NEAR EAST UNIVERSITY
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
ECONOMICS DEPARTMENT
MASTER OF SCIENCE ECONOMICS

MASTER'S THESIS

THE IMPACT OF FISCAL POLICY ON THE NIGERIAN ECONOMY (1980-2012)

MUHAMMAD A. MUHAMMAD
20124882

THESIS SUPERVISOR: ASSIT. PROF. DR. ERGIN AKALPLER

NICOSIA
(2015)

DEDICATION

To my lovely parents Alhaji Muhammad AwwalNuhu, HajiyyaHauwa Muhammad, Alhaji Muhammad Sani Ashraf Nuhu, HajiaAsabe Muhammad and late Officer Musa Yawale. I dedicate this thesis to them as they are the most important people in my life.

ABSTRACT

This study investigates the impact of fiscal policy on economic growth in Nigeria. The data used is time series and span 1980-2012. Cointegration and Vector Error Correction Model (VECM) is the approach used for data analysis. The series were tested to determine their statistical properties using Augmented Dickey Fuller (ADF) and Phillip Perron (PP). The series were found to be stationary or integrated of order one, that is, I (1). Furthermore, a cointegration test was conducted. The result shows that, Trace Test has 3 cointegration and Maximum Eigenvalue results indicates 2 cointegrating equations of the series use in our model. The result of VECM shows that deficit financing, domestic debt and government consumption expenditure are negative and significant determinants of gross domestic product in Nigeria at 5% (α =0.05) level of significance. However, external debt and government revenue are positive and statistically significant determinants at 5% level of significance. The granger causality test shows some variables having bi-directional causality, uni-directional causality and others without any form of causality. The impulse response function shows that the variables have various levels of shocks and innovation on itself and others. In trying to achieve macroeconomic stability and sustainable growth in recent years, there has been excessive reliance on public expenditure at different levels (Federal, State and local Government) that mostly results to borrowing to finance fiscal deficits or complement internal resources. The study suggests the need for conscious efforts to improve the quality of government expenditure and the capacity to manage public resources.

Keywords: Fiscal Policy, Economic Growth, Co-integration, Vector Error Correction Model.

ACKNOWLEDGEMENTS

All praises and glories are for Allah (SWT) for his guidance, favor and bounties. May The peace and mercy of Allah be on our prophet Muhammad (SAW) and his Companions and those who follow him faithfully till the Day of Judgment.

I would like to thank my supervisor. Asst. Prof. Dr. Ergin Akalplerfor his continuous guidance, inspiration, support, opinion and encouragement in the preparation of this thesis. My thanks are not enough for his continuous help.

I would like to express my special thanks to my family for their invaluable and continuous support throughout my studies and my life. They are: Abdurrahman Awwal, SalisuAwwal, Abdul-azisAwwal, Zakiyyu Sani Ashraf, Abdul-rashadAwwal, Khalid Yussif, TahaSain Ashraf, Ahmed Sani Ahraf, Sadia, Hasia, Rahina, Ilham, Widad, Rashida, and Hamdiya may the Almighty Allah award them abundantly.

Furthermore, I would like to thank all of my friends for their endless support and encouragement in my life. Abdul-halim Ahmed, Mustapha HussainiGarinGabas,NuhuMuktarNuhu,Bashir AwwalAbubakar, Umar Aminu Abdullahi, Muhammad Saeed Alyahaya (Erabil), Hydar Bashir Aliyu, Muhammad Yasar, AbdulqayumAwwalAbubakar, ZainulAbideenJibril, Muhammad Sani Bello. May God bless and reward them abundantly.

My sincere appreciation goes to all the academic and non-academic staff of Economics Department, Near East University, especially, MrsTijenÖzügüney, Assoc.Prof. Dr. HüseyinÖzdeşer Head of Economic Department, MrsBehiyet, and Prof. Dr. Irfan Civcir for their valuable and commendable helping hand towards the actualization of this program.

I am indebted to Saadatu Musa Yawale (my fiancée) for encouraging me to study abroad.May God reward her and the family abundantly.

My perpetual gratitude, appreciation and prayers go to those not mentioned but are in my memory and those lost out of my memory. May God most profusely reward them all.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ADF Test	Augmented Dickey-Fuller test
AIC	Akaike Information Criteria
DF	Deficit Financing
DMD	Domestic Debt
ECM	Error Correction Model
ECT	Error Correction Term
EXD	External Debt
GCE	Government Consumption Expenditure
GDP	Gross Domestic Product
GRV	Government Revenue
IMF	Internal Monetary Fund
PP Test	Phillips-Perron test
RGDP	Real Gross Domestic Product
SIC	Schwartz Information Criterion
VAR	Vector Auto Regressive
WDI	World Development Indicators

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

Nigerian government over the years had consistently embarked on diverse macroeconomic policy options in order to direct the economy on the path of growth and development. One of the measures or policy option the government frequently used, is the fiscal policy. Fiscal policy refers to a deliberate attempt by the government to manipulate its expenditure, taxes and public debts to achieve macroeconomic objectives of the governments among which are economic growth. Several economic problems bedevilled the growth and development of the economy which may be identified as high rate of unemployment, inflation, under capacity utilization in industrial sector, poor infrastructures and a host of other problems which necessitated the frequent government intervention in the management of the economy through its fiscal policies.

Despite huge amount of revenues accruing to the federal government of Nigeria through the sale of crude oil and improved tax system, successive government borrowing both internal and external to finance ever increasing government expenditure and direct government involvement through various public enterprises, an overview of the Nigeria economy for the past two decades shows that inflation still remain high in Nigeria, unemployment has increased to an unimaginable size, economic growth has also been

little until 2000s when it start improving significantly, the balance of payment also faces pressure over the period.

Several fiscal measures have been implemented and given the importance of fiscal policy in macroeconomic management in Nigeria, economic growth has not accelerated. The growth of the economy has been sluggish although recently improved, that does not translate in the living standard of the populace as poverty level is increasing by the day, youth unemployment reaching unprecedented level, inadequate and mal functioning infrastructures. It is therefore very important to examine the effects of some fiscal policy instrument on the growth of the Nigerian economy over the years under study in order to access their contribution or otherwise.

Exploration into the literature has also shown that, fiscal policy is widely recognized as a strong tool for improving economic growth in most economies of the world, though the Nigerian experience is tending to suggest otherwise. A number of studies have examined the empirical relationship between fiscal policy and economic growth. The results of these studies are varied. Studies such as that of Barro& Martin (1990); Glomm&Ravikumar (1997); Genetski& Chin (1978); Eusterly and Rebelo (1993) have examined the relationship between some fiscal policy variables (taxation and public expenditure) and economic growth. Their statistical result is not unanimous, while some studies found out that taxes have long term influence on growth rate, others found no significant effect. Hence, the need for other studies that will try to find out whether fiscal policy have any substantial impact on Nigeria's economic development in order to clear the uncertainties and the counter results of the previous studies.

Moreover, given the nature and importance of the relationship between fiscal policy and the gross domestic product, the study becomes necessary in Nigeria, where output and capacity utilization have suffered rapid fluctuations. Since the public desires is to increase total expenditure in the economy through its fiscal policy which can either increase its spending or reduce taxes in ensuring stability in the economy, it is therefore the researcher's interest to investigate the impact of such fiscal policy instruments as; government revenue, government expenditure, external and internal debt and deficit financing on the growth of the Nigerian economy.

1.1 Background of the Study

Fiscal and monetary policies are important instruments use to achieve stable and viable macroeconomic environment in a drive towards the achievement of economic growth and development of economies especially developing countries. It is evident that in a fast integrated world, macroeconomic fluctuations with political instability and doubtfulness hampered long term growth, development and welfare (Adefeso and Mobolaji, 2010; Hnatkovska and Loayza, 2005). As a result economies around the globe keep fine tuning their policies to place their economies on growth path in a sustainable manner.

The macroeconomic policy objectives that economies seek to achieve include price stability, economic growth, full employment and balance of payments. In addition, developing economies also seek to achieve exchange rate stability and equitable distribution of income or resources. This has been an economic policy priority of advance and developing countries because of the degree of exposure of macroeconomic variables to volatility in the face of globalization (Zhattau, 2013; Omitogun and Ayinla, 2007). To gain macroeconomic policy targetsit requires the use of fiscal and monetary policy instruments.

The main fiscal policy instruments include public expenditure and tax (Wosowei, 2013). The fiscal policy is crucial for the performance of an economy. This is because the ability of the government to collect tax and use it to provide public goods enhanced economic and social activities that propel economic growth and development. This role played by government in growth process also significant for the performance of the private sector. For instance, government spending can provide the incentive for private sector growth on the one hand, though on the other hand it can crowd-out of the private sector scarce resources in a situation where budget deficits leads to competition for scarce financial resources from the banking sector as the government seeks to finance its deficit. This can be harmful to the growth of the economy by outweighing any short-term benefits of an expansionary fiscal policy. Therefore, determining and ensuring a balance in the management of fiscal regime (in addition to the monetary policy) is fundamental for its effectiveness. While it is necessary to generate enough income to

meet up with government expenditure outlays and support growth driven activities, it should not be in a manner that will affect the level of financial resources required by the private sector to invest and boost industrial activities.

The Nigerian economy over the years has been characterised by fiscal policy instability (Akani and Osiniwo, 2013). The level of fiscal instability has been a function of fluctuations in government revenue largely because of the heavy dependence of the economy on crude oil revenue that is subject to international market price volatility. To reduce the extent of such impact the monetary authority (Central Bank of Nigeria) is compelled to implement policies that act to neutralize and in some instances leads to further macroeconomic instability (Vincent et al., 2013; Obiyeluaku, 2006). Beside the fact that Nigeria is one of the developing economies, one of its major economic challenges is that it is susceptible to volatile macroeconomic environment constrained by external terms of trade shocks and reliance on crude oil export. The focus on oil has hampered the diversification of the Nigerian economy and Industrialization.

Nigeria discovered oil in 1956 but began to export oil in 1958. Beginning from early 1970s oil has become the prevailing factor in Nigerian economy and the revenue from it is the major source of government income. The oil price volatility in the international market has had its share on fiscal instability in Nigeria which largely has channelize its effect to the rest of the economy with fundamental effect on government revenue and provision of public goods. The recent oil price decline that started mid-last year with the price above US$100 now sale for around US$50 (January, 2015). The effect of such decline is oil price is usually felt on real exchange rate and growth performance. More worrisome, is the fact that the Federal Government of Nigeria budget of 2015 fiscal year is predicated on US$65 per barrel while actual price of crude oil is around US$50. This indicates a deficit of about US$15 and still counting.

The deficit financing has remained unyielding in Nigeria because of the public sector's lacking the power or unfitness to manage her fiscal abreast in a sustainable manner (CBN, 2014). Since the forceful oil price fall of early 1980s including the contemporary oil price decline challenge, fiscal policy management in Nigeria has lost the desirable characteristics required for its effectiveness as a tool for aggregate demand management

(Medee and Nenbee, 2012). Ezeoha and Chibuike (2005) observed that government at all levels (three tiers) are fiscally reckless and more often than not contradicts the fundamental monetary policy objective of price stability. The consequence has been the potential for destabilizing the macroeconomic environment that can retard economic productivity and development. Therefore, the search for viable and stable macroeconomic environment through sound fiscal and monetary policies cannot be overemphasized.

The quest to finance fiscal deficit usually results in public debt policy to fill the resource gap arising from the inadequacy of non-debt national and international financial resources. This is required to implement public policies and development programmes of government. In view of this, the Nigerian government overtime has resorted to procuring loans from both internal and external sources to supplement non-debt sources of financing growth. The use of debt instruments accordingly, has provided mixed results (Bamidele and Joseph, 2013; Vincent et al., 2012). Debt over hang became a long economic problem that confronted Nigeria in 1980s and 1990s, until debt relief or forgiveness that was granted in the early 2000s.

1.2 Statement of the Problem

The Nigerian government have made effort through policy measures to address fiscal challenges (external and domestic), this has remained intractable and persistent with its adverse effect on macroeconomic fundamentals. In developing economies like Nigeria, borrowing from international financial institutions and Central Bank to finance sizeable portion of the deficits contribute to liquidity and inflation (Bamidele and Joseph, 2013; Cohen, 2005). This is because rather than spending the borrowed money on capital expenditure such that has the capacity to improve standard of living of which in turn may improve the country's economic growth, such borrowed money is used on unproductive ventures (Iyeli and Ijomah, 2013; Iyoha, 1999). This has led to situations where expenditure could not be cut back or cut short, resources could not be raised for fear of adverse effects, and greater deficits fuelled more inflation on one hand, while debt increase pose another threat of high debt service on the economy.

