# GOVERNMENT BUDGET DEFICIT AND ECONOMIC PERFORMANCE IN NIGERIA

(1981-2019)

BY

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## BEING A PROJECT SUBMITTED TO THE DEPARTMENT OF ECONOMICS, COLLEGE OF HUMANITIES MANAGEMENT AND SOCIAL SCIENCES, MOUNTAIN TOP UNIVERSITY

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#### CERTIFICATION

This is to certify that this work was carried out by USIADE, Gloria Osarhuwense (18020301006) at the Department of Economics, Mountain Top University, Ogun state, Nigeria under my supervision.

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#### **DEDICATION**

I dedicate this project with much gratitude, humility and fulfilment to Almighty God, who has always been my beginning and my end, directed my foot steps and kept my alive till this moment in every aspect of my life. I give all the glory to God the Father, the Son and the HolySpirit.

This project is whole heartedly dedicatwed to my wonderful Mother Mrs. Enobakhare Imuetinyan. Also, to my father Mr. Ephraim Usiade. Furthermore, I want to acknowledge the contribution of my mother, who has been there for me from the beginning of my birth till this very moment.

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#### ABSTRACT

The study analyses the economic performance of Nigeria from 1981 to 2019 as a result of the government budget deficit. The analysis included the independent variables bank rate, broad money supply, inflation rate, foreign direct investment and exchange rate, while GDP per capita income, employment rate and price stability measured economic performance. The study made use of annual time series secondary data, the obtained data were analyzed using tables, and econometric approaches, namely the Autoregressive Distributed Lag (ARDL) model. The unit root test, utilizing both the Augmented Dickey-Fuller (ADF) test and the Philip-Perron (PP) test, the lag order of the ARDL models using VAR lag order selection criteria, and the bound test were all conducted. From the foregoing statistical output, findings established that budget deficit insignificantly stimulate economic performance. Unfortunately, Nigeria's budget deficits, money supply, do not generate growth that increases employment. The findings, however, demonstrates that the bank rates all contribute to price instability, but the outcome of the bank rate is the inverse. Before reaching conclusions, the study recommended that policymakers guarantee

appropriate use of borrowed money and keep a sporadic assessment and monitoring of the borrowed funds project to produce lucrative returns that would assist in service and boost economic performance. The Government should develop policies that examine the channels of government spending to determine why the massive investment has not resulted in a viable economic performance in terms of price stability and growth that ensures job creation.

#### **CHAPTER ONE**

#### **INTRODUCTION**

#### **1.1 Background to the Study**

There is no country that does not desire economic growth and development for itself, in order to achieve these, macroeconomic objectives are drawn up by policy makers and it is to be fulfilled, although the government must strive hard to achieve it. Earlier, in the time of Adam Smith, economist focused on the principle of the invisible hand where the economy is self-adjusting, until Keynes came into play during the great depression of the 1930s, he advocated that the government should partake in the running of the economy (Yusuf Salihu, 2013). The role of the government is embodied in its fiscal operations in determining aggregate demand, income, prices and more recently the balance of payments. The macroeconomic objectives of an economy are: economic growth, low inflation, low unemployment, satisfactory balance of payment, price stability etc. To fulfil these objectives, the government has to invest in the performance of its economy which is known to be the government expenditure. And for this to be possible there has to be source of income derivable from taxation and other sources; through revenue there would be rapid development but also there is the need for the government to make conscious planning.

Public expenditure cannot be avoided due to the dominant role of the public sector in financing activities geared towards economic development, hence, the resultant growth in public spending in most developing countries, (Fagbonhan Akinola, 2017). As a result, there has been increase in negative fiscal balances and it often occurs in these economies. In addition, as public expenditure grows it may lead to budget deficit which has to be financed

through borrowing and other miscellaneous. When the government expenditure exceeds its revenue in order to achieve economic performance, it is termed budget deficit.

It has become a prevalent issue that developing countries stimulate their economy by operating budget deficit. Budget deficit is a famous instrument of fiscal policy used to increase the rate of economic performance of a country (Momodu Ayodele & Monogbe Tunde, 2017). Large number of conditions can bring about expenditure of the government exceeding its revenue, during recession government loose revenue. Unlike other economic agents, the government is able to add yearly deficit to the debt already in place for a long period of time. The interest rate on the national debt is inexpensive as long as the interest rate remains low. To finance economic performance in Nigeria, deficit was introduced after the civil war, oil crisis, and current financial economic issues. The Nigerian budget has been on a deficit of 85% since the independence period (Momodu Ayodele & Monogbe Tunde, 2017).

However, so as to achieve development in an economy, very sound capital and financial market is a precondition needed (Yusuf Salihu, 2011). Though the government extended its expansion on its expenditure in Nigeria over the years, there has not been increase in the level of economic development more than the average percentage. But due to structural problems mixed with financial markets in Nigeria such as; inhibit policy environment, inadequate capital, the problem of liquidity and management, under developed tax system and accounting system. Due to general low income, there is low revenue from tax and non-tax sources that have not been forth coming which are important funds needed for development (Yusuf Salihu, 2011). Consequently, Nigerians still live-in poverty, continuous increase in mortality rate, low life expectancy as a result of inaccessible substandard medical facilities, poor road networks, unavailability of enough food and very high rate of

unemployment (Ogunleye and Simon, 2004). The persistent increase of the budget deficit for more than two decades resulted to over indebtedness and debt crisis, poor investment, high rate of inflation and poor growth rate. The difference between government revenue and expenditure created led to an increase in fiscal deficits from the second half of 1970s, except in 1979. In 1975-1978, the cumulative budget deficit of the central government was N4.8 billion naira. Relative to gross domestic product (GDP) budget deficit changed between 2% and 7% in the period (Festus o, 1997). In 1981, Nigeria recorded an increase in budget deficit from N3,902.10 million to N8,254.30 million in 1986 to N15,134.70 million in 1989 but catapulted to 133,398.30 million and N301,401.60 million in 1998 and 2000 respectively. There was a moderate decline in the budget deficit as of 2003-2006, from N202,724.70 million in 2003, N172,601.30 million in 2004, N161,406.30 million in 2005, to N101,397.50 million in 2006 (CBN,2012) (Fagbohun akinola, 2017). The yearly continuous increase in budget deficits were caused by bloating of government bureaucracy, cost of providing critical infrastructures and shortage of revenue generation (Umeora, 2013).

Several arguments have transpired, series of extensive theoretical and empirical studies has been done on this subject matter which have contrary views and random outcomes has emerged. For instance, Ricardian Equivalence theorem emphasis that increase in the budget spending will be matched with a future increase in taxes and so they leave interest rates and private investment unchanged (Banerjee A et al, 1993). Also, theoretically an extensive literature (friedman, 1968; Miller, 1983; Dywer, 1982; among others) have argued that government deficit spending is a primary cause of inflation. (Fleming, 1962; Mundell, 1963; Volcker, 1987) among others argued that government deficits may cause trade deficits through different channels. The Keynesian absorption theory suggests that with an increase

in the budget deficit there would be an influence in domestic and also cause import expansion, causing a current account deficit (Ali Salman 2005). The Mundell-Fleming framework, advocates that an increase in the budget deficit would bring about upward pressure on interest rates, as a result there's capital inflow and an appreciation of the exchange rates which will raise the current account deficit. Evans (1985,1986), argues that higher budget deficit tends to raise domestic consumption. Therefore, If the budget deficit adds to aggregate demand there might be inflation and therefore, currency depreciation.

Consequently, different scholars have contrast opinions on the relation between budget performance and economic performance. Keynesian economics opined that there is a positive complicated series of connection between budget deficit and economic performance. However, the neoclassical school of thought believe that excessive budget deficit leads to crowding out effect, they opined that there's a negative relationship. The purpose for examining this subject matter in Nigeria, is to find out the effect the operation of budget deficit takes on Nigeria. Is it a negative or positive effect? The result of financing this deficit may lead to a bigger debt, the planning technique of the government has not been implemented properly.

#### **1.2 Statement of the Problem**

There have been arguments between economists, government advisers and policy analyst on the impact of budget deficit in an economy. Until the early 20century, balanced budget and surplus budget were advised by economists. Others suggest that the government should spend enough money so as to run larger deficits in order to increase aggregate demand while others opined that budget deficit has a negative effect on macroeconomic variables. With the presence of deficit in

the economy there would be crowding out private borrowing, decreases net exports, leads to higher tax and increased inflation and manipulates capital structure (Sean roses, 2021).

However, the Keynesian revolution and increase of demand-driven macroeconomics made it politically possible for government to spend more than they brought in. In order to fulfil stated fiscal policies, the government borrow money and increases its expenditure. Keynes argued that in times of downturn in the economy for any reason, the fear and gloom it engenders among business and investors will tend to become fulfilling and this can lead to maintained period of depression in economic activity. During the periods of misery Keynes advocated a countercyclical fiscal policy, the government should undertake deficit spending to make up for the decrease in investment and make more successful consumer spending so as to stabilize aggregate demand.

The empirical study of osuka and Achinihu, Omurah and Ogbonna reported that budget deficit has a positive impact in the Nigeria economic performance, it therefore supports Keynes crowding out proposition. Whereas, the study of Isah and Akinmulegun report that budget deficit does not stimulate economic performance in Nigeria, therefore it supports the neoclassical view. Though empirical and theoretical research form basis on the fact that budget deficit stimulates economic performance especially when the economy is facing downturns, practically reverse is the case in Nigeria context (Momodu, Monogbe, 2017).

Evidence suggests that the trajectory of Nigeria's budget deficits has been increasing throughout the years. Since 1980, deficits have been documented for forty years to stimulate economic activity during depression by use of induced variables or aggregates. Although throughout these times the Nigerian economy ran deficits and functioned in a condition of under-full employment, it was distressed that run counter to the nature of deficits. The citizens' standard of living has clearly declined; the economy's growth has slowed; poverty has spread throughout the country; there is a persistently unfavorable balance of payments, increased public debt, continuous depletion of foreign reserves, little or no savings, and a decline in exports, increased inflationary pressure, and continued reliance on external economies.

The impact of the budget deficit on these macroeconomic indicators has been negative. The question therefore becomes whether the fiscal deficit no longer stimulates economic performance in Nigeria. Do we then accept the Keynesian economists' claim that a budget deficit crowds in private investment through its impact on macroeconomic variables, or do we accept the neoclassical economists' claim that a budget deficit crowds out private investment through its impact on interest rates and other variables, or do we accept both? Budgets, according to Ricardian economists, have no positive or negative influence on aggregate demand. Because there is no agreement in the literature on the net impact of deficit financing in emerging economies, we need to do more research by extending the time-frame to 2018. Thus, this study focuses on investigating the existence of such relationship in Nigeria.

#### **1.3 Research Question**

In the course of evaluating the implementation deficit budget policy of the government on the economic performance between 1981 and 2018, there are some questions that needs to be addressed. The following research questions are:

- i. What is the effect of government budget deficit on GDP Per Capita performance?
- ii. How has government budget deficit affect employment performance?
- iii. In what way has government budget deficit contributed to price stability performance?

#### 1.4 Objectives of the Study

The main objective of the study is to investigate government budget deficit and economic performance in Nigeria over the study period 1981-2019. In order to achieve this objective, the three specific objectives to analyze are:

- i. Effects of government budget deficit on GDP per capita performance.
- ii. Examine the effects of government budget deficit in employment performance
- iii. Investigate the impact of government budget deficit on price stability performance

#### **1.5 Research Hypothesis**

In order to achieve the study objectives, the following null hypothesis are proposed:

 $H_{01}$ : There is no effect of government budget deficit on GDP per capita performance.

 $H_{02}$ : There is no effect of government budget deficit on employment performance.

 $H_{03}$ : There is no impact of government budget deficit on price stability performance.

#### **1.6 Significance of the study**

Several empirical studies have been carried out, ranging from country-specific analyses to panel analyses with different methodologies and scope; For individual countries, different conclusions were drawn with regard to various macroeconomic variables (per capita income, debt, trade, money supply, inflation, tax, exchange rate) and the budget balance. (Hassan & Kalim, 2012; Murwirapachena, Maredza & Choga, 2013; Umeora, 2013; Wosowei, 2013) and for panel studies (Tujula & Wolswijk, 2004; Murwirapachena, Maredza & Choga, 2013). positive-negative relationship and bi-uni to no reported causality for the various variables used. The study will attempt to bridge the conflicting opinions observed in the literature by using variables in the

study in place of the number used in another individual study. The results of the study are intended to educate the government on possible ways to find a way out of the never-ending deficit. Funding swamp.

This study is to ascertain if it has a positive or negative effect on the performance of the economy. It will also look into how deficit can be reduced, there are two ways to reduce a budget deficit which are by reducing expenditure or increase taxes to increase revenue and how it is effective. This research is based on the on the questions raised earlier, it also includes how budget deficit is being financed and its consequences on the economy.

