

TITLE PAGE

**BUDGET DEFICIT AND CURRENT ACCOUNT
BALANCE IN NIGERIA (1986- 2010)**

**A PROJECT SUBMITTED IN PARTIAL FULFILLMENT
FOR THE COURSE REQUIREMENTS FOR THE AWARD
OF BACHELOR OF SCIENCE (B.Sc.) DEGREE
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BY

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DEDICATION

This project is dedicated to Almighty God and to my dearest parents for their unflinching financial and moral support throughout my pursuit of academic excellence.

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First and foremost, I wish to thank and praise the Almighty God for sparing my life and more importantly for his spiritual guidance and heavenly mercies rendered to me since the beginning of my academic pursuit to this stage.

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I personally that in moment of sober reflection discover that I am indebted to very many people even for the least achievement. Here I find myself limited in space, I would have gone on and on mentioning them.

Above all, I give all glory, endless thanks to Almighty God, the author and finisher of our faith, for giving me the grace to embark and successfully complete this programme.

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ABSTRACT

This work is based 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 isto 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.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Budgeting generally can be said to be a control device in an organisation designed to ensure that activities pursued within the budget period are such that contribute to the achievement of the organisation's objectives.

For government, its objectives are the provision of services and improvement of the living standard of the people.

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. In an attempt to reduce large budget deficit, government usually recourse to deficit financing namely;

- i) internal and external borrowing
- ii) raising the level of taxation
- iii) increasing money supply
- iv) Draw down from government saving or what is called foreign reserve

A deficit is financed from government borrowing which may result to

accumulated debt burden or a debt overhang situation. Inflation may result from increased money 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. Budget deficit has its theoretical background from the proposition made by Keynes in the 1930s during the event of the great depression; Keynes's advocate increased government spending as a panacea to the world economy.

Current account balance is the sum of net export goods and services, net income and net current transfers. Current account balance consists of transactions relation to trade in goods and services and unilateral transfers. Secondly, current account balance is the different between the total receipts from export of goods and services and grants of transfer payment abroad. Current account balance 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. 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 current account balance; 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. A striking feature of Nigeria's fiscal operation since the second half of the 1970s is persistent and rising budget deficits.

Nigeria has recorded deficit and current account balance thereby experienced twin deficit. From the 2008 annual report of the Central bank of Nigeria (CBN), article 5.3 page 71, it states that there was a notional 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 last 15 years has been financed largely through money creation by the central bank. Consequently, monetary policy has been vastly expansionary with direct implication for price inflation and exchange rate. Finding from various comprehensive studies have generally indicated that country with successful trade reforms tend to pursue tight monetary and fiscal policies.

1.2 STATEMENT OF THE PROBLEM

The budget deficit and current account balance position in Nigeria has recorded more deficit in her budget over the years and also the current account balance has an unhealthy growth rate even to recording deficit in some of the years. Most

importantly, the successive governments in Nigeria have devised many strategies and means to control the unhealthy rise in the budget deficit and improve current account balance such as in year 2009, there were initiative to spend less on salaries, the establishment of monitoring committee who would inspect project and further confirm proper utilization of funds before disbursement and strict orders that disbursement should be made based on proper utilization of previous ones and so on. Despite these measures, the budget deficit continue to be on the increase and current account balance keeps fluctuating.

RESEARCH QUESTIONS

The following research question will guide the study.

- 1.) Is there any relationship between budget deficit and current account balance in Nigeria?
- 2.) What are the causes of budget deficit and fluctuating current balance in Nigeria?

3.) What is the contribution of budget deficit to current account in Nigeria following Keynesian argument that demand and productivity”?

4.) What are the measures to control budget deficit and improve current account balance in Nigeria.

1.3 OBJECTIVES OF THE STUDY

The broad objective of this study is to investigate the budget deficit and current account balance in Nigeria and how it affects the economy.

Specifically the objectives are

i.) To empirically investigate the relationship between budget deficit and current account in Nigeria.

ii.)To investigate the causes of budget deficit and fluctuating accounting balance in Nigeria.

iii.)To identify the various measures necessary to control budget deficit and improve current account balance in Nigeria.

1.4 RESEARCH HYPOTHESIS

Research hypothesis is proposition stated in a testable form to predict particular relationships between two or more variables. Hypothesis of this research are stated in both null and alternative form.

The hypothesis formulated for the analysis of this study and from which to draw relevant conclusion are

1.) Ho:
Current account balance has no effect on budget deficit in Nigeria

1.5 SIGNIFICANCE OF THE STUDY

This study is relevant since that it will inform the policy makers in Nigeria the nature of the relationship between government budget deficit and economic growth where in no small measure will aid in appropriate fiscal policy measure.