The impact of fiscal deficit on macro-economic aggregates depends or reckon on the financing techniques (Inflation tax). Also the use of expansionary monetary policy often leads to inflation while domestic borrowing inevitably or unavoidable leads to a credit squeeze or pressure through higher interest rates or through credit allocation (Easterly and Robello 1994 Sowa, 1994).

However, though there are recent studies on the impact of fiscal policy on economic growth in Nigeria with particular reference to the impact of fiscal deficit and debt (Bamidele and Joseph, 2013; Akani and Osiniwo, 2013; Vincent et al., 2013), there is no consensus on the subject matter. Some have argued that the level of economic development and the fiscal structure of Nigerian economy compound the problem (Medee and Nenbee, 2012; Ndekwu, 1996). Besides, some studies have advanced in characterising the implications of alternative sources and composition of deficits spending without investigating whether fiscal deficit lead to economic growth (Nathan, 2012). Thus, studies on fiscal policy instruments seem to have divergent or different views.

1.3 Objectives of the study

The objectives analyze the impact of fiscal policy on the Nigerian economy (1980-2012).

The specific objectives are:

(i) To examine the impact of fiscal policy instruments on Nigerian economy.

(ii) To determine the causal relation between fiscal policy and economic performance in Nigeria and

(iii) To analyze the trend of fiscal policy instruments in Nigeria.

1.4 Research Questions

The study addresses the following questions:

(i) What is the impact of fiscal policy on Nigerian economy?

(ii) What is the impact of fiscal policy instruments on Nigerian economy?

(iii) What is the causal relation between fiscal policy and economic performance in Nigeria?

(iv) What is the trend of fiscal policy instruments in Nigeria?

1.5 Hypotheses of the Study

Hypothesis is tested to know whether fiscal policy instruments have over the years, impact positively or negatively on economic growth. Also, to test whether fiscal policy instruments are effective and efficient source of managing development in Nigeria. The hypotheses that this study seeks to test are stated in null form below:

(i) H_0: $\beta_0 < 0$; Fiscal policy does not affect economic performance in Nigeria

(ii) H_0: $\beta_0 < 0$; Fiscal policy instruments does not affect economic performance in Nigeria.

(iii) H_0: $\beta_0 < 0$; There is no causal relationship between fiscal policy and economic performance in Nigeria.

1.6 Significance of the Study

The aim of every government is to ascertain the security of life and property and fast tracteconomic growth and development. This is even to a greater extent important in Nigeria where the citizen looks up to government for the provision of most of its basic needs including developing human capital. To achieve this, government directly or indirectly mobilize long term fund (internally and externally) for its development programmes, to achieve high and prolong level of economic growth.

This study recognized the important role of debt financing over the years. However, the quest for reducing debt financing instruments because of its impact on the economy for non-debt in recent times has not been properly covered in most studies.

Therefore, the study is significant in a number of ways. Looking at the range and the procedure adopted, it's observed that, the result of the present study will make a meaningful policy preparation and carrying out in the development of an economic growth in Nigeria. It will also, provide evidence for researchers with interest on the subject field matter.

1.7 Scope of the Study

The study examines the impact of fiscal policy on economic growth in Nigeria covering the period 1980–2012. The specific fiscal instruments of interest are rate of deficit financing and debt (external and internal).

1.8 Organization of the Study

To achieve the objective of this study, the work is organized into five chapters. Apart from chapter one which this part conclude as introduction, Chapter two is literature review. The chapter provides conceptual, empirical and theoretical review as well as theoretical framework and review previous studies. Chapter three is overview of fiscal regimes and performance in Nigeria. Chapter four this chapter describes source and type of data and methods of data analysis and empirical analysis and discussion of result. Chapter five is summary, conclusion and recommendation.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.0 Conceptual Issues

Fiscal policy refers to the deliberate attempt of government policy to manipulate its expenditure and the raising of gross or tax revenue through taxation and other sources and determining on the level and figure of consumption for the purpose of regulating economic activities (Munogo, 2012). It can also be seen as a policy whereby the government uses its expenditure and revenue programmes to produce worthy effects and prevent unworthy effects on national income, production and utilization. According to Jhingan, 2003 fiscal policy is a deliberate spending and taxation actions undertaken by government in order to control inflation, achieve economic growth, and to bring about nation's output and employment to desired levels.

Fiscal policy can be seen in two different ways that is discretionary and non-discretionary. The discretionary fiscal policy is a deliberately attempt or measure by the government or its agencies to influence the economy in a desired direction in order to achieve macroeconomic objectives through taxes and government expenditure. On the other hand, non-discretionary fiscal policy we mean the actions that occur automatically without any deliberate attempt but due to the existence of automatic built-in stabilizers within the economy such as, unemployment benefits and progressive tax system. Since this non discretional fiscal policy tends to help the economic automatically it's refer to as automatic built-in stabilizers. There is need for government

to stabilize the economy, specifically by making some adjustment to the level and allocations of taxes and expenditure. Federal taxation and expenditure policies are designed to level the business cycle and achieve full employment, price stability and sustained growth of the economy.

Fiscal policy can also be expansionary and contractionary. An expansionary fiscal policy is desired to stimulate aggregate demand thereby increasing economic activities in order to reduce or fight depletion, unemployment and to achieve economic growth. This policy is always adopted when government wants to pull the economy out of recession. While contractionary fiscal policy refers to the policy designed by the government to reduce aggregate demand in order to fight inflation and correct balance of payments problem.

The main objectives of fiscal policy according to Anyanwu and Oaikhenan (1995) are generation of significant revenue for the government with which she can provide other services that benefit the entire society diversification of revenue sources away from crude oil-based revenues, deduction in the tax burden on individuals and corporate bodies; maintenance of economic equilibrium, particularly to control inflationary pressures, speed up economic growth, decrease Balance of Payments deficits, and yield increased employment.

Fiscal deficit it is the disruption within the government's total expenditure and the total of its revenue receipts and non-debts capital receipts, (Buhari 1994). Which exemplify the total amount of borrowed funds demand by the government to totally meet its spending. It can also be defined as the surplus of total expenditure including loans net of payments over revenue receipts and non-debt capital receipts. It also indicates or suggests the total borrowing of the government, and the growth or increase to its outstanding debt.

Debt on the other hand is produce by the act of borrowing. It can be defined according to Oyejideet al (2004) as the resource or money use by an establishment or governing body that is not contributed by its owner and does not in any other way belong to them. It is a financial obligation represented by a financial tool or other formal equivalent. External debt therefore can be defined as the resources of money in use in a country that is not

yield internally and does not in any way come from local citizens whether corporate or individual. Oke (2012) defined external debt as the total amount of money at any given time disbursed or pay out and outstanding or unpaid contractual indebtedness of residents to pay interest, either with principal or without principal.

When a government borrows, the debt is a nation debt. Nation debts internal and external are debts receive by government through borrowing in domestic and international markets in order to finance domestic investment. Therefore, national debt is observed as all claims against the government maintain by the private sectors of the economy or by the foreigners, whether interest aim or not, less any claims held by the' government against the private sectors and foreigners (Anyanwu,1999). Public debt can be internal or external: internal debt can be described as when debt is owed or held by the subject of the indebted government. Whereas, international debt refers to unpaid portion of external resources acquired for developmental purposes and BOPs supports, which could not be repaid when they cut down payable (Salawu, 2004). In other words, external debts are debts owed by a country to institutions or countries abroad, that is, the creditors are foreigners in which case, its services and repayment will mean drainage of national resources in favor of the foreigners.

One of the most important objectives of macroeconomic policy in recent years has been the rapid economic growth of an economy. Economic growth can be defined or seen as the process whereby the real per capita income of a country increases over a long duration of time. Economic growth is measured by the increase in the total amount of goods and services produced in a particular country. A growing economy produces more goods and services in each successive time duration. In its wider aspect, economic growth implies raising the standard of living of the people and reducing inequality of income distribution (Jhingan, 2003).

The relationship between government expenditure and economic growth has continued to generate series of debate among scholars. Some scholars argued that increase in government socio-economic and physical infrastructure encourages economic growth. For example, government spending on wellness and education raises the productivity of labour and increase growth of national output. Likewise expenditure on infrastructure

such as roads, communications, power, etc., enhance private sector investment, reduces production costs and gainfulness of firms, thus, raising economic growth.

Overall, the Keynesian revolution changed the meaning of fiscal policy moving it away from the tax or revenue side of the budget to include both revenue and spending. For the Keynesians, fiscal policy refers to the manipulation of taxes and public spending to influence aggregate demand which also include its stabilization role.

2.1 Tools of fiscal policy

A rational government basically uses government expenditure taxes and subsidy as good tools to achieve its stated goals of macroeconomic variables through the manipulation of fiscal policy.

1. Government Expenditure: - If government wants to embark on an expansionary fiscal policy in order to stimulate the aggregate demand, it will increase its expenditure. This is usually adopted during the period of recession when there is high rate of unemployment, low demand and decrease in output of goods and services.

On the other side if the objective of the government is to embark on a contractionary fiscal policy it will decrease its expenditure and increase taxes in order to reduce the aggregate demand. This is usually adopted during the period of inflation or when balance of payment is in deficit.

2. Taxation: - Tax is another tool or instrument used by the government in order to achieve the stated macroeconomic goals. If the government wants to embark on an expansionary fiscal policy taxes could be reduced and as a result of reduction in taxes, money is made available in the hands of individuals and this will result to an increase in demand for goals and services. This will stimulate producers or manufacturers to hire more factors of production and this will raise the level of output. This policy is usually adopted during the period of recession and low aggregate demand.

On the other hand, if the government wants to embark on contractionary fiscal policy it will increase taxes, this will in turn lead to a decrease in the purchasing power of individuals and aggregate demand will also fall. This policy is adopted in time of inflation or when the country's balance of payment is in disequilibrium.

3. Government Subsidy: - Government should subsidize when it is embarking on an expansionary fiscal policy. This is usually put into use when there is unemployment. For a contractionary fiscal policy, the government should reduce its subsidy. This is usually done during the period of inflation and during the period of balance of payment deficits.

2.2 Tools of Monetary Policy

The Federal government of Nigeria find it very difficult to control inflation and also influence the country output as well as employment directly instead it uses the monetary policy tools which are as follows:

1. Open Market Operations

Open market operations refer to sale and purchase of securities in the money market by central bank, when prices are rising and there is need to control them, the central bank sells securities. The reserves of commercial banks are reduced and they are not in a position to lend more to the business community. Further investment is discouraged and the rise in prices is checked. It is expansionary or contractionary.

2. Bank Rate

The bank rate is the minimum lending rate of the central bank at which it rediscounts first class bills of exchange and government securities held by the commercial banks. The rate influences the other interest rates in the economic activities within a given economy.

3. Funding

This refers to the conversion of short-term government securities. For example, treasury bills (short-term liabilities) could be converted to long-term securities(such as bonds) if the Central Bank feels that the condition of the economy has not yet improved for the short-term loans to be repaid. If inflation persists, short-term securities may be converted to long –term ones.

4. Reserve Ratio

Every commercial bank is required by law to maintain a minimum percentage of its deposits with the central bank, the minimum amount of reserve with the central bank may be either a percentage of its time and demand deposits separately or of total deposits, whatever the amount of money remains with the commercial bank over and above these minimum reserves is known as the excess reserves

2.3 Theoretical Review

The Keynesian theory advocates the use of fiscal policy to offset imbalances in the economy. According to Keynes, a government should use fiscal policy to stimulate an economy slowed down by recession through deficit, which means it should spend more than what it collects from taxes. On the other hand, to slow down an economy that is threatened by inflationary pressures, government should increase taxes or cut expenditure to create a budget surplus that would act as a drag on the economy (Grossman 1987). Stabilization policy requires that policy makers can determine feasible targets and can effectively control the instrumental variables for which the government seek desirable values.

