per capita income and boost productive sectors and grow the Nigerian economy rapidly.

5.4 CONTRIBUTION TO KNOWLEDGE

Capital expenditure is one of the fiscal tools the Federal government uses to boost economic growth in any country (Nigeria in this case). This aspect of public finance has created a lot of contributions to knowledge by researchers through their

studies. Therefore, this research has made the following as its contribution to knowledge. Thus;

a. Modeled Government Capital Expenditure and Economic Growth in Nigeria.
b. Contributed to literature in the field of Banking and Finance and particularly Public Finance.
c. Contributed a regulatory framework of Nigerian Capital Expenditure and Gross Domestic Product.
d. Contributed statistical tools in analyzing the significance effect of Capital Expenditure on Nigerian Economic Growth.

5.5 SUGGESTION FOR FURTHER STUDIES

The following are suggestions for further studies by the researcher;

a. The study suggests that other variables like capital expenditures in agriculture, interiors and others should be investigated into by observing the effect of capital expenditure in other sectors on the economic growth of the Nigerian economy.

b. The study also suggests that other researchers should expand the time series of the study to estimate the effect of Federal government capital expenditure in this four selected sectors on the Nigerian economy and GDP.
c. The study also suggests that researchers should make use of other statistical tools in these hypotheses to checkmate the results and findings of these variables selected for this research.
d. This study suggests that other studies should do an empirical study between capital expenditure and sectoral gross domestic product.

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APPENDIX

APPENDIX 1:

Table B.1.3: Federal Government Capital Expenditure (N' Billion)

Year	Admin-istration	% of Total	Economic Services	% of Total	Social Community Services	% of Total	Transfers	% of Total	Total	% of GDP
1981	0.72	10.97	3.63	55.27	1.30	19.78	0.92	13.99	6.57	6.96
1982	0.39	6.01	2.54	39.62	0.97	15.09	2.52	39.29	6.42	6.35
1983	1.10	22.48	2.29	46.89	1.03	21.01	0.47	9.63	4.89	4.44
1984	0.26	6.41	0.66	16.01	0.24	5.79	2.94	71.79	4.10	3.53
1985	0.46	8.41	0.89	16.34	1.15	21.12	2.96	54.14	5.46	4.06
1986	0.26	3.11	1.10	12.90	0.66	7.69	6.51	76.31	8.53	6.33
1987	1.82	28.50	2.16	33.89	0.62	9.72	1.78	27.89	6.37	3.30