The research work will provide insight to the policy makers in making policies that is related to budget deficit and current account balance in the entire economy.

Further more it will contribute immensely in developing the the analysis of budget deficit on macroeconomic variables and serve as useful platform tool in policy making.

The study will be useful to future researchers who might be working on the topic or other related topics.

1.6 SCOPE/LIMITATION OF THE STUDY

This research work

will cover the period of 1987 to 2010 following the limited scope of this research work, data will be sourced from secondary data.

The limited scope of this research work is necessitated by the changes posed by the problem of limited time frame stipulated for this research work, shortage of fund and high cost involvement in sourcing data on some of the variables required as a result of problem of limited statistical materials. Effort will be made to find out the relationship of budget deficit and current account balance within this period.

Despite all this impediments, this research work will be relevant in serving the purpose of which is intended.

LITERATURE REVIEW

In this literature review, the researcher will look in to relevant theories on the subject under consideration. In this section, the theoretical base of the research and the empirical literature will be evaluated.

2.1 THEORITICAL FRAMEWORK

Nigeria as a country is a federation with one central government, 36 state government and 774 local governments. Every year, Nigeria look up to the federal government on Abuja to announce the budget of the country for that year. Until the budgets announced, both the business of government and the organised private sector appear stalled because nobody is sure of what policy he government will adopt (Ibe,2006).

The projects included in the budget represent the activities on which money would be spent and the meansof financing these projects and her policies incidental to successful implementation of the budget becomes the operational policies adopted for the fiscal year. 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,

- 1.) Internal and external borrowing
- 2.) Increasing taxation level
- 3.) Borrowing from foreign reserve

4.) 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.

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 in its balance of payment because it imports raw materials, machineries, capital equipment and services associated with development process and exports primary exports. 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. This is known as Ricardian equivalence hypothesis (REH). Theoretically,

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. Perkins (2002) also argues that if a government attempts to improve the current account by reducing her expenditure in infrastructure, the consequence declines in net wealth it is likely to exceed whatever benefits arises from the stronger current account. Perkins suggests that government should strengthen the current account balance by reducing the expenditure overseas. Perkins still stress that the effect of budget deficit will have on investment and current account

balance depends on the extent on which a country produces its own investment goods.

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 its stock in capital. Since deficit reduce national savings, investment will also reduce consequently, net export fall, this increase budget deficit.

In the context of simple Keynesian open economy model, it is shown that there is a positive association between the government budget and trade balance, it has also shown that net export equals public and private savings. Therefore increase in budget deficit reduces national savings which reduces domestic investment and net export but worsens the current account balance. It can be said at this point that studies of the relationship between budget deficit and current account balance proceed from one of the two theoretical bases; Mundeu-fleming model and Keynesian open economy.

In consonance, with mundeu-fleming model, Shojai (2005) states that increase in government budget deficit generates increase consumer spending. He argued that increasing disposable income and financial wealth of consumers encourages increase in import. Moreover the Keynesian absorption theory that an increase in budget deficit should induce domestic

absorption import expansion thereby leading to current account deficit.

Budget deficit increases public debt as money is borrowed internally and externally to finance government expenditure, this causes interest rate to rise, future tax increases, fall in public saving and reduces investment and degenerate into low volume of export and weakens the current account balance.(Scott 2005)

Suahir (2004) argued that appreciation of currency caused by foreign capital inflow attracted by interest rate as a result of government borrowing to finance fiscal deficit leads to low demand of her exports in the market because of the high price of the export and it decreases current account balance. Sometimes budget deficit acts as a catalyst to aggregate output of the economy. It revives the economy through the injection of funds and controls recession and depression which improve the disposable income and aggregate demand thereby causing investment increase and this has a positive impact on the total export in economy.

According to Baypai and Sachs (2006) budget deficit imperil national rate thereby reduces overall aggregate investment. This reduction in investment may lead to decrease in total output for domestic consumption will supplemented by increase in importation of scarce goods and services. This increase import relative to export and this may lead to current account

deficit, if this condition is left unchecked for some period. Budget deficit reduces national savings which reduces domestic investment and increases borrowing from abroad. The reduction in domestic investment lowers productivity growth and this reduces current account balance.

Iyoha (2004) states that one of the implications of budget deficit is that higher fiscal deficit increase government desperation to inflate ways its debts. This precipitates and conditions of increased tax on the future income and production and in turn discourages production and drastically reduces investment and output and affect the current balance.

Kim and Roubini (2004) has stated that budget deficit impacts positively on the current account in the short run regardless whether the deficit arises from an increase in government expenditure or reduction in taxes. Increase in budget deficit causes private saving increase and interest rate increase because government borrowing increases and interest rate crowds out private domestic investment. The argument holds that increase in private savings and decline in government saving in short run contribute to current account improvement.