The continual inclusive opinions regarding the role of government in managing the economy using fiscal policy lies in two dominant theoretical views. The first is the Keynesian perspective, which makes up the subject that government can play a major role in determining the level of national income. The alternative is the Ricardian perspective, which states that, the level of national output is basically neutral to government policy. The effectiveness of fiscal policy will therefore depend very much on which view persists (Chamberlin and Yueh, 2006). The difference between the Keynesian and the Ricardian view of the world comes down to the type of consumption function that is used, while the Keynesian model states that expansion of government expenditure (expansionary fiscal policy) accelerates real GDP, endogenous growth models do not allocate any significant role to government in the growth process, but Barro and Sala-Martin (1992); Easterly and Rebelo (1993) emphasized the importance of government intervention in economic activities to enhance economic growth.

The literature on fiscal federalism provides guidance on how expenditure assignment could be optimally designed on the grounds of distribution efficiency, flexibility, independence and accountability. Over a period of time, government intervention has increased in absolute and relative terms, particularly in developing countries of the world. This growth in public sector size has been attributed to some reasons (according to Wagner's hypothesis), which involves increasing income, elasticity of voters needs for public goods, comparative price changes effects such as depressions, interest group needs for instance, public sector employees productivity, redistribution, motivations as well as centralization of government activities (Musgrave and Musgrave 2005; Grossman, 1992).

For instance, Barro (1990) and Diamond (1990) formally endogenized government and the rate of growth and savings. From an allocating view of point, an increase in public consumption leads to capital formation or private consumption. Some development economists of the structuralize school opined that some categories of government expenditures are necessary to overcome constraints to economic growth (Chenery and Syrguin, 1975). From the foregoing, it is clear that if fiscal policy is used with circumspection and synchronized with other measures, which will probably smoothen out trade cycles and lead to economic growth and stability.

Governments directly and indirectly influence the way resources are used in the economy. Fiscal policy that increases total demand directly through an increase in government expenditure is typically called expansionary or sloppy. By contrast, fiscal policy is often considered contractionary or "tight" if it reduces demand via lower spending (Horton and El-Ganainy, 2009). Horton and El-Ganainy (2009) observed that besides providing goods and services, the objectives of fiscal policy differ. In the short run, governments may emphasis on macroeconomic stabilization. In an oil-producing country, fiscal policy might aim to moderate pro-cyclical spending; moderating both bursts when oil prices rise and painful cuts when they drop.

Richard et al., (2009) noted that fiscal policy affects national output, the country's capacity to produce goods and services and the distribution of income. In the short run, changes in expenditure or taxing can alter both the magnitude and the pattern of demand

for goods and services. With time, this national output affects the allocation of resources and the productive capacity of an economy through its influence on the returns to factors of production, the development of human resource, the allocation of capital expenditure and investment in technological breakthrough. Fiscal policy together with monetary policy according to Omitogun and Ayinla (2007) and Adeoye (2006) is the most important means of regulating the rate of inflation in an economy and preventing or controlling depression. They noted that when there is economic recession or depression, government usually plans budget deficit, popularly known as expansionary fiscal policy.

Grayet al., (2007) asserts that government can use fiscal policies to reduce the demand for goods and services. It can prevent depressions by increasing expenditure, while the rate of inflation can be controlled by decreasing expenditure. Fiscal policy determines tax rates, which in turn influence the level of expenditure by influencing the total amount of money people have for consumption expenditure. Government can also decrease or increase its own spending to manage inflation and depression.

Fiscal policies that increase the deficit will result in future taxes being higher than they otherwise would have been, but, depending on the policies' effects on incentives for investing in human or physical capital, they might also raise future living standards. (Horton and El-Ganainy, 2009).

Blinder (2006) argued that views on the use of discretionary fiscal policy as a tool for macroeconomic stabilization have undergone changes since the early 1960s, when it was generally viewed that discretionary fiscal policy was effective and desirable for taming the trade cycle, and that fiscal policy was the most important tool with which to conduct stabilization policy. He concluded that the weight of the evidence supports the view that both temporary and permanent tax changes do affect consumption spending. In the final analysis, argued that monetary policy should be relied upon as the primary policy tool for macroeconomic stabilization, but that discretionary fiscal policy can play an important stabilization role under unusual circumstances. When a recession is unusually long or when a short-term nominal interest rate approaches zero, then it is appropriate to supplement monetary policy with fiscal stimulus.

2.4 Empirical review

The empirical literature is rich of studies on the impact of fiscal policy on economic growth ranging from countries with undeveloped economies to developed economies, with diverse methodologies. It is evident from the wide range of previous studies that the results are mixed and varies upon the economic development activity and stability of the studied country. For instance, Adam and Bevan, (2004) using panel data of 45 developing countries analyzed the relationship between fiscal deficits and growth. The study revealed a beginning effect of the deficit around 1.5 percent of GDP. This threshold tangled a change in slope and a change of sign in the relation irrespective of the budget category. This studies framework states that a non-steady point economy, short range funding might be growth-enhancing. This result points to the fact that the activity of economic growth has impact on deficit financing. This result is not appropriate for an economy like Nigeria. Also, it fails to capture fiscal dynamics of economies around the world.

Brauninger, (2002) examined the interactions between budget deficit, Public debt and endogenous growth. The study found that a fixed deficit ratio by the government holds below an unfavorable degree. Brauninger concluded that there is no equilibrium if the deficit ratio surpasses the unfavorable level. Moreover capital growth declines incessantly and capital itself is driven down to zero in finite time.

De Castro, (2004) took Spain as a sample and investigated the effect of Fiscal Policy, he found that a shock to government expenditure boosts Gross Domestic Product, private consumption and investment, accompanying with a positive multiplier close to one in the short term and a negative multiplier in both the medium and long terms. These studies largely focus on steady state growth but economics are largely dynamic and cannot he explain by static models. Studies in Europe may not also explain fiscal dynamics of African countries like Nigeria.

Benos, (2004) investigated the OECD countries revealing a V-shaped relationship between government expenditure on social amenities and energy. On the other hand a U-shaped relationship with growth was found among other variables namely: the rate of per-capita growth, public expenditures on social protection, social assistance and transportation and communication. Moreover the effect of growth from public spending on education and social expenditure is stronger, the poorer the country is. In contrast the contradictory is true for expenditure on health. The study also showed that a positive effect exists between budget surplus and growth.

Cohen, (2005) attempted to find the extent of attribution of the debt crisis of the 1980's to the growth slowdown of the 1990's. Moreover measure what could be a suitable debt-to-export target. This study found that the debt crisis of the 1980's played a significant role in leading to the growth slowdown of Latin America and Africa in the 1990's period. Exposing a debt-to-export ratio of between 200 percent and 250percent was a strong signal for an approaching debt crisis. This high percent stressed the need of African countries to a debt to export ratio to be brought to 198%. Fiscal dynamics of economies are not time bound and the effect may vary depending on the nature of the shocks. Thus, the 21 crisis may be different from 1980s or 1990s crisis.

Edward (2001) Using a panel data of 104 LDCs for three periods (1970-1979, 1980-1989, 1990-1998), investigated to what extent economic growth may be adversely affect from the uncertainty in the annual debt service payments, specifically for heavily indebted poor countries. He justified that the large time to time fluctuations in debt service payment make it difficult for the governments of poor countries to precisely expect the sufficient amount of resource available to carry out economic reforms. Edward suggested a sweeping debt relief initiative may help contribute to regain these economies growths. This can be reached by reducing uncertainty with respect to debt service payments assuming it will increase the effectiveness of future government policies and therefore providing the private sector with positive signals regards their future possibilities of profitability. The use of panel data by the study may not provide a country specific effect as a country specific study may be preferable.

Pattillo and Ricci, (2004) investigated the quantitative effect of debt on economic growth using multiple regression analysis. Their findings stated that debt and economic growth presented an inverted U-shaped relationship. Accordingly a positive impact on economic growth is likely to be when countries accept more foreign capital and start borrowing. In addition, a negative contribution was shown from debt to economic growth over the period from 1960's to 1970's. In a similar fashion, the study used panel data and could not provide country specific results thus the need for a disaggregated model.

Grossman and Elhannan, (1990) Investigated the impact of Jordan's external indebtedness on its economic growth. The results revealed the existence of a positive relationship between external debt and economic growth below 53 percent of GDP. In cases where the debt increases beyond this level, its effect on the Jordanian economy turn out to be negative significant. The threshold determined in Jordan cannot be universal due to country specific examination.

Kraav and Vihani (2004) from 1968 to 1998 examined the ways through which debts affects growth by applying on 60 developing countries. Non-linearity was shown as evidence to the relationship between sources of growth and the level of debt of the country. TFP growth had a positive influence on growth with little debts levels in contrast had a negative influence at great debt levels. In addition, the existence of a negative effect from physical capital on TFP growth was shown. Conclusions were that boosting both capital accumulation and productivity growth will make to reduce debt level and therefore will give to growth increment.

Munongo, (2012) covering the time period from 1980 to 2010 of Zimbabwe's economy, Munongo investigated the efficiency of fiscal policy in encouraging economic growth. In order to take in consideration of short-run dynamics Error-correction models were applied. The results indicated that both government consumption and tax income positively influenced significantly Zimbabwe's economic growth during the period of coverage. In contrast capital expenditures had a negative effect accompanied with a long-run relationship. Zimbabwean economy has experience some level of crisis in

recent times with high level of instability politically and economically. This seems to affect economic fundamentals in Zimbabwe.

Onah, (1994) by selecting eight African countries examined the affection of external on their GNP growth prospects. Onah summed up his results that, the extensive and significant increments in these countries' GNP are still consistent with increments in debt. The debt ratio to GNP for all countries becomes large to tolerate at 5 percent increment in debt and more. Moreover improvement of the growth of the economics can be achieved by a reduction of debt.

Essien and Onwioduokit (2002) found that the degree of responsiveness of growth to external finance in Nigeria was elastic. They advised to place appropriate debt management strategies in order to give feasibility studies for plans financed by externally injected resources invested in productive ventures.

Nathan (2012) investigated the causality between selected variables namely: exports, fiscal deficits and money supply as a representation of analyzing the impact of economic policies on economic growth of the Nigeria in a time span between 1970 and 2010. Co-Integration, Error Correction Model (ECM) and a Two Hand Recursive Least Square tests were the test applied on the data. The objective was to explore the influence of the selected variables on the relative effectiveness of Nigeria's economies' past implemented fiscal policies. Outcomes of the study showed evidence that a significant causal relationship between gross domestic product (GDP) and both exports and fiscal policies exists. The policy variables employed in this study did not capture government income and consumption which are important indicators of fiscal policy. There is need to examine the effect of such variables on the performance of the economy.

Iyeli and Ijomah (2013) applied a co-integration and Error Correction Model technique to investigate the influence of selected fiscal policy variables on Nigeria's economic growth between the period 1970 and 2011. A long run relationship between economic growth and the selected variables existed in the outcomes of the study.

Vincent et al., (2012) studied the bond between economic fiscal deficits and economic growth. They applied the analysis over a time period from 1970 to 2006. A modeling technique that incorporates co-integration with structural analysis was used. The studies

outcomes showed that fiscal deficit influences economic activity negatively if a lag is accompanied in the system. Moreover a one percent rise in fiscal deficit is expected to decrease economic growth by 0.023 percent. Also existence of a strong negative relationship between economic growth and government expenditure was shown in the analysis.

Zhattau, (2013) argued that economic growth is a powerful engine for generating long-term standard of living and that fiscal policy has been identified as a means of generating growth. Taxation as a major source of government revenue as well government expenditure is an important channels of transmission between fiscal policy and growth. He employed a descriptive method to review the effect of fiscal policy in Nigeria. The study revealed that there are various challenges facing fiscal policy and tax implementation in Nigeria and that an appropriate method of tax implementation will increase the revenue of the country thereby accelerating economic growth. The stud submitted that efficiency of tax system is not just a matter of appropriate tax laws hut also the efficiency and integrity of tax administrators.

Wosowei (2013) investigated the relationship among macroeconomic performance in Nigeria and its fiscal deficit for the period span from 1980 to 2010, with a view to define the impact on macroeconomic aggregates from fiscal deficits, and whether fiscal deficit had led lo economic growth in Nigeria. He used OLS in analyzing the model. The findings showed that fiscal deficits even though that it met the economic a prior in terms of its negative coefficients so did not significantly affect macroeconomic productivity. The result also revealed a bi- causal relationship between governmental balance deficit and GDP, government tax, and unemployment, while a uni-causality between economic deficit and government expenditures and inflation. This study used a static model and requires some form of verification using a dynamic model approach including the causal linkages.