1988	1.90	22.76	2.13	25.52	1.73	20.70	2.59	31.02	8.34	3.17
1989	2.62	17.41	3.93	26.12	1.84	12.27	6.65	44.20	15.03	3.93
1990	2.92	12.14	3.49	14.49	2.10	8.72	15.55	64.65	24.05	5.09
1991	3.35	11.80	3.15	11.10	1.49	5.26	20.36	71.84	28.34	5.19
1992	5.12	12.87	2.34	5.88	2.13	5.36	30.18	75.89	39.76	4.54
1993	8.08	14.83	18.34	33.66	3.58	6.56	24.50	44.95	54.50	5.00
1994	8.79	12.39	27.10	38.22	4.99	7.04	30.04	42.35	70.92	5.07
1995	13.34	11.01	43.15	35.62	9.22	7.61	55.44	45.76	121.14	4.17
1996	14.86	6.98	117.83	55.34	8.66	4.07	71.58	33.62	212.93	5.28
1997	49.55	18.38	169.61	62.90	6.90	2.56	43.59	16.16	269.65	6.44
1998	35.27	11.41	200.86	65.00	23.37	7.56	49.52	16.02	309.02	7.75
1999	42.74	8.58	323.58	64.97	17.25	3.46	114.46	22.98	498.03	10.64
2000	53.28	22.25	111.51	46.57	27.97	11.68	46.70	19.50	239.45	3.57
2001	49.25	11.23	259.76	59.21	53.34	12.16	76.35	17.40	438.70	6.36
2002	73.58	22.89	215.33	67.00	32.47	10.10	0.00	0.00	321.38	4.12
2003	87.96	36.39	97.98	40.54	55.74	23.06	0.01	0.00	241.69	2.44
2004	137.77	39.22	167.72	47.75	30.03	8.56	15.73	4.48	351.25	3.08
2005	171.57	33.03	265.03	51.02	71.36	13.74	11.50	2.21	519.47	3.56
2006	185.22	33.53	262.21	47.47	78.68	14.24	26.27	4.76	552.39	2.98
2007	226.97	29.89	358.38	47.20	150.90	19.87	23.04	3.03	759.28	3.68
2008	287.10	29.88	504.29	52.48	152.17	15.84	17.33	1.80	960.89	3.95
2009	291.66	25.30	506.01	43.89	144.93	12.57	210.20	18.23	1,152.80	4.65
2010	260.20	29.44	412.20	46.64	151.77	17.17	59.70	6.75	883.87	1.63
2011	231.80	25.24	386.40	42.07	92.85	10.11	207.50	22.59	918.55	1.45
2012	190.50	21.78	321.04	36.70	97.40	11.13	265.90	30.39	874.84	1.23
2013	283.65	25.59	505.77	45.63	154.71	13.96	164.27	14.82	1,108.39	1.38
2014 [1]	1,049.27	39.14	181.83	6.78	615.34	22.95	834.62	31.13	2,681.08	11.08

Sources: Federal Ministry of Finance, Office of the Accountant-General of the Federation

Note: [1]Provisional

APPENDIX 2

Dependent Variable: GDP

Method: Least Squares

Date: 09/07/16 Time: 04:31

Sample: 1985 2014

Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-37759.52	25440.15	-1.484249	0.0502
CEAD	377.5510	254.3705	1.484256	0.0502
CEES	377.6024	254.4050	1.484257	0.0502
CESC	378.0663	254.4391	1.485881	0.0498
CETR	377.6006	254.4009	1.484274	0.0502

R-squared	0.848123	Mean dependent var	4.943667
Adjusted R-squared	0.675822	S.D. dependent var	3.060835
S.E. of regression	2.216049	Akaike info criterion	4.580340
Sum squared resid	122.7718	Schwarz criterion	4.813873
Log likelihood	-63.70510	Hannan-Quinn criter.	4.655049
F-statistic	7.581185	Durbin-Watson stat	2.770904
Prob(F-statistic)	0.000383		

APPENDIX 3: AUGMENTED DICKEY-FULLER UNIT ROOTS TEST ON GDP

Null Hypothesis: GDP has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.595886	0.0010
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GDP)

Method: Least Squares
Date: 09/07/16 Time: 04:34
Sample (adjusted): 1986 2014
Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP(-1)	-0.795032	0.172988	-4.595886	0.0001
C	3.719175	0.998504	3.724748	0.0009

R-squared	0.438928	Mean dependent var	-0.176207
Adjusted R-squared	0.418148	S.D. dependent var	3.726463
S.E. of regression	2.842518	Akaike info criterion	4.993730
Sum squared resid	218.1575	Schwarz criterion	5.088026
Log likelihood	-70.40908	Hannan-Quinn criter.	5.023262
F-statistic	21.12217	Durbin-Watson stat	1.648667
Prob(F-statistic)	0.000090		

APPENDIX 4: AUGMENTED DICKEY-FULLER UNIT ROOTS TEST ON CEAD

Null Hypothesis: CEAD has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.345985	0.1653
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(CEAD)
Method: Least Squares
Date: 09/07/16 Time: 04:38
Sample (adjusted): 1986 2014
Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CEAD(-1)	-0.331628	0.141360	-2.345985	0.0266
C	7.560753	3.196319	2.365456	0.0254