The significance of the study is to provide us with a better insight on how to control or reduce budget deficit no matter the kind of effect in the performance of the economy. This study would benefit the Policy makers, private investors, researchers and the economy itself. For the policy makers, this study will enlighten them on what steps to take and the direction in finding suitable policy to use when the issue of budget deficit arises and how to reduce them, to also enlighten them on how to effectively utilize borrowed funds to finance budget deficit. The private investors will be able to avoid crowding out and prevent losses when there is high growth in deficit reduction and they would know the actual state of the economy. Researchers will be able to add it to their prosperous collection of work. This study will be effective in revealing the stand of the economy performance in the face of budget deficit system, the outcome of choosing the different ways of reducing budget deficit and which will result in better economic performance and not the opposite. In order to find solution to the persistent increase in government budget deficit over the years, we will also have a glance on how the government can avoid the budget deficit if it is not beneficial and how to control and reduce budget deficit if it is necessary in the economy in order to achieve macroeconomic objectives.

#### **1.7 Scope of the Study**

The scope of the study will span through thirty years, starting from 1981 before the structural adjustment program (SAP) of 1986 was implemented to 2019. The study will be focusing on the positive or negative effect of the government budget deficit on the economy and how it is being financed or reduced. The study will also give an insight on how long the government has been running on budget deficit, if the policies implemented are effective in the economy.

#### 1.8 Organization of the Study

The study is arranged in five chapters. The chapter one is the introduction of the topic which consist of eight different sections giving basic insight on the topic. Chapter two contains the literature review on the topic and the theoretical aspect of budget deficit and empirical research with various opinions and suggestions on the effect of budget deficit on the economic performance. Chapter three deals with the methodology used for the evaluation of the study and model specification. Chapter four consists of data presentation, analysis of data, interpretation and discussion of results. Chapter five is the conclusion of the study alongside recommendations.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### **2.0 Introduction**

This chapter focuses on the conceptual review, theoretical review and empirical review on government budget deficit and economic performance of Nigeria. Scholars have continued to debate the relationship between government spending and economic growth. Government performs two functions- protection (and security) and provisions of certain public goods (Abdullah, 2000 and Al-Yousif, 2000). The protection role consists of establishing the rule of law and enforcing property rights. This serves to reduce criminal risks, safeguard life and property, and protect the nation from external attack. Public goods include, to name a few, defense, roads, education, health, and power. Some academics claim that increasing government spending on socioeconomic and physical infrastructure promotes economic growth. Government spending on health and education, for example, increases labor productivity and national production growth. Similarly, spending on infrastructures such as roads, communications, and power decreases production costs, improves private sector investment and business profitability, therefore promoting economic growth Scholars such as Al-Yousif (2000), Abdullah (2000), Ranjan etal (2008), and Cooray (2009) found that increasing government spending leads to economic growth.

#### 2.1 Conceptual Review

#### 2.1.1Concept of Government Budget

Government Budget or fiscal balance is the difference between government revenues (e.g., tax) and spending i.e., a positive balance is called a government budget surplus, and a negative balance is called a government budget deficit (Akrani, 2011).

The national budget describes the actions that a particular government will take in monetary terms; it lists how much the government will receive in the current fiscal year and how it will spend it; the tasks to be completed are related to the number of resources required to maintain the task. (2000) Analyzed the national budget to reflect the choices the government will make or not make. It reflects the general public's views on the types of services that the government should provide and the rights that citizens should enjoy as members of society. Provide services that the private sector cannot provide, such as water, electricity, transportation, and housing. The national budget reflects the government's priorities. The essence of a budget is that it provides limited resources, so you can choose between possible expenditure items. This involves weighing priorities and requires a decision-making process. The national budget is political.

Olatunde (2003) quoted the definition of budget as defined by the chartered institute accountants (CIMA) official terminology 1995 as;

A financial quantitative statement, prepared and approved prior to a defined period of time, of a policy to be pursued during that period for the purpose of attaining a given objective. They may include income, expenditure and the employment of Capital. For satisfactory control, a budget requires regular review and modification to reflect rapidly changing conditions in the business environment.

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He cited a budget as a statement, expressed in monetary terms, of the specified performance of a corporation within the pursuit of its objective in the short run (one year). Its associate action arranges for the immediate future, representing the operational and financial finish of the company coming up with a chain. As a building guide the builder in the construction process, thus will a budget guide all those that have any responsibility for the business operation. Aremo (2002) postulated that there are several definitions as there are many writers on budget. He stated that a budget may be a plan expressed in quantitative and sometimes in financial terms covering a particular amount of time, usually a year. He conjointly quoted Hadden (1938) that defines a budget as an inspiration of action that's dynamic instead of static. Success can come back to those whose plans were rigorously prepared. Aremo (2000) more determined that budget may be a method that has stages that embody preparation, approval, execution, management and view.

#### 2.1.2 Government Budget Deficit

A budget deficit is when spending exceeds revenue and indicates a country's financial health. The government generally uses the term budget deficit when referring to spending (Investopedia.com). The budget deficit in this context refers to a situation in which public spending exceeds public revenue to ensure economic performance (Monogbe et al).

The deficit must be paid; otherwise, debts will be created. The deficit increases the debt every year. As the debt increases, the deficit can increase in two ways. First, debt serving i.e. the interest on the debt must be paid annually. This increases the cost without any benefit. Second, higher debt levels may make fund raising difficult. The lender is worried about the borrower's ability to pay off the debt. This is a higher risk and will increase the deficit every year.

The problem of deficit financing has always been the focus of attention of scholars, because when a country has a budget deficit, financial experts will think of financing the budget deficit in order to eliminate the negative impact on the economy. Funds are the source of government deficits or surpluses. Every time the government has a budget deficit, there will be deficit financing. However, in order to align economic growth with the budget, it is necessary to fund the loss of revenue due to cost overruns and raise funds from other sources available to the government. Deficit financing can be seen as a way of stimulating a country's economy by increasing government expenditures other than sources of income (CBN, 2012). Measures taken by a company or government to make up for lost revenue. When government spending often exceeds government revenue, the government can use deficit funds to make up for the budget deficit. Keynes's theory recognizes the idea of using compensatory spending to make up for the deficit to solve the problems of unemployment and depression. Modern economists stipulate to raise deficits for development. Nvaotka (2004) defines deficit financing as a surplus of planned expenditures that exceeds the income stipulated by government policies or by establishing a deficit fund (which must repay interest within a certain period of time) by borrowing from internal or external sources. In the financial sector, deficit finance is defined as government expenditure that exceeds credit financing revenue. The theory of Keynesian economists is that deficit financing is to stimulate economic activity and reduce unemployment in the country. Stiglitz (2005) regards deficit financing as a situation in which the federal government exceeds the payment funds and generates income funded by public funds for a period of time. Deficit financing can also be seen as the sale of debt to fund expenditures that exceed income. Fundraising methods can also be regarded as non-bank public funding sources. Financing, because income from taxes and levies usually cannot be used to pay for expenses as with debt

monetization, since government debt and private equity compete for limited capital, deficit financing puts upward pressure on interest rates (Smriti, 2010).

#### **2.1.3 Government Budget Deficit – Components** [corporatefinanceinstitute.com]

- 1. **Revenues:** For the national government, majority of revenue comes from financial gain taxes, company taxes, consumption taxes, and welfare taxes. For non-governmental organizations and companies, revenues come from the sale of products and services.
- 2. Expenses: For governments, expenses embody government disbursement on healthcare, infrastructure, defence, subsidies, pensions, and different things that contribute to the performance of the economy. For non-governmental organizations and companies, expenses include the quantity that is spent on daily operations and factors of production, together with rent and wages.

#### 2.1.4 Types of Deficits

Following are three types of deficits (economic discussion.net):

#### 1. Revenue deficit

Revenue deficit is the total revenue expenditure of the government over its total revenue receipts. It involves solely revenue expenditure and revenue receipts of the government. Alternatively, the insufficiency of total revenue receipts compared to total revenue expenditure is outlined as a revenue deficit. Revenue deficit signifies that government's own earning is too little to fulfil the traditional functioning of presidency departments and provision of services. Revenue deficit leads to borrowing. Therefore, once a government spends over what it collects by the method of revenue, it incurs a revenue deficit. In mind, revenue deficit includes such transactions that have an effect on current financial gain and expenditure of the government. Put in symbols:

#### **Revenue deficit = Total Revenue expenditure – Total Revenue receipts**

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#### 2. Fiscal deficit

A commercial enterprise deficit is outlined because the far more than total budget expenditure over total budget receipts excluding borrowings throughout a fiscal year. In other words, it's the quantity of borrowing the government needs to resort to satisfying its expenses. An out sized deficit means that a large amount of borrowing. A fiscal deficit could be a life of what proportion the government needs to borrow from the market to meet its expenditure once its resources are inadequate.

#### **Fiscal deficit = Total expenditure – Total receipts excluding borrowings = Borrowing**

#### 3. Primary deficit

The primary deficit is outlined as a commercial enterprise deficit of the present year minus interest payments on previous borrowings. In alternative words, whereas fiscal deficit indicates borrowing demand inclusive of interest payment, primary deficit indicates borrowing requirement exclusive of interest payment (i.e., the quantity of loan).

#### **Primary deficit = Fiscal deficit - Interest payments**

#### 2.1.5 Causes of Government Budget Deficit

Causes of the budget deficit include:

#### 1. Politics

Politics is one of the factors that causes budget deficit in a country. Once government spends fairly what it receives, it would build troublesome political decisions. It is to extend taxation, scale back spending, or simply keep on borrowing – increasing the debt further. Any one of those will prove unpopular with voters. However, carrying on with the deficit is the best

short solution. Because the debt piles up, it'll become a drag for consequent government instead. Consequently, increasing taxation or reducing public defrayment will hurt this government within the short-term.

"When government spends quite it receives, it should build troublesome political choices – increase taxation, scale back spending, or simply keep it up borrowing."

Budget deficits are often times utilized in the run-up to associate degree election a lift in fragmentary aims at stimulating the economy and the government's public image.

Unfortunately, this spending continues once there is election, and therefore the cycle repeats. And whereas some governments try and resist – they still have to be compelled to win votes.

#### 2. Keynesian Fiscal Deficits

Politics may be a sturdy reason for the budget deficit. However, the concept that government outlay will stimulate growth additionally plays its part. The idea, originating from John Maynard Keynes, has been around since before the Second World War. The idea is that if the government spends, it creates demand, thereby stimulating the economy, this may add the short term. In fact, it absolutely was solely originally designed to be enforced during times of economic decline. However, it is currently used as the simplest way to increase economic growth. The matter with this can be that it starves out a lot of economical personal investors. A lot of governments borrow and spend, then less funds are in the market to non-public enterprises to take a position within the wider economy. We have a tendency to then return to the question of whether or not the cash is spent more showing wisdom by organization or by private enterprise.

#### 3. Cyclical Reasons

During periods of economic contraction, government revenues will decrease rapidly, as seen throughout the 2008 money crisis. While revenues drop thanks to individuals losing their jobs, prices additionally rise from magnified state edges and financial gain support. Thus, incomes fall and disbursement will increase simultaneously, this provides a robust force that makes a budget deficit.

#### 4. Interest Payments

If a nation runs a continued budget deficit, its debt will pile up. And because it piles up, the number it is to pay in interest invariably increases, which in turn, can cause a budget deficit. For example, the North American country paid \$389 billion in interest alone in 2019 that is, regarding thirty-three p.c of its overall budget deficit. This works in a very vicious circle that continues to form future budget deficits.

#### 2.1.6 Effects of Government Budget Deficit

#### **1. Crowding Out Effect**

Budget deficits usually go along with high levels of debt as governments struggle to usher in enough cash to hide expenditures. What this will attract is investment in government bonds and different sorts of denominated debt. However, this takes investment and loans faraway from non-public establishments and towards government instead, therefore, in turn, it makes it tougher for little and medium corporations to access an equivalent level of credit that they'll acquire otherwise.

#### 2. Increased Debt

One impact of a deficit is increased debt. Once the government spends more than what it receives, it can purchase such expenses. Unless it's accumulated funds from the previous year's surpluses, it should be funded through debt. Governments borrow money by

provision of bonds to personal investors. Within the UK, these are known as gilts, and within the US, they're referred to as Treasury bonds. By these, the government borrows money from the private sector, insurance/pension funds, banks, households, and overseas investors. When running a budget deficit, the government owes an increasing amount to the likes of banks and pension funds, in turn, they need to raise extra cash to still fund the deficit. However, the more the government borrows, the less give there is for private establishments. In numerous words, the banks and alternative establishments have fewer funds to lend to the government as they have already lent them billions. As a result, governments should provide higher interest rates which can increase debt further.



#### 3. Higher Interest Rates

As the government borrows additional, it makes it difficult for money to be available to the nonpublic sector. For example, at a rate of one per cent, solely one hundred people could also be willing to lend money to the government. If the government desires to boost more money, it is to draw in more people willing to lend by increasing the interest they are willing to pay. For instance, by increasing the speed to a pair of per cents, there may be many people willing to lend to the government. The consequence of such is that the more government runs a deficit, the more it would borrow. The more it borrows, the more interest it will have to pay. The higher the interest the government has to pay, the higher the debt pile becomes. As a result, consistent budget deficits can, therefore, find you to a pair of per cents into bigger levels of debt.

#### 4. Higher Interest Payments

When the government runs a budget deficit, it must borrow money. It must also pay interest on these debts. In the same way we pay interest on our mortgages, government pays interest on its debt.