From the various past studies in which analyzed the linkages between economic growth and the fiscal policies it is assured that the results are in a variety of outcomes. Some studies found a negative relationship while others found a positive in contrast.

2.5 Theories of fiscal policy

The fiscal policy analysis in the light of macroeconomics is founded by some theories. In particular, we have Keynesian and Ricardian Equivalence theories. The mechanism behind the fiscal policy is clarified by the Keynesian income-expenditure method. The fiscal policy according to Keynesians has significant cause on income, employment and productivity in the short term without money supply. It asserts that aggregate demand is a determinant of output. An increase in government expenditure will reflect a cause and surge in domestic income. As internal income increases, imports will also increases and finally decrease the surplus in the trade cycle. Also, the Keynesians open economy model asserts that a casual relation runs from budget deficit to aggregate demand. Specifically rise in budget deficit will increase the interest rates as acompensation of the loss and a source of fund. Therefore increases the capital inflows thereby increasing the demand on the local currency (Barro. 1989).

Enders and Lee (1990) opined that public debt is as crucial as the stock of money. A country with a balance of payments deficit will borrow resources from the rest of the world and give a negative representation of that country's economic situation. For example if a countries' invests the borrowed funds into better profitable opportunities, paying back the borrowed funds to foreigners will be no possible. This will lead to the country to decrease and limit its debt in the future. In contrast the Ricardian equivalence theory says if the balance of payments is used to just raise the share of consumption and no practical improvement in the economies capital stock or exports, this increment will lead to less capacity to repay the borrowed funds in the future.

The Ricardian Equivalence theory argued that the budget deficit has no influence on the current account deficit. This is justified that when the government take actions to reduce taxes by then increases its default, the public expects a later rise of the taxes in the future. As a consequence consumers decrease their consumption spending and increase their savings to face the expected increase in the taxes latter on.

According to Barro (1974) and his theory of infinitely-lived families, government debt is a scheme named Ricardian-equivalence. In this theory government's debt policy is redistributed along with its tax burden on the generations of the country. However

families, who want smooth their consumption over time, inverse the effects of the debts redistribution process through their bequests.

On the other hand according to Peter Diamond (1965) the Diamond-Samuelson theory of overlapping-generations state that societies smooth consumption over its own lifetime. Nonetheless there is no bequest motive. When the government issues debt, it enriches some generations at the expense of others by that it crowds out capital from these generations and this leads to a reduction in the steady-state living standards of other generations.

Though, in cooperation the Diamond-Samuel model and Barro-Rarnsey model undertake the assumption that all the households of the economy use financial markets to smooth consumption over time as which researchers are skeptical.

2.6 Theoretical Framework

It is an established fact in macroeconomic literature that fiscal policy is one of the key instrument through which the government effect changes in an economy and direct the affairs of the economy into a desired direction. Government in both developed and underdeveloped countries have used fiscal policy to achieve macroeconomic stability and move its economy forward. In line with the above, different attempts were made by various scholars in both developed and developing countries to investigate empirically the effectiveness fiscal policy in promoting growth and stabilizing the economy.

This tradition dates back to the 1960s with studies by Meiselman and Friedman (1963) as the pioneering work. These two gentlemen tries to investigate empirically the responsiveness of general level of price, aggregate demand, level of employment and general output to the autonomous level of government expenditure. They conclude that many of the fiscal policy instruments are proved to have the desired output and good measures of correcting macroeconomic imbalances. Other studies in the area have also come up with opposite view of the researchers above. For example, a study by Ajisafe (2001) found out that the higher emphasis and priority given by the government to fiscal policy options has eventually led to higher distortions in the Nigerian economy.

However, among all economists Keynes was the one who gave the highest emphasis on fiscal policy as a tool of fine turning an economy. Keynes has emphasized on the role of fiscal policy as means of stabilizing an economy. He regards government revenue, public expenditures, taxation and public debt as exogenous factors that can be used to achieve the government macroeconomic objectives.

From the Keynesian point of view thought, government revenue and expenditure if managed prudently can contribute positively to economic growth. Therefore government can use instruments of fiscal policy such government revenue, public expenditure, public debt, budget deficit and others to influence the economy in a desired direction and has been used to by the government in Nigeria over the years as proposed by Keynes and his supporters. This idea provides the theoretical foundation to the study and all discussions in the study will be based on these views.

According to Nurkse (1953), the problem of the countries was that there is small capacity to save resulting from low level of real income. The low level of real income is a reflection of low productivity, which in turn is due largely to the lack of capital. The lack of capital is a result of small capacity to save. It is evident that to break out of this vicious circle of poverty, the country must increase its savings. The country's incremental saving ratio is the crucial determinant of growth. The general problem is to maximize the marginal saving ratio, that is, the proportion of any increment in income that is saved.

This earlier analysis included various strategies as to how the saving rates could be increased. Lewis (1955) argued that since the users and sources of the savings are the private sector, the government should develop and implement policies which would encourage saving, including tax exemptions and granting monopoly rights. This consideration was based on the assumption that a developing country has the potential to finance its investment requirement, if only the government would create an environment conducive for its mobilization and effective utilization.

Given the need for larger capital stock and the inadequacy of domestic saving to boost investment that would make this possible, it was concluded that domestic savings should be supplemented by foreign resources. This shifted the issue from whether external

resources are useful to developing countries, to how much is it sufficient to help them realize their growth potential.

However, the general case for borrowing abroad is to add to total resources, not just to acquire specific resources. Foreign borrowing performs two roles in development (Eshag, 1983); first, it can increase resources available for investment by supplementing domestic savings; second, it can augment foreign exchange resources by supplementing export earnings. A country's foreign borrowing requirements depend on its total expenditure in relation to total domestic production. Accordingly, in national income accounting, an excess of investment (I) expenditure over domestic savings (S) is equivalent to a surplus of imports (M) over exports (X). At equilibrium, the following identities hold

$$I - S = M - X \qquad 2.1$$

$$S - I = X - M \qquad 2.2$$

Expression (2.1) or (2.2) says that the domestic resource gap (S-I) is identical to the foreign exchange or external sector gap (X - M). An excess of imports over exports necessarily implies an excess of resources used by an economy over resources generated by it, or an excess of investment over savings. This means that the need for foreign borrowing over time is determined by the rate of investment in relation to domestic savings. However, the two gaps in equation (2.1) and (2.2) may not be equal. Where there is complete substitutability between imports and domestic resources, theoretically, there is one gap ex ante as well as ex post (Thirwall, 1978). For a country desiring to achieve a particular target rate of growth, such growth may be limited by lack of domestic savings or foreign exchange (Obadan, 1988). Growth it is argued is limited by the larger of the two gaps and foreign borrowing is required to meet the larger gap.

However, the model view of the dual-gap analysis is that a number of goods necessary for growth cannot be produced by many developing countries themselves and must therefore be imported with the aid of external assistance. In general, however, the rate of growth of output will be faster with capital imports, provided new inflows of foreign capital exceed the loss of domestic savings to pay interest. This is a rather stringent

condition. If, however, interest charges are met by new borrowing, capital imports should have a favorable effect on the rate of output. Furthermore, the rate of growth of income with capital imports will be faster as long as the productivity of capital imports exceeds the rate of interest on foreign loans.

The two-gap model or dual-gap approach rests on the simple extension of the Harrod-Domar model which was expanded by Solow model, the essence of which is presented below following Ashinze and Onwioduokit, (2001):

(i) Calculate the incremental capital output ratio (ICOR) either historically for technologically:

$k\Delta K / \Delta Y$ 2.3

Where ΔK is ICOR, k is capital stock and ΔY is income/output and represented change: Thus, represents additions to the capital stock and (ΔY) additional output attributed to the increase in capital stock.

(ii) Determine the desired level of output y* and, using this obtains the amount of additional investment (1 *) necessary to achieve this output:

$1 * = KY*$ 2.4

(iii) Project the possible level of domestic and foreign savings that could be generated by the country:

$S = (Y-T-CP) + (G-Cg) + (M-X-R)$ 2.5

Where S is total resources made up of:

(i) Private sector domestic saving which equal income (Y) less taxes (T) and private consumption (CP)

(ii) Government saving which equals revenue (G) less government consumption (Cg) and

(iii) Foreign savings which equal imports (M) less exports (X) and net transfer (R) the volume of savings thus generated is compared with the volume of investment required, and where there is inequality, attempts are made to remove the difference by either scaling down investment and/or increasing saving through foreign resources.

CHAPTER THREE

OVERVIEW OF FISCAL REGIMES AND PERFORMANCE IN NIGERIA

3.1 Fiscal Policy and Economic Outlook in Nigeria

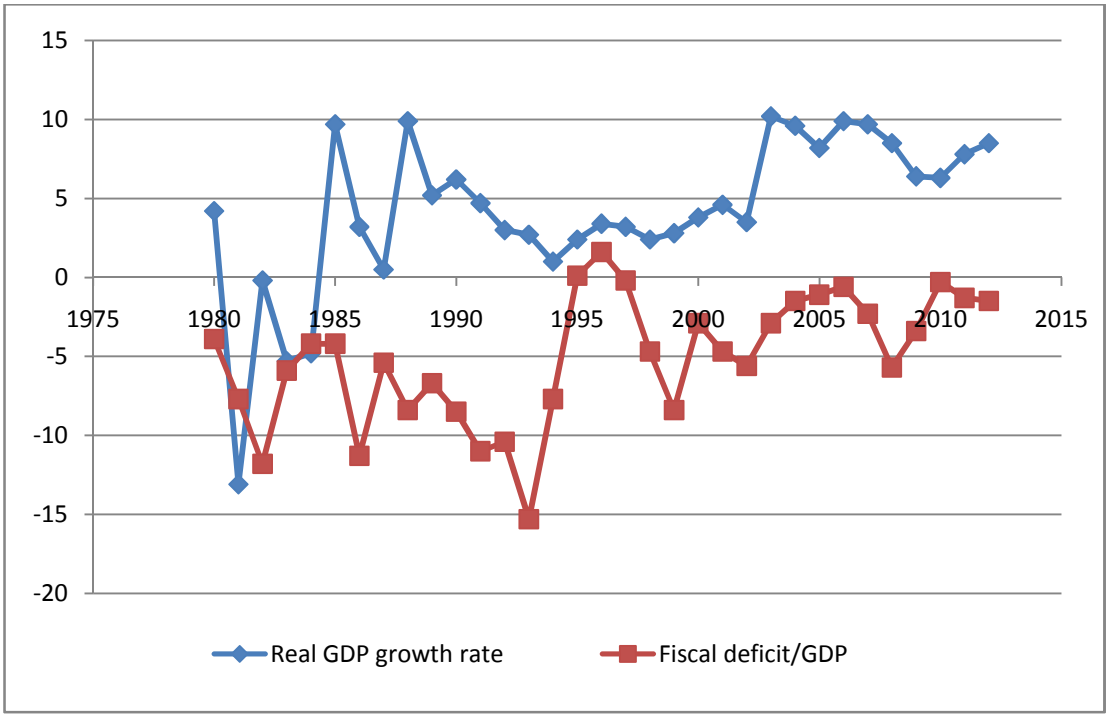
The Mid 70's marks an important milestone in the economic development of Nigeria with a shift from its main source of earnings i.e. agriculture to crude oil. The exploration of the oil sector brought huge earnings to the nation's economy that deeply eased foreign exchange constraints on development. Despite the income from the international earning from oil (crude) the country still borrow from the foreign and domestic source for budget deficit financing, which lead to a huge state of spending and misallocation of the country resources in the economy (Obadan and Uga, 2004).

The Nigerian economic crisis erupted in the early 80s as a result of shocking shocks from the economic environmentreflected in recession and declining world commodity prices. Other areas of economic crisis included the deformation andstructural imbalances in the economy due to the oil boom. Furthermore, the collapsed of oil prices adversely affected the nations income and alsogave rise to high fiscal shortfall, huge external current account deficit, high external debt burden or high unemployment and inflation rates (Nathan, 2012).

The real GDP growth rate was depressing in the first half of the early 80s and though positive in the second halve the figures were very low and on the average just 2.0 percent. The population growth at the same time was put above 3.0 percent. The deficit

financing as a ratio of GDP was negative and average 8.2 percent for the period under review. The external debt as ratio of GDP that was barely 2.0 percent in 1986 rose to 115.7 percent in 1990 and reduced to 64 percent in 2010. The investment as ratio of GDP stood at 11.0 percent averagely on the period under review (CBN, 2012).