R-squared	0.169324	Mean dependent var	0.797315
Adjusted R-squared	0.138558	S.D. dependent var	8.007873
S.E. of regression	7.432418	Akaike info criterion	6.916052
Sum squared resid	1491.503	Schwarz criterion	7.010348
Log likelihood	-98.28275	Hannan-Quinn criter.	6.945584

F-statistic	5.503645	Durbin-Watson stat	2.197818
Prob(F-statistic)	0.026571		

APPENDIX 5: AUGMENTED DICKEY-FULLER UNIT ROOTS TEST ON CEES

Null Hypothesis: CEES has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.047970	0.2660
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(CEES)
Method: Least Squares
Date: 09/07/16 Time: 04:39
Sample (adjusted): 1986 2014
Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CEES(-1)	-0.247706	0.120952	-2.047970	0.0504
C	11.64294	5.369410	2.168383	0.0391

R-squared	0.134454	Mean dependent var	1.489062
Adjusted R-squared	0.102397	S.D. dependent var	11.71599
S.E. of regression	11.09996	Akaike info criterion	7.718232
Sum squared resid	3326.645	Schwarz criterion	7.812528
Log likelihood	-109.9144	Hannan-Quinn criter.	7.747764
F-statistic	4.194181	Durbin-Watson stat	2.190324
Prob(F-statistic)	0.050403		

APPENDIX 6: AUGMENTED DICKEY-FULLER UNIT ROOTS TEST ON CESC

Null Hypothesis: CESC has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.202912	0.2097
Test critical values:	1% level	-3.689194	

	5% level	-2.971853
	10% level	-2.625121

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(CESC)
Method: Least Squares
Date: 09/07/16 Time: 04:40
Sample (adjusted): 1987 2014
Included observations: 28 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CESC(-1)	-0.470428	0.213548	-2.202912	0.0370
D(CESC(-1))	-0.211453	0.176708	-1.196626	0.2427
C	5.217176	2.503584	2.083883	0.0475

R-squared	0.344273	Mean dependent var	0.202644
Adjusted R-squared	0.291815	S.D. dependent var	5.741121
S.E. of regression	4.831367	Akaike info criterion	6.089093
Sum squared resid	583.5527	Schwarz criterion	6.231829
Log likelihood	-82.24730	Hannan-Quinn criter.	6.132729
F-statistic	6.562817	Durbin-Watson stat	2.169964
Prob(F-statistic)	0.005117		

APPENDIX 7: AUGMENTED DICKEY-FULLER UNIT ROOTS TEST ON CETR

Null Hypothesis: CETR has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.748569	0.3973
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(CETR)
Method: Least Squares
Date: 09/07/16 Time: 04:41
Sample (adjusted): 1986 2014
Included observations: 29 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CETR(-1)	-0.209030	0.119544	-1.748569	0.0917
C	3.723466	4.338256	0.858286	0.3983

R-squared	0.101721	Mean dependent var	-2.018868
Adjusted R-squared	0.068452	S.D. dependent var	15.81640
S.E. of regression	15.26548	Akaike info criterion	8.355537
Sum squared resid	6291.940	Schwarz criterion	8.449833
Log likelihood	-119.1553	Hannan-Quinn criter.	8.385069
F-statistic	3.057493	Durbin-Watson stat	2.030888
Prob(F-statistic)	0.091728		

APPENDIX 8: CORRELATION MATRIX

	GDP	CEAD	CEES	CESC	CETR
GDP	**1.000000**	**0.357142**	**-0.060163**	**0.712260**	**-0.260046**
CEAD	**0.357142**	**1.000000**	**0.338464**	**0.528506**	**-0.765745**
CEES	**-0.060163**	**0.338464**	**1.000000**	**-0.043337**	**-0.840244**
CESC	**0.712260**	**0.528506**	**-0.043337**	**1.000000**	**-0.405447**
CETR	**-0.260046**	**-0.765745**	**-0.840244**	**-0.405447**	**1.000000**