#### 5. Short-term Economic Growth

When governments run budget deficits, they will stimulate 'aggregate demand' they will do, thus throughout a recession, so as to spice up the economy. For instance, once a recession hits demand declines as individuals lose jobs and have less cash to spend. Governments may look to step in and build artificial demand in order to stop a deep economic downturn. Governments look to melt that blow by increasing outlay, that paying goes into the pockets of households, with governments hoping that they spend and increase combination demand – thereby softening the negative effects of the recession.

When the government spends more, it takes away cash from the non-public sector. It then uses this to rent individuals and build new demand. Hiring people provides them money, therewith money than being spent within the economy. within the short term, this could stimulate economic activity. However, in the long-term, it might bring about a problem on growth, this can be as a result of today's expenditure which will have to be compelled to be acquired by the remunerate of tomorrow.

Government outlay is unbelievably sticky, once it increases, it's terribly troublesome to decrease again. Thus, when governments pay more, it always stays that way this can be as a result of it's incredibly difficult, politically to chop jobs or social security. What results in the arrogation of funds from the non-public sector? thus whereas \$10 billion in government outlay could produce employment for 1,000 individuals – it comes at the value of starving the private sector of investment. These same funds may be employed by the private sector to speculate in new and additional economical machinery, while additionally increasing employment within the long term.

#### 2.1.7 Concept of economic performance

The performance of an economy is usually measured by achieving economic goals, which can be long-term, such as sustainable growth and development, or short-term, such as stabilizing the economy in response to unexpected and unpredictable events called an economic shock. To find out how well an economy is achieving these goals, economists use a variety of economic indicators. Economic indicators measure macroeconomic variables that enable economists, directly or indirectly, to assess whether economic performance has improved or deteriorated both in terms of assessing whether an intervention is necessary and whether or not the intervention has worked.

#### 2.1.8 Government Budget Deficit in Nigeria

The financial changes introduced by the colonial administration in 1958 were the beginning of Nigeria's current borrowing market. These changes have resulted in the establishment of the

Central Bank of Nigeria (CBN) to fund the fiscal deficit and in the setting up of marketable public security. The issuing and administration of the Federal Government loans, issued publicly in Nigeria according to paragraph 35 of the Central Bank of Nigeria (CBN). These loans may be provided in accordance with the criteria approved by the Federal Government and the Bank in Nigeria. Since the early 1960s, the domestic government to Gross Domestic Product (GDP) ratio has risen. By 1974, this ratio had risen marginally to 6.9 percent of GDP. However, by 1984, the domestic debt-to-GDP ratio had risen to more over 40%. Although it fell somewhat in the 1990s, it has risen steadily since 2000, according to Asogwa (2005). He went on to say that while Nigeria has not been alone in facing rising levels of government domestic indebtedness, in contrast to other Sub-Saharan African countries, Nigeria's domestic debt to GDP ratio is obviously on the high side. The evolution of domestic debt can be analysed by its size or by taking into account several components. In terms of national output, the stock of government debt is measured. This is demonstrated by the size of the domestic debt structure, which grew significantly from N0.23 billion at the beginning in both nominal terms as a percentage of the overall debt to N1.86 billion in 1980. The level of the external debt was first higher than the level of domestic debt at the beginning of the structural adjustment program (SAP), the foreign debt stock has always been more than domestic debt since then. Several explanations have been advanced in Nigeria to explain the shifting domestic debt profile from the 1960s to the present. High budget deficits, poor output growth, big spending growth, a high inflation rate, and a narrow tax base have all been observed since the 1980s. Output growth fell as it recorded annual average values of 5.9 percent in 1980-1984, 4 percent in 1990-1994 and 2.8 percent in 1998-1999 period correspondingly. Growth, on the other hand, was reported in 2003. It is generally assumed that as countries increase their output, they would rely more heavily on domestic public

debt issuance to finance expansion. As a result, there is a strong cross-country connection between economic growth and overall debt market size. Public spending as a proportion of GDP grew from 13 percent in 1980 to 1989 to 29.7 percent in 1990–1994. This higher public expenditures-to-GDP ratio stemmed from fiscal policy expansion undertaken during the 1970s oil boom. However, when the oil boom waned in the 1980s, government spending priorities remained unchanged. As a result, the federal government's budgetary operations resulted in huge deficits. From an average of 0.8 percent of GDP in 1970–1979, the level of deficit grew steadily, averaging 5.1 percent in 1980–1989 and 10.0 percent in 1990–1994. Because foreign loans were difficult to acquire, a notable aspect of the government fiscal growth was the funding of surplus expenditures from local sources, which averaged 79.2 percent between 1980 and 2002, since obtaining a foreign loan was complicated The gross - country connection between fiscal deficits (as a share of GDP) and the size of government debt markets reveals that countries with bigger fiscal deficits have issued more government securities in domestic markets. In general, government income reductions were matched by borrowing from the Central Bank via the mechanism of ways and means advances. These advances were never paid for by the federal government, but were refinanced through the flotation of treasury bills and treasury certificates, which are rolled over by issuing new ones to pay holders of existing debt instruments, adding to the debt stock's continued increase. As a result, the research sought to evaluate the impact of growing domestic debt on the Nigerian economy.

Government expenses in Nigeria have continued to climb due to enormous income from crude oil production and sales and rising demand for public goods (equipment) such as roads, electricity, education and health. Furthermore, internal and exterior security for the people and the nation is becoming increasingly necessary. Statistics available demonstrate that over the previous 30 decades there have been steadily rising overall Government expenses (capital and recurring components). For example, the government's total recurrent spending grew from N3,819.20 million in 1977 to N4,805.20 million in 1980 and N36,219.60 million in 1990. In 2000 and 2007, recurrent spending was N461,600.00 million and N1,589,270.00 million, respectively. Similarly, the mix of government recurrent expenditure reveals that spending on defence, internal security, education, health, agriculture, construction, and transportation and communication grew over the study period.

#### **2.2 THEORETICAL REVIEW**

There are primarily 2 major school of thought on deficit that are extremely arguable (though there's a 3rd model referred to as the small open economy view).

#### 2.2.1. The Keynesian propositions

The Keynesian proposal, which is the standard budget deficit theory or the conventional view, assumes that households react to an increase in current disposable income that corresponds to the tax cut, partly with higher desired private savings, and partly with higher Consumer demand increases, National saving is the sum total of private and public savings. (Orji Uka Odim, Onyeze Clementina Ngozi and Edeh Lawrence ,2014) This theory further suggests that the decision to fund public spending through the budget deficit due to a tax cut instead of current taxes will reduce national savings, and that the decrease in national savings is partly reflected in lower domestic investment and investment increases external debt, which reduces future national income and future national production. Budget deficit and interest rate.

However, the Keynesian economics believes that there is a positive correlation between deficits and economic performance, but they believe that budget deficits can stimulate domestic production at any time, trigger aggregate demand, increase savings and promote investment trends. This level of unit cost consolidates private investment. Now at an economy whose sensitivity to the unit value of investment is a small target. In addition, the reading indicates that the deficit will lead to an increase in private investment as investors expect positive results from government payments. Therefore, it is more of a deviation than a deviation. Therefore, from Osuki and Achinihu, Onuora andOgbonna and Monogbe et al. The report (2015) pointed out that the budget deficit is positively correlated with the economic performance of the Federal Republic of Nigeria, so it supports Keynesianism as an excuse.

Tax cuts funded by government loans will go a long way in stimulating consumer spending. The growth of consumer spending will affect the economy in the short and long term. In the short term, higher consumer spending will increase demand for goods and services, thereby increasing production and employment. Interest rates will also rise; however, as investors compete for less savings flows, and in Mundell-Fleming's open macroeconomic model, higher interest rates will inhibit investment and stimulate foreign capital inflows. The competitiveness of Nigerian companies in the global market will decrease. In the long run, a reduction in national savings caused by tax cuts will mean a reduction in investment capital and an increase in foreign debt. As a result, domestic production will be reduced, and most of the production will come from foreigners.

In the long run, the reduction in national savings due to tax cuts means lower investment capital and higher foreign debt, so government output will decrease, and most of the output will come from foreigners. To support the economists' hypothesis, Ball and Mankiev (1995) gave a comprehensive overview of the direct impact of budget deficits. The direct impact of budget deficits has multiple levels after the initial impact of the first category. influences. The deficit reduces national savings; national savings is the sum of personal savings (household savings instead of one-time taxable income from consumption) and government savings (government savings instead of government income paid). Once the government has a budget deficit, government savings will become negative, and national savings will not increase. Following this, the decrease in government savings partially offset the increase in private savings. For example, consider a tax cut. This tax cut reduces government savings by n1. However, household spending increased part of this gift, but government savings decreased.

#### 2.2.2 The Ricardian Equivalence Hypothesis (REH)

The Ricardian Equivalence Hypothesis (REH), however, encompasses another controversial force of scarcity thinking. Despite its theoretical appeal, standard values for the ratio between budget deficits and units of expenditure are generally not accepted and Ricardian economists dispute that the aforementioned logical statement is wrong. Although tax cuts funded by debt will increase the current financial returns available, it also means that in the nearest future, the government must raise taxes to pay off the debt and accrued interest. Tax cuts only allow buyers to temporarily increase their income and eventually repay it. When consumers realize this, they will understand that their permanent resources remain the same, and as a result, the tax cuts will not affect consumption, and households will save any additional revenue to maintain long-term tax liabilities. And provided it has no impact on consumption, including national savings, then the budget deficit will not have the consequences that the Keynesian economists pointed out. In particular, production, employment, foreign debt and interest rates are not affected in the short term and therefore not affected in the long term. Tax cuts do not affect economic conditions. Many researchers have relied on the Ricardian equivalence hypothesis to debate that budget deficits result mainly from tax cuts, which tend to diminish public revenues and public savings.
While these tax cuts reduce public savings and increase the budget deficit, they increase private savings. The authors of this reading argue that changes in the construction of public funding, i.e., debt versus tax, have no effect on real interest rates, mixed demand and personal expenses (Orji Uka Odim, Onyeze Clementina Ngozi and Edeh Lawrence ,2014).

The Ricardian Equivalence Hypothesis asserts that a deficit backed tax reduction will give way for a decrease in public savings and an increase in personal savings. Such a reduction in public savings is absolutely offset by the increase in private savings, and therefore the national income is not affected, that is, it remains the same. In other words, the budget deficit has no impact on national saving, interest rate, balance sheet, future national production or future national income. Gale and Orszag (2004). The ultimate principle is that sovereign debt is like future taxes, and when buyers look to the future, future taxes are equal to current taxes. Therefore, financing the government with debt is similar to financing it with taxes. This reading is called the Ricardian Equivalence in honor of the famous 19th century economist David Ricardo, as a result of what the theoretical argument originally pointed out.

To illustrate the Ricardian equivalence, allow us to assume that government purchases stay constant which the government. decides a cut in taxes. The Ricardian equivalence states that lump-sum changes in tax revenues won't have an effect on the amount of total consumption, total savings, the rate of interest, cash demand, national debt, accounting balance and different necessary economic variables. Suppose that the government reduces taxes by N1. The tax cut ought to lead people to extend consumption, as a result of the present tax cut will increase their current incomes. However, provided that the government has not modified its expenditures for product and services, the N1 tax cut these days should additionally increase current borrowing by N1. as a result of the extra debt of N1 are going to be repaid within the future, tax revenues can

be higher in the future implying lower future incomes for the citizens. The decline in future disposable incomes will cause people to consume less today, compensative the positive impacts on consumption of the N1 current tax cut. during this way, the overall effect of a current tax cut on desired consumption is zero, because the positive effects of redoubled current disposable income and also the negative effects of declined future disposable income cancel one another out. Additionally, considering that government deficits don't influence total consumption and savings, the amount of interest remains constant and also the demand for cash is not strained. Among the IS-LM model, the principle of the Ricardian theorem indicates that deficit will increase do not affect the equilibrium purpose of the IS and LM curves. Thus, government deficits do not affect the balanced level of interest rate and different key economic variables corresponding to consumption, savings, inflation and so forth the dispute raised by the Ricardian equivalence is that government bonds don't seem to be net wealth. in keeping with Barro (1974, 1987) and other advocates of the Ricardian equivalence, debt finance by bond certificate postpones taxation imposition for the future. Consequently, future taxation is akin to current taxation and thus citizens notice that their government bonds are going to be paid off with increase in future taxes.

The Ricardian equivalence implies that the debt-financed tax cut has no impact on consumption. Households save the additional income to pay off future tax debts that come with a reduction in taxes. The total of public and private savings remains the same. Hence, lowering taxes does not have any of the consequences that traditional analysis predicts. this implies that taxes will only change if the government decides to alter this price of your expenses. The idea behind the above postulate is that economists argue that there's no such issue as a free meal. If the government decides to cut down on taxes these days to facilitate the spending (deficit), that tax is going to be paid sooner or later in the future.

#### 2.2.3 The Neoclassical

The neoclassical college opined that excessive budget deficit results in a state of affairs out effect. They argue that government excessive disbursal stimulates mixture demand and therefore produce a high level of competition in demand for a loan between government and personal investor given hard and fast funds which can successively sky-rocket interest rate, and at last force out non-public investors. Empirical proof like that of Isah and Akinmulegun report that deficit doesn't stimulate economic performance in an African country and herewith canvas support for the neoclassical. At this junction, one surprise why empirical proof and theoretical underpinning justifies the very fact that deficit stimulates economic performance particularly once associate the economy is facing a persistent state like Nigeria but, within the sensible sense, the reverse is that the case in the African country context. It is in lightweight of the underlined observation that this study sought-after to analyse whether or not or not budget deficit stimulates economic performance in an African of relation into the economy using the sod-buster relation in volt-ampere univariate Model.