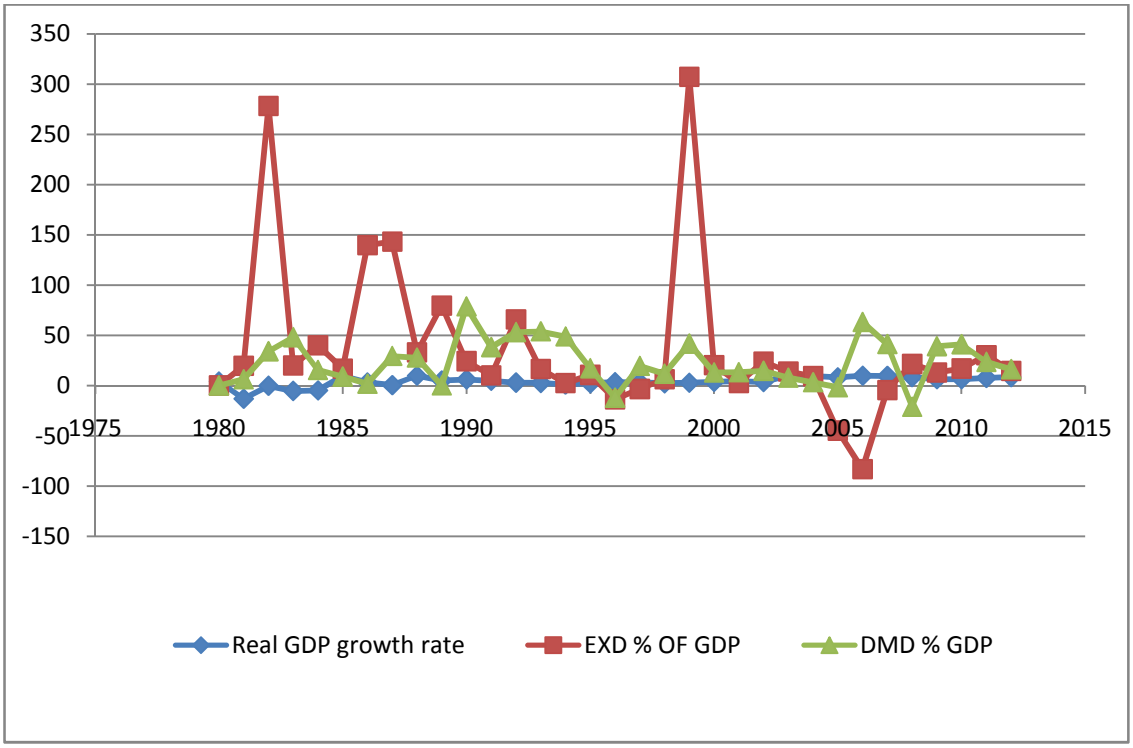
(Figure1) Real GDP & Fiscal Deficit Trend



Source: Researcher's plotting Using Data from CBN

The graph above shows the trend in the GDP growth rate and the trend of fiscal deficit/GDP ratio. From the graph we can see that GDP experienced a negative growth between 1980 up to 1984 from there it becomes positive till 2012. From the graph also we can see that Nigeria has been experiencing deficit throughout the period under study except for 1995 and 1996. We can also understand from the curve that both GDP growth and that of government budget deficit has shown similar trends over the years. Thus we can say that budget deficit is an inverse function of gross domestic product. (Figure 1)

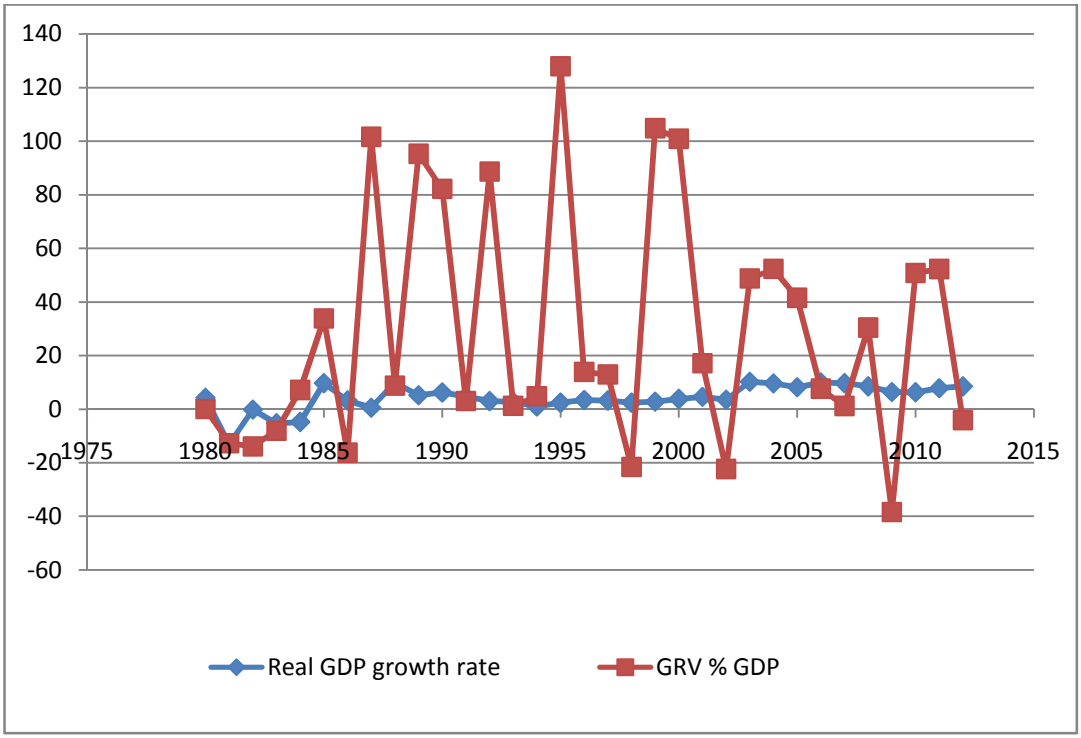
(Figure2) Real GDP, EXD & DMD Relationships



Source: Researchers Plotting Using Data from CBN

The dynamic relationship between the growth of external debt domestic debt and that of GDP as presented by the table above provides evidence concerning the economy's debt sources and the relation that exist between the two and the growth of domestic product. It is clearly shown in the graph that Nigeria's external debt has reached its all-time peak in 1999 and it declines thereafter to zero and even negative from 2004 to 2008. Domestic debt is not much compared to external debt as the economy always relies on foreign donors for debt sourcing. Both the two sources of debt have shown little or no similar trend with the GDP growth due to mismanagement of debt by the government. (Figure2)

(Figure 3) Trend of Real GDP & Government Revenue



Source: Researchers Plotting Using Data from CBN

The graph above depicts the relationship between the growth of government revenue and that of gross domestic product over the years under study. The graph shows that government revenue has shown higher fluctuations over the period as government revenue in Nigeria is highly dependent on the price of crude oil in the international market which is highly volatile. Although it (revenue) has shown greater fluctuations it has certain similarities in terms of movement of the trends with that of GDP. We can therefore understand that both GDP growth and that of government revenue show similar trends indicating a positive correlation among the two in Nigeria over the years. (Figure3).

Despite the fact that, Nigeria is an oil-rich state with a huge amount of revenue from the oil in its balance of payments, the country has how ever experienced ups and down in the government budget deficits and aggregation of international debt. During 1970s to 2004, there was a serious deterioration of the government finances in Nigeria. In addition, the period 1975-1978 also witnessed very large and increasing fiscal deficits.

Another feature of the economy was the movement towards high inflation rate. In the 70s the total inflation averaged stood at 15 percent, where as in the 80s it increased to an average of 23 percent approximately. Furthermore, in the 90s the average inflation rate was 31 percent. Meanwhile by 2006, the economy witnessed a drastic average fall of 18 percent in the inflationary trend (CBN, 2012). It has been ascertained that the main causes of inflationary trend were the widening of fiscal instability and the devaluation of the Naira exchange rate. However, the transformation to high inflation rates over the duration resulted in substantial real cost and huge losses in income, at the same time as the performance of the economy as a whole decreases as a result of broadening fiscal deficits and reducing oil revenues, pursuing the breakdown of oil prices in the early 1980s, aggravated by political uncertainty and poor macroeconomic management.

Furthermore, late 1980s were also noticeable by the increase in the fiscal deficit which led to the infliction of International Monetary Fund (IMF) and World Bank induced Structural Adjustment Program (SAP) intent at making more approving conditions for the restoration of the economy along a sustainable growth rate. The drastic decreasing in the average rate of inflation has been mainly assigned to the adoption of close monetary and fiscal policies which, on the one hand, were designed to ease the success of the Structural Adjustment Program (SAP) to facilitate relieve the government's unsatisfactory fiscal programs (Ekpo, 1995). It is important to note that, the macroeconomic measure enabled the economy to return to acceptable levels of fiscal performance, which make the economy to run on a more stable part of economic growth since the early 80s.

As a result of the above mentioned, the government was only able to maintained its level of spending by increasing its international debt burden and through other internal sources such as, private sector debt. The process may also include policies to widen the government sources of revenue, decreasing in government subsidies, imports, government interference in economic activities and redirecting the economy away from the public sector in favour of the private sector.

The growth rate of the Nigerian economy was very discouraged during the 1981 and 1984. Furthermore, it continues to improve from mid-80s to 2008 when it's economic shrink due to the global economic meltdown. But year 2000 to early 2008 witnessed a strong growth averaging 5.6%. The deficit financing as ratio ofGDP was largelynegative. It increased from -4.0% in 1980 to -11.0% in 1986 which declined to -0.2% in 1997, -3.0% in 2008 and -2.0% in 2012.

Nigeria's International debt misfortune can be traced to both endogenous and exogenous factors. Some of the endogenous factors include: incoherent domestic policies, capital flight, unlimited borrowing, and application of funds to unproductive and unviable projects, fiscal disorderliness and exchange rate over valuation. The exogenous factors include oil glut which led to declining foreign exchange receipts, declining trend in world oil prices, and unfavorable terms of trade, rising foreign interest rate and the global economic recession also contributed to the debt crisis. In general, the debt crisis includes neglect of agricultural development, dependent industrialization, debt inducing social reforms, failure to diversify export base and heavy defense expenditure.

3.2 Performance of Domestic Debt in Nigeria

It has reviewed that, domestic debt was just increasing to an average of 115.0% of bank deposits. In the period 1994, debt as percentage of bank deposits was 250. Furthermore, it has also observed that in 1994, the treasury invoice calculated for 42% of internal debts, Treasury bond measured for 48%, treasury certificate for 9.2% and development inventory for 8.2% of also domestic debt and that was the business cycle up to the period 2007.

In 2002, treasury bill accounted for 62.93%, treasury bond accounted for 36.93% and development stock which is the long term instrument accounted for a mere 0.14% of domestic debt. The implication of this is that the debt was used to finance recurrent expenditure which was not growth inducing. But this situation reversed from 2007 as the contribution of treasury bills to domestic debt fell to 26.50%, Treasury bond accounted for 18.80% and federal government bonds which are the long term instrument accounted for 54.67% of the domestic debt (CBN, 2012).

3.3 Reason for Rising Domestic Debt Profile in Nigeria

There are many reasons responsible for government domestic debt according to Alison et al (2003). There are: Financing of budget deficit, monetary policy implementation and developing of the financial sector. Nigeriahas used many factors in explaining the changes of domestic debt profile since 1960s up to date (Odozi 1996; Rapu, 2003). Those factors include: decrease in productivity, increase in the rate of inflation, high budget deficits, increase in expenditure growth and narrow revenue base witnessed in 1980s. But, .The fiscal operation of the federal government resulted in large deficit averaging 1.93% of GDP between 1994 and 2010. From an average deficit of 1.56% of GDP for the period 1994-1979, it increased on average to 3.35% in 1999-2010 and then reduced to 0.86% of GDP in 2004-2010. A very remarkable feature of the government fiscal expansion was the financing of the excess expenditure from domestic debt averaging 114.98% of bank deposit between 1994 and 2010 (CBN, 2012).