According to Gramliah(2004) budget deficit and trade deficit have strong link and they are worrisome only in the long run. He continues his argument

that budget deficit can create trade deficit and also there is possibility for trade deficit to create budget deficit.

Aiyar (2005) argues that increase in capital inflows as a result of increased rate caused by increase in government expenditure offset the crowding out impact of high fiscal deficits. He argues further that fiscal deficit causes high growth of the economy, strong balance of payment and accumulated of foreign reserve.

2.1.1 CURRENT ACCOUNT TRANSACTION

Current account transacts good and services plus unilateral transfer constitute the current account component of the statement.

Secondly, current account can be used for economic analysis of the country's strength and weakness as a partner international trade (nzotta 2006).

CURRENT ACCOUNT OPERATION

- 1.) Merchandize export + value
- 2.) Merchandize import - value
- 3.) Balance on merchandize trade is made up from line 1+2
- 4.) Export of services + value
- 5.) Import of service + value

- 6.) Balance of goods and services is made up from line 3+4+5
- 7.) Government grant and private remittance – value
- 8.) Balance on current account is gotten from line 6+7 (Ezirim 2004)

Balance of payment are always on balance when no double entry book keeping system whereby both sides of transaction, receipt and payment are from the above description of how current account operation in the Nigeria economy, we can see that when the government or policy makers fall short of these, it leads to deficit in the economy thereby affecting every productive sector in the economy. This transaction involves the provision and receipt of resources such as goods and services and income and also specific changes claims on asset and liability to the rest of the world (AKA2005). Finally, a set off macro-economy variables will used to examine the sustainability of the Nigeria current account and also helps in correcting the excessive relevance on oil revenue in other to save structural weakness of the economy, unsustainable current account deficit and external crises in the economy Obi, (2004).

Perkins (1997) argues that if a government attempt to improve the current account balance by reducing its own spending on useful infrastructure, the subsequent decline in net wealth is likely to

whatever benefit that arises from the stronger current account. If the government reduces its expenditure in overseas on such items as defence or diplomatic activity that will tend to strengthen the current account and do. That there is no general presumption that this form of reduction in government outlays will reduce the level of activity or domestic investment.

2.2 EMPIRICAL LITERATURE

The results of the investigation on the relationship existing between budget deficit and current account balance holds divergent views. Morgan (1974) developed a framework using the concept of domestic budget balance and foreign budget balance to demonstrate the interrelationship between the budgetary development and domestic liquidity, aggregate demand and the balance of payments. Findings from the 12 oil exporting countries considered show that there are strong relationship among fiscal operation, credit creation, inflation and the balance of payment.

In Nigeria, Olopoenia (1986) adopted Morgan analytical framework to evaluate the implications of fiscal operations in Nigeria's balance of payments developments. On the basis of theoretical relationship established, the argument was advanced that because the source of

financing the domestic budget balance comes mainly from the foreign budget balance, increase aggregate demand enhanced through the monetization of the foreign exchange earnings will propagate inflation and a balance of payment problem. The policy relevant of this theoretical exposition is the recognition that adequate care must be taken in financing budget deficit through credit in order to achieve the macro-economic objective to price stability with external balance.

Darrat (2006) found out that the empirical result only supports the conventional view that a rising budget deficit causes trade deficit. The result as test being carried out on the relationship between budget deficit and trade deficit. He summarised his findings by saying that budget to trade deficit causality, but also find stronger evidence of trade to budget deficit causality. He concluded that budget deficit affect the trade deficit through its impact on domestic absorption and income rather than through higher interest rate and exchange rate.

Abel (2007) supported the work of Darrat. He concluded that budget deficit influences trade deficit indirectly. He contended the indirect causation running from budget deficit through interest rate and exchange rate to the trade deficit exists.

Regression carried out by Kearney and Monad Jemi (2006) shows that a temporary twin deficit relationship between stance of fiscal policy and the performance of current account payment which does not persist overtime, examination of the impulse response function confirms that fiscal expansion will lead to prolonged period of improved current account performance as the economy adjust towards its long run equilibrium. They concluded that twin deficit relationship varies internationally in magnitude and duration.

Evan (2007) in another cross country regression shows that the current account are unrelated to budget deficit. He further stressed that causal relationship exist between budget deficit and current account. The result suggests that a high correspondence between the two deficits in the long run is more likely to occur especially in developing countries.

Egwaikhide (1998) appraises the implication of Nigeria budget profile for inflation and current account balance. Evidence indicates that fiscal indiscipline in the major determinant of budget deficit in Nigeria while its mode of financing has aggravated inflation in the country. Most importantly, it is revealed that budget deficit correlates highly with current account deficit implying that external disequilibrium is partly attributed to endogenous factors.