The neoclassic economic expert proposes the negative relationship between budget deficits and economic performance. They argue that a rise in government payment stimulate combination demand and hence motivate the high level of competition between government and personal investors in exacting for loan leading to higher interest rates and any discourages the issue of personal bonds, private investments, private spending will increase inflation level, and cause an identical increase within the accounting deficits and eventually slows the performance rate of the economy through resources crowding out. The neoclassic faculty considers individuals designing

their consumption over their entire cycle. By shifting taxes to future generations, business enterprise deficits increase current consumption. By assumptive full employment of resources, the neoclassic faculty argues that inflated consumption implies a decrease in savings. The rate of interest should rise to bring equilibrium in the Capital markets (Momodu and monoge,2017).

#### 2.3.1 Empirical Review of Literature

Between 1970 and 2014, most of Nigeria's national budgets had a deficit of 39 years and a surplus of 6 years. Economic indicators deal with issues related to achieving economic goals. These goals can be long-term, such as sustainable growth. And development or short-term development, such as stabilizing the economy in response to sudden, unpredictable events (called economic shocks). Monitoring these indicators is especially valuable for decision-makers, both in assessing whether an intervention is being undertaken and whether the intervention has worked. (fagbohun Akinola, 2017) For the purpose of this study, three indicators of economic activity are used: per capita income, unemployment, and price fluctuations. Per capita income measures the per capita income of a given region (city, region, country, etc.) in a given year. The unemployment rate is defined as the percentage of the total labour force who is unemployed but actively looking for work and ready to work. The price volatility reported in the Consumer Price Index (CPI) measures changes in the price level of a basket of consumer goods and services purchased by households.

Oladeji and Ekperiware Oladeji researched on the structural break relationship between deficit and economic performance in an African country. The study used quarterly time-series info of deficit, budget deficit service and real gross domestic product from 1980-2009. Academic degree empirical investigation was conducted victimization the chow check technique of estimation to figure out the structural break results of the deficit on economic performance in Nigeria as a result of the 2005 Paris Club debt relief. The results of their findings discovered that 2005 budget deficit relief caused a structural break that leads to the connection between deficit and economic performance. Balance and future relation of five variables (GDP, private investment, public investment, deficit and imports). Data point info covering the amount 1974-2007 was used and additionally, the vector autoregressive model (VAR) technique of estimation was employed. Their findings discovered that external that includes a negative result on gross domestic product and private investment and OS investment options a positive relationship with private investment (Momodu and monoge,2017).

Adeboye (2003) uses non-parametric economical methods to study the long-term relationship between budget deficits and economic growth including savings and investment. It has classified 64 developing countries, including Nigeria, into categories A, B and C based on their ranks. Studies have shown that the impact of the budget deficit that crowds out a private investment on the Nigerian economy has a significant impact on economic growth, employment and living standards. A place to reduce operating costs, increase your investment to encourage and create an environment conducive to private investment and promote income growth in the short and long term (Dr. Onwe, Basil Uche, 2014).

Joseph and Uma, through empirical observation, examine the nexus between charge per unit and deficit within the context of African nation applying error correction model (VECM) spanning from 1970 to 2010. From the findings, it had been discovered that deficit includes a positive and vital impact on a charge per unit within the long-run implying that rising charge per unit happens

as a result of higher deficit herewith bell ringing support for the Keynesian proposition. Sequel to this, the scientist postulates that acceptable financial — fiscal policies combine ought to be placed in place (Momodu and monoge,2017).

Bakare, Adesanya and Bolarinwa (2014) conducted a study on empirical investigation between budget deficit, inflation and funds in Nigeria. The paper critically investigates the future relationship between budget deficit, money supply and inflation in Nigeria between 1975 and 2012. The paper utilized a quantitative method framework and specifically attracts an economics technique to seek out the connection between inflation rate, rate of cash supply, growth of budget deficit/GDP and growth of external debt/GDP. Stationary take a look at conducted exploitation increased, Dickey-Fuller (ADF) reveals that the variables used are stationary at levels. The Johansen co-integration test suggests that there is a minimum of three co-integrating vectors among these variables. The calculable constant of the electronic countermeasures reveals that concerning 132% of the errors within the short run are corrected in the long run. The general result between the rate of inflation and growth of cash supply, growth of BD/GDP and growth of ED/GDP indicates that the desired model is statistically vital at a 5% level. By implication, the model is of the goodness of work i.e. reliable for policy making. However, the paper recommends that the Nigerian government ought to demonstrate a high sense of transparency in its monetary and monetary operations to curb the high prevalence of money supply and external debt, funds to scale back the incidence of inflation in Nigeria.

Taiwo and Agbatogun (2011) used unit root test, cointegration test and error correction model to check the impact of Nigerian government expenditure on the economic process from 1980 to 2009. income is that the most vital variable that helps to enhance or improve the situation. Stimulate economic growth in Nigeria. it's counselled to properly manage future investments and existing resources, and fitly manipulate alternative economic science variables to confirm property economic growth (Dr. Onwe, Basil Uche, 2014).

Ekpo (1994) studied the contribution of Nigerian government expenditure to economic growth from 1960 to 1992. The study found that budget growth was driven by large-scale private investment caused by government infrastructure expenditure. (2009) analyzed the impact of government spending on Nigeria's economic growth from 1970 to 2008. The document shows that total government investment, total current expenditure and education expenditure have a negative impact on economic growth, while medical, transportation and communications expenditures have a negative impact on economic growth. Daud (2010) studied the impact of capital expenditures on American education. Using time-series data from 1977 to 2007 for thirty (31) years, the economic growth of Nigeria was studied. The research used co-integration and error correction techniques. The results show that education expenditure has a positive and significant impact on economic growth.

Between 1991 and 2005, Ebimoboway (2010) studied the impact of fiscal policy on Nigeria's economic growth by studying taxes, government debt, current government expenditures, government investment, regular government budgets, and the contribution of government investment to GDP. Point out that there is a significant correlation between the descriptions certain variables are used together with GDP. Except for capital and current government expenditures, there is no significant relationship between the specific explanatory variables that contribute to the GDP. They concluded that achieving growth through Nigeria's fiscal policy is a miracle caused by inconsistency. Disrupt public order, waste, corruption and poor policy implementation.

Based on reviews of previous research and Nigeria's legislation, Abata, Kehinde, and Bolarinwa (2012) assessed how fiscal and monetary policies affect Nigeria's economic growth and development. The government's fiscal discipline requires far more than the formulation of fiscal policy rules. However, according to a previous study evaluated by Adefeso and Mobolaji (2010), monetary policy has a stronger impact on Nigeria's economic growth than fiscal policy, so the study recommends the use of monetary policy to stabilize the economy. Using annual data from 1970 to 2007, the relative effectiveness of Nigeria's fiscal and monetary policies relative to economic growth was studied. The empirical results show that the monetary policy has a stronger impact on them than the fiscal policy, and the conclusion is not weakened without considering the degree of openness. Therefore, the purpose of this study is to confirm this proposition by studying the impact of monetary and fiscal policies on Nigeria's economic growth.

Ogunmuiwa used time-series data from 1970 to 2007 to check whether the budget deficit contributed to Nigeria's economic performance. Econometric methods (such as the extended Dickey-Fuller test, Granger causality test, Johansen co-integration test, and vector error correction method (VECM)) are used to estimate the equation regression. The results show that there is no causal relationship between budget deficits and budget deficits. Nigeria's economic performance.

Ejigayehu also analyzed the economic performance of budget deficits on eight selected heavily indebted African countries (Benin, Ethiopia, Mali, Madagascar, Mozambique, Senegal, Tanzania, and Uganda) through over-indebtedness and the effect of debt on budget deficit ratio. Impact. And total volume. National income is used as an indicator of excessive debt, and the debt service export ratio is used as an indicator of debt replacement. Panel data for the period 1991-2010An empirical study was conducted in the horizontal regression model, which used the extended Dickey-Fuller test, heteroscedasticity and conventional regression to test for stationary. The final evaluation found that budget deficits affect economic performance through crowding rather than excessive debt. Alabama.an examination

Ayadi and Ayadi studied the impact of large budget deficits and their demand for services on the economic performance of the economies of Nigeria and South Africa. Neoclassical performance models, including the use of ordinary least squares (OLS) and generalized the least squares (GLS) methods. Found that debt and maintenance requirements had a negative impact on the job regarding the economic performance of Nigeria and South Africa. Econometric methods such as the extended Dickey-Fuller test, Granger causality test, Johansen cointegration test, and vector error correction method (VECM) are used to evaluate the equation. And Nigeria's economic performance.

Suliman used annual time series data from 1970 to 2010 to examine the impact of the budget deficit on Nigeria's economic performance. Using the econometric method of Ordinary Least Squares (OLS), the Dickey-Fuller root of the unit and Johansen co-integration are empirically analyzed. Test And error correction methods. Co-integration test shows the long-term relationship between variables and error correction. The results of the error correction model show that the budget deficit has a positive impact on Nigeria's economic performance. Therefore, they recommend providing political and economic stability to ensure effective debt management.

#### 2.5 Research gap

With the divergent estimation techniques and results from different studies on the assessment of the impact of deficits financing on economic growth in view, the pertinent question still remains whether the persistent budget deficits have effect on Nigeria economic performance between 1981 and 2019. Notwithstanding these various approaches that have been adopted by various researchers, in order to add value to the existing studies, this study will not only extend its scope beyond those of earlier studies by modifying the available models but will also fill knowledge gap by extending the periods captured to 2019 (i.e. the most recent data available)

#### **CHAPTER THREE**

# **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

This chapter presents the research methodology which reveals the theoretical framework of the study to delineate the relationship between government budget deficit and economic performance in Nigeria and the methodological approach employed to establish the empirical impact of government budget deficit on economic performance. It contains the research design, analytical frame work, model specification and estimation technique, a priori specification and data source.

### 3.1 Research design

This study created use of the Ex-post facto analysis style. Onwumere (2009) states that ex post facto design is that this sort of research involving events that have already taken place. the information already exists as no try would be made to manage or manipulate the relevant freelance variable. It aims at decisive and activity the link between one variable and another or the implications of one variable on another. The analysis style is that the framework utilized for analysis and deciphering the research observation. In actual fact, it reveals inferences regarding casual relation and defines the domain of generalizability. (Osuagwu, 2002). The study can adopt a quasi-experimental design. this can be an empirical study accustomed estimate the causative impact of an intervention on its target population while not random assignment. Quasiexperimental research shares similarities with the standard experimental design or irregular controlled trial, however it specifically lacks the part of random assignment to treatment or control. Instead, quasi-experimental styles usually permit the researcher to manage the assignment to the treatment condition but mistreatment some criterion save for random assignment. The primary part of making a quasi-experimental style is to spot the variables. The quasi-independent variable is going to be the x-variable, the variable that's manipulated so as to have an effect on a dependent variable. "X" is usually a clustering variable with completely different levels. Grouping suggests that two or more additional teams, like two groups receiving various treatments, or a treatment group and a no-treatment group (which could also be given a placebo - placebos are more oft employed in medical or physiological experiments). the expected outcome is the variable quantity, that is that the y-variable in a very statistical analysis, the dependent variable is determined over time for any changes that will take place. Once the variables are known and defined, a procedure ought to then be enforced and cluster variations should be examined.

#### **3.2 Definition and Measurement of Variables**

The variables used in the study were informed from the analytical framework and the existing empirical studies. The definition and measurement of these variables are classified into endogenous variables and exogenous variables. Where economic performance is the endogenous variable. It is measured from three performance criteria, GDP per capita performance, employment performance and price stabilization performance. On the other hand, the exogenous variables which is budget deficit and also consist of the control variables which are debt, exchange rate, infrastructure, inflation, tax, foreign direct investment, money supply.

### 3.3 Analytical framework

Literature in great quantity on the comparative effectiveness of deficit in developed and developing countries of the world. However, there has been contrastive opinions on that the 2 policies exert a larger influence on economic activity (Ajisafe and Folorunsho, 2002) and (Abata, Kehinde and Bolarinwa, 2012). Economic policy is thought to stifle the economic process by distorting the result of tax and inefficient government spending. Therefore, in the lightweight of the above, the question that involves the fore is what has been the result of economic policy on economic growth in Nigeria. Moreover, economic policy consists of the manipulation of presidency finances by raising or lowering taxes or levels of paying to push economic stability and performance. This role of the government sector in economic management is performed through the formulation and implementation of policy types and fiscal policy in particular. It is designed to realize the target of worth stability, growth, the balance of payments equilibrium, full employment, mobilization of resources and investment. These objectives have influenced the government's policy style and development efforts in the African country since independence. Different opinions have so continued to emerge on however economic policy will have an effect

on economic activities. The genesis of those controversies has been derived from the theoretical exposition of the various colleges of thought namely: the Classical; the Keynesian; and therefore, the Neo-classical colleges of thought. To the Classical school of thought, business enterprise deficits continuously supported by debt crowds-out, non-public investment and by extension lowering the level of economic growth. As summarized by Tchokote (2001), the classical economists believe that debt issued by the general public has no result on the non-public sector savings. To them, a deficit-financed by increasing the supply of securities, ceteris paribus reduces its worth and raises real interest rates and this crowds out non-public investment. According to the neoclassical economists, an associate in Nursing excessive budget deficit will result in poor economic performance. Following the neoclassical top of argument on the importance of budget deficit on the economic performance of developed and developing countries, it reveals that business enterprise policies proxy by budget deficits enhance economic performance measured by per capita financial gain, income stability, pct. and worth stability as explicit by Adefeso and Mobolaji (2010) and Abata, Kehinde and Bolarinwa (2012). Mathematically and functionally, it is viewed as:

$$Y(t) = \beta_0 + \beta_1 (BD_t)$$
(3.1)

Signifying,

Y is economic performance measured by per capital income, unemployment rate and price stability; BD is budget deficit that differentiates between tax revenue and government expenditure;  $\beta_0$  is the constant;  $\beta_1$  is the slope.