Domestic debt reduction in Nigeria has taken certain stage for conversing realistic pricing of petroleum products in Nigeria as the domestic debt profile has been rising astronomically and if not controlled could create some unfavorable consequences as crowding out private sector investment, poor GDP growth etc (Okonjo-Iweala, 2011). On the other hand, government has to continue to finance projects to grow the economy and one viable option of doing so is by issuing debt instruments. For example, the 2012 national budget presented to the national assembly contains a deficit of N1.11trillion which has to be financed majorly through domestic debt. As at September 2012, Nigerian domestic debt stood at N5.3 trillion, an equivalent of $34.4 billion while external debt was $5.6 billion bringing the National debt to a total of 40 billion dollar which amounted to 19.6 percent of GDP, (Nwankwo, 2011).

Domestic debts are debts instrument issues by the federal government and denominated in local currency. State and local government can also issue debt instrument, but debt instrument currently in issue consists of Nigerian treasury bills, federal government development stocks and treasury bonds. Out of these treasury bills and development stocks are marketable and negotiable, while treasury bonds; ways and means advances are not marketable but held solely by the central bank of Nigeria, (Adafu et al 2010).

The central bank of Nigeria as banker and financial adviser to the federal government is charged with the responsibility for managing the domestic public debt.

3.4 Nigeria's Debt Management Strategies

The Nigerian economy in recent past was highly indebted which caused a lot of ripples. The instruments of debt management have to be weighted before use, otherwise the nation could strained her relationship with the outside world or jeopardize her future economic growth and the socioeconomic prospects of future generations.

On due consideration of some of these facts, Nigeria in time past restrained herself from the use of debt management options such as debt repudiation, which is unilateral decision of refusing to settled due debt obligation; debt cancellation by creditors, which African countries are jointly exploring (Nigeria during Obasanjo administration benefited from this option); and the payment in full of all debt obligations as and when due. Nigeria has adopted the debt management option of negotiation for debt relief or debt reduction as well as the adjustment of some internal variables.

Meanwhile, Nigeriaused some instruments of debt relief and reduction which are as follows:

(i) There were some rules placed on the international borrowing during1980s that means, the country can only borrow if only it is necessary.

(ii) The federal government also pegged the exchange rate for debt service payments in the year 1986 so that, the external exchange earning will not be more than 30%.

(iii) Refinancing of debt and its rescheduling

(iv) Conversion of debt equity swap

(v) Debt forgiveness

The last three strategies are analyzed below to have a clearer picture of what the options connotes.

3.4.1 Refinancing of debt and its rescheduling

Debt refinancing involves acquiring a new loan to pay off the old debt which is due while the debt rescheduling involves making a new arrangement for the repayment of

existing loans. Debt rescheduling could cover the repayments of principal or principal and interests, who are due in particular period, say a year. In this sort of new arrangement the debtor country continues to pay interest on the outstanding debt until fully liquidated.

In 1983, Nigeria refinanced 1.5 billion of trade debts in confirmed letters of credit to be repaid in three years including a period of six month grace at an interest rate of 1l/4 percent of LIBOR (London Interbank Offer Rate). These claims were fully paid in 1986. Another attempt was made to further refinance trade arrears by the issuance of promissory notes of six year maturity with two years grace period. The promissory notes worth US$3,834.4 million at an interest rate of 1.0 percent above LIBOR and the redemption were to begin in 1986. Nigeria was unable to redeem the notes on due dates so the principal was refinance and the interest due was capitalized amounting to US$4.8 billion. This rescheduled in January 1988 with a repayment period of 22 years including 2 years of grace. Thus, refinancing transforms short term debt obligation into long term ones (Anyiwe and Izedonmi, 2005).

Some rescheduling efforts made by Nigeria included that with London Club in 1989 according to Anyiwe and Izedonmi, which provided for:

(i) Repayment between 1989 and 1991 of payable debt of US$500 million;

(ii) Repayment between 1999 and 2003 of refinanced letters of credit of 2.4 billion;

(iii) Repayment between 1992 and 2008 of medium/long term debt amounting to US$2.8 billion, interest rates of 13/16 and 7/8 percent above LIBOR or refinancing and restructuring amendment agreements respectively, while payable debt is non- interest, provided there is no default:

The debt rescheduling reached with the Paris Club in 1989 also involved rescheduling of various debts for payments between 1989 and 1999. Efforts towards debt rescheduling or debt relief continued. For instance, in 1996 work on the preparation of Medium Term Economic Programme (MTEP) aimed at resorting macroeconomic stability and thereby pave the way for negotiations for debt relief with the Paris Club creditors was given a fillip (CBN, 1996).

3.4.2 Debt-Equity Conversion

Debt-equity swap or conversion involves conversion of debt at face value and at prevailing exchange rate for the currency of the debtor-country, the proceed are designated as registered capital investment of the creditor in the debtor country and used strictly for financing an entirely new company, expanding an existing one, recapitalizing portfolio investment (Sanusi, 1987).

Thus, it implies the conversion of external or foreign debt into domestic debt in local currency of foreign investment in the debtor country. Debt conversion is of several types including:

(i) The exchange of a country's external debt denomination in foreign currency for local currency and the proceeds may be used to set up new enterprises or used to buy equity shares of classified existing enterprises.

(ii) The exchange of external debt for domestic debt, which maybe

Sold in the secondary market for cash;

(iii) The exchange of a country's exports for cash in foreign currency and part of its external debt.

Nigeria's Debt Conversion Committee (DCC) was established in February 1988. In the 1990s the external debt management strategy continued to be targeted at reducing the level and growth of the nation's external debt stock by collaborating with international agencies in order to gain access to concessional debt relief. Also, external borrowings were restricted to facilities with concessional terms (CBN, 1996).

3.4.3 Debt Forgiveness

The Nigerian government over the years solicited for debt relief from its creditors especially in 1990s. This could not be achieved because the creditors perceive Nigeria as a reach country that does not need debt forgiveness throughout right cancellation of the amount owed by World Bank, International Monetary Fund, and Paris. However, in 2004 through the effort of the Nigerian government, some of the creditors granted Nigeria debt forgiveness.

CHAPTER FOUR

METHODOLOGY AND DATA ANALYSIS

4.1 Model Specification

The Theoretical literature on fiscal policy and economic growth has been considerably subjective byBarro (1990). Endogenous growth models have emphasized the size and organization of taxation and public spending as having influence on the potential growth of the economy. The Productive management of public expenditure also influences growth (Kneller, et al. 1999), this is so in developing countries with comparatively low infrastructures facilities.

Based on this discussion, a model of the impact of fiscal policy and its instruments on the Nigerian economy can be adopted from a previous study conducted by Wosowei (2013) with some few adjustments. The final form of the model will take the form:

$GDP = f(DF, EXD, DMD, GCE, GRV)$ 4.1

In the specified model in equation (4.1), GDP is the gross domestic product at current basic prices; DF is deficit financing; EXD is external debt stock; DMD is domestic debt stock; GCE is the federal government consumption expenditure; GDR is federal government total revenue.

4.2 Definitions of Variables

After specification of the models, the next important task involves describing the variables and their source as well as giving the theoretically expected signs of the coefficients.

Real Gross Domestic Product: Is a macroeconomic measure of the economic value of economic output weighted or well-balance for price alteration, modification or changes. This adjustment transforms the money value measure, normal GDP into an indicator or forefinger for quantity of total output. GDP is the summation or totality of consumer spending investment made by industry, surplus of Exports over Imports and Government disbursement. Due to inflation, GDP increase and does not actually reflect the time growth in economy. Which is the reason inflation rate must be deducted from the GDP to get the real growth percentage called the real GDP.

Deficit Financing: This arises when the Government of a particular country outlay more money than it receives as revenue or result from government in efficiency, reflecting widespread tax nonpayment or evasion. This divergence is produce by borrowing or minting of new funds.

Government Consumption Expenditure: This variable is measured as the ratio of government expenditure to GDP. Government expenditure is expected to bear a direct relationship to economic growth. This is because a higher level of government consumption should translate into provision of more social capital that should encourage production and growth.

Government Revenue: Government revenue has long being a tool of influencing the economic activities in Nigeria and was used by various researchers to access the effectiveness of fiscal policy in achieving macroeconomic objectives. In this study we use the ratio of government revenue to GDP as a proxy to government revenue.

Domestic Debt Stock: Debt itself is a liability one mustrepay. It may also be a financial warrantee, allegiance or commitment one must honor on time. Debt can be short or long, the short time debt is a loan that is repay within twelve months (12) whereas long time liability or debt has a maturity date exceeding one (1) year. Domestic debt otherwise called national debt consist of liabilities that a country citizens or government owe.

External Debt Stock: Is the total debt a particular country owes to international creditors. Those debtors can be public, organizations or citizens of that particular country. These debts are money owed to private commercial banks, International Financial Institutions which are IMF and World Bank.

The expected sign for the variables is that deficit financing (DF) is expected to be negative (-) in relation to GDP, external debt stock (EXD) is either positive or negative depending on level (+ -) in relation to GDP, the domestic debt stock (DMD) is expected to be negative or positive depending on level (+ -) in relation to GDP, the government consumption expenditure (GCE) is expected to have a positive (+) relation with GDP, and government total revenue (GRV) is expected to have a positive (+) relationship with GDP.

The specified model in 4.1 can be stated in Vector Error Correction Model (VECM) form where GDP may not immediately adjust to their long run equilibrium levels in which the speed of adjustment between the short run and long run levels can be captured ECT_{t-1} in the Error Correction equation in 3.3, where Δ indicates change in GDP and fiscal instruments proxies.

$$\Delta \ln RGDP_t = \beta 0 + \sum_{i=1}^{P} \beta_1 \Delta \ln RGDP_{t-1} + \sum_{i=0}^{P} \beta_2 \Delta \ln DF_{t-1} + \sum_{i=0}^{P} \beta_3 \Delta \ln EXD_{t-1} +$$

$$\sum_{i=0}^{P} \beta_4 GRV_{t-1} + \sum_{i=0}^{P} \beta_5 \Delta \ln DMD_{t-1} + \sum_{i=0}^{P} \beta_6 \Delta \ln GCE_{t-1} + \beta_7 ECT_{t-1} + \mu t \qquad 4.2$$

Therefore, the expected sign or a priori expectations are such that β_1, β_4 and $\beta_{5,} > 0$ while β_2 and $\beta_3 < 0$.

Therefore, the model to be estimated is equation (4.2) and the parameters to be estimated are β_0 - β_5.

4.3Technique of Analysis

This study will employ Vector Error Correction Model (VECM) techniques to estimate the impact of fiscal policy on the Nigerian economic growth.The statistical properties of the series will be examined. Engel and Granger (1987) observed that most economic time series data are not stationary over time. This prompts the investigation of the statistical properties of the variables. The three statistical test for our series are Augmented Dickey Fuller (ADF) and Phillips-Perron (PP) unit root tests, Johansen co-integration tests which is used to determine the long run relationship among fiscal policy and economic growth and Granger causality tests which is used to determine the transmission mechanism of causality among variables (endogenous and exogenous).

4.3.1 Unit Root Test for Stationarity (ADF and PP)

Most of economic data are having unit roots (i.e. are not stationary) and this result to the problem of spurious regression. In order to do away with this problem the study conducts a test for stationarity for the time series data using the Augmented Dickey Fuller (ADF) and Phillips-Perron (PP) tests. The optimum lag length for ADF test will be determinedby Schwarz information criterion (SIC). When there is unit root in the data,the corresponding time series will be considered non- stationary.The formal ADF test procedure can be presented by the following equation:

$$\Delta X_t = a_0 + a_1 t + \beta X_{t-1} + \sum_{j=1}^{p} \delta j \, \Delta X_{t-1} + \mu_t \qquad 4.3$$

Where

ΔX_tdenotes first difference of the time series data while*p* represent the lag order and *t* is representing time. Inthe ADF result, we will reject the the null hypothesis that variable(x) is nonstationary (H0:$\beta = 0$) if β is significantly negative.

The Philip-Perron (PP) test on the other hand will also be employed due to its additional advantage over the ADF test as it was adjusted to do away with the assumption that the error terms are serially independent and include serial correlation through the use of

theNewey-West (1994) covariance matrix. In the PP test the order of integration in our variables are based on the test which includes both the intercept and time trend. We can therefore present the general form of the test using the following equation:

$$X_t = a_1 + b_2X_{t-1} + a_3(t + \frac{T}{2}) + \mu_t \qquad 4.4$$

where a_1, a_2, and $a_3$are thecoefficients of the regression while$T$ is the number of observations in the model. Here we also test the null hypothesis that the series are having unit root against alternative that assumes the opposite.

