TITLE PAGE

THE IMPACT OF BUDGET DEFICIT ON PRIVATE SAVINGS IN NIGERIA, (1980-2012)

A PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF BACHELOR IN SCIENCE (B.Sc.) DEGREE IN ECONOMICS AND DEVELOPMENT STUDIES

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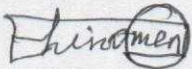
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DEDICATION

I dedicate this work to the most high God, the creator of heaven and earth. My all Sufficient God, ever merciful, lovely and gracious to me. He made who I am today and to him be all the glory.

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ABSTRACT

This research work focused on the impact of budget deficit on private savings. The scope of the study spanned from 1980 to 2012 using time series from the CBN. Budget deficit is the difference between tax revenue and government spending when government spending exceeds tax revenue while Private Savings is the amount of money that the household did not spend on consumption but rather saves it. The existing body of theory and evidence establishes a significant likelihood that budget deficits have large effects on private savings.. The broad objective of this study is to investigate the impact of budget deficit on private savings in Nigeria.. The methodologies employed in this study include both the descriptive and inferential analysis. This includes summary of statistic, correlation matrix of distribution, and the inferential statistics used is the regression analysis. The variables used in the study are budget deficit, interest rate, inflation rate, population, real GDP are determinants of private savings. The test for correlation matrix shows a positive correlation between budget deficit and private savings. Also, the regression result shows a positive relationship between budget deficit and private savings in the economy of Nigeria which follows the Ricardian equivalences that increase in budget deficit leads to a rise in private savings which is against the Keynesian and Neo-classical view which supports the point that increase in budget deficit will increase aggregate demand and offset private savings. The study recommends that the mindset of people should be change so that the citizens will see budget deficit as injection to the economy and not as a future burden to them through fiscal discipline.

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CHAPTER ONE

1.1   INTRODUCTION

In the recent years, a lot has been discussed about the impact of budget deficit on private savings. The effect of budget deficit on private savings has been discussed in different ways by different scholars. Various scholars like the ricardian and the standard model theory, they view budget deficit as having a positive effect on private savings while others like the keynesian views budget deficit as having a negative effect on private savings also the neo-classicals hold a neutral stand by saying that budget deficit can have both positive and negative effect depending on whether budget deficit is temporary or permanent.

The Ricardian views this relationship in such a way that suggests that when a government tries to stimulate demand by increasing debt-financed government spending, demand remains unchanged. This is because the public will save its excess money in order to pay for future tax increases that will be initiated to pay off the debt. This theory was developed by David Ricardo in the nineteenth century. The basic idea behind Ricardo's theory is that no matter how a government chooses to increase spending, whether with debt financing or tax financing, the outcome will be the same and demand will remain unchanged. The ability for individuals to borrow and save whenever they want, and the assumption that individuals will be willing to save for a future tax increase even though they may not see it in their lifetimes. The economic significance of government deficits is commonly constructed in terms of their effects on private savings (Barro 1989).

According to the Neoclassical views of budget deficits, if consumers are rational, fraught-ed and have access to perfect capital markets, then permanent deficits significantly depress capital accumulation and temporary deficits have either a negligible or perverse effect on the most economic variables (including consumption savings and interest rates) Bernheim 1989. Also, if many consumers are either liquidity constrained or myopic, the impact of permanent deficits remains qualitatively unchanged. However, temporary deficits should depress savings and raise interest rates in the short run. Thus, the Neoclassical paradigm does not tie down the effects of temporary deficit, and evidence that bears on the effects of temporary deficits is not useful to testing this problem.

In the standard model, there is an assumption that the substitution of a budget deficit for current taxation leads to an expansion of aggregate consumer demand. In other words, desired private saving rises by less than the tax cut, so that desired national saving declines. In a closed economy, the expected real interest rate would have to rise to restore equality between desired national saving and investment demand. The higher real interest rate crowds out investment, which shows up in the long-run as a smaller stock of productive capital.

In the Keynesian model, increasing the budget deficit by incremental tax ratio causes output to be explained by the inverse of the marginal propensity to save. It sees an increase in budget deficit, causing aggregate demand with these there is no cause for private saving to rise. Over and above all, budget deficit is one of the most discussed phenomenon in Nigeria especially in the current decade. Similarly according to Baiter (1985) who in his work state that budget deficit is bad, always and everywhere, regardless of the country circumstances. However, there is a common believe among economist, that budget deficit is harmful to the total functioning of the

economy. The budget deficit arises when a government outlays exceed revenue for that fiscal year.

Expectedly, deficit may be financed from government borrowing which may result to accumulated debt burden or a debt overhang situation. Inflation may result from increased money supply used to finance the deficit. There would be a decrease in disposable income of the consumers if the deficit is financed by raising the level of taxation, it could affect economic behaviour by changing the financial rewards to various activities. Budget deficit is a fiscal instrument used by government to affect increase in aggregate demand during depression. The government does this by increasing its spending which will lead to borrowing and eventually cause budget deficit but once government increases its spending it will increase money supply and consumption spending will increase making aggregate demand to increase.

On the other hand, private savings refers to the sum of net export goods and services, net income and net current transfers. According to Aschauer 1989, "Private savings is the different between the total receipts from export of goods and services and grants of transfer payment abroad". Private savings tells us if a country has a deficit or surplus budget. The current account is in surplus when absorption is less than income and in deficit when absorption exceeds income. Government expenditure is an important component of aggregate demand. An increase in government outlay that is not met the available revenue usually trigger a series of development in the economy due to the budget deficit. As in the case of budget deficit, there are also some negative effects on the private savings; when a country experiences deficit, its deficit will cause

increase in imports of goods and services and also affect adversely the domestic industry and this will indirectly affect employment and income in that country.

Notably, the striking feature of Nigeria's fiscal operation since the second half of the 1980s is persistent and rising budget deficits. Nigeria has recorded deficit and current account balance thereby experienced twin deficit. According to the 2008 annual report of the Central bank of Nigeria (CBN), page71, it states that there was a national deficit of 47.4 billion Naira or 0.2% of GDP compared with the deficit of 117.2 billion naira or 0.6 GDP in 2007. Evidences suggests that government deficit, notably in the last 15 years has been financed largely through money creation by the central bank.

For instance, from 1980 to 2012 (32 years), Nigeria being a developing economy only recorded fiscal surplus in 1981, 1983, 1986, 1989, 1995 and 1996. In 1995 during the era of tight banking policies, fiscal deficit as a ratio of GDP was less than unity i.e. 0.05% (CBN, 2011). While for the remaining 25 years were characterized with expansionary budget, the deficits as a percentage GDP was not only on the increase but also far from unity except for the years 1972, 2006, 2007 and 2008, which stood at -0.08, -0.55, -0.57 and -0.20 respectively. This prolong deficits would not have been a cause for alarm, provided their reasonable share were directed towards capital expenditure in terms of infrastructure facilities, human capital development (education and health) and economic diversification. Unfortunately, greater part of the deficits is spent on recurrent expenditure such as debt servicing, national assembly administration, maintenance, allowances, pension and gratuities among others. For instance, the excess of recurrent expenditure over capital expenditure in 2000 stood at over N222.14bn, which skyrocketed to

over N1.14tr in 2009 and approximate N2.42tr in2010 (CBN Bulletin, 2011). This prolong irrational national spending will no doubt have bearing impact economic growth and other macroeconomic indicators in Nigeria.

Thus, a budget can be defined as a detailed statement of the proposed expenditure revenue and policies of the government for a given period of time (Ibe 2006). Egwaiknde 1998, appraises the implication of Nigeria budget deficit profile for financing has aggravated inflation indicates that fiscal indiscipline in terms of lack of control over expenditure is the major determinant of budget deficit in Nigeria, while it modes of financing has aggravated inflation in the country, most importantly it is revealed that budget deficit correlate highly with current account deficit implying that external disequilibrium is partly attributable to endogenous factors. Budget deficit arises in an economy whenever the expenditure outlays of the government are greater than the expected revenue of a given period of time. In advancing theoretical framework of this research work, it is pertinent to note the events of the world's ever greatest economy crises of 1930s. Whenever the government expenditure is exceeding its revenue, the situation becomes nothing short of deficit financing.

Deficit financing arises in an economy when government is inclined to resort to other ways of finance gap between is expenditure and revenue. According to Afolabi (2004), deficit financing is as follows: internal and external borrowing, increasing taxation level, borrowing from foreign reserve, ways and means of printing of more currency by the central bank. According to Mach Person (2003), deficit financing has its implications on the economy depending on the source used to finance the budget deficit. If a deficit is financed from the government borrowing, it will

enhance public debt and may result to accumulated debt burden or debt over-hang hypothesis. Budget deficit will lead to inflation if it is financed by increasing the money supply base, if it is financed by raising the level of taxation, it could affect the economy behaviour by the financial rewards to many activities.