Egwaikhide (2006) used a macroeconomic model to examine the effect of budget deficit on trade balance in Nigeria and the result shows that the budget deficit arising from increase in government spending negatively affects the balance of trade irrespective of whether it is money financed or by external borrowing. From the empirical investigation, the study reveals that current account deficit.

Onafowora (2006) carried a test on the relationship between budget deficit and trade deficit in Nigeria. This revealed positive relationship between trade and budget deficit in both short and long run. It supports the conventional and Keynesian twin deficit proposition and refutes the Ricardian equivalence hypothesis.

Philips (1997:p 23-25) critically analysis the Nigeria fiscal policy between 1960 and 1997 with a view of suggesting workable ways for the effective implication of vision 2010.he observes that budget deficit have been an abiding feature in Nigeria for decades . He notes that except for the period of 1971 to 1974 and 1979, there has been an overall deficit in the federal government budget each year since 1960 to date. The chronic budget deficit and their financing largely by borrowing, he asserts has resulted in excessive money supply worsen inflationary pressure and complicated macro economy instability, resulting in negative impact of externalbalance,

employment and growth. He however contends that fiscal policy will be an effective tool for moving Nigeria towards the desired state in 2010 only if it is substantially cured of chronic budget deficit syndrome it had suffered for decades.

Nickel and Vansteenkiste (2008) discovered that higher budget deficit leads to higher current account deficit.

Mukhtar, et al (2007) in a cross country analysis used the ECM(error correction model) strategy and Granger causality test to empirically test the twin deficit hypothesis and discovered the existence of long-run relationship between the two deficits and that bi-directional causality runs between the two variables. Granger causality tests shows there is a directional relationship between the two variables.

Chete (2001) found a negative correlation between current account and variables such as square of relative income, inflation, the degree of openness in Nigeria. His study also showed the existence of a positive relationship between current account balance and net foreign asset, budget deficit exports.

Ozman (2004) empirically investigated the effects of institutional and macro-economic policy stance variable on current account deficits. The result strongly suggests that better governance increases the ability of a

country to control adverse changes in current account behaviour. In addition the findings of the paper indicated that a flexible exchange rate and openness imposes a discipline in the current account behaviour. Barro (1978, 1979) put forward a hypothesis that deficit is a result of inflation, rather than inflation being a result of deficit. The government deficit is the change on normal value of outstanding government bonds. If the anticipation of inflation increases, then the nominal value of bonds must increase to maintain the real value of outstanding bonds. In addition, the monetarists have argued that there is a positive link between deficit and monetary growth asserting that higher bond financial deficit puts upward pressure. Because the central bank is concerned with smoothing interest rate movements so as to it would then tend.

2.3 LIMITATION OF THE PREVIOUS STUDIES

Abel (2007) concluded that budget deficit influences trade deficit indirectly but failed to point out the various ways budget deficit influences trade deficit. Researchers like Abel(1990), Islam(1998), Zeidic and Pemberton(1990), Bachman(1992), Kasak(1994), Vamoukas(1999), Ageel and Nishat(2000), Piersanti(2000), Leachman and Francias(2002), Cavallo(2005), and Erceg, Guerrieri and Gust (2005) supported the

conventional view that the twin deficit. Other investigations of the correspondence between the two deficits include those undertaken by Landey (1984), Miller and Russek(1989), Dewold and Ulan(1990), Enders and Lee(1990), Boucher(1991), Evans(1993), Winner(1993), Kim(1995), Bartlett(1949), Papaioannou, Kei-muyi(2001) and Kaufmann et al (2002) do not detect a stable long run association between the two deficit using variety of samples. Darrat (1988), Kearney and Monadjemi(1990) and Normandin (1999) have reported evidence supportive of bi-directional causality between the twin deficits. Some studies as Anoruo and Ramchander (1998), Khalid and Teo(1999) and alkswani (2000) support the reverse causality running from current account to budget deficit. This reverse causation is designated in the terminology of summers (1988) by current account targeting.

As a result of the above mention weakness this research sets out to examine the potency of budget deficit improving current account balance in Nigeria as well as examining the relationship between budget deficit and current account balance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 METHODOLOGY

Research methodology is a strategy used for the purpose of investigating problems (Osula, 2006). Therefore in order to appreciate its relevance, it is necessary to examine the subject matter which revolves around budget deficit and current account balance in Nigerian economy.

However the system and method to be used by any researcher depends on the purpose of the study, the type and nature of problem to be investigated.

This research study is based on BUDGET DEFICIT AND CURENT ACCOUNT BALANCE IN THE NIGERIA ECONOMY and the period covered is extended from 1987-2010.

This research study is descriptive and empirical in value. The descriptive aspect of it reinforces the budget deficit and current account in Nigeria.