If our variables are found non stationary at level, they will be converted to first difference in order to achieve their stationarity and the null hypothesis will be tested at the conventional 1%, 5% and 10% level of significance.

4.3.2Cointegration Test

If the stationarity of our variables is established that is to say, all our variables are established to be of the same order of integration we go ahead to test for the existence of cointegration among the included variables. What we do here is to test whether there is a long run relationship between non stationary data that is cointegrated of the same order. As introduced by Johansen (1988) and Johansen and Juselius (1990). The test for cointegration is performedin order to examine if our variables exhibits long run equilibrium relationship.The Johansen approach to cointegration test is presented using the equation below:

$$\Delta Y_{t-1} = \Gamma_0 + \Gamma_1\Delta Y_{t-1} + \Gamma_1\Delta Y_{t-2} + \ldots + \Gamma_{k-1}\Delta Y_{t-k} + \Pi Y_{t-k} + \varepsilon_t \quad (t = 1, 2, .., T) \qquad 4.5$$

Where:Δ denotes difference operator, $Y_t$represent a$p \times 1$ vector of non stationary variables (at level), while Γ_0 is the deterministic trend of model and $e_t$is the random

errors term. *Π*is the error correction terms (ECT) which provides information about the adjustment to the long-run equilibrium of the VECM.

As argued by Engle and Granger (1987) the cointegrated series must have an ECM representation. This why the cointegration analysis becomes popular as it provides a formal background for testing and estimating both the short-run and long run relationships among economic variables. Moreover, the ECM procedure provides an adjustment to the possible problem associated with regression.

4.3.3Granger Causality Test

The test for Granger causality as argued by Granger (1969) implied that a time series variable (say,y) is granger caused by another time series variable (say, x) if values of y can better be predicted if we add the past values of both 'y' and 'x' than it is predicted from the past values of 'y'only. In this study we present a simple bi-variate model that test y is Granger caused by x by the following equation:

$$y_t = \alpha_0 + \sum_{j=1}^{P} \gamma_{11,} \, i \, y_{t-j} + \sum_{j=1}^{p} \gamma_{12,} \, i \, x_{t-j} + \varepsilon_t \qquad 4.7$$

From the equation α_0 is the constant and $\varepsilon_t$represent the error term.

As explained by the Granger representation theorem, Granger causality shows that, at least one out of various adjustment coefficients must have a non-zero value if a long run relationship among the variables must hold.

In its conventional form, Granger causality result shows two way feedback relationships.

4.4 Source of Data

Central Bank of Nigeria (CBN) statistical Bulletin (various versions); Debt Management Office (DMO) reviews of debt reviews (external and domestic) Federal Ministry of Finance (FMF) reviews of federal government public revenue and expenditure. Where

necessary, data from World Bank and IMF international Financial Statistics will be used to complement. The series will span the period 1980-2012.

4.5. Empirical Results

4.5.1 Unit Root Test of Stationarity

As a precondition to cointegration analysis, we conduct a test of unit root using the major two procedures of ADF and PP tests in order to establish the stationarity of our variable. The results of the Augmented Dickey Fuller (ADF) and Philips-Perron (PP) tests are presented in the table below:

The table below presents the results of ADF and PP unit root tests. From the result it shows that all the variables are non-stationary at level. But however, when the variables are converted to the first difference and using both intercept and deterministic trend they become stationary. Thus the variables are integrated of one order, that is, I (1).

Table 4.1: Unit Root Test

Variable	**Lag length**	**ADF test Statistic**	**PP Test**	**Order of Integration**
LnGDP	2	-1.2342	-0.5352	
D(lnGDP)	2	-3.7822**	-4.4657***	I(1)
LnDF	2	-0.3427	-0.1633	
D(lnDF)	2	-3.8634**	-6.8439***	I(1)
lnEXD	2	-0.0436	-0.1540	
D(EXD)	2	-6.2374***	-9.2376***	I(1)
LnGCE	2	-3.0193	-2.5314	
D(lnGCE)	2	-4.2583**	-4.8632***	I(1)
LnGRV	2	-2.0476	-1.9803	

D(lnGRV)	2	-3.6750**	-4.5812***	I(1)
Critical Values				
	1%	-4.3139	-4.3139	-
	5%	-3.5742	-3.3742	-
	10%	-3.2226	-3.2224	-

*** represents stationary at 1% level of significance; ** represents stationary at 5% level of significance; * represents stationary at 10% level of significance

Level represents Logarithms of variables; 'D' represents that the variable has been differenced.

4.5.2 Johansen Cointegration Test

The result of Johansen cointegration test based on trace test is depicted in Table 4.2a. The test based on trace statistics test the null hypothesis that there is no cointegration among the variables. We reject the null hypothesis if the test statistic is greater than the critical values of the trace tests at 1% or 5%.

Table 4.2b provides the results of Johansen cointegration test based on the maximum eigenvalue. The test (maximum eigenvalue) is conducted on the null hypothesis of the number of cointegrating equations (r) against the alternative hypothesis of number of cointegrating equations plus one (r + 1). The null hypothesis cannot be rejected if the test statistic is smaller than the maximum eigenvalue test critical value.

In table 4.2a, the trace test which is much stricter reflected that at least three cointegrating equations exist at 5 per cent level of significance. As such the null hypothesis of no cointegration will be rejected if the trace (test) statistic of 272.8, 160.6 and 88.8 is greater than the 5 per cent critical value of approximately 142.9, 90.7 and 73.8 respectively. Hence the trace statistics specified 3 cointegrating relationship at 5 per cent levels of significance.

The maximum eigenvalue test in Table 4.2b indicates the existence of two cointegrating equations at 5 per cent levels of significance. Therefore, we can reject the null hypothesis of no cointegrating vectors since the eigenvalue statistic of 112.2 and 71.8 are greater than the 5 per cent critical value of 68.3 and 29.6 respectively.

Considering the result it can be concluded that there are three significant long run relationships between the variables using trace test and two significant long run relationship using Maximum Eigen value statistics. Since the variables can both have short or long run effects, we estimate the vector error correction model (VECM) which disaggregate these effects.

Table 4.2a: Johannes cointegration results based on (Trace statistics)

Unrestricted Cointegration RankTest (Trace)			
Hypothesized No. of CE(s)	**T.Statistic**	**C. Value0.05**	**Prob.value****
None *	272.8319	142.98620	0.0000
At most 1 *	160.6265	90.78214	0.0000
At most 2 *	88.81023	73.87610	0.0001
At most 3	42.61062	46.36547	0.0835

Trace test indicates 3 cointegratingeqn(s) at 0.05 levels

*denotes rejection of the hypothesis at the 0.05 levels

Table 4.2b: Johannes cointegration results based on (Max-Eigen statistics)

Unrestricted Cointegration Rank Test (Max Eigen-values)			
Hypothesized No. of CE(s)	**T.StatisticEigenvalue**	**C. Value 0.05**	**Prob.value****
None *	112.2054	68.39874	0.0010
At most 1 *	71.81630	29.69254	0.0000
At most 2	28.19961	48.36587	0.0603
At most 3	20.00664	32.39741	0.2427

Max-eigenvalue test indicates 2 cointegrating eqn(s) at 0.05 levels

*denotes rejection of the hypothesis at the 0.05 level

4.5.3 Vector Error Correction Model Estimates

The cointegration of the variables gives room for *VECM* estimation. The estimated *VECM* result is presented in appendix I and summarized in Table 4.3 below.The cointegration test provides evidence of long run relationship and for us to disaggregate the long run effects to the short run. The VECM provides information on how the short run disequilibrium relationship among the estimated variables is adjusted to the long run equilibrium path. The result of vector error correction based on cointegration is presented in table 4.3 below. The coefficients of variables are the long term elasticities of the normalized cointegrating vectors.

The standard error statistics are given in ( ) while the t-statistics are given [ ]. The coefficients for deficit financing (DF), domestic debt (DMD), and government consumption expenditure (GCE) are negative and significant, but the expected sign of

GCE were supposed to be positive it's negative because of crowding out effects of government expenditure to private investments.

On the other hand, the coefficients of external debt (EXD) and government revenue (GRV) are positive and significant.

In Table 4.3 (Panel A), lnDF is negative and statistically significant at 5% level of significance, as it relates to the level of gross domestic product. A 10% increase in deficit financing will results in a decrease in gross domestic product by 0.9%. The result for EXD is positive and significantly related to gross domestic product. A 10% increase in external debt will results in an increase in gross domestic product by 0.8%. The result for DMD is negatively and significantly related to GDP. A 10% increase in DMD will results in a decrease in GDP by 1.9%. The result for GCE is negative and significantly related to GDP. A 10% increase in GCE will results in a decrease in GDP by 1.1%. The result for government revenue is positively and significantly related to GDP. A 10% increase in GRV will results in an increase in GDP by 6.7%.

The speed of adjustment (dynamics of short run) is shown by the coefficient of the error correction terms (ECM). The results are presented in Table 4.3 (Panel B). The coefficient of D(lnGDP) is -0.398141. This indicates that, the speed of adjustment is 39.8% approximately. The implication is that, if there is a deviation from equilibrium only 39.8% is corrected in one year as the variable moves towards restoring equilibrium. Thus, there is relatively no strong pressure on lnGDP to restore long run equilibrium wherever there is a disturbance. The speed of adjustment coefficient has the correct sign (negative) and statistically significant with t-value of (-1.46).

Table 4.3: Results of Vector Error Correction Model

Panel A: Normalized Cointegrating Coefficients (Long Run Estimates)						
lnGDP(-1)	lnDF(-1)	lnDMD(-1)	lnEXD(-1)	lnGCE(-1)	lnGRV(-1)	Constant
1.000000	*-0.009565* *(0.00294)* *[-3.2536]*	*-0.192063* *(0.03615)* *[-5.3135]*	*0.083652* *(0.01037)* *[8.0702]*	*-0.112357* *(0.03458)* *[-3.2495]*	*0.675628* *(0.03182)* *[21.2302]*	*-1.465186*

Panel B: Coefficients of Error Correction Terms					
D(lnGDP)	D(lnDF)	D(lnEXD)	D(lnDMD)	D(lnGCE)	D(lnGRV)
-0.398141 *(0.27191)* *[-1.46422]*	*-15.68030* *(15.4445)* *[-1.01526]*	*0.053027* *(0.32830)* *[0.16152]*	*1.971664* *(0.91185)* *[2.16227]*	*0.421998* *(0.38826)* *[1.08690]*	*2.186346* *(0.45035)* *[4.85481]*

Source: Author's computation as summary of appendix I (E-Views 7.0 iterations Results);

Note: standard errors in ( ) and t-statistics in [ ]

4.5.4 Pairwise Granger Causality Test Analysis

Although the estimation of the Johansen cointegration established the existence of a long-run equilibrium relationship among the variables of the VECM models, but this does not provide any information about which of the variables cause the other. That is it does not indicate the direction of causality among variables. It therefore (Granger causality test) helps to determine the direction of causality between different variables of

the VEC model. The result of pairwise Granger causality test between gross domestic product and instruments of fiscal policy can be presented in the table below:

.

The results in the table below indicate that a bi-directional causal relationship exists between DMD to GDP; GRV to GDP and GRV to GCE. The result also provides evidence for a uni-directional causal relationship running from GDP to GCE; GCE to DF; EXD to DMD; EXD to GCE; and GCE to DMD.