### **3.4 Methodological Approach**

This subsection will reveal the methodological approach employed by the study as it pertains to model specified, and the estimation techniques and procedures employed in the research to evaluate the relationship between government budget deficit and economic performance in Nigeria.

#### **3.4.1 Model specification**

Following the theoretical postulation by totally different schools of thought as adopted by previous studies like Adefeso and Mobolaji (2010) and Abata, Kehinde and Borinwa (2012), the model adopted for analysing the relation between budget deficit and economic performance emanated from the idea expressed in equation (3.1). the adopted model is expressed as:

$$Y(t) = \beta_0 + \beta_1 (BD_t)$$

More so, to control the fact that budget deficits have great effect on output level, exogenous factors (Control variables) are incorporated in the model (3.1) as:

$$Y(t) = \beta_0 + \beta_1 (BD_t) + \beta_2 X_t + \mu_t$$
(3.2)

Where; Y = output level; BD = Budget deficit, X = Control variables,  $\beta_0 =$  constant,  $\beta_1 =$  slope,  $\mu =$  error term and t = time.

Following the empirical studies drawn from the theoretical underpinning of budget deficit, this study adapted the work of Fagbohun (2017) which is expressed in functional and econometric equation of the three objectives in the study as follows:

$$Ypcp = f(BD, CF, EXCH,)$$
(3.2)

$$Emp = f(BD, INFCPI, FDI,)$$
(3.3)

$$Psp = f(BD, BR, MS) \tag{3.4}$$

Where the econometric equations are:

$$Ypcp_t = \beta_0 + \beta_1 D_t + \beta_2 CF_t + \beta_3 EXCH_t + \mu_t$$
(3.5)

$$Emp_t = \omega_0 + \omega_1 BD_t + \omega_2 INFCPI_t + \omega_3 FDI_t + \mu_t$$
(3.6)

$$Psp_t = \varphi_0 + \varphi_1 BD_t + \varphi_2 BR_t + \varphi_3 MS_t + \mu_t$$
(3.7)

Where;

*YPCP*= income per capita performance; *EMP*= employment performance proxy as unemployment rate; *PSP*= price stability performance proxy as Inflation, GDP deflator; *BD*= budget deficit ; *INF* = inflation; CF= Capital formation *FDI* = foreign direct investment; *EXCH* = exchange rate; MS=money supply proxy as broad money;  $\beta_0$ ,  $\omega_0$ ,  $\varphi_0$  =Constant,  $\beta_1$ ,  $\omega_1$ ,  $\varphi_1$  =Slope, *t* = Time, and  $\mu$ =Error term.

# 3.4.2 A priori Specification

This section reveals the a priori specification of the expected relationship between each dependent variable and independent variable.

 Table 3.1: A priori Expectation

Coefficient	Variable	A priori expected sign
$eta_0, \omega_0, arphi_0$	Intercept	Positive
$eta_1$	BD	Positive
$eta_2$	CF	Positive
$eta_3$	EXCH	Negative
$\omega_1$	BD	Negative
$\omega_2$	INF	Negative
$\omega_3$	FDI	Negative
$arphi_1$	BD	Positive

$arphi_2$	BR	Negative
$arphi_3$	MS	Positive

#### Source: Author's compilation, 2021

The a priori expectation provides expected signs and significance of the values of the coefficient of the parameters under review on the part of the empirical evidence and theoretical assertions. Budget deficit is expected to enhance per capita income growth (+) and reduce unemployment rate (-) and price instability (-). The same signs also apply to money supply and external reserves.

#### **3.5 Estimation Techniques**

The estimation technique emphasized in this study are time series pre-econometric test and the Augmented Dickey Fuller (ADF) to ascertain the stationary level of each variable, the Philip-Perron unit roots test will also be implemented to avoid misleading regressions and the long run co-movement of the variables. The ARDL testing approach allows the analysis of long-term relationships between variables regardless of their remarks ie stationary at level or at first difference. Also, it analyzes simultaneous estimation of the short-run and long-run components, eliminating the issues that has to with the omitted variables and the presence of autocorrelation. The co-integration test will also be done so as to determine the long run relationship between the dependent and independent variables when one or all of the variables are non-stationary, it is used to check if the independent variables can predict the dependent variable in a short-run and long-run. Based on the nature of incorporated variables in the formulated model, secondary data were employed for the study.

In order to formulate the ARDL equation or model, some of the Greek letters will be used to symbolize the relationships between variables and co-efficient estimated. The symbol  $\Delta$  denotes first difference operator, $\alpha_0$  is the drift component and  $\mu_t$  is the white nose residual,  $\alpha$  represents the short run coefficient of each variables in the model, while  $\beta$ ,  $\omega$ ,  $\varphi$  symbols denote the long run coefficient of each variables respectively in the model while Ln is natural log used to express the variables in ratio form. Hence, from the respective ARDL models in applying cointegration examination, the study tests the null hypothesis of no cointegration  $H_0$ :  $\beta_1 = \beta_2 =$  $\beta_3 = \beta_4 = 0$ ;  $H_0$ :  $\omega_1 = \omega_2 = \omega_3 = \omega_4 = 0$ ;  $H_0$ :  $\varphi_1 = \varphi_2 = \varphi_3 = \varphi_4 = 0$  against the alternative hypothesis  $H_1$ :  $\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq 0$ ;  $H_1$ :  $\omega_1 \neq \omega_2 \neq \omega_3 \neq \omega_4 \neq 0$ ;  $H_1$ :  $\varphi_1 \neq \varphi_2 \neq \varphi_3 \neq$  $\varphi_4 \neq 0$ . The Above illustrations will be used for the three objectives respectively, ARDL form of equation (3.5) for objective one:

$$\Delta lnRGDPpc =$$

$$\alpha_0 \sum_{i=1}^{a} \alpha_1 \Delta \ln RGDPpc_{t-i} + \sum_{i=0}^{b} \alpha_2 \Delta \ln BD_{t-i} + \sum_{i=0}^{c} \alpha_3 \Delta \ln CF_{t-i} + \sum_{i=0}^{d} \alpha_4 \Delta EXCH_{t-i} + \beta_1 \ln \text{GDPpc}_{t-1} + \beta_2 \ln \text{BD}_{t-1} + \beta_3 \ln \text{CF}_{t-1} + \beta_4 \ln \text{EXCH}_{t-1} + \mu_t$$
(1)

ARDL form of equation (3.6) for objective two:

# $\Delta lnEMTp =$

$$\alpha_{0} \sum_{i=1}^{a} \alpha_{1} \Delta \ln EMPT p_{t-i} + \sum_{i=0}^{b} \alpha_{2} \Delta \ln BD_{t-i} + \sum_{i=0}^{c} \alpha_{3} \Delta \ln INF_{t-i} + \sum_{i=0}^{d} \alpha_{4} \Delta FDI_{t-i} + \beta_{1} \ln \text{GDPpc}_{t-1} + \beta_{2} \ln \text{BD}_{t-1} + \beta_{3} \ln \text{CF}_{t-1} + \beta_{4} \ln \text{EXCH}_{t-1} + \mu_{t}$$

$$(2)$$

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ARDL form of equation (3.7) for objective three:

$$\Delta lnPRSp = \alpha_0 \sum_{i=1}^{a} \alpha_1 \Delta \ln PRSp_{t-i} + \sum_{i=0}^{b} \alpha_2 \Delta \ln BD_{t-i} + \sum_{i=0}^{c} \alpha_3 \Delta \ln BR_{t-i} + \sum_{i=0}^{d} \alpha_4 \Delta MS_{t-i} + \beta_1 PRSp_{t-1} + \beta_2 lnBD_{t-1} + \beta_3 lnBR_{t-1} + \beta_4 lnMS_{t-1} + \mu_t$$
(3)

# **3.6 Data Source**

The data point knowledge was sourced and extracted from existing documents and materials. These from the financial institution of country (CBN) mathematics Bulletin, Volume 26, 2019 and World Development Indicator (April, 2020).

# **CHAPTER FOUR**

# DATA PRESENTATION, ANALYSIS AND DISCUSSION

# **4.1 Introduction**

As already stated, the information for the estimation was generated from the assorted publications of the Central Bank of Nigeria. The secondary data from the financial organization statistical Bulletin and World Bank Development Indicators Data set covered figures on GDP per capita, budget deficit, capital formation, exchange rate, employment performance, inflation, foreign direct investment, bank rate and money supply for the period, 1981-2019 were analyzed and interpreted during this section. The extracted data was presented with tables for simple presentation and interpretation of knowledge. The study also incorporates tested hypothesis.

## 4.2 Data Presentation on excel from secondary data (source: WDI & CBN Statistics)

### 4.3 correlation analysis

	GDPPC	BDGR	CF	EXCH	EMP	INF	FDI	BR	PSP	MS
Mean	0.5208	19.31246	35.943	94.14346	3.86	19.146	1.55	17.7	22.0281	16.1
Median	1.4729	-0.104	34.049	101.6973	3.77	12.555	1.16	17.6	11.1189	13.4
Maximum	12.457	802.4067	89.386	306.921	8.53	72.836	5.79	31.7	219.003	27.4
Minimum	-15.45	-86.6	14.169	0.617708	1.74	5.388	0.26	8.92	0.6861	9.06
Std. Dev.	5.3249	131.3058	19.39	92.82186	1.64	17.063	1.23	4.79	35.4983	5.77
Skewness	-0.8747	5.792465	1.027	0.81018	1.69	1.7836	1.74	0.25	4.62135	0.65
Kurtosis	4.7022	35.12791	3.718	2.854578	5.76	4.9977	6.07	3.75	25.7746	1.8
Jarque-Bera	9.6817	1846.821	7.6936	4.300915	30.9	27.163	35	1.31	981.676	5.07
Probability	0.0079	0	0.0213	0.116431	0	1E-06	0	0.52	0	0.08
Sum	20.312	733.8735	1401.8	3671.595	151	746.71	60.6	690	859.094	629
Sum Sq. Dev.	1077.5	637924.6	14288	327404.1	102	11063	57.8	873	47885	1266
Observations	39	38	39	39	39	39	39	39	39	39

### Table 4.2 Descriptive Statistics for each Variables

Source: Author's computation using E-view 10 (2021)

The descriptive statistics for this research are shown in Table 4.2. The gross domestic product per capita, budget deficit growth rate, capital creation, exchange rate employment performance, inflation, foreign direct investment, bank rate, price stability performance, and money supply are among the ten variables in this table for the study period 1981-2019. Each of the descriptive outcomes are discussed below:

**Mean**: The mean is used to measure the average value of a distribution. Here, we have 39 observations i.e. the data span from 1981-2019. The average values of Gross Domestic Product per capita, budget deficit growth rate, capital creation, exchange rate employment performance, inflation, foreign direct investment, bank rate, price stability performance, and money supply are 0.52, 19.31, 35.94, 94.14, 3.86, 19.14, 1.55, 17.7, 22.02 and 16.1 respectively.

**Standard deviation**: Standard deviation measures the dispersion of the data set from the mean. It can be thought of as a measure of dispersion. The Large values of standard deviation imply greater variability in the data. The standard deviation as revealed in table 4.1 above shows BDGR as the highest variability of 131.3058 and FDI as the lowest variability of 1.233527.

**Skewness**: Skewness is the measure of asymmetry in a distribution. When the distribution is mound-shaped symmetrical, the mean, median and mode values are the same or nearly the same. The skewness as shown in table 4.2, it showed that all the included variables are not normally distributed, hence, asymmetrical distributions exhibited. Precisely, all the variables are positively skewed distribution, except GDP per capita which exhibited a negatively skewed distribution in this study.

**Kurtosis**: This measures the weight of the variables' data distribution tails in the heaviness or lightness. The normal standard distribution has a kurtosis of 3. A Positive value represent heavy-

tails (i.e., a lot of data are in your tails), whereas the negative values indicate light-tails (i.e. little or no data is in your tails). Table 4.2 reveals that all of the variables have a kurtosis distribution, signaling that they have outliers in their distribution because their kurtosis values are higher than 3.0 i.e. a leptokurtic distribution, however money supply and exchange rate kurtosis values are lower than 3.0 implying that they have lower outliers i.e. a platykurtic distribution.

### **4.3.1** The Time series Econometric result

The time series econometrics results are checked using the unit root test and the cointegration test to determine individual stationary levels and long-run co-movement of the included non-stationary variables, respectively, to avoid a misleading regression. The E-view 10 econometric program is used to perform these estimation procedures.