Primarily the behavioural pattern balance budget and current account, budget deficit, current account deficit and trade deficit as it affects the growth and development of Nigeria economy thereby destabilizing the

productive sector in the Nigeria economy.

The empirical analysis entails the various data collected for the purpose of testing and consequently accepting or rejecting the stated hypothesis (Ho and Hi) respectively. The hypothesis of the study is stated in both null and alternative types. The null hypothesis assumes that there is no significant different. The accepting of the null hypothesis (Ho) automatically means rejection of the alternative hypothesis (Hi) and vice versa.

3.2 SPECIFICATION OF THE MODEL

Specification of the model is a step a good researcher must take in attempting the study of any relationship in mathematical form with which the economy phenomenon will be employed empirically.

Based on the above theoretical formation, the model will be specified in the general form as

$$\text{BGD} = F (\text{CAB}, \text{UMP}, \text{GEP}, \text{GEH})$$

where

BDG = Budget deficit

CAB = current account balance

UMP =Unemployment

GED = Government expenditure on education

GEH = Government expenditure on health

The representation of the economy form of model is summarised as a functional relationship below

$$BGD = b_0 + b_1 CAB + b_2 UMP + b_3 GED + b_4 GED + U_t$$

U_t = Error term

The specification of a model is based on the available information relevant to the study in question. The ordinary least square method of classical linear regression model is the econometric technique adopted in the study which covers a period of twenty three years (1987-2010).

3.3 ANALYTICAL TECHNIQUES

1.) Economic Test (Apriori criteria)

The econometric test involves examining the economic meaningfulness of the equation with regards to meeting the apriori expected signs. Theoretical 'apriori' evaluation of the signs of the parameter will be employed as determined by the principle of economic theory.

ii.) Statistical Criteria

The following statistical test is been carried out to test the reliability of the model. R2 Co-efficient of multiple determinations shows

the percentage of the total variation of the dependent variable explained by changes in the independent variable. The value of R^2 lies between 0 and 1. The higher the R^2 the greater the percentage of the variation of the dependent variable explained by the regression equation. That is the better the 'goodness of fit' of the regression equation to the observation while the closer the R^2 to zero, the "worse the fit".

F-statistic, F-test is carried out to test the overall significance of the whole regression. The calculated F^* value is compared to 5% level of significant.

We are testing the hypothesis at 0.05 level of significance in order to decide whether to accept alternative hypothesis or reject the null hypothesis or vice versa. Example if $\text{prob}(\text{sig}) > 0.5$. We accept the null hypothesis and reject the alternative hypothesis.

OR

if $\text{prob}(\text{sig}) < 0.05$, we accept the alternative hypothesis and reject the null hypothesis.

iii.) **Econometric criteria**

Durbin-Watson test for autocorrelation compares the calculated D^* value from the residual with a_1 and d_u in the Durbin-waston and with all their transformers $(4-d_1)$ and $(4-d_u)$

Where

d^* = calculated Durbin-waston

d_u = upper Durbin-waston

d_l = lower Durbin-waston

NORMALITY TEST

This is carried out to check if the error term has a normal distribution.

This is based on the assumption that the random variable/error term U_t is normally distributed around zero mean and a constant or finite variance (Koutsoyiannis 2003)

MULTICOLLINEARITY TEST

This will be used to check for multicollinearity among the explanatory variables, the basis for the test being the correlation matrix result, using the correlation coefficient between pairs of regressors.

3.4 JUSTIFICATION OF THE MODEL

The following are the preference of this technique in estimating the model. The phenomena which this work seeks to investigate are a simple one that requires a single model. That is it involve a linear relationship between the dependent and explanatory variables, thus the

ordinary least square (OLS) technique is the most suitable for the elimination of this model.

This work lays emphasis on the statistical significance of the variables. Thus, the ordinary least square estimator possesses properties of the best linear and unbiased estimator (BLUE).

3.5 DATA COLLECTION AND SOURCES

In carrying out this research work, secondary data was used in this research work. The source of this data is from the central bank of Nigeria (CBN), statistical bulletin, federal office of statistics etc.

Moreover, journals, magazines, write-ups, textbooks and other relevant materials.

3.6 ECONOMETRIC SOFTWARE PACKAGE

The researcher used PC-GIVE 8.00 software package to run the ordinary least square (OLS)

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF RESULT.