Table 4.4: Pairwise Granger Causality Tests

Null Hypothesis:	**Obs**	**F-Statistic**	**Prob.**
LNDMD does not Granger Cause LNGDP	31	7.75739	0.0023
LNGDP does not Granger Cause LNDMD		5.37902	0.0111
LNGCE does not Granger Cause LNGDP	31	0.14064	0.8695
LNGDP does not Granger Cause LNGCE		2.58915	0.0543
LNGRV does not Granger Cause LNGDP	31	11.0523	0.0003
LNGDP does not Granger Cause LNGRV		11.2843	0.0003
LNGCE does not Granger Cause LNDF	31	3.11928	0.0411
LNEXD does not Granger Cause LNDMD		2.87466	0.0545
LNGCE does not Granger Cause LNEXD	31	0.48775	0.6195
LNEXD does not Granger Cause LNGCE		3.73711	0.0374
LNGRV does not Granger Cause LNEXD	31	0.41789	0.6628
LNEXD does not Granger Cause LNGRV		1.39448	0.2659

LNGCE does not Granger Cause LNDMD	31	8.71391	0.0013
LNDMD does not Granger Cause LNGCE		14.3404	0.0005
LNGRV does not Granger Cause LNDMD	31	1.31753	0.2851
LNDMD does not Granger Cause LNGRV		14.7749	5.00E-05
LNGRV does not Granger Cause LNGCE	31	3.18837	0.0478
LNGCE does not Granger Cause LNGRV		4.86886	0.016

Source: E-Views 7.0 iterations Test Results

4.5.5 Estimates for Impulse Responses

The response of GDP, DF, EXD, DMD, GCE and GRV to itself and to other variables in the generalized ordering for the 9 years is presented and the analysis is based on three periods of each term, where 1 to 3 periods represent the short term, 4 to 6 periods for medium term and 7 to 9 periods for long term. Hence, the figures given at each of the first periods are the basis of this analysis.

Table 4.51

Response of LOGGDP:						
Period	LOGGDP	LOGDF	LOGDMD	LOGEXD	LOGGRV	LOGGCE
Short Term	685867.5	0.000000	0.000000	0.000000	0.000000	0.000000
Medium Term	1941838.	-455550	472842.9	324262.7	-291876.5	252088.8
Long Term	3397367.	-2074265	1931315.	24021.96	-258084.4	475125.9

Source: E-Views 7.0 iterations Test Results

The response of LOGGDP to itself and other macroeconomic variables in table 4.5.1 above shows that, one unit shock of itself accounted for a positive response throughout the periods. Also, a unit shock of LOGDMD and LOGGCE are positive throughout the periods. But a unit shock of LOGDF and LOGGRV, are accounted for a negative response of LOGGDP in the medium and long term but positive in the short term.

Response of LOGDF:						
Period	LOGGDP	LOGDF	LOGDMD	LOGEXD	LOGGRV	LOGGCE
Short Term	0.596874	4.224945	0.000000	0.000000	0.000000	0.000000
Medium Term	-0.58241	1.628817	1.823122	-0.777107	0.950381	-0.346546
Long Term	-0.08185	0.252763	2.820783	-0.915684	0.680151	0.026509

Source: *extract from estimation output using E-views 7*

The response of LOGDF to itself and other macroeconomic variables in table 4.5.2

Above shows that, one unit shock of itself accounted for a positive response throughout the periods which is the same with LOGDMD and LOGVR. But a unit shock of LOGGDP and LOGEXD accounted for a positive response in the short term but negative in the medium and long term periods. Also, LOGGCE is accounted for a negative response in the medium term but positive in the short and long term period.

Response of LOGDMD:						
Period	LOGGDP	LOGDF	LOGDMD	LOGEXD	LOGGRV	LOGGCE
Short Term	-23159	-40926.4	142426.1	0.000000	0.000000	0.000000
Medium Term	198828.9	-219651	157850.9	13665.10	39498.22	-11292.5
Long Term	433903.7	-572613	526682.1	-123248.5	47651.30	48101.72

Source: *extract from estimation output using E-views 7*

The response of LOGDMD to itself and other macroeconomic variables in table 4.5.3

Above shows that, one unit shock of itself accounted for a positive response throughout the periods which is the same with LOGGRV. But, LOGDF is negative throughout the three periods. Also, a unit shock of LOGGDP is negative in the short term but positive in the medium and long term periods. LOGEXD accounted for a positive response in the short term and the medium but negative in long term period. Also, LOGGCE is accounted for a negative response in the medium term but positive in the short and long term period.

Response of LOGEXD:						
Period	LOGGDP	LOGDF	LOGDMD	LOGEXD	LOGGRV	LOGGCE
Short Term	104679.2	-108165	224053.8	197583.0	0.000000	0.000000
Medium Term	-761495	-240819	707245.3	186596.3	-500199	285876.9
Long Term	-546054	292112.8	93815.21	340813.5	-436035.8	187769.2

Source: *extract from estimation output using E-views 7*

The response of LOGEXD to itself and other macroeconomic variables in table 4.5.4

Above shows that, one unit shock of itself accounted for a positive response throughout the periods which is the same with LOGGCE and LOGDMD. But, LOGDF is negative in the short and medium term but positive in the long term. Furthermore, a unit shock of response in LOGGDP and LOGGRV are positive in the short term but negative in the medium and long term periods.

Response of LOGGRV:						
Period	LOGGDP	LOGDF	LOGDMD	LOGEXD	LOGGRV	LOGGCE
Short Term	387478.3	72.56754	-70727.8	-146368.1	97264.98	0.000000
Medium Term	769568.6	-180073	42188.01	178734.7	-240424	192987.6
Long Term	889951.2	-294119	618577.2	-30288.61	-422623.6	381135.7

Source: *extract from estimation output using E-views 7*

The response of LOGGRV to itself and other macroeconomic variables in table 4.5.5

Above shows that, one unit shock of itself accounted for a positive response in the short term and a negative in the other periods which is the same with LOGDF. In addition, LOGGDP and LOGGCE are positive throughout the three periods. LOGDMD is negative in short but positive in medium and long term. But, LOGEXD is negative in the short and long term but positive in the medium term.

Response of LOGGCE:						
Period	LOGGDP	LOGDF	LOGDMD	LOGEXD	LOGGRV	LOGGCE
Short Term	-8836.6	6945.003	17695.47	6740.455	-24229.97	15431.48
Medium Term	15287.72	12002.46	14018.69	8359.236	-32978.58	22484.36
Long Term	27305.21	-2164.16	25213.74	1433.179	-21934.68	17284.40

Source: *extract from estimation output using E-views 7*

The response of LOGGCE to itself and other macroeconomic variables in table 4.5.6

Above shows that, one unit shock of itself accounted for a positive response throughout the periods which is the same with LOGEXD and LOGDMD. But, LOGGDP is negative in the short term and positive in the medium and long term. Furthermore, a unit shock of response in LOGDF is positive in the short and medium term but, negative in the long term periods.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND POLICY RECOMMENDATIONS

5.1 Summary of Findings

This study investigates the impact of fiscal policy (using selected policy instruments as proxies) on economic growth in Nigeria. The data used is time series and span 1980-2012. The econometric technique used for the estimation of the model is Vector Error Correction Model (VECM). The series were tested to determine their statistical properties using Augmented Dickey Fuller (ADF) and Phillip Perron (PP). The series were found to be stationary or integrated of order one, that is, I (1). Also, a cointegration test was conducted. The result shows that, in Trace Test 3 cointegrating equation and 2 in Maximum Eigenvalue of the series used in the model.

The result of VECM shows that deficit financing, domestic debt and government consumption expenditure are negative and significant determinants of gross domestic product at 5% (α =0.05) level of significance. However, external debt and government revenue are positive and statistically significant at 5% level of significance. The granger causality test shows some variables having bi-directional causality, uni-directional causality and others without any form of causality. The impulse response function shows that the variables have various levels of shocks and innovation on itself and others.

5.2 Conclusion

In trying to achieve macroeconomic stability and sustainable growth in recent years, there has been excessive reliance by the government at different levels (Federal, State and local Government) on borrowing from different sources to finance fiscal deficits or complement internal resources. Furthermore, It's observed that, budget deficit is not the critical issue of interest. Instead it's the funding source, and quality of spending. The problem of debt would of course result if those resources that should have been deployed for the carrying out of productive programsare employed in the financing of current or past consumption. It will bring about the need to evaluate the economic and social rate of return of all government projects. Although some of the policy instruments were found to be statistically insignificant, but the overall fiscal policy effect on the Nigerian economic performance is significant looking at the result of Granger causality and impulse response function.

5.3 Policy Recommendations

From the findings it's observed that:

There is the need to address the problem of transparency on the part of the government. Most of the government policies targets are deviated from the actual as a result of secrecy in carrying out government programs and projects. Thereby, giving the policy more credibility and public expectations may come closer to the objectives of the government.

Conscious efforts must be made to improve the quality of government expenditure especially in terms of contracts awards and execution. This is to ensure value for the use of public resources.

Productive use of borrowed funds must be taking as a matter of necessity. Such funds should be used in carrying out productive programs so that, the settlements of principal and that of the interest elements will be improved. A powerful management of debt demands that borrowed resources should not be unproductively utilized so that social rate and that of the economic repay will be more than the future servicing cost of the debt.

There is also the need to employed civil servants that are well grounded in policy making. Most of the people in the field are not experts therefore cannot make policies that will engender a great change.

BIBLIOGRAPHY

Abbas, S. and Christensen, J. (2007) the role of domestic debt market in economic growth: An Empirical Investigation for Low Income Countries and Emerging Markets-IMF working Paper

Abubakar, M. (2008) 'The Implication of Global Financial Crisis on International Marketing' Unpublished M.Sc. Assignment on International Marketing Bayero University, Kano.

Adafu, S. N., Ogbolo F. and Essi D. (2010). Fiscal Policy and Economic Growth: Evidence from Nigeria (1970-2006). Journal of Economics, Management Studies and Policy (JEMSAP), 3(1), 1 - 15.

Adam, C. S. and Bevan, D. L. (2004).Fiscal Deficits and Growth in Developing Countries. Journal of Public Economics, Vo.89, pp. 511-597.

Adefeso, G. and Mobolaji, W. (2010) Domestic debt and the Nigerian Economy, Current Research Journal of Economic Theory 2(1):22-26

Adeoye, T. (2006) "Fiscal Policy and Growth of Nigerian Economy: An Empirical Perspective" NISER Monograph Series No 3, NISER Ibadan.

Adofu, I and Abula, M. (2010).Domestic debt and the Nigerian economy,Current Research Journal of Economic Theory 2(1):22-26

Ajayi, E.A. (1989). Nigerian debt management experience, Central Bank Nigeria, 13 (2)

Akanni K. A. and Osinowo O. H. (2013) "Effect of Fiscal Instability on Economic Growth in Nigeria", Advances in Economics and Business 1(2): pp. 124-133.

Alison, J., (2003). Key issues for analyzing domestic debt sustainability. Debt Relief International Publication, ISBN: 1-903971-07-1

Aniyanwu, J. E. and Oaikhenan, H. E. (1995).*Modern Macroeconomics: Theory and Applications in Nigeria*, Joanee Educational Publisher Ltd. pp363-386

Anyanwu, J.C. (1999) "An Analysis of the External Debt Burden of sub-Saharan Africa" in Africa Debt Burden and Economic Development, NES days Conference in Lagos.

Ashinze, R. and Onwioduokit, E. A. (2001), "Nigeria's Economic Growth and Foreign Debt: An Analytical Re-Examination" CBN Economic and Financial Review, 3(1), March.

Asogwa, R.C. (2005). Domestic government debt structure, risk characteristics and monetary policy conduct, evidence from Nigeria. Access from: http://www.inf.org/external/np/res/seminars/2007/macro/pdf/asogwa.pdf

Bamidele, T. B. and Joseph, A. I. (2013), "Financial Crisis and External Debt Management in Nigeria", International Journal of Business and Behavioural Sciences 3(4): pp. 62-

Barro, R. (1990). Government spending in a Simple model of Endogenous Growth.Journal of Political Economy, 98, S103 - S125.

Barro, R. and Sala-Martin, X. (1992).Public Finance in Models of Economic Growth. Review of Economic Studies, 59, 645 – 661

Barungi, B. and Michael, A. (2000) "Growth and Foreign Debt: The Ugandan Experience" in Ajai and Khan, External Debt and Capital Flight in sub-Saharan Africa, IMF.

Blinder, A. J. (2006) "The case against the case against discretionary fiscal policy".In The macroeconomics of fiscal policy. Cambridge: MIT Press.

Brauninger, M. (2002), "The Budget Deficit, Public Debt and Endogenous Growth", Journal of Economics, 63(41): pp.1-15.

CBN, (2005) Statistical Bulleting, Central Bank Nigeria December, Vol. 16 Access from: http://www.cenbank.org/OUT/PUBLICATIONS/RE[PRTS/RD/207/STABULL-2005.PDF

Central Bank of Nigeria (2012) Annual Report and Statement of Accounts 31st Dec. 2012, Abuja.

Central Bank of Nigeria (2012) CBN Statistical Bulletin. CBN, Abuja.

Chamberlin, G