# **4.3.2 Pre-test estimation**

#### 4.3.3 Unit Root Test

### **Table 4.3: Stationary Test Using Augmented Dickey-Fuller Unit Root Test**

			Augmente	ed Dickey-	Fuller To	est (inte	rcept only)					
Variable	Level								First diff	erence		
	ADF						ADF					
	Statistic		<b>Critical</b>	values	Prob.	Remark	Statistic		Critical V	Values	Prob.	Remar
		1%	*5%	10%			_	1%	*5%	10%		
GDPPC	-4.1834	-3.6156	-2.9411	-2.6091	0.0022	<b>I(0)</b>	-10.0878	-3.6210	-2.9434	-2.6103	0.000	) I(1)
BR	-2.4928	-3.6156	-3.6156	-2.6091	0.1251	NS	-5.3656	-3.6268	-2.9458	-2.6115	0.0001	l I(1)
CF	-3.6171	-3.6156	-2.9411	-2.6091	0.0100	<b>I(0)</b>	-4.4156	-3.6210	-2.9434	-2.6103	0.0012	2 I(1)
EXCH	1.4000	-3.6156	-2.9411	-2.6091	0.9987	NS	-4.2576	-3.6210	-2.9434	-2.6103	-2.6103	3 I(1)
FDI	-3.9334	-3.6156	-2.9411	-2.6091	0.0043	<b>I(0)</b>	-8.0198	-3.6210	-2.9434	-2.6103	0.0000	) I(1)
INF	-2.9156	-3.6156	-2.9411	-2.6091	0.0529	NS	-5.6726	-3.6210	-2.9434	-2.6103	0.0000	) I(1)
MS	-1.0062	-3.6156	-2.9411	-2.6091	0.7414	NS	-4.8999	-3.6210	-2.9434	-2.6103	0.0003	3 I(1)
BDGR	-6.06116	-3.6210	-2.9434	-2.6103	0.0000	<b>I(0)</b>	-10.0878	-3.6210	-2.9434	-2.6103	0.000	) I(1)
EMP	-0.9281	-3.6156	-2.9411	-2.6091	0.7683	NS	-5.15464	-3.6210	-2.9434	-2.6103	0.0001	l I(1)
PSP	-13.6632	-3.6156	-2.9411	-2.60907	0.0000	<b>I(0)</b>	-16.1824	-3.621	-2.9434	-2.61026	0	I(1)

Variable			]	Level					First diffe	erence		
	ADF						ADF					
	statistic		Critical va	alues	Prob.3	lemark	Statistic		Critical v	alues	Prob.	Remark
		1%	*5%	10%			_	1%	*5%	10%		
GDPPC	-4.0012	-4.2191	-3.5331	-3.1983	0.0171	<b>I(0)</b>	-10.3272	-4.2268	-3.5366	-3.2003	0.0000	<b>I</b> (1)
BR	-2.2780	-4.2191	-3.5331	-3.1983	0.4352	NS	-5.6383	-4.2350	-3.5403	-3.2024	0.0002	<b>I</b> (1)
CF	-2.6409	-4.2191	-3.5331	-3.1983	0.2656	NS	-5.1337	-4.2268	-3.5366	-3.2003	0.0009	<b>I</b> (1)
EXCH	-2.0798	-4.2268	-3.5366	-3.2003	0.5396	NS	-4.5046	-4.2268	-3.5366	-3.2003	0.0049	<b>I</b> (1)
FDI	-3.8512	-4.2191	-3.5331	-3.1983	0.0244	<b>I(0)</b>	-7.9731	-4.2268	-3.5366	-3.2003	0.0000	<b>I</b> (1)
INF	-4.0198	-4.2268	-3.5366	-3.2003	0.0166	<b>I(0)</b>	-5.6067	-4.2268	-3.5366	-3.2003	0.0003	<b>I</b> (1)
MS	-2.8288	-4.2268	-3.5366	-3.2003	0.1966	NS	-4.8326	-4.2268	-3.5366	-3.2003	0.0021	<b>I</b> (1)
BDGR	-5.9733	-4.2268	-3.5366	-3.2003	0.0001	<b>I(0)</b>	-9.9503	-4.2350	-3.5403	-3.2024	0.0000	<b>I</b> (1)
EMP	-2.0814	-4.2191	-3.5331	-3.1983	0.5392	NS	-5.1000	-4.2268	-3.5366	-3.2003	0.0010	I(1)
PSP	-13.5216	-4.2191	-3.5331	-3.1983	0.0000	<b>I(0)</b>	-15.4648	-4.2268	-3.5366	-3.2003	0.0000	I(1)

Source: Author's Compilation from Eviews 10 (2021)

In order to establish if a data set is stationary and the sequence of integration in a time series data, the unit root test is performed using the Augmented Dickey Fuller test. Table 4.3 upper panel (ADF test for intercept only) shows that GDP per capita, capital formation, foreign direct investment, budget deficit growth rate, and price stability performance are stationary at level I(0) while at the first difference 1(1) bank rate, exchange rate, inflation, money supply, employment

performance were stationary. The lower panel of the same table 4.3 ADF test for (trend and intercept) shows that bank rate, capital formation, exchange rate, money supply and employment performance were stationary at first difference I(1) while GDP per capita, foreign direct investment, inflation, budget deficit growth rate and price stability performance are stationary at level I(0).

After determining that the results were stationary, the Johanssen co-integration test were used, which uses no exogenous variables. This assisted in determining that there is a strong long-run equilibrium between government deficits and economic performance on the one hand, and overall budget deficits and chosen macroeconomic variables on the other.

Table 4.4 represents the Philip-perron test. The test results given in the upper panel (intercept only) reveal that GDPPC, CF, EXCH FDI, BDGR, EMP and PSP are stationary at level I(0), following the PP test as stated in table 4.4. BR, INF, and MS are the outcomes of the variables stationary at first difference I(1). In addition, the results of the PP test for panel two (trend and intercept) revealed that GDPPC, FDI, BDGR and PSP are stationary at level I(0), but BR, CF, EXCH, INF, MS and EMP are stationary at first difference I(1).