4.1 Presentation and Interpretation of Result:

Dependent variable: Budget Deficit

Method: Ordinary Least Square

Period: 1986-2010

Included Observations: 25

Variable	Coefficient	Standard error	t-statistics	t-prob	partyRy
Constant	59983	45430	1.320	0.2016	0.0802
CAB	5734.5	3812.9	1.504	0.1482	0.1016
UMP	-23192	7663.1	-3.026	0.0067	0.3141
GED	7.4844	2.9849	2.507	0.0209	0.2392
GEH	-14.730	4.1054	-3.588	0.0018	0.3916
Ry = 0.756703 F{4, 20} = 15.551 {0.0000} a = 118170					
DW = 2.15 RSS = 2.792846084 for 5 variables and 25 observations					

From the above, the interpretation of the result as regard the coefficient of various regressors is stated as follows:

The value of intercept which is 59983 shows that the Nigerian economy will experience a 59983 increase when all other variables are held constant.

The estimate coefficients which are 5734.5 {CAB} shows that a unit change in CAB will cause a 5734.5 unit increase in BGD, -2319 {UMP} shows that a unit change in UMP will cause a 2319 unit decrease in BGD, 7.4844 {GED} shows that a unit change in GED will cause a 7.4844 unit increase in BGD and -14.730 {GEH} shows that a unit change in GEH will cause a 14.730 unit decrease in GDP.

4.2 Economic Apriori Criteria

The test is aimed at determining whether the signs and sizes of the results are in line with what economic theory postulates. Thus, economic theory tells us that the coefficients are positively related to the dependent variable, if an increase in any of the explanatory variables leads to a decrease in the dependent variable.

Therefore, the variable under consideration and their parameters exhibition of a priori signs have been summarized in the table below.

These table will be guarded by these criteria

When $\beta > 0$ = Conform

When $\beta < 0$ = not conform

Variables	Expected sign	Estimated	Remark
CAB	+	$\beta > 0$	Conforms
UMP	+	$\beta > 0$	Does not Conform
GED	+	$\beta > 0$	Conform
GEH	+	$\beta > 0$	Does not Conform

From the above table, it is observed that signs of CAB and GED parameters actually conform to the economic theories, while the reverse is the case for UMP and GEH.

A positive relationship which exists between CAB, GED and BGD indicates that an increase in either CAB or GED will result in a positive change in the Budget Deficit. This conforms to the apriori criteria because an increased or high CAB and GED over the years will increase BGD in the economy.

4.3 Statistical Criteria {First order test}

4.3.1 Coefficient of Multiple Determination { R^2 }

The R^2 {R-Squared} which measures the overall goodness of fit of the entire regression, shows the value as $0.756703=75.6703\%$ approximately 76%. This

indicates that the independent variables account for about 76% of the variation in the dependent variable.

4.3.2 The Student's t-test

The test is carried out, to check for the individual significance of the variables. Statistically, the t-statistics of the variables under consideration is interpreted based on the following statement of hypothesis.

H_0 : The individual parameters are not significant

H_1 : The individual parameters are significant

Decision Rule:

If $t\text{-calculated} > t\text{-tabulated}$, we reject the null hypothesis $\{H_0\}$ and accept the alternative hypothesis $\{H_1\}$, and if otherwise, we select the null hypothesis $\{H_0\}$ and reject the alternative hypothesis $\{H_1\}$.

$$\begin{aligned} \text{Level of significance} = \alpha \text{ at } 5\% &= \frac{0.05}{2} \\ &= 0.025 \end{aligned}$$

Degree of freedom: $n-k$

Where n : sample size.

K : Number of parameter

The t-test is summarized in the table below:

Variable {t-value}	t-tab	Remark
CAB {1.504}	± 2.086	Insignificant
UMP {-3.026}	± 2.086	Significant
GED {2.507}	± 2.086	Significant
GEH {-3.588}	± 2.086	Significant

The t-statistics is used to test for individual significance of the estimated parameter $\{\beta_1, \beta_2, \beta_3 \text{ and } \beta_4\}$. From the table above, we can deduce that UMP $\{-3.026\}$, GED $\{2.507\}$ and GEH $\{-3.588\}$ are greater than 2.086 {going by absolute values} which represents the t-tabulated implying that UMP, GED and GEH are statistically significant. On the other hand, the intercept $\{1.320\}$ and CAB $\{1.504\}$ are less than the tabulated $\{2.086\}$ signifying that they are statistically insignificant.

4.3.3. F-Statistics:

The F-statistics is used to test for simultaneous significant of all the estimated parameters.

The hypothesis is stated;

$$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$$

$$H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq 0$$

$$\text{Degree of freedom: } \frac{K - 1}{n - k}$$

Decision Rule:

If the F-calculated is greater than the F-tabulated {F-cal > F-tab} reject the null hypothesis {H₀} that the overall estimate is statistically significant.

From the result, F-calculated {15.551} is greater than the F-tabulated {2.87}, that is F-cal > F-tab. Hence, we reject the null hypothesis {H₀} that the overall estimate has a good fit which implies that our independent variables are simultaneously significant.