Ball and Mankiw (2003) argues that in the long run, an economy's output is determined by its capacity which in turn is partly determined by is stock in capital. Since deficit reduce national savings, investment will also reduce consequently, net export fall, this increase budget deficit. Kelly (2005) argues that government spending is a central determinant of successful private sector activities and economy growth especially in developing countries where the level of development is at the initial stage. In following this argument, it is now known that the need for an economy growth and development precipitates financing of the expenditure outlays of the government. Jhingan (2004) states that a country's balance of payment depends on its stages of economy development, He argued that if a country is developing, it will have a deficit is its balance of payment because it imports raw materials, machineries, capital equipment and services associated with development process and exports primary exports.

1.2   STATEMENT OF THE PROBLEM

This research work examines the impact of budget deficit on private savings in Nigeria. This work will analyse the kind of relationship between budget deficit and private savings in Nigeria. The budget deficit and private savings position in Nigeria has recorded more deficit in her budget over the years and also the private savings has an unhealthy growth rate even to recording deficit in some of the years. (Kelly 2005)

The existing body of theory and evidence establishes a significant likelihood that budget deficits have large effects on private savings. In addition, there is lack of evidence or coherent theoretical argument to dispute the view that Sustained deficits will significantly increase private savings in the long run (Bernheim 2004).

There is a substantial debate among economists about whether or not taxpayers actually behave in the ways that the Ricardian Equivalence model proposed. The theory requires taxpayers to understand how changes in government taxation and spending will affect them throughout their lives, and to change their spending habits to reflect this knowledge. The basic theory assumes that current taxpayers value the consumption of future taxpayers (perhaps their children) the same as they value their own consumption. The problem from this point of view is that, the Ricardian Equivalence idea ignores two important features of the Keynesian theory; first, higher spending creates new incomes when resources are unemployed. Second, the extent that the government issues bonds will now be paid off in the future, there is more than just a liability for future taxpayers; there is also a new asset created for the holders of government bonds and also to ascertain which theory the tax payer folows. The assumptions of the basic Ricardian Equivalence theory are restrictive and likely unrealistic in many situations.

This research work will examine the entire basic theory model explaining this relationship and ascertain which of the theory has been in practice in Nigeria economy.

1.3   OBJECTIVES OF THE STUDY

The objectives this study intends to achieve will be categorized basically into broad and specific

objectives. The broad objective of this study is to investigate the impact of budget deficit on private savings in Nigeria and its effects on the economy. Specifically the objectives are

- To investigate therelationship that exist between private savings and budget deficit

- To identify various measures necessary to control budget deficit and improve private savings in Nigeria.

1.4 STATEMENT OF HYPOTHESIS

Ho: budget deficit does not have a significant influence on private savings

H1: budget deficit have a significant impact on private savings

Ho: there exist no relationship between budget deficit and private savings.

H1: there exist a relationship between budget deficit and private savings

1.5 JUSTIFICATION OF THE STUDY

This research work is aimed at measuring the impact of budget deficit on private savings in Nigeria from 1980-2012. This research work is of great importance to the Nigeria economy to know when budget deficit will be of great importance to the economy. To know when deficit in the economy will increase aggregate demand and not increase private saving so as to avoid crowding out effect.

This research work will fill gap in literature by making a comparison of all approaches to the relationship like the Keynesian view, Neo-classicals view, Ricardian view and that of the Standard model theory, and see which one is more relevant to Nigeria over the past years and also which one is more realistic. In spite of the numerous empirical studies on the budget deficit

in Nigeria, no empirical study has been known to examined the impact of budget deficit on private savings in Nigeria. This study will therefore provide empirical attempt to fill this gap in the literature.

1.6   SCOPE OF THE STUDY

The primary concern of this study is to find the impact of budget dficit on private savings in Nigeria. The influence of other variable like interest rate and GDP will be put into cognizance. This study will make use of secondary data of which the sources are the central bank of Nigeria (CBN) statistical bulletin 1980-2014 version. This research work centers on the impact of budget deficit on private savings in Nigeria from 1980-2012. It is expected that this study will examine and appraise the topic in Nigeria economy.

1.7   ORGANIZATION OF THE STUDY

This study is divided into five chapters. Chapter one provides the introduction of the study, statement of problem, objectives of the study, hypothesis, significance of the study, scope of the study, and the justification of the study. Chapter two focuses on the conceptual framework, empirical literature and theoretical framework of the impact of budget deficit on private savings. The chapter three provides the research methodology which makes use of a regression analysis to identify the impact of budget deficit on private savings. Again, chapter four provides analysis of data and the presentation of findings while the chapter five will also provide the summary of findings, conclusion of the research and recommendation.

1.8   DEFINITION OF TERMS

Budget Deficit: it is a situation in an economy when the government spending is more than government revenue. Where it inflow is less than its outflow.

Private Savings: it is the amount of that household did not use for consumption or did not use it to pay tax.

CHAPTER TWO

LITERATURE REVIEW

2.0   INTRODUCTION

This chapter captures the views of various scholars on the impact of budget deficit on private savings. The goal of this paper is to assess theoretically as well as empirically the influence of government budget deficit on private saving, with special emphasis on ricardian equivalence and other transition economies. It is organised as follows: Section I discusses the conceptual framework, Section II discusses the theoretical aspects of the influence of budget deficit on private savings, Section III outlines empirical results from the literature.

2.1   CONCEPTUAL FRAMEWORK

This first section is to define necessary terms under this research study.

2.1.1   Definition Budget Deficit

It is a situation of financial health in which expenditures exceed revenue. It can also be said as outflow higher than inflow. It is also the annual amount the government has to borrow to meet the shortfall between current receipts and government spending. If over a period of time the government spend more than it earns then it is budget deficit.

The budget deficit is the difference between tax revenue and government spending when government spending exceeds tax revenue. An increase in government outlay that is not met the available revenue usually trigger a series of development in the economy due to the budget deficit. As in the case of budget deficit, there are also some negative effects on the private

savings; when a country experiences deficit, its deficit will cause increase in imports of goods and services and also affect adversely the domestic industry and this indirect effect on employment and income in the country.

Budget deficit is one of the most discussed economic issues in Nigeria. Baiter (1985) states that deficit are bad, always and everywhere, regardless of the country circumstance. There is a common believe among economist, that budget deficit priori harmful for the total function of economy. The budget deficit arises when a government outlays exceed revenue for that fiscal year.

2.1.2   Causes of Budget Deficit

- Budget deficit is caused when a government spends more than it collects in taxes. Also reducing tax rate can also cause a deficit if spending is not reduced to account for the decrease in revenue.

- Periods of economic growth and economic decline can have a tremendous effect on the ability of a government to finance its spending. In fact, a budget deficit can occur even if a government does not increase its spending or lower its tax rate

- Deficit can increase more during economic downturns if the government attempts to stimulate economic growth with spending, by doing this government spending will increase while revenue will decline leading to budget deficit.

- Unplanned expenses can also cause a deficit. National disasters such as drought, floods and hurricanes not only destroy assets, but also impede or stop economic activities that will result in less taxable income from which to collect revenue. War is also another example of a major unplanned event that is very costly. If even war is planned, it is often difficult to project an end date and the resources necessary to successfully prosecute it.

2.1.3   Methods of Financing Budget Deficit

- Government can borrow funds from the other sector of the economy. This involves selling of new commonwealth government securities such as treasury bonds through a tender system. This is the preferred government method raising funds, as it does not add to net foreign debt, because the government is not borrowing from overseas.

- Secondly, government can sell commonwealth government securities to the reserve bank. This form of borrowing from the reserve bank basically means that the government prints money to finance the deficit.

- Also government can borrow from international financial markets. He might decide to do this in order to avoid crowding out effects.

- Government can also decide to sell its assets in order to fund budget deficit. The use of this method will reduce crowding out effect caused by sales of bonds.

2.1.4   Overview of Budget Deficit in Nigeria

Fiscal deficit in Nigeria has been noted as one of the reasons for the continued pressure onthe price level. It is usually financed by the Central Bank of Nigeria (CBN) and theproportion of the CBN's credit in the total deficit financing of the government hassignificantly more than double over the years. For instance, it increased from about 25.4%immediately after the implementation of Structural Adjustment Programmes (1987) to ashigh as 67.9% in 1994 (Emenuga, 1998; Tomori, Akano and Adebiyi, 2005)). This stance hasled to excess liquidity in the banking system and a substantial increase in domestic aggregatedemand. Possible consequences of fiscal deficit can increase the cost of production, higherinterest rates, high transportation costs, increase in the

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price level resulting from thedepreciation of the foreign exchange rate and the excessive growth in domestic liquidity(CBN, 2002).

Budget discipline generally implies the extent to which a country can stay within the budget.It can be measured by the ratio of budgetary expenditure to actual expenditure. It is verysimilar to fiscal discipline which is captured by the ratio of budget deficit to the Gross Domestic Products (GDP) (Nazarovetes, 2001; Garba, 2011).