Table 4.4: Result of the Phillip-Perron (PP) Test

											_	
			Phillips-P	erron Tes	t (interc	ept onl	y)					
Variable			]	Level					First diff	erence		
			~ • • •			_			~			
	P-VALUE		Critical	values	Prob.	Rema	P-VALUE		Critical	Values	Prob.	Remarks
		1%	*5%	10%				1%	*5%	10%		
GDPPC	-4.2024	-3.6156	-2.9411	-2.6091	0.0021	<b>I(0)</b>	-10.4306	-3.6210	-2.9434	-2.6103	0.0000	I(1)
BR	-2.4703	-3.6156	-2.9411	-2.6091	0.1305	NS	-6.8525	-3.6210	-2.9434	-2.6103	0.0000	I(1)
CF	-3.5398	-3.6156	-2.9411	-2.6091	0.0121	<b>I(0)</b>	-4.4156	-3.6210	-2.9434	-2.6103	0.0012	I(1)
EXCH	1.3487	-3.6156	-2.9411	-2.6091	0.9984	NS	-4.1577	-3.6210	-2.9434	-2.6103	0.0024	I(1)
FDI	-3.8587	-3.6156	-2.9411	-2.6091	0.0053	<b>I(0)</b>	-13.9820	-3.6210	-2.9434	-2.6103	0.0000	I(1)
INF	-2.7850	-3.6156	-2.9411	-2.6091	0.0699	NS	-9.6693	-3.6210	-2.9434	-2.6103	0.0000	I(1)
MS	-0.7787	-3.6156	-2.9411	-2.6091	0.8137	NS	-5.9170	-3.6210	-2.9434	-2.6103	0.0000	I(1)
BDGR	-6.0611	-3.6210	-2.9434	-2.6103	0.0000	<b>I(0)</b>	-35.3693	-3.6268	-2.9458	-2.6115	0.0001	I(1)
EMP	-0.9281	-3.6156	-2.9411	-2.6091	0.7683	NS	-5.1546	-3.6210	-2.9434	-2.6103	0.0001	I(1)
PSP	-10.1777	-3.6156	-2.9411	-2.6091	-2.9411	NS	-36.20185	-3.6210	-2.9434	-2.6103	0.0001	I(1)
			Phillips-P	erron Tes	t (Intero	cept and	l Trend)					
Variable			]	Level		•	,		First diff	erence		
			~	_		_			~	_		
	P-VALUE	40/	Critical v	alues	Prob.	Rema	P-VALUE	40/	Critical	values	Prob.	Remarks
~~~~~		1%	*5%	10%		= (0)		1%	*5%	10%		
GDPPC	-4.0012	-4.2191	-3.5331	-3.1983	0.0171	<b>I</b> (0)	-12.1554	-4.2268	-3.5366	-3.2003	0.0000	<b>I</b> (1)
BR	-2.1898	-4.2191	-3.5331	-3.1983	0.4814	NS	-7.0490	-4.2268	-3.5366	-3.2003	0.0000	I(1)
CF	-2.563763	-4.2191	-3.5331	-3.1983	0.2980	NS	-5.1337	-4.2268	-3.5366	-3.2003	0.0009	I(1)
EXCH	-1.5110	-4.2191	-3.5331	-3.1983	0.8082	NS	-4.2484	-4.2268	-3.5366	-3.2003	0.0095	<b>I</b> (1)
FDI	-3.7635	-4.2191	-3.5331	-3.1983	0.0299	<b>I(0)</b>	-17.9881	-4.2268	-3.5366	-3.2003	0.0000	I(1)
INF	-2.8675	-4.2191	-3.5331	-3.1983	0.1839	NS	-10.6055	-4.2268	-3.5366	-3.2003	0.0000	I(1)
MS	-2.0381	-4.2191	-3.5331	-3.1983	0.5624	NS	-6.3853	-4.2268	-3.5366	-3.2003	0.0000	I(1)
BDGR	-5.9732	-4.2268	-3.5366	-3.2003	0.0001	<b>I(0)</b>	-36.2646	-4.235	-3.5403	-3.2024	0.0000	I(1)
EMP	-2.2347	-4.2191	-3.5331	-3.1983	0.4577	NS	-5.0947	-4.2268	-3.5366	-3.2003	0.0010	I(1)
PSP	-10.5716	-4.2191	-3.5331	-3.1983	0.0000	<b>I(0)</b>	-34.0920	-4.2268	-3.5366	-3.2003	0.0000	I(1)

Source: Author's Compilation from Eviews 10 (2021)

# 4.4 Lag Length Order Selection Criteria Results

The ARDL co-integration technique was used to determine if there is a long-run link between the variables while evaluating the stated ARDL models. This is due to the fact that, unlike other approaches for estimating cointegrating relationships, the ARDL cointegration technique does not need lag length symmetry; each variable can have a varying number of lag terms. However, before running this test, it was necessary to identify the proper lag time to avoid misspecification and loss of degrees of freedom. According to the literature, lag order selection criteria attributed to Hannan-Quinn information criteria (HIC), the Log Likelihood criterion, and the Log Likelihood criterion ascribed to the Log Likelihood criterion ascribed to the Akaike information criteria (SIC), Final Prediction Error (FPE) criteria and the Akaike information criteria (AIC) were considered. The results are presented in table 4.5.

The result presented in table 4.5 illustrates the optimum lag structure for the VAR, From the output, the chosen lag order is represented by an asterisk symbol distributed between lags 1 and 2. As seen, the results reflect that all selection principles selected the optimum lag length. Based on majority of the chosen lag, for objective one the lag length chosen is the lag two which means two lags will be used to test the cointegration. However, for objective two and three the most suggested lag is lag one therefore, there will only be one lag used for the cointegration.

Table 4.5 Lag	Length	Order	Selection	Criteria	Results
---------------	--------	-------	-----------	----------	---------

LAG LE	NGTH CRITE	ERIA SELECT	TION FOR OF	BJECTIVE O	NE	
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-659.6637	NA	1.21E+11	36.87021	37.04615	36.93162
1	-571.767	151.3777	2.24E+09	32.87595	33.75568*	33.183
2	-549.0097	34.13601*	1.60e+09*	32.50054*	34.08406	33.05323*

LAG LE	NGTH CRITE	ERIA SELECT	TION FOR OF	BJECTIVE T	WO	
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-500.1644	NA	17152980	28.00913	28.18508	28.07054
1	-454.8064	78.11650*	3381586.*	26.37814*	27.25787*	26.68519*
2	-445.0606	14.61878	4962312	26.72559	28.30911	27.27828

LAGL	ENGTH CRITE	ERIA SELECT	FION FOR OF	BJECTIVE T	HREE	
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-585.1662	NA	1.93E+09	32.73146	32.9074	32.79287
1	-529.9534	95.08869*	2.20e+08*	30.55297	31.43270*	30.86002*
2	-513.8073	24.21913	2.26E+08	30.54485*	32.12837	31.09754
~						

Source: Author's Compilation from Eviews 10 (2021)

\* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

#### 4.5 Test for Co-integration

The study used the Johansen Co-integration Rank Test to assess the co-integration rank of variables as a requirement or condition for examining the Vector Error Correction Model. The cointegration test is used to determine whether two variables have a potential long-run equilibrium relationship among concerned variables according to various objectives used in this research. Awestruck (2012). The advantages of this technique is that it allows a mixture of I (0) and I (1) variables as regressors with the implication that the order of integration of variables may not essentially be the identical. After determining the optimal lag length, the study tests for the co-integration relationship among the variables.

If the computed F-statistics is less than the lower bound value at 5%, the null hypothesis is not rejected. If the F-statistics is greater than the upper bound value at 5%, it denotes that the existence of a long-run relationship among the variables. If the F-statistics is between the lower bound value and the upper bound value, then long-run association between the variables becomes inconclusive.

From the table 4.6, for the objective one, results show that the F-statistics (4.198782) is greater than the higher bound (1) value (3.67) at 5%, therefore, rejecting the null hypothesis of no levels relationship. This indicates that there exists a long run relationship among Income per capita, budget deficit, capital formation and exchange rate.

For the objective two, results show that the F-statistics (1.099448) falls below the lower bound (0) value (2.79) at 5%, this indicates that there is no long-run relationship amongst employment performance, budget deficit, inflation and foreign direct investment.

Finally, the cointegration test for the third objective reveals that the F-statistics (58.64572) is greater than the higher bound (1) value (3.67) at 5%, this implies that there is no long-run relationship among price stability performance, budget deficit, bank rate and money supply. The total result shows that there is existence of a long run relationship amongst the tested variables in objective one and three.

Table 4.6	Presentation	of (	Cointegra	ation	Test	Result
I ubic no	I I Countration		Jonnegie		LOU	Itesuit

Results of Bound Test Approach to Co-Integration for Objective One									
Significance	Critical va	lue Bonds	Computed F-statistics						
	Lower Bound I(0)	Higher Bound I(1)							
10%	2.37	3.2							
5%	2.79	3.67	4.198782						
2.50%	3.15	4.08							
1%	3.65	4.66							

<b>Results of Bound Test Approach to Co-Integration for Objective One</b>				
Significance	Critical value Bonds		Computed F-statistics	
	Lower Bound I(0)	Higher Bound I(1)		
10%	2.37	3.2		
5%	2.79	3.67	1.099448	
2.50%	3.15	4.08		
1%	3.65	4.66		

<b>Results of Bound Test Approach to Co-Integration for Objective three</b>				
Significance	Critical value Bonds		Computed F-statistics	
	Lower Bound I(0)	Higher Bound I(1)		
10%	2.37	3.2		
5%	2.79	3.67	58.64572	
2.50%	3.15	4.08		
1%	3.65	4.66		

**Source**: Author's Compilation from Eviews 10 (2021)

# 4.5 Result of the ARDL Estimates

# 4.5.1 Long run Estimates of Government Budget Deficit and Gross Domestic Product Per

# Capita

The table 4.7 result of the global statistics for the effect of government budget deficit and Gross

Domestic Product Per Capita performance.

# **Table 4.7 Result for Long run Estimates**

Regressand: DRGDP					
Panel A: Long Run Coefficients					
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
С	1.84809	3.786626	0.488057	0.6296	
GDPPC(-1)	0.241007	0.148854	1.619087	0.1175	
GDPPC(-2)	0.211031	0.126151	1.672854	0.1063	
BDGR	0.001986	0.003642	0.545286	0.5902	
BDGR(-1)	0.001148	0.003689	0.31112	0.7582	
BDGR(-2)	0.012966	0.003609	3.592386	0.0013	
CF	-0.213632	0.120915	-1.766796	0.089	
CF(-1)	0.185118	0.12618	1.467089	0.1543	
EXCH	-0.05963	0.028365	-2.102252	0.0454	
EXCH(-1)	0.060465	0.02973	2.033817	0.0523	
Panel B: Goodness-of-fit Measures					
$R^2$		0.573988			
Adjusted R <sup>2</sup>		0.426523			
<i>F-statistic</i>			3.892357		
Prob(F-statistic)			0.00312		
Durbin-Watson stat			2.121314		

Source: Author's Computation using Eviews 10 (2021)

Variable C= This is the regression line equation's intercept. The outcome is positive, indicating that if the budget deficit is positive, the real exchange rate, real GDP growth rate, inflation rate, real interest rate, and real private investment will remain stable at their current levels. However, when the size of the budget deficit varies at this level, these macroeconomic indicators are affected positively or negatively, depending on the circumstance.

The table 4.7 reports the long run of objective one, this result shows that there is a positive relationship between gross domestic product per capita and log value of budget deficit. This implies that a percentage increase in budget deficit will lead to a corresponding increase of 0.02% increase in economic performance in the long run equilibrium all things being equal. This result is in line with economic expectation; however, it does not satisfy the t-statistic (absolute value) value condition that the t-st5atistic value of the variable should be > 1.5 and the prob. value (critical value) that the prob. Value of the variable should be < 0.5, the t-statistic (0.545286) and prob. Values (0.5902) reports that the coefficient of log value of budget deficit is statistically insignificant. In addition, the table 4.7 shows that capital formation (CF) and exchange rate (EXCH) have a negative relationship with gross domestic product per capita in the Nigeria economy. This indicates that 1% increase in CF and EXCH would bring about a decrease in economic performance by 21.4% and 5.9% respectively. However, Furthermore, the coefficient of capital formation (-0.213632) is statistically insignificant with prob. value (0.089)which is greater than 0.05 and t-statistic (-1.7667) which has a negative effect on economic performance. From the above result the coefficient of GDPPC, BDGR, CF and EXCH in previous years is positive which implies a positive relationship between economic performance of previous years and present year. Further, in the panel B, the explanatory power is  $R^2$  is high (0.573988), this exceeds the 50% benchmark. That is the variation in economic performance is explained to a 50% event by GDP per capita and other control variables introduced in analyzing objective one. However, the adjusted  $R^2$  of (0.426523) says otherwise, it does not agree after removing the effect of the explanatory variables in the variation in the variables. Also, the F-statistic which is used to measure the overall significance of the estimated model is significant at (3.892357) with probability value p = 0.00312, the Durbin-Watson is significant at 2.121314 which shows a negative auto-correlation. This indicates there is no re-enforcement of goodness of fit. These suggest that the rate of natural increase in log value of budget deficit, capital formation and exchange rate are insignificant determinants of economic growth in Nigeria.

#### 4.5.2 Long run Estimates of Government Budget Deficit and Employment Performance

The table 4.8 result of the global statistics for the effect of government budget deficit and Employment performance in the economy.

As stated earlier, there is no long run relationship in objective two. The table 4.8 above shows the result of the long run effects of objective three, an ARDL examination of the result in table 4. 8 represents a direct and insignificant relationship of the log value of budget deficit (BDGR) and bank rate (BR) with price stability performance (PRSP) measured by inflation rate. they do not adapt with theoretical expectation. In magnitude terms, the implication is that if there is a percentage increase in budget deficit and bank rate, it will lead to an increase in price stability performance by 0.8% and 70.9% respectively in the long run equilibrium. Also, t-statistic of budget deficit and bank rate are statistically insignificant at 0.563667 and 1.039263 correspondingly, as well as the prob. Value of budget deficit and bank rate which is statistically insignificant at 0.5778 and 0.3083 respectively. The table also described that the money supply

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(MS) has an indirect and significant impact on price stability, and this conforms with the theoretical expectation. This indicates that a 1% change in money supply (MS) would decrease price stability performance in the economy by -2.081391 and statistically significant in the t-statistic and prob. Value of -2.509343 and 0.0187 respectively. the panel B of table 4. Shows the goodness of fit measures. The R<sup>2</sup> and adjusted R<sup>2</sup> result shows that a 46.1% and 37% respectively of the total variation in price stability performance (PRSP) **is** accounted by changes in log value of budget deficit (BDGR) bank rate proxy by lending interest rate (BR) and broad money supply (MS) during the reviewed periods. The F-statistic result reveals that all the incorporated price stability performance (PRSP) and independent variables are simultaneously significant at 5% critical level. The Durbin-Watson test result of 2.444298 shows that there is presence of negative serial correlation among the residuals. This model is not spurious as the Durbin-Watson value is greater than the R-square.

# Table 4.8

Regressand: DRGDP					
Panel A: Lo	ong Run Coeffic	ients			
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
С	-5.595084	11.43487	-0.4893	0.6287	
PSP(-1)	0.339936	0.162791	2.088182	0.0467	
PSP(-2)	0.045726	0.056386	0.810952	0.4248	
BDGR	0.007874	0.013969	0.563667	0.5778	
BDGR(-1)	-0.014879	0.013911	-1.069548	0.2947	
BR	0.709118	0.682328	1.039263	0.3083	
BR(-1)	-0.999786	0.777991	-1.285088	0.2101	
BR(-2)	1.610941	0.618156	2.606041	0.015	
MS	-2.081391	0.829457	-2.509343	0.0187	
MS(-1)	2.99814	1.265184	2.369727	0.0255	
MS(-2)	-1.385748	0.902806	-1.534935	0.1369	
Panel B: Goodness-of-fit Measures					
$R^2$		0.461228			
Adjusted R <sup>2</sup>			0.369243		
<i>F-statistic</i>			5.014148		
Prob(F-statistic)			0.000362		
Durbin-Watson stat			2.444298		

Source: Author's Computation using Eviews 10 (2021)

#### 4.6 Results of the ARDL Short-run Relationship objective one (Equation (1))

The result of the short run coefficients in equation 1 are presented in Table 4.8, the sign of the effects of government budget deficit on GDP per capita performance is negative. The short run BDGR and CF are negative and statistically in significant, where a 1% increase in BDGR and CF leads to a 0.39% and 3.9% decrease in GDPPC respectively. Also, the t-statistic and prob. Value of both variables are statistically insignificant. The exchange rate (EXCH), has a positive relationship with GDPPC. This implies that 1% increases bring about a 0.001763% increase in GDPPC. However, it is statistically insignificant with t-statistic and prob. Value not satisfying the existing conditions. In the short run, budget deficit and capital formation are negatively the negative sign of the coefficients of GDP per capita (GDPPC), log value of budget deficit (BDGR), and capital formation (CF) in the model advocates that the economy has not applied efficient use of budget deficit nor acquired relevant capital formation that would have enabled GDP per capita bring about growth in the economy performance on the short run. The error correction term's (ECT) coefficient is negative and insignificant (0.353) at the 1% significance level. The short run adjusts at a speed level of 35.3% into the long run equilibrium by short run shock.

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Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-0.35398	0.886123	-0.39947	0.6929
D(GDPPC(-1))	-0.221144	0.260486	-0.84897	0.404
D(BDGR(-1))	-0.00398	0.00467	-0.85283	0.4019
D(CF(-1))	-0.03995	0.173866	-0.22978	0.8201
D(EXCH(-1))	0.001763	0.041216	0.042779	0.9662
ECT(-1)	-0.36925	0.266825	-1.38385	0.1786

 Table 4.9 Estimated Short Run Dynamics Test Result for Objective One

Source: Author's Computation using Eviews 10 (2021)