4.4 Econometric Criteria

4.4.1 Test for Autocorrelation

One of the underlying assumptions of the ordinary least regression is that the succession values of the random variables are temporarily independent. In the context of the series analysis, this means that an error {U_{t-1}}. The problem is usually dictated with Durbin-Watson {DW} statistics.

The Durbin-Watson's test compares the empirical d^* and d_U in d - u tables to their transforms $\{4-d_L\}$ and $\{4-d_U\}$.

Decision Rule:

1. If $d^* < D_L$, then we reject the null hypothesis of no correlation and accept that there is positive autocorrelation of first order.
2. If $d^* > \{4-d_L\}$, we reject the null hypothesis and accept that there is negative auto correlation of the first order.
3. If $d_U < d^* < \{4-d_U\}$, we accept the null hypothesis of no autocorrelation
4. If $d_L < d^* < d_U$ or if $\{4-d_U\} < \{4-d_L\}$, the test is inconclusive.

Where: d_L = Lower limit

d_U = Upper limit

d^* = Durbin Watson

From our regression result, we have;

$$d^* = 2.15$$

$$DL = 1.123$$

$$d_U = 1.654$$

$$4-d_L = 2.877$$

$$4-d_U = 2.346$$

Conclusion

Since $d_U \{1.654\} < d^* \{2.15\} < \{4-d_U\} \{2.346\}$, we accept the null hypothesis of autocorrelation.

4.4.2 Normality Test for Residual

The Jarque-Bera test for normality is an asymptotic, or large-sample, test. It is also based on the ordinary least square residuals. This test first computes the skewness and kurtosis measures of the ordinary least square residuals and uses the chi-square distribution {Gujarati, 2004}

The hypothesis is:

H_0 : $X_1 = 0$ normally distributed

H_1 : $X_1 \neq 0$ not normally distributed

At 5% significance level with 2 degree of freedom

$$JB = n \left\{ \left(\frac{s^2}{6} \right) + \frac{(k-3)^2}{24} \right\} = 4.4705$$

While critical $JB > \{X^2_{\{2\}} df\} = 5.99147$

Conclusion:

Since $4.4705 < 5.99147$ at 5% level of significance, we accept the null hypothesis and conclude that the error term follows a normal distribution.

4.4.3 Test for Heteroscedasticity:

Heteroscedasticity has never been a reason to throw out on otherwise good model, but it should not be ignored either {Mankiw Na, 1990}.

This test is carried out using White's general heteroscedasticity test {with cross terms}. The test asymptotically follows a chi-square distribution with degree of freedom equal to the number of regressors {excluding the constant term}. The auxiliary model can be stated thus:

$$U_t = \beta_0 + \beta_1 \text{CAB} + \beta_2 \text{UMP} + \beta_3 \text{GED} + \beta_4 \text{GEH} + \beta_5 \text{CAB}^2 + \beta_6 \text{UMP}^2 + \beta_7 \text{GED}^2 + \beta_8 \text{GEH}^2 + V_i$$

Where V_i = pure noise error.

This model is run and an auxiliary R^2 from it is obtained.

The hypothesis to the test is stated thus;

$$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7 = \beta_8 = 0 \text{ \{Homoscedasticity\}}$$

$$H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq \beta_6 \neq \beta_7 \neq \beta_8 \neq 0 \text{ \{Heteroscedasticity\}}$$

Note: the sample size $\{n\}$ multiplies by the R^2 obtained from the auxiliary regression asymptotically follows the chi-square distribution with degree of freedom equal to the number of regressors {excluding constant term} in the auxiliary regression.

Using Pc Give software package saves us the above rigour by calculating the chi-square value.

Decision Rule:

Reject the null hypothesis if $X^2_{cal} > X^2$ at 5% level of significance. If otherwise, accept the null hypothesis. From the obtained results, $X^2_{cal} = 20.193 > X^2_{tab 0.05 \{8\}} = 15.5$ we therefore accept the alternative hypothesis of Heteroscedasticity showing that the error terms do not have a constant variance and reject the null hypothesis showing that the error terms have a constant variance.

4.4.4 Test for Multicollinearity

The term multicollinearity is due to Ragnar Frisch. Originally it meant the existence of a “perfect” or exact, linear relationship among some or all explanatory variables of a regression model. The tests are carried out using correlation matrix. According to Barry and Feldman {1985} criteria; “Multicollinearity is not a problem if no correlation exceeds 0.80”.

	BGD	CAB	UMP	GED	GEH	REMARK
BGD	1.000					-
CAB	-0.2897	1.000				Nm

UMP	-0.7419	0.4942	1.000			Nm, Nm
GED	-0.6268	0.8144	0.8058	1.000		Nm, M, M
GEH	-0.6757	0.8000	0.7735	0.9846	1.000	Nm, Nm, Nm, M

Where M = Presence of multicollinearity

Nm= No multicollinearity.