2.1.5 Definition of Private Savings

Private savings can be defined as total savings from households and business after tax. It can also be defined as the portion of households' income that is not used for consumption or paying taxes. It is the income remaining after households pays their taxes and pay for consumption. Private savings is the sum of net export goods and services, net income and net current transfers. Private savings is the different between the total receipts from export of goods and services and grants of transfer payment abroad. Private savings tells us if a country has a deficit or supplies budget. The current account is in surplus when absorption is less than income and in deficit when absorption exceeds income.

2.1.6 Examples of what household do with their savings:

- Buy corporate bonds or equities

- Purchase a certificate of deposit at the bank

- Buy shares of a mutual fund

- Let accumulate in savings or checking account

- Reduce credit card balances

2.1.7   Overview of Private Savings in Nigeria

Private saving witnessed much less volatility, with the variable recording a negative value only once in the 38 year period. The saving rate fluctuated between 20 percent and 41 percent between 1970 and 1979. This figures changed to 14 percent and 36 percent in the next decade. Between 1990 and 1999, the saving rate hovered between -0.6 percent and 39 percent, reaching an impressive range of between 20 percent and 65 percent in the period 2000 to 2007. The private saving rate stood at 58 percent in 2007.

In Nigeria, Olusoji (2003) identified financial institutions such as deposit money banks as themain agents of savings mobilization. To effectively mobilize deposits, the deposit money banksshould offer relatively high deposit rates while inflation rate should be relatively stable.Unfortunately, the deposit rates offered by banks in Nigeria have been generally low in the lastfive decades with an average of 9%; while inflation rate has been relatively high with an averageof 19% in the last decade. Furthermore, a trend analysis of the ratio of total savings to GDP inNigeria shows that the saving rate has been fluctuating over time. The savings/GDP ratio was 2%in 1960. It increased to 7.8% and 11.6% in 1970 and 1980, respectively. In 1990 and 2000, itdeclined to 11.1% and 8.4% respectively. In 2011, the savings/GDP ratio in Nigeria stood at17.4% (CBN, 2011). Clearly, the relatively poor rates at which domestic savings in Nigeria isgrowing is a source of worry to policy makers in Nigeria.

In mobilizing funds from the surplus units of the economy, banks incur somecosts mainly in interest payments on deposit accounts. In order to recover the cost ofdeposit mobilization and other operating overheads, banks lend at higher interestrates. The difference between the two types of rates is referred to as the interest ratespread or the intermediation spread. The spread measures the efficiency of theintermediation process in the market, such that, a high

intermediation spread impliesthat there is inefficiency in the market, especially as it discourages potential saversand borrowers, thus, hampering investment and growth.Prior to the deregulation of the banking sector, interest rates wereadministratively determined by the Central Bank. Both the deposit and lending rateswere fixed by the CBN on the basis of policy decisions. At that time, the major goalswere socially optimum resource allocation, promotion of orderly growth of thefinancial market, as well as reduction of both inflation and the internal debt serviceburden on the government. During the period 1970 to 1985, the rates were unable tokeep pace with prevailing inflation rate, resulting in negative real interest rates, (Nwachuku 2009).

Moreover, the performance of the preferred sectors of the economy was belowexpectation, thus, leading to the deregulation of the interest rate in August 1987 to amarket-based system. This enabled banks to determine their deposit and lendingrates according to the market conditions through negotiations with their customers. However, the minimum rediscount rate (MRR) which is the central bank'snominal anchor continued to be determined by the CBN. The lack of responsivenessof the structure of deposit and lending rates to market fundamentals makes theinterest rate inefficient. The wide divergence between the deposit and lending rates(interest rate spread) is inimical to economic growth and development of the Nigerianeconomy. Between 1980 and 1984, interest rate differentials averaged 3.9 per cent.Even though this was reasonable within the accepted limit, the spread widenedbetween 1985 and 1989, averaging 4.3 per cent per annum. This impacted negativelyon the amount of loanable funds available to the private sector for investment (Peter 2009).

The interest differential further widened to an average of 7.9 per centbetween 1990 and 1994. Thereafter, the yearly interest rate spread maintained anupward trend, rising from 8.2 per cent in 1995 to 24.6 per cent in 2002, beforedeclining to 15.7 per cent in 2005. The widening gap between thedeposit and lending rates reflects the prevailing inefficiencies in the Nigerian bankingsector and has deterred potential investors from borrowing, and thus lowered thelevel of investment in the economy. The use of interest rate spread has however been criticized given that higherlevels of interest rates are usually associated with higher inflation rates, and thereforea higher cost of holding money. In addition, higher inflation rates tend to be associatedwith higher country premia. As a result of these disadvantages of interest rate spreadas an indicator of efficiency, net interest margin has been proposed as a betteralternative. Net interest margin is equal to total interest revenues minus total interestexpenditure divided by the value of assets. Higher values of net interest marginindicate a higher spread on deposit and lending rates and therefore lower efficiency.

The real interest rate figures present an interesting picture. Between 1970 and2007, the figure was negative 20 times, attaining positive figures on 18 occasions.The fixed interest rate regime of the 1970s and early 1980s no doubt contributed tothis negative trend by fixing the interest rate at artificially low levels. For instance, inthe first two decades (1970 to 1989) when the fixed regime dominated, real interestrate was negative 14 times and positive only 6 times. However, in the last twodecades (1990 to 2007), when market forces took over, the real interest rate wasnegative on only 6 occasions. The inflation rate also played a very important role inmaking the real interest rate negative for most of the period. (Nwachuku 2009)

2.2   THEORETICAL LITERATURE

This chapter captures the views of various scholars on the relationship between private savings and budget deficit. The goal of this paper is to assess the theoretical influence of government budget deficit on private saving from different scholars.

2.2.1   RICARDIAN EQUIVALENCE

The Ricardian equivalence is an economic theory that suggests that when a government tries to stimulate demand by increasing debt-financed government spending, demand remains unchanged. This is because the public will save its excess money in order to pay for future tax increases that will be initiated to pay off the debt. This theory was developed by David Ricardo in the nineteenth century. The Ricardian equivalence proposition (also known as the Ricardo–De Viti–Barro equivalence theorem) is an economic hypothesis holding that consumers are forward looking and so internalize the government's budget constraint when making their consumption decisions. This leads to the result that, for a given pattern of government spending, the method of financing that spending does not affect agents' consumption decisions, and thus, it does not change aggregate demand. According to Ricardian Equivalence, however, rational, forward-looking taxpayers will anticipate paying for government spending at some time in the future. If the government defers taxation, taxpayers will save enough of their current income to pay the higher taxes in the future necessary to meet the bond obligations. This higher saving causes private demand to decline when government demand rises, which reduces, if not totally eliminates, the demand stimulus created by higher government spending.

The basic idea behind Ricardo's theory is that no matter how a government chooses to increase spending, whether with debt financing or tax financing, the outcome will be the same and demand will remain unchanged. The ability for individuals to borrow and save whenever they want, and the assumption that individuals will be willing to save for a future tax increase even though they may not see it in their lifetimes. The economic significance of government deficits is commonly constructed in terms of their effects on private savings.

The Ricardian perspective can be summarized by two related claims: the timing of taxes is irrelevant and if government purchases are unchanged, tax cuts or increases should have no effect on the economy. These claims follow from the government's intertemporal budget constraint and the household's lifetime budget constraint, taken together. The government's constraint tells us that a given amount (that is, a given discounted present value) of government spending implies a need for a given (discounted present value) amount of taxes. These taxes could come at all sorts of different times, with different implications for the deficit, but the total amount of taxes must be enough to pay for the total amount of spending. The household's lifetime budget constraint tells us that the timing of taxes may be irrelevant to households as well: they should care about the total lifetime (after-tax) resources that they have available to them. Budget Deficits (caused by a reduction in taxes today in exchange for future tax increases of equal present value) are expected to cause changes in private Savings. In other words, private agents recognize that the reduction in taxes today are expected to increase future tax liabilities and thus they will save the entire tax cut, making private savings to increase. (Barro 1989)

The implications of the Ricardian perspective are not quite as stark if the increased deficit is due to increased government spending. Households should still realize that they have to pay for this spending with higher taxes at some future date. Lifetime household income will decrease, so consumption will decrease. However, consumption smoothing suggests that the decrease in consumption will be spread between the present and the future. The decrease in current consumption will be less than the increase in government spending, so national savings will decrease. Since the Ricardian perspective says that the timing of taxes is irrelevant, the effect is the same as it would be if the taxes were also imposed today. So one way of thinking about this is to suppose that the government increases spending and finances that increase with current taxes, (Barro 1989).

This is the idea that increased government borrowing may have no impact on consumer spending because consumers predict tax cuts or higher spending will lead to future tax increases to pay back the debt. If this theory is true, it would mean a tax cut financed by higher borrowing would have no impact on increasing aggregate demand because consumers would save the tax cut to pay the future tax increases. This is related to two factors: (a) Income Life cycle hypothesis, (b) Rational expectations on behalf of consumers. It is argued that if the government borrows money to fund a tax cut, rational consumers realise in the future taxes will have to rise to finance the borrowing. Therefore, they save the extra income so that they can pay future tax rises. Consumers wish to smooth their consumption over the course of their life. Thus if consumers anticipate a rise in taxes in the future they will save their current tax cuts to be able to pay future tax rises, (Barro 1989).