### 4.7 Results of the ARDL Short-run Relationship objective two (Equation (2))

Furthermore, in order to determine the short run effects of the variables used in equation 2 for objective 2, assess the short run adjustment mechanism to equilibrium as well as the speed of adjustment, the short-run dynamics of the equilibrium relationship were obtained directly as the estimated coefficients of the levelled and first-differenced variables in the ARDL model and the results are presented in table 4.9. it is evident that the coefficient of the error correction term for the estimated equation is both statistically insignificant but positive with prob. Value 0.9586 and t-statistic 0.052365. consequently, the adjustment speed applied by the coefficient of C advocates that the deviation from short run to long run equilibrium is corrected at 0.14762% per year. Hence, there is no stable relationship among employment performance, budget deficit, inflation and foreign direct investment. The negative relationship of BDGR, INF and FDI with EMP implies that 1% increase in BDGR, INF &FDI will lead to a decrease in EMP proxy by

unemployment rate by -0.0000153%, -0.003162 and -0.044597% respectively. They are also statistically insignificant.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.14762	0.102038	1.446726	0.1583
D(EMP(-1))	0.195146	0.209063	0.933434	0.358
D(BDGR(-1))	-1.53E-05	0.000495	-0.03095	0.9755
D(INF(-1))	-0.003162	0.006236	-0.5071	0.6158
D(FDI(-1))	-0.044597	0.069194	-0.64452	0.5241
ECT(-1)	0.004098	0.078256	0.052365	0.9586

Table 4.10 Estimated Short Run Dynamics Test Result for Objective two

Source: Author's Computation using Eviews 10 (2021)

# 4.6 Results of the ARDL Short-run Relationship objective one (Equation (3))

Results of the estimated short run for equation 3 are presented in table 4.10. the results report that money supply (MS) is positive but statistically insignificant. An increase in money supply does not significantly change price stability performance in the short run. This implies that a 1% increase leads to a 1.400301 increase in price stability performance (PRSP). The t-statistic is 1.60707 and the prob. Value is 0.1185 the conditions are not satisfied together therefore it is statistically insignificant. From the table 4.10 results show log value of budget deficit BDGR and bank rate BR is negative. This indicates that 1% increase in each variable will result in a decrease in price stability by -0.011451% and -1.826406% respectively. However, the t-statistic and prob. Value of BR are statistically significant at -2.93225 and 0.0064 correspondingly as the conditions are satisfied. This indicates an increase in bank rate has a significant effect on price stability. Although, the t-statistic -1.13869 and prob. Value 0.2638 of BDGR is statistically
insignificant. Additionally, the ECT coefficient value is negative and statistically significant.

This implies that the short run adjusts at a speed level of 70.4% into the long run equilibrium by

short run shock in the previous year.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-0.555645	1.911983	-0.29061	0.7733
D(PSP(-1))	0.220178	0.16604	1.32606	0.1948
D(BDGR(-1))	-0.011451	0.010057	-1.13869	0.2638
D(BR(-1))	-1.826406	0.622869	-2.93225	0.0064
D(MS(-1))	1.400301	0.871338	1.60707	0.1185
ECT(-1)	-0.704624	0.193316	-3.64493	0.001

Table 4.11 Estimated Short Run Dynamics Test Result for Objective three

Source: Author's Computation using Eviews 10 (2021)

# 4.7 Data analysis and Discussion of Results

Based on the preceding analytical statistical output, it was determined that a budget deficit significantly boosts economic performance. Augmented Dickey Fuller (ADF) tests for stationarity indicate that GDPPC, CF, FDI, BDGR AND PSP are integrated at level while BR, EXCH, INF, MS AND EMP is integrated at first difference.

The univariate analysis of the non-stationary series indicates the processes of I(0) and I(1) for these variables. The following table provides all the variables used to compare the ADF value reported in table 4.3 to the stationary test results.

The result of the co-integration assessment utilizing a maximum likelihood technique provided in table 4.5 was achieved after the results of the VAR Lag Length Selection Criteria Results. Given that residuals are stationary and not stationary from the co-integration regression.

There is a large yet unfavorable link between economic performance and The negative reaction of the budget deficit to economic performance could be linked to moral hazard mismanagement of funds and financial indiscipline, which prevents the country from achieving the projected level of growth over time. The VAR estimate's output established that the lag value of the federal government's budget deficit has contributed to the economy's performance in previous year, the beneficial influence has not been felt to a significant amount.

The results reveal that budget deficits boost the rate of per capita income and income equality, but they worsen the level of unemployment and the volatility of commodity prices. As indicated in Table 4.1, the outcome reveals that the budget deficit boosts the growth rate of per capita income in Nigeria, which confirms theoretical expectations, but the size is small. This shows that budget deficits explain a significant portion of the change in per capita income. This indicates that government spending on social infrastructure improves overall incomes in Nigeria and, as a result, per capita income growth.

Furthermore, the results in Table 4.2 demonstrate the existence of a positive link between the budget deficit and the unemployment rate. It demonstrates that Nigeria's growth is not inclusive of employment creation. This suggests that understanding the causes of the high unemployment rate in Nigeria will be useful in ending the vicious cycle and reducing poverty. Similarly, as seen in Table 4.3, the expansion of output and per capita income is inflationary pushed. As a result, the findings could lead to the conclusion that all of the models in Tables 4.1 to 4.3 provide a more accurate picture of the relationship between Nigeria's budget deficits and economic performance.

The economic implication of this is that additional increases in the budget deficit as a supplement to paying government spending will only improve economic performance if and only

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if they are directed efficiently toward the capital sector of the economy. Nigeria's economic performance, which suggests that funding activities have a good impact on economic growth. As a monetary phenomenon in Nigeria's economies, inflation is based upon our results. Some fundamental changes in the productive basis of the economy have to be done in order for the budget deficit to be successful. Based on the study results, the government of these economies will adopt strategies to reduce the size and revenue of the informal sector. Furthermore, the interest rate should be cut to make private sector investment money available and accessible, which will contribute greatly to Nigeria's economic growth. The economy should also be prevented from exchange-rate depreciation as it has a detrimental effect on economic performance. As a result, ensuring that government expenditure is directed in the appropriate direction could successfully cut unemployment and inflation rates, boost per capita income, and possibly reduce inequality in Nigeria.

#### **CHAPTER FIVE**

# CONCLUSIONS AND RECOMMENDATIONS

## **5.0 Introduction**

This chapter boons the summary of the research, policy conclusions and recommendations revealed on the results of the study. It presents the contributions to knowledge and also the suggestion of the study as well as proposals on the study for future implementation.

## 5.1 Summary of the Study

The resolve of this study was to analyze long and short run relationship between government budget deficit and economic performance in Nigeria. The study implemented the ARDL bounds testing co-integration approach to investigate the long -run and short -run relationships government budget deficit and economic performance in Nigeria in three different functional procedures. The unit root test was assessed to determine the time series of variables contained within the study using both the Augmented Dickey-Fuller (ADF) and the Phillip- Perron (PP) test before the ARDL test was directed. The conclusions of the ADF and PP discovered all the variables that were not stationary in level form, leading to the first difference test. Subsequently the variables had been determined to be stationary at level or first difference. The ARDL models ' lag order was forecast using VAR lag order selection criteria that selected lag 2 for the first ARDL models (1) and lag 1 for the other ARDL models (2 and 3). The cointegration relationship between the variables was determined in respective ARDL model by means of the bound sample strategy after the lag length was chosen. The results illustrate that there is a cointegration relationship between government budget deficit and economic performance functional form where government budget deficit was the dependent variable. The results also indicate that government budget deficit has a negative but significant impact on

economic performance. In contrast, the results for the second functional form where employment performance was the dependent variable show no evidence of long run relationship between government budget deficit and employment performance. But a short- run relationship between the three variables was found in the three functional forms. Summarily, the results obtained indicate that it was budget deficit that was driving the wellbeing of the economy in Nigeria.

### **5.2 Conclusion**

This study examines the relationship between government budget deficits and economic performance in Nigeria between 1981 and 2019. The model takes into account the replacement of the bank interest rate by the lending interest rate, the broad money supply, the foreign direct investment, inflation, and the budget deficit as independent variables, while economic output is given by GDP the per capita Income performance, employment performance proxy as the unemployment rate and price stability were approximated according to the inflation.

The estimated results of the model showed that money supply have indirect but significant effects on GDP per capita. While capital formation and exchanged rate are both negative and insignificant to GDP per capita. Also, budget deficit, price stability and bank rate have a positive but insignificant impact on GDP per capita income in the long run. In the short run, budget deficit, capital formation, inflation, foreign direct investment is negative and statistically insignificant. However, bank rate has a negative relationship but is significant. Unfortunately, budget deficits and inflation do not create growth that improves the employment rate in Nigeria, but the result shows that the bank rate lowers the unemployment rate.

# **5.3 Recommendation**

The report offers the following policy perspectives in order to reduce the bottling gap related with long-term development of revenues and economic performance in Nigeria by means of sustainable public expenditures:

- Policymakers should work to break down the ties that have built up between accrued fore ign loans, remove the potential for misappropriation of borrowed funds, and therefore inc rease the economic impact of this resource.
- The government should develop a monitoring policy to examine the channel of increased government expenditure to determine why the massive investment has not resulted in a viable economic performance in terms of price stability and growth that ensures job creation.
- The government should begin providing social amenities in rural areas in order to prevent urban–rural drift, which has the effect of lowering the rate of unemployment.
- A conducive environment for foreign direct investment should be fostered to ensure Nigeria's full participation in global economic possibilities that would provide jobs for the teeming people.
- The government must reinvigorate the agriculture industry and invest in modern agricultural equipment.
- Because the sector has been put in the hands of the youth, amenities are likely to lure them to work in guys in their eighties
- The government should launch a social security scheme to help improve Nigerians' unemployment situation.

• There is also an urgent need for more infrastructural amenities, such as expanding the country's telecommunication network to rural areas, as well as good roads and electrification projects that can boost output and create job

### References

- Abata, M. A., Kehinde, J. S., & Bolarinwa, S. A. (2012). Fiscal/Monetary Policy and Economic Growth in Nigeria: A Theoretical Exploration. *International Journal of Academic Research in Economics and Management Sciences*, 1(5), 75.
- Abdullah HA, 2000. The Relationship between Government Expenditure and Economic Growth in Saudi Arabia. Journal of Administrative Science, 12(2): 173-191.
- Adeboye, F. O. (2003). The Relationship between Budget Deficit and Economic Growth in Nigeria. *Nigerian Journal of Economics Development Matters*, 4 (6), 103-112.
- Akrani, G. (2011). What is public expenditure? Meaning and classification. Accessed from http://kalyancity.blogspot.com.ng/2011/02/what-is-public-expenditure-meaning-and.html
- Ali,S.S &CHARLES,H. (2005). *The Budget Deficit and Economic Performance: A Survey*. © World Scientific Publishing Company.
- Al-Yousif Y, 2000. Does Government Expenditure Inhibit or Promote Economic Growth: Some Empirical Evidence from Saudi Arabia. Indian Economic Journal, 48(2).
- Akinmulegun, S. O. (2014). Deficit Financing and Economic Performance in Nigeria: A Preliminary Investigation. Department of Banking and Finance, Adekunle Ajasin University, P.M.B. 001, Akungba Akoko, Ondo State, Nigeria.
- Angahar, S.J, Inyang, H.B & Odiba, E. (na). Deficit Budgeting and Economic Growth in Nigeria.
- Asogwa, R.C. (2005). Domestic Government Debt Structure, Risk Characteristics and monetary policy cinduct, Evidence from Nigeria
- Bakare, A. O., Adesanya, O. A. and Bolarinwa, S. A. (2014). Empirical Investigation between Budget Deficit, Inflation and Money Supply in Nigeria. *European Journal of Business* and Social Sciences, 2(12), 120-134.
- Banerjee, A., Dolado, J.J., Galbrath, J.W., & Hendry, D.F. (1993). Co-integration, Error correction and the econometric analysis of non-stationary data. Oxford University press, Oxford.
- Central Bank of Nigeria (CBN), Statistical Bulletin. Abuja: Central Bank of Nigeria. 2019
- Ekperiware, M.C., & Oladeji, S.I. (2012). "Budget deficit Relief and Economic Performance in Nigeria": American Journal of Economics. 2(7).
- Ekpo, A. H. (1994). Public expenditure and economic growth in Nigeria, 1960-1992. *Final Report. AERC, Nairobi.*

Evans, P. (1985), "Do large deficits produce high interest rates?", American Economic Review,

Vol. 75 No. 1, pp. 68-87.

- Evans, P. (1986), "Is the dollar high because of large budget deficits?", *Journal of Monetary Economics*, Vol. 18, pp. 227-29.
- Fagbohun, A. (2017). *The economic performance of budget deficit in Nigeria*. Research journal of finance and accounting. Ibadan, Nigeria:Lead City University.
- Festus, O. E. (1997). *Effects of budget deficit on the current account balance in Nigeria*. The African Economic Research Consortium, P.O Box 62882, Nairobi, Kenya.
- Gale, William G and Orszag, Peter R, (2004), Budget Deficits, National Saving and Interest Rates. A paper prepared for the Brookings, panel on Economic Activity, Sept. 9-10. Html version:
- Ifeanyi, O. N. & Umeh, G. N. (2019). *Deficit financing and economic growth: The Nigerian Experience.* International journal of economics and financial management.
- Isah, I. (2012), Deficit financing and its implication on private sector investment: the Nigerian experience: Arabian Journal of Business and Management Review (OMAN Chapter) 1(10);
- Momodu, A.A & Monogbe, T.G. (2017). *Budget Deficit and Economic Performance in Nigeria*. Saudi journal of business and management 2415-6663. Dubai, United Arab Emirates.
- Monogbe, T.G, Dornubari I.G., & Emah D.S. (2015). Deficit finance and the Nigeria economic performance: International Journal of Advanced Academic Research | Social Sciences and Education | 1(3) (December)
- Nicholas, A (1997). Budget deficit and exchange rates: "further evidence from co-integration and causality tests". Journal of economic studies, Vol 25, issue: 3, pp.161-178.
- Onuorah and Ogbonna (2014). Deficit financing and the performance of Nigeria economy: International Journal of Management Sciences and Business Research, 2013 ISSN (2226-8235) 3(2)
- Orji, U. O, Onyeze, C. N & Edeh, L. (2014). *The Keynesian-Ricardian Dichotomy on Budget* Deficits in Nigeria. IOSR Journal of Economics and Finance (IOSR-JEF).
- Osuka, B.O., & Achinihu, J.O. (2014) impact of budget deficits on macro-economic variables in the Nigeria economy (1981-2012): *International Journal for Innovation Education and Research*. 2(11), 2014.
- Smriti, J. E. (2010). *Economic of the Public Sector: Third Edition*. New York and London; W.W. Norton and Company, 790.

- Stiglitz, J. E. Stiglitz (2005). Fair Trade for all: How Trade can Promote Development, *International Journal of Business*.
- Taiwo, M and Abayomi, I. (2011), "Government Expenditure and Economic Development: Empirical Evidence from Nigeria", *European Journal of Business and Management*, Vol. 3, No1.
- Umeora, C.E. (2013). An analysis of the relationship between fiscal defificits and selected macroeconomic variables in Nigeria, 1970 2011. *Journal of Business and Management*, 12(6), PP 19-27.
- Yusuf, S.J (2011). Budget Deficit and its impact on the Nigerian Economic Growth and Development. Department of Business Administration, Ahmadu Bello University, Zaria.
- Adeneye, O.A., Isa, A.M. (2016). Economics Department, Nigerian Defense Academy, Postgraduate School, Nigeria Corporate Communications Department, Central Bank of Nigeria, Abuja. ISSN 2222-2855 (Online) Vol.7, No.14.