From the above table, we conclude that multicollinearity exists only between GED and CAB, between GED and UMP; and between GEH and GED.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

This research study is based on Budget Deficit and Current Account Balance in the Nigerian economy, and the period covered is extended from 1986-2010 and selected macroeconomic variables were used to unravel the true nature of the budget deficit. From the interpretations of results in chapter four, we would discover that Current Account Balance (CAB) and Government Expenditure on Education (GED) both have a positive relationship with Budget Deficit which Unemployment (UMP) and Government Expenditure on Health (GEH) both have negative relationship with Budget deficit.

The student's T-test also proves to us that UMP, GED, GEH all have positive impact on budget deficit this is as a result of attaining a significant level of being greater than 2.086 while Current account balance has a negative impact on budget deficit.

Finally, an Ordinary Least Square analysis was used and the researcher use PC GIVE 8.00 software package of which BGD was the dependent variable while Current Account Balance (CAB), Unemployment (UMP), Government Expenditure on Education (GED), Government Expenditure on Health (GEH),

are the independent variables. Every hypothesis formulated was also tested statistically.

5.2 CONCLUSION

The relationship between budget deficit and current account balance depends on the method of financing the increased government expenditure and on macroeconomic condition of macroeconomic variable prevailing in the economy.

Finally, for there to be stable growth and development in the economy, policy makers need to formulate and implement expenditure policy that will improve the economic growth rate and reduce the balance of payment deficit and also the government should call for fiscal discipline and prudent monetary management on the part of the Central Bank of Nigeria (CBN) for effective management in Nigeria.

5.3 POLICY RECOMMENDATION

- Budget planning, monitoring and implementation agency should be set up by all tiers of government to institute fiscal discipline on the part of government.
- From our findings, policies on government expenditure on education should be encouraged and policies on expenditure, unemployment and

health should be reduced as they tend to have negative effects on budget deficit.

- Budget deficit policy should be controlled based on the absorptive capacity of the economy.
- Finally, diversification of the economy is highly needed for increased supply of goods and services for exports and domestic consumption

BIBLIOGRAPHY

- Abbas, S. M. (2010). *Fiscal Policy and the Current Account*. CEP Discussion papers 7859
- Afolabi, L. (2004). *Monetary Economics Lagos: Inner ways* Publication
- Baro, R. J. (2005). *The impact of the Budget Deficit on key Macroeconomic Variables* (Lagos: F&A Publishers)
- Bacham, D. (2004). *The budget deficit and Economic performance* (Florida: Atlantic Publishers)
- Ball L, & Mankiw. (2005). "What does Budget Deficit Do" Working paper no 5263 National Bureau of Economic Research Cambridge
- Chete, L.N. (2001). "Explaining Current Account Behaviour in Nigeria" Nigerian Journal Economic and Social Studies
- Eisner, R. (2005). "Effects of Budget Deficit on Trade Balance in Nigeria. A Simulation Exercise" African Development Review Vol.11 No (2)
- Evans, P. (2007). "Do Budget Deficit affect the current account" Ohio: City publishers
- Egwaikhide, F. (1997). "Casualty between Budget Deficit and the Current Account Balance in African Countries" West African Ltd and Economic Integration
- Festus o. (2001). "Effects of Budget Deficit on the Current Account Balance in Nigeria" A Simulation Exercise
- Fajana, F.O. (1993). "Nigeria's Debt Crises". UNECA Development Research Paper Series, No 5
- Jhingan M.L. (2003). *Macro-Economic Theory* (11th edition) Vrinda publication Ltd Delhi 722

Keynes, J. M (2006) “*The General of Employment, Interest and Money*”
London and New York: Macmillan

Khalid, A.M.(2006). “*Causality Tests of Budget and Current Account Deficit.Cross Country Comparisons*” Empirical Economics vol24

JOURNAL

Abel, J.D.(2007). “ *The role of the Budget Deficit*” Southern Economic Journal
Vol.57,No(1)

Darrat (2006) “*Have large Budget Deficits caused Rising trade deficit*”
Southern Economic Journal vol.56 No(2)

Iyoha, M. A. (2004) “*The Impact of External Debt Reduction on Economic Growth in Nigeria.Some simulation Result*”. Nigeria Journal of Economic and Social Studies Vol.42 no(2).

Kearny , c. & Monad Jemi M. (2006) “*Fiscal Policy and Current Account Performance: International Evidence on the tv Deficit*” Journal of Macro-Economic Vol.12.

WEB PAGE

International Monetary Fund. (2011). *World Economic Outlook*
Retrieved July 23,2012, From
http://www.indexmundi.com/nigeria/current_account_balance.h