Let us begin by taking the strong assumptions of the Ricardian Equivalence theory at face value.

Assume that everyone has full information about the future and that taxpayers take current and future taxes into account when they decide how much to spend. For simplicity, we will divide up time into just two periods: "today" and "the future." The bonds issued as the result of a government deficit incurred today will be paid off in the future, with interest. We will also assume that all taxpayers are the same in the sense that they spend the same share of the after-tax income that they earn both today and in the future. That is, taxpayers will smooth any after-tax income fluctuations across the two periods of time. We will start with a closed economy in which the government borrows from domestic citizens only. These are strong assumptions, but they establish a useful baseline. We will relax some of these assumptions later on this page.

Suppose government spending rises today and that taxes are constant. The government issues bonds as the result of the consequent deficit. The rise in government spending is a direct increase in demand. But the forward-looking taxpayers in our simple model recognize that the government will raise taxes in the future to pay off the bonds that they issue today. If we just look at the anticipation of these future taxes in isolation, it seems that taxpayers would reduce what they spend today (because they smooth the effect of future taxes by reducing both current and future consumption). But we should not look just at the taxes in isolation; we must also consider what the higher taxes will be used for in the future. When higher taxes retire the government bonds in the future, the payments do not disappear down some black hole. Indeed, we can think of future taxes to pay off the government debt as a transfer from taxpayers to government bond holders. Because of our assumptions that everyone is the same and that all the bond holders are domestic citizens, there should be no net effect of this transfer. It is as if the

representative taxpayer pays principal and interest on the government bonds to himself as a representative bondholder, and the whole thing is a wash in the future (Seater 1993)

According to the Ricardian perspective, increases in the government deficit should be matched by increases in private saving and vice versa. There is some evidence that private and government saving move in opposite directions, as suggested by the Ricardian view. Private savings increased from the 1980 to 1985 period and decreased thereafter. Large deficits emerged during the early 1980s (negative government savings). At this time, there was an increase in the private savings rate. The government savings rate increased steadily during the 1990s, and, during this period, the private savings rate decreased. These data are therefore more supportive of the Ricardian view: private and government savings were moving in opposite directions.

Theoretically, Ricardian Equivalence Hypothesis (REH) declares officially that the relationship between budget deficit and current account deficit is invalid or ineffective. REH asserts that government deficit are anticipated by individual who increase their saving because they that borrowing today to finance the increase government purchases will be repaid through a result of increase in government spending will be cancelled out by the increase in private sector balance depends on the extent on which a country produces its own investment goods. Barro 1989

The Ricardian approach to budget deficits amounts to the statement that the government's fiscal impact is summarized by the present value of its expenditures. Given this present value, rearrangements of the timing of taxes—as implied by budget deficits—have no first-order effect on the economy. Second-order effects arise for various reasons, which include the distorting

effects of taxes, the uncertainties about individual incomes and tax obligations, the imperfections of credit markets, and the finiteness of life. To say that these effects are second order is not to say that they are uninteresting; in fact, the analysis of differential taxation in the theory of public finance is second order in the same sense. However, careful analysis of these effects tends to deliver predictions about budget deficits that differ from those of standard macroeconomic models. I have argued that empirical findings on interest rates, consumption and saving and the current-account balance tend mainly to support the Ricardian viewpoint. However, this empirical analysis involves substantial problems about data and identification, and the results are sometimes inconclusive. It would be useful to assemble additional evidence, especially in an international context. Although the majority of economists still lean toward standard macroeconomic models of fiscal policy, it is remarkable how respectable the Ricardian approach has become in the last decade. Most macroeconomists now feel obligated to state the Ricardian position, even if they then go on to argue that it is either theoretically or empirically in error, I predict that this trend will continue and that the Ricardian approach will become the benchmark model for assessing fiscal policy. (Brown 2003)

There is a parallel between the Ricardian equivalence theorem on inter-temporal government finance and the Modigliani-Mi Her (1958) theorem on corporate finance. Everyone knows that the Modigliani-Miller theorem is literally incorrect in saying that the structure of corporate finance does not matter. But the theorem rules out numerous sloppy reasons for why this structure might have mattered, and thereby forces theoretical and empirical analyses into a disciplined, productive mode. Similarly, the prediction that most analysts will embrace Ricardian equivalence in the sense of concluding that fiscal policy is irrelevant. But satisfactory analyses

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will feature explicit modeling of elements that lead to departures from Ricardian equivalence, and the predicted consequences of fiscal policies will flow directly from these elements.

The composition of national savings changes, so public savings decrease, and private savings increase. But these two changes exactly offset each other since the private sector saves the entire amount of the tax cut. As a result, the supply curve does not shift. Since national savings do not change, the equilibrium remains at point A, and there is no crowding-out effect. Economists call this idea Ricardian equivalence, after David Ricardo, the 19th century economist who first suggested such a link between public and private saving. Ricardian equivalence occurs when an increase in the government deficit leads to an equal increase in private saving and no change in either the real interest rate or investment (Hutchinson 1992). In a closed economy, private savings matches the budget deficit. A large budget deficit means a high net private saving. A reduction in the budget deficit implies low net private saving. This relationship makes sense considering that government expenditure i.e budget deficit involves crediting private bank accounts whereas taxing involves debiting private bank accounts. If the government spends more and taxes less, there is a net increase in private bank deposits held by households and firms, and a corresponding increase in bank reserves, held in special accounts with the central bank. Some households and firms may use the extra funds to buy government bonds, which will result in some bank reserves being converted into bonds. Either way, there is an increase in net financial assets (which comprise currency, bank reserves and government securities). If, on the contrary, governments try to cut spending and raise taxes, as they are beginning to do in a wrong attempt to reduce government debt, private saving will be affected negatively. But for an open economy, include external sources of revenue and expenditure. There are now three sectors: the

government, domestic private and external sectors. Net Exports (exports minus imports). Budget Deficit = Net Private Saving – Net Exports   Net Private Savings can also be budget deficit plus Net Exports. (Ayodele 2015)

The Ricardian Equivalence Hypothesis states that a deficit financed tax cut will lead to a decrease in public savings and an increase in private saving. Such decline in public savings is fully offset by increase in private saving and thus, national income is unaffected i.e, remains the same. In other words, budget deficit has no effect on national saving, interest rate, current account balance, future domestic production, or future national income. Gale and Orszag (2004). The general principle is that government debt is equivalent to future taxes, and if consumers are sufficiently forward-looking, future taxes are equivalent to current taxes. Hence, financing the government by debt is equivalent to financing it by taxes. This view is called Ricardian Equivalence after the famous nineteenth-century economist David Ricardo, because he first noted the theoretical argument. Baro (2005) has a country view on this matter, according to him, shifts between budget deficit and taxes do not matter for the real rate, the quantity investment or current account balance because the shift taxes as a result of increase in government spending would have no effect on the investment as the increase budget deficits only decreases public saving thereby making the national output to be constant.

Ricardian Equivalence Theorem hold that the households behave as if they lived forever and thus it does not matter when taxes will be risen to pay for the debt: in the near future or during the lives of next generations. This problem was solved by Robert Barro [Barro, 1974], who showed, that this assumption will be satisfied, if one takes into account, that people usually love their

children. It is then plausible, that the utility of the next generations has the same value for the individuals as their own utility: individuals treat children as extensions of themselves. If this is true, then people will save the additional income from tax decrease, even if they expect, that the taxes will not be increased during their lifetime, but during the lifetime of their children.

The central Ricardian observation is that deficits merely postpone taxes. A rational individual should be indifferent between paying ₦1 in taxes today, and paying ₦ 1 plus interest in taxes tomorrow. Since the timing of taxes does not affect an individual's lifetime budget constraint, it cannot alter his consumption decisions. The relevance of this observation depends upon the length of consumers' planning horizons. If fiscal policy postpones tax collections until after current taxpayers have died, then it may well alter real economic decisions Diamond [1965] and Blanchard [1985]

2.2.2 KEYNESIAN VIEW

Budget Deficits (caused by a reduction in taxes today in exchange for future tax increases of equal present value) are expected to cause changes in private Savings. The Keynesian proposition supports that fiscal policy can affect the national output and that an increase in the budget deficit leads to an increase in the real domestic product and reduces private savings. Keynes argued that, the government increase in spending, reduce taxes, and shift its budget toward a deficit. According to Keynes, higher levels of government spending would directly increase total demand. Further, lower taxes would increase the after-tax incomes of households and they would spend most of that additional income, which would also stimulate total demand

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and reduce private savings. He also explain that even if a substantial portion of the funds is not spent quickly, there will be an immediate positive impact on the financial position of households.

The Keynesian Proposition posits that households respond to an increase in current disposable income which is equal to the tax cut partly with higher desired private savings and partly with higher consumer demand and because of this increase in desired national savings declines. National saving is the sum total of private saving and public saving. This theory further suggests that a decision to finance government spending by budget deficit as a result of tax cut instead of current taxes reduces national saving and that the reduction in national savings is partly reflected in lower domestic investment and partly increases borrowing from abroad, both of which reduces future national income and future domestic production. The reduction in domestic investment is as a result of increases in interest rate, thereby, establishing a connection between budget deficit and interest rate. A tax cut financed by government borrowing would have many to stimulate consumer spending. Higher consumer spending affects the economy in both the short run and long run.

In the short run, higher consumer spending would rise the demand for goods and services and thus rise output and employment. Interest rate would also rise; however, as investors competed for a smaller flow of saving and according to Mundell- Fleming model of an open macro economy, higher interest rates would discourage investment and would encourages capital to flow in from abroad. The naira would rise in value against foreign currencies, and Nigerian firms would become less competitive in world markets. In the long run, the smaller National saving caused by the tax cut would mean a smaller capital stock and a greater foreign debt. Therefore,

the output of the nation would be smaller, and a greater share of that output would be owed to foreigners.

In buttressing the Keynesian proposition, Ball and Mankiw (1995) gave a deep insight on the immediate effects of budget deficits have many effects which follow form a single initial effect: national saving. Deficits reduce national saving. National saving is the sum of private saving (the after – tax income that households save rather than consume) and public saving (the tax revenue that the government saves rather than spends). When government runs a budget deficit, public saving is negative which reduces national saving is most likely less than one – for – one, for a decrease in public saving produces a partially offsetting increase in private saving. For example, consider a #1 tax cut. This tax cut reduces public saving by #1, but also rises household"s spend part of this windfall but fall in public saving.

2.2.3   NEOCLASSICAL VIEW

Neo-classical approach holds that the opposite – that government debt will be viewed as increasing the households' net wealth. The Neo-classical approach holds that the time pattern of financing the deficit does matter. This approach assumes that economy consists of overlapping generations that plan consumption over own life cycle, with little or no altruistic behaviour. Individuals recognise that a tax-cut-induced rise in budget deficit must be eventually paid off by an increase in future taxes. If however the burden of the debt is expected to be borne by future generations, then the expected future tax increase will not induce any offset in private saving. Contrary, consumption will rise and private saving may fall. Because individuals do not expect pay the future higher taxes themselves, they perceive a tax-cut induced budget deficit and government debt as increasing their wealth. (Bernheim 1993)

The neoclassical model has three central features. Each of them plays an important role in determining the impact of budget deficits

- The consumption of each individual is determined as the solution to an inter-temporal optimization problem, where both borrowing and lending are permitted at the market rate of interest.

- Individuals have finite lifespan. Each consumer belongs to a specific cohort or generation and the lifespan of successive generations overlap.

- Market clearing is generally assumed in all periods. Bernheim 1992

Consumers behave as though they solve an inter-temporal optimization problem with access to perfect capital markets. The formulation of the above assertion is based on the stochastic permanent income hypothesis. Despite numerous problems with estimation and interpretation, the evidence on balance supports the view that a sizable minority (roughly 20%) of individuals fails to behave in a way that is consistent with unconstrained inter-temporal optimization (Seater 1993).

According to the neoclassical views of budget deficits, if consumers are rational, fraught-ed and have access to perfect capital markets. Then permanent deficits significantly depress capital accumulation and temporary deficits have either a negligible or perverse effect on the most economic variables (including consumption savings and interest rates). Also, if many consumers are either liquidity constrained or myopic, the impact of permanent deficits remains qualitatively unchanged. However, temporary deficits should depress savings and raise interest rates in the short run. Thus, the Neoclassical paradigm does not tie down the effects of temporary deficit,

and evidence that bears on the effects of temporary deficits is not useful to testing this problemBernheim 1993)

The Neo-classical view predicts that a permanent deficit will not increase private savings because it will induce households to consume more. Therefore national saving ratio will fall. A temporary budget deficit may indeed not have an adverse effect on national savings, but through a different channel, than predicted by Ricardian Equivalence Theorem [Bernheim, 1989]. The Neo-classical approach holds that the time pattern of financing the deficit does matter. This approach assumes that economy consists of overlapping generations that plan consumption over own life cycle, with little or no altruistic behaviour. Individuals recognise that a tax-cut-induced rise in budget deficit must be eventually paid off by an increase in future taxes. If however the burden of the debt is expected to be borne by future generations, then the expected future tax increase will not induce any offset in private saving. Contrary, consumption will rise and private saving may fall. Because individuals do not expect pay the future higher taxes themselves, they perceive a tax-cut induced budget deficit and government debt as increasing their wealth.

Although without doubt most parents care about their children, it is impossible to assume that the bequest motive will be strong enough to balance government dissavings with private saving increase. If altruism had been sufficiently important to induce Ricardian Equivalence, than it would have also caused some rather implausible results. Because family linkages form complex networks, then strong altruism would link all families together and then all redistributive policies would be irrelevant, including tax rates. Since this is not observed, the fundamental assumption must be wrong (Bernheim, 1989).

2.2.4 STANDARD MODEL THEORY

In the standard model, there is an assumption that the substitution of a budget deficit for current taxation leads to an expansion of aggregate consumer demand. In other words, desired private saving rises by less than the tax cut, so that desired national saving declines. In a closed economy, the expected real interest rate would have to rise to restore equality between desired national saving and investment demand. The higher real interest rate crowds out investment, which shows up in the long-run as a smaller stock of productive capital. Therefore, in the language of Franco Modigliani (1986) the public debt is an inter-generational burden that it leads to a smaller stock of capital for future generation.

In an open economy, a small country's budget deficits would have negligible effects on the real interest rate international capital markets. Therefore, in the standard analysis, the home country's decision to substitute budget deficits for current taxes leads mainly to increased borrowing from abroad, rather than to a higher real interest rates. That is, budget deficits leads to current account deficits. Expected real interest rates rise for the home country only if it is large enough to influence world markets or if the increased national debt induces on this country's obligations. In any event, there is a weaker tendency for a country's budget deficits to crowd up in the long run as a stock of nation wealth and correspondingly higher claims for foreigners, Branson (1985). The standard view of budget deficit is that a deficit financed tax cut has a positive effect on consumption. A budget deficit tends to raise income consumption and reduce private savings.

2.3   EMPIRICAL LITERATURE

There are studies on the relationship between budget deficit and private savings.

Ayodele (2002), worked on the interactions between private savings and government budget deficit. The estimation is done over the period 1930–1976 for Nigeria, using OLS. He found out that a 0.9 significant increase in budget deficit while lead to an 0.7 increase in private savings. He therefore concluded that changes in budget deficit affects private savings in Nigeria.

Masson et.al. (1995), investigated on the private saving rates were regressed on number of potential explanatory variables, like government budget surplus, government current expenditures and investment, growth rates of real output, consumer prices and terms of trade, the real short termed interest rate, GDP per capita, dependency ratio. It was done for 21 industrial countries for the period 1971–1993 and for 40 developing countries for the period 1982–1993. The results of this research imply that for the industrial countries, private savings offsets around half of the change in the government budget, which is caused by tax changes. For developing countries the coefficient of the government budget surplus variable was larger –0.659. When however the sample of developing countries was divided into high, middle and low income countries, the results were different: for high income countries the coefficient of government budget was almost one (–0.940), exactly in line with Ricardian Theorem, while for middle income countries it was –0.349 and for low -income –0.673. The results for developing countries also indicate, that when the deficit is reduced by cuts in government investment spending, rather than increases in taxes, there is a smaller offset on private saving (except in the case of middle-income economies). The current government expenditure variable was not included in the developing country regression. In the case of developed countries, private savings reacts equally to the change in budget caused by taxes and investment spending, but reacts less, if government

current expenditure is changed. This research is therefore supportive of a weak form of Ricardian Equivalence, and indicates, that the results are probably different across countries, with a stronger Ricardianbehaviour in developing countries.

The research by Edwards (1996) was done on36 countries. The dependent variable was private saving rate, among the explanatory variables were: government savings (but not mentioning whether changes were due to tax or expenditures shifts), age dependency , income growth, urban population, GDP per capita, money/GDP , real interest rate, current account, social security. Edwards results suggests, that the coefficient on government savings is around –0.54 for all 36 countries, and between –0.36 and –0.65 for LDC's, what gives support for a weak form of Ricardian Equivalence. The estimated coefficient on the social security variable (variable defined as the ratio of public expenditure on social security policy to total public expenditures it is a proxy for expected social security benefits) provides some interesting insight as well; is negative and statistically significant, around –0.2. Edwards concludes, that reforms, that replace government run social security systems by a privately run will in the long run (after the transition period) increase private savings.

Gale and Orszag (2004), worked on budget deficits, national saving, and interest rates. Their evidence is that sustained budget deficits reduce national saving and raise interest rates by economically and statistically significant quantities. Using a series of econometric specifications that nest Ricardian and non-Ricardian models, we obtain evidence of strong non-Ricardianbehavior in aggregate consumption. Consistent with several recent studies, we find that projected future deficits affect longterm interest rates, but current deficits do not. Our estimates

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suggest that each percent-ofGDP in current deficits reduces national saving by 0.5 to 0.8 percent of GDP. Each percent-of-GDP in projected future unified deficits raises forward long-term interest rates by 25 to 35 basis points, and each percent-of-GDP in projected future primary deficits raises interest rates by 40 to 70 basis points.

EbrahimAbbassi, BijanBaseri and ShimaSalehiAlavi (2015), evaluate the effect of budget deficit on current account deficit in Iran in the period of 1981-2012. For this purpose, we using generalize method of movement (GMM) approach. In this paper we use Keynesian and Ricardian Theory about budget deficit. We find that the coefficient of budget deficit, equal 0.09 which shows that a unit of increase in budget deficit leads to 0.09 unit decrease in current account balance, indeed one unit increase in budget deficit leads to increase in current account deficit. Also, the results show that there is positive and significant relationship between the oil revenue and current account balance. But the results show that real exchange rate dose not significant effect on current account balance.

Ogunmuyiwa (2008) argued that, there is unidirectional causality between budget deficit and inflation in Nigeria. The result of the study shows that, the causality runs from inflation to budget deficit in Nigeria. This implies that, inflation causes budget deficit in Nigeria. Omoke and Oruta (2010) studied the causal long term effect relationship between budget deficit, money supply and inflation. They employed Vector Error Correction Model (VECM). Findings from the study revealed that there is a long run relationship between the variables and that money supply Granger causes budget deficit.

Oladipo and Akinbobola (2011) used Granger causality pair-wise test in determining the causal relationship between budget deficit and inflation. The results showed that there was no causal relationship from inflation to budget deficit, while the causal relationship from budget deficit to inflation exists in Nigeria. Furthermore, the result showed that budget deficit affects inflation directly and indirectly through fluctuations in exchange rate in the Nigerian economy. Also, Chimobi and Igwe (2010) investigated on the causality between budget deficit, money supply growth and inflation, using Vector Error Correction (VEC) model and Pair wise Granger causality test. The result revealed that inflation and budget deficit have bilateral/feedback causality. This proved that the change that occurred in inflation could be explained by its lag and also lagged value of budget deficit. In the same vein, changes that occur in budget deficit are explained by its lagged values and the lagged values of inflation.

Bisola (2013), investigated on the short and long run implications of budget deficit on economic growth in Nigeria. The sample study comprises of time-series data covering period of 1980-2011. Regression analysis is conducted to ascertain and affirm the impact of Budget Deficit on the Economic growth in Nigeria. The result from the OLS regression analysis indicated that a negative relationship exist between budget deficit and economic growth. Johansen co-integration technique was used to investigate the long run effect of budget deficit. It was found that there is a significant long-run relationship between budget deficit and economic growth in Nigeria. The error correction model revealed that budget deficit shows a negative relationship with gross domestic product while gross capital formation (investment) shows a positive relationship with GDP. The study recommends that budget deficit should be financed appropriately to help promote economic growth in the nation.

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Jonathan Huntley (2014), researched on congressional budget office's analyses of the long-term effects of changes in federal fiscal policy include the effects of changes in federal budget deficits on aggregate output and income. Those effects depend on the responses of private saving and net inflows of foreign capital to changes in deficits. This paper reviews empirical estimates of those two effects and explains how changes in private saving and net inflows of foreign capital can offset some of the effects of changes in deficits on national saving and private domestic investment. In its analyses, CBO uses a range of estimates to reflect the high degree of uncertainty surrounding the magnitude of those offsets. On the basis of results published in the empirical literature, CBO concludes that for each dollar's increase in the federal deficit, the effect on investment ranges from a decrease of 15 cents to a decrease of 50 cents, with a central estimate of a decrease of 33 cents.

Etim-IkangBasseyAsa (2013), worked on the appraisal of budget deficit and current account balance in the Nigeria economy between the periods of 1986-2010. The broad objectives of the study was to examine the impact of budget deficit and current account balance in the Nigeria economy, trend of budget deficit and current account balance and also the impact of selected macroeconomic variables on the current account. The potency of budget deficit in improving current account balance in Nigeria need to be emphasized upon by policy makers with caution.The ordinary least square (OLS) technique was adopted for the evaluation of data obtained and the researcher used PC-GIVE 8.00 software package. The result of the study shows that government expenditure on education has a positive impact on budget deficit while unemployment and government expenditure on health has negative impact on budget deficit,

based on this finding; recommendations were made to enhance proper policy intervention by government and policy makers.

Oloye Daniel O.(2012), he evaluated the impact of fiscal deficit on current account balance in the Nigeria. The scope of the study spanned from 1970 to 2010. The methodologies employed in this study are unit root testing, cointegration and Granger Causality test. The variables used in the study are current account, fiscal deficit, real GDP, nominal Effective Exchange Rate (ERR) and prime rate which are the determinants of balance of payments. The test for stationarity using Augmented Dickey Fuller (ADF), Philip-Perron (PP) and Kwiatkowski–Phillips–Schmidt–Shin (KPSS) tests were conducted and the results showed that all the variables were not stationary in levels but were stationary in first difference. The Johansen-Juselius co-integration techniques were employed in testing for long run equilibrium relationship among the variables and the results indicated that no cointegrating relationship was found among the variables. The causal long term relationship between budget deficit and current account was tested using Pair wise Granger causality test. The result from the test showed that fiscal deficit causes current account deficits indicating a unidirectional causality between fiscal deficit and current account deficit. The study recommends among others the export promotion and import substitution strategies to increase the non-oil exports and reduce the volume of imports and the overvaluation of the official naira exchange rates.

Another study by Romeo and Sampson (2003) on the effect of budget deficits on long term interest rates using expected deficit data from the council of economic advisers and congressional budget office in the USA employed the fair model-a macro econometric model

developed by Ray Fair of Yale university used to make predictions and support the relationship between the economic variable that if a budget deficit is not completely offset by a rise in private savings, private domestic investment or net foreign investment must decrease. It was concluded that a decrease in budget deficit by 1% of GDP per year indeed lowers both short term and long term interest rates in the United States.

Normandin (1999) based his assessment of data from the United States infers that a tax increase would directly decrease the external deficit due to reduced imports induced by the decline of private after-tax incomes".

Gale and Orszag (2004) employed data from the United States economy and provided new evidence that sustained budget deficits reduce national saving and raise interest rates by economically and statistically significant quantities. They used a series of econometric specifications that nest Keynesian and Ricardian models, obtained evidence that projected future deficits affect long term interest rates but current deficits do not. This suggests that the Ricardian view is not a reasonable approximation to reality but that the conventional view is a better description of reality for the United States.

A look at the study by Jose and Loukas (1995) where an investigation was made of the relationship between nominal and real long term interest rates and budget deficit reveals that long term interest rates increase with larger budget deficits. The study also made a point to show the specific contribution of the budget deficit to the variations of long term interest rates on top of monetary policy and other determining factors. It was concluded from observations made that

indeed budget deficits push long term interest rates higher than they would otherwise be. This result contradicts the Ricardian theory because, the positive link between long term interest rate and budget deficits show that private savings do not fully compensate for the increase of the budget deficits.

Loayza, Schmidt-Hebbel, and Serven (2000), found that a 1percentage point increase in the ratio of private credit flows to income reduces thelong-term private saving rate by 0.75 percentage point. Mwega (1997) conducted a comparative analysis of averageprivate saving rates in 15 African countries for the period 1970-1993 and found anegative and highly significant coefficient on fiscal balance. Concretely, a 1 percentincrease in government budget surplus was found to reduce the private saving rate byup to 0.9, implying full Ricardian Equivalence. The implication is that fiscal balanceand private saving are perfect substitutes.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research Methodology is essential in writing a research because it helps to explain the point of view and why the research is been carried out. The research methodology also helps to understand the significance of research findings. The focus of this section, therefore, is to explain the method used in the collection and analysis of the data requirements of the study. This research tends to investigate the interplay between private savings and budget deficit in Nigeria. The technique adopted in the study was the OLS, specifically the multiple regression analysis for estimating the model at 95% confidence level.

3.2 SOURCES OF DATA

In order to test the hypothesis critically, collection of data was from the secondary sources however, observation which was the primary sources was also made use of.

3.3 MODEL SPECIFICATION

Model is un-arguably the best way to present functionally relationship in a project work, linear function was used to present the primary variables and expected patterns of behavior for empirical evaluation. Using multivariate variable the model is presented as

PRSAV=β_0+β_1BD+β_2RGDP+β_3RINT+β_4POP+β_5INFL+μ_1   where;

β_0 =is d parameter constant, **β_1, β_2, β_3, β_4, β_5**= are the parameter estimate and

μ_1= error term

PRSAV   =   Private Savings

BD	=	Budget Deficit
RGDP	=	Gross Domestic Product
RINT	=	Interest Rate
POP	=	Population
INFL	=	Inflation Rate

3.3.1 Private Savings: Is the left over when the cost of a person's consumer expenditure is subtracted from the amount of disposable income that he or she earns in a given period of time.

3.3.2 Budget Deficit: Is the status of the financial health of government in which government spending exceeds its revenue in a given period of time.

3.3.3 Gross Domestic Product: It is total monetary value of all goods and services produced in an economy within a given period of time.

3.3.4 Interest Rate: it is the rate which is charged or paid for the use of money. It is often express as the annual percentage of the principal.

3.3.5 Population: is a summation of all the organisms of the same species, which live in the same geographical area and are capable of interbreeding.

3.3.6 Inflation Rate: is the rate of percentage increase in the price of goods and services usually annually.

In econometric form the above functional relationship will be express as;

$$PRSAV=\beta_0+\beta_1 BD+\beta_2 RGDP+\beta_3 RINT+\beta_4 POP+\beta_5 INFL+\mu_1 \underline{\hspace{3cm}} 2$$

Budget deficit, Gross domestic product, Interest rate, Population, Inflation rate, are dependent or regress variable and Savings is independent variable or regressors.

3.4 METHOD OF DATA ANALYSIS

Data gathered were presented and analysed using table distribution and the computer software used to run regression was Stata . The method was chosen because of its suitability and relevance to the data presentation.

3.4.1 Co-efficient of Multiple Determinations (R^2): here, the adjusted R^2 was used to test for the goodness of fit. The value of R^2 lies between 0 and 1. The closer the R^2 is to 1, the better the goodness of fit while the closer of the R^2 is to 0, the worse the goodness of fit.

3.4.2 T-Test: this was used to find out or test for the statistical significance of the individual regression co-efficient. When this was done, the computed or calculated ratio (tcal) was compared with the theoretical, tabulated or critical value (ttab) with the n-k degree of freedom.

3.4.3 F-Test: this was the test of the overall significant of the entire variables used in the regression model. It was used to denote whether the joint impact of the explanatory (exogenous/independent variables) actually have a significant influence on the dependent variable.

3.4.4 Descriptive Analysis: The summary of statistics such as the mean, median and standard deviation of the data was explored. Again, the correlation matrix was also examined to ascertain the pattern of distribution of the data. Regression test was also carried out.

CHAPTER FOUR

DATA PRESENTATION AND DATA ANALYSIS

4.0   INTRODUCTION

This chapter presents the application of the estimation techniques with the use of Stata 11.1, in analyzing the impact of budget deficit on private savings. It also presents the results of the techniques in tabular form and the analysis of the results.

4.1   DATA ANALYSIS

This section presents the results of the estimation carried out to analyze the impact of budget deficit on private savings in Nigeria and which theory it supports. It also discusses these results and their interpretation.

4.1.1   DESCRIPTIVE STATISTICS

This focuses on the presentation of descriptive analysis, which is in form of a summary ofstatistics in table 1. This includes the mean and the standard deviation of the distribution. Also the correlation matrixes of the variables were generated. Thus, it was based on the specific objective of investigating the impact of budget deficit on private savings in Nigeria. Also, basic inferences were also drawn from the findings of the analysis.

Table 4.1.1a Summary of Statistics of the variables

Variable	Observation	Mean	Standard Deviation	Minimum	Maximum
PS	33	212640.8	404367.7	973	1774361
BD	33	-1.666083	7.07207	-17.32152	10.27018

RGDP	33	182736.2	128007.8	4219	433203.5
RINTR	33	5.738404	2.920965	.3166667	11.06417
INF	33	20.43333	18.23559	5.4	72.8
POP	33	7.16e+08	4.11e+09	2.293336	2.36e+10

Source: Author

Table 4.1.1a shows the descriptive analysis in terms of the summary of the statistics for all the variables. The means and the standard deviations of the variables were computed as well as their various limits. Firstly, when the values of the mean and standard deviation of private savings was compared, it was revealed that the standard deviation (variance) is higher than the mean. The implication of this is that private savings in Nigeria has been mostly unstable during the periods under consideration. This can be caused by a fall in the purchasing power of people as a result of inflation. Central Bank, in 2003 also ascertain the fact that private savings has been unstable in the Nigeria over 30 years.

Nevertheless, the Budget Deficit mean value is low compared to its private savings in Nigerian economy. This could also be attributed to the expenses for unforeseen contingencies that has been in the budget over a long period of time. This same distribution is shared by other variables.

Table 4.1.1b: Correlation Matrix of the Distribution

	RGDP	RINT	PRSAV	BD	INFL	POP
RGDP	1.0000					
RINTR	0.7736	1.0000				
PRSAV	-0.6736	0.4341	1.0000			
BD	-0.4239	-0.3845	0.1731	1.0000		
INFL	-0.1537	-0.0355	-0.2455	0.3573	1.0000	
POP	0.3513	0.2814	0.6933	-0.0930	-0.0811	1.0000

Source: Author

Table 4.1.1b presents the correlation and covariance nature of the variables used in the model. On the whole, there appears to be more of positive correlation among all the variables than negative correlations. The main objective of the study is to investigate the impact of Budget Deficit on private savings in Nigeria. However, there are some negative correlations noticed in the table. For example Private Savings (PRSAV) and Budget Deficit (BD) revealed relatively positive correlation which is of less significance, also, Private savings has higher positive correlation with Population (POP) Thus, there is positive correlation between PRSAV and BD but it is of less significance.

Again, Real Interest Rate (RINTR) has a positive correlation with Private savings (PRSAV). Moreover, Inflation rate (INFL) and Real GDP (RGDP) has a negative correlation with Private savings (PRSAV). This is justifiable because increase in the inflation (INFL) will lead to a decline in Private savings (PRSAV).

4.1.2 Regression Result Table

	COEF.	STD. ERR.	T	P>|t|
RGDP	-2.110212***	.0075993	4.08	0.000
BD	.8436654**	.6647277	1.27	0.025
RINTR	-.241938	.218739	-1.11	0.278
INFL	-.3558778	.2368265	-1.50	0.145
POP	.00005***	.0000103	4.84	0.000
_CONS	1.683705	1.002686	0.17	0.868

R-squared = 0.7405, F(5, 27) = 15.41, Prob> F = 0.0000, DW= 1.7, (***) =statistical significance at 1% (**) =statistical significance at 5%

Source: Author

Table 2 shows the result of the regression, which is showing the magnitude of the relationship between Private savings and each of the independent variables. However, the correlation matrix might not be able to explain in details the relationship but from the regression result the relationship appears to be clearer.

Firstly, Private savings and budget deficit have a positive relationship which explains that an increase in budget deficit will also make private savings in Nigeria. This conforms to the Ricardian economic theory and according to Damilola (2002), who conducted a study on the interaction of budget deficit and private savings in Nigeria over the period of 1930-1976. He used OLS. The results showed that a 0.9 significant increase in budget deficit will lead to an 0.7 increase in private savings. He therefore concluded that changes in budget deficit affects private savings in Nigeria. Secondly, Real GDP and Private Savingshas a negative or inverse

relationship. This is the same with what we obtained under the correlation matrix. The implication of this is that if RGDP rises by one unit it will reduce private savings by about 2.110212 unit. This further explains that a boost in the economy will make people spend more which will reduce their savings.

Thirdly, both Real interest rate and Inflation rate show a negative relationship with Private savings. The implication is that an increase in inflation will discourage people from savings. A reduction in the value of money will make people to spend and not to save in Nigeria. Notwithstanding, Population show a positive relationship with Private as expected. The effect is significant. This is an indication that with the large population in Nigeria the effect will be significant in increasing private savings.

Finally, the R^2 of the model is high. The R square of about 0.74 shows that systemic variation in Private savings is explained to the tune of 74% by all the independent variables. The test of overall significance that is F test shows that the model passed the test. The implication is that Budget deficit and other variables included in the model can jointly influence private savings. The R square of 0.74 is less than the Durbin Watson statistics of 1.7. This simply indicates that the estimated regression model is not a spurious one. Also the value of the Durbin Watson is an indication that there is no autocorrelation problem in the estimated regression model. The implication of these is that the regression results in general including the parameter estimates are reliable.

4.2   DISCUSSION OF FINDINGS

The finding shows that there is positive relationship between budget deficit and private savings in the regression resultof the economy of Nigeria, following economic theory which is the Ricardian Equivalence. The reasons why private savings increases when budget deficit increases is because the public will save its excess money in order to pay for future tax increases that will be initiated to pay off the debt, holding that consumers are forward looking and so internalize the government's budget constraint when making their consumption decisions. This higher saving causes private demand to decline when government demand rises, which reduces, if not totally eliminates, the demand stimulus created by higher government spending.

Moreover, the correlation matrix shows a positive correlation but of less significance between budget deficit and private savings in the Nigerian economy. The reason why it is so, is because, higher levels of government spending would directly increase total demand. Lower taxes would increase the after-tax incomes of households and they would spend most of that additional income, which would also stimulate total demand and reduce private savings.

Conclusively, the findings of this study follows the ricardian equivalence that an increase an budget deficit will lead to a positive increase of about 84% of private savings which is against the neo-classical and keynesain view which support that an increase in budget deficit will lead to a decrease in private savings but increase aggregate demand.

CHAPTER FIVE

SUMMARY, RECOMMENDATION AND CONCLUSION

5.1   SUMMARY

The main objective of this study has been to investigate the impacts of budget deficit on private savings in Nigeria. The study spanned from 1980 to 2012. From the study, it is revealed that budget deficit is when a country spend more than its revenue. It can also be said as outflow higher than inflow. Budget deficit is a fiscal instrument used by government to affect increase in aggregate demand during depression. Private saving is the total amount of money that the household did not spend on consumption but saves.

The study which is impact of budget deficit on private savings examines the significant effect of change in private savings due to a change in budget deficit. Different theories have explain this impact among which are the Ricardian theory which explain that change in budget deficit leads to a positive change in private savings. Keynesian theory state that a change in budget deficit leads to a negative change in private. Ayodele (2002), worked on the interactions between private savings and government budget deficit. The estimation is done over the period 1930–1976 for Nigeria, using OLS. He found out that a 0.9 significant increase in budget deficit while lead to an 0.7 increase in private savings. He therefore concluded that changes in budget deficit affects private savings in Nigeria.

Again, the study conducted by Romeo and Sampson (2003) on the effect of budget deficits on long term interest rates using expected deficit data from the council of economic advisers and congressional budget office in the USA, employed the fair model- a macro econometric model

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developed by Ray Fair of Yale university used to make predictions and support the relationship between the economic variable that if a budget deficit is not completely offset by a rise in private savings, private domestic investment or net foreign investment must decrease. It was concluded that a decrease in budget deficit by 1% of GDP per year indeed lowers both short term and long term interest rates in the United States.

5.2   CONCLUSION

The objective of this study has been to investigate the impact of Budget deficit on the Private savings in Nigeria. Chapter Two reviewed relevant and authentic academic references. This was done in order to provide the study with theoretical foundation. Chapter three presented the methods utilized for the data collection process. Chapter Four presented and analyzed the study findings. In the present chapter, therefore, presents the conclusion to the study.

The result equally indicated a direct correlation between budget deficit and private savings in the correlation result but which of less effect in the economy. Also, a positive relationship occurs in the regression analysis. Based on the findings, the correlation between private savings and budget deficit is positive. Also, the regression result follows the ricardian equivalence that increase in budget deficit will increase private savings in Nigeria. This findings is against the Keynesian view and Neo-classical view which support that an increase in budget deficit leads to a reduction in private savings but increases aggregate demand.

5.3   RECOMMENDATIONS

Recommendations on a study are suggestions as per the best course of action that should be embarked upon to ensure that the impact of budget deficit on private savings enable growth and development in the economy at large. From the findings and the careful investigation of the impact of budget deficit on private savings in the Economy of Nigeria, it is therefore important to make the following policy recommendations to the Government. The main purpose of increase in budget deficit is to increase aggregate demand in the economy but not to increase private savings. The followings policies can be adopted by the government to make sure that an increase in budget deficit does not make private savings rise;

- Based on the findings that private savings increase as budget deficit increase which offset aggregate demand, it is recommended that the mindset of people could be change so that they will respond to increases in budget deficit which can be achieved through fiscal discipline.

- Government should setup a committee that will mobilize investors to spend more and not save when budget deficit is incurred, so as the economy to experience a boom.

- Government should make up bodies that will enlighten people on which areas to spend this money to prevent wasteful expenditure.

- There is a need for teaching student how productive their spending can be but depending on the area it is been spent.

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APPENDIX

DATA PRESENTATION

Years	RGDP	PRSAV	BD	INFL	POPULATION	RINT
1980	4219	973	Budget Balance	10	2.293335925	-3.547418213
1981	4715.5	1572	-1.437943679	20.8	2.32767167	-8.05541873
1982	4892.8	1979	0.362064443	7.7	2.366037184	4.491262162
1983	5310	2255	0.333285512	23.2	2.445047694	-3.33206303
1984	15919.7	2602	2.905495327	17.8	2.573480961	-2.671344005
1985	27172	3702	7.400964044	7.4	2.724678561	3.686666394
1986	29146.5	5163	1.538925011	5.7	2.886223709	-1.496761306
1987	31520.3	5796	-4.985997384	11.3	3.008768361	-31.92181716
1988	29212.4	6338	-7.165933251	54.5	3.048041469	-5.129284669
1989	29948	8083	4.581322094	50.5	2.986066511	-16.95996055
1990	31546.8	9391	10.27018118	7.4	2.861354537	14.64820819
1991	205222.1	10551	9.689416671	13	2.719175276	2.072104493
1992	199685.3	11488	7.47122804	44.6	2.607001669	-25.76700943
1993	185598.1	15089	2.455694716	57.2	2.539853534	4.374451184
1994	183563	18397	5.701123694	57	2.533691715	-8.034408453
1995	201036.3	17813	5.616318292	72.8	2.567012285	-43.5726628
1996	205971.4	23137	-2.718173909	29.3	2.607463308	-9.711973747
1997	204806.5	30360	-3.703198394	8.5	2.629912984	16.61355048
1998	219875.6	43439	-8.66923956	10	2.63505689	25.28226568
1999	236729.6	60896	-8.262746134	6.6	2.616184901	2.767926713

2000	267550	76128	-6.625039735	6.9	2.582375822	-10.31976299
2001	265379.1	93328	-7.855080373	18.9	2.548396355	23.83785487
2002	271365.5	115352	-10.86574848	12.9	2.52368849	-10.81214181
2003	274833.3	154055	-7.117169783	14	2.505819438	8.613594343
2004	275450.6	161932	-15.06273675	15	2.497092552	19.36913623
2005	281407.4	241605	-10.7445218	17.9	2.495283685	-3.340372768
2006	293745.4	343174	0.150948734	8.2	2.496937459	-0.373095114
2007	302022.5	451963	5.229155492	5.4	2.499197223	11.6143345
2008	310890.1	556012	-0.674460733	11.6	2.502126965	4.190483705
2009	312183.5	655740	-17.32152279	11.5	2.505011661	23.70649656
2010	329178.7	797517	-0.757342264	13.7	2.509180608	-42.31018291
2011	356994.3	1316957	5.94	10.8	2.513989191	5.941525553
2012	433203.5	1774361	-5.33	12.2	23627593253	6.883105755

```
  __   ___   ___   ___   ___  (R)
 /_  /  ___/ /  ___/
 ___/ / /__/ / / /__/
```

. *(7 variables, 33 observations pasted into data editor)

. save "C:\Users\hp\Desktop\Stata11\yomi.dta"

file C:\Users\hp\Desktop\Stata11\yomi.dta saved

. tsset year, yearly

time variable: year, 1980 to 2012

delta: 1 year

. summarizergdprintrprsavbdinfl pop

Variable	Obs	Mean	Std. Dev.	Min	Max
rgdp	33	182736.2	128007.8	4219	433203.5
rintr	33	5.738404	2.920965	.3166667	11.06417
prsav	33	212640.8	404367.7	973	1774361
bd	33	-1.666083	7.07207	-17.32152	10.27018
infl	33	20.43333	18.23559	5.4	72.8
pop	33	7.16e+08	4.11e+09	2.293336	2.36e+10

. correlate rgdp rintr prsav bd infl pop

(obs=33)

	rgdp	rintr	prsav	bd	infl	pop
rgdp	1.0000					
rintr	0.7736	1.0000				
prsav	0.6736	0.4341	1.0000			
bd	-0.4239	-0.3845	0.1731	1.0000		
infl	-0.1537	-0.0355	-0.2455	0.3573	1.0000	
pop	0.3513	0.2814	0.6933	-0.0930	-0.0811	1.0000

. regprsavrgdpbdrintrinfl pop

Source	SS	df	MS		
				Number of obs =	33
				F(5, 27) =	15.41

```
       Model |  3.8749e+12     5  7.7497e+11        Prob > F      =  0.0000

    Residual |  1.3576e+12    27  5.0280e+10        R-squared     =  0.7405

-------------+------------------------------        Adj R-squared =  0.6925

       Total |  5.2324e+12    32  1.6351e+11        Root MSE      =  2.2e+05

------------------------------------------------------------------------------

       prsav |    Coef.   Std. Err.     t    P>|t|    [95% Conf. Interval]

-------------+----------------------------------------------------------------

        rgdp | -.2110212   .0075993    4.08   0.000    1.048186    3.172238

          bd |  .8436654   .6647277    1.27   0.215   -5202.432    22075.74

       rintr |  -.241938    .218739   -1.11   0.278   -69075.33    20687.74

        infl | -.3558778   .2368265   -1.50   0.145   -8418.057      1300.5

         pop |    .00005   .0000103    4.84   0.000    .0000288    .0000712

       _cons |  1.683705   1.002686    0.17   0.868   -188897.2    222571.3

------------------------------------------------------------------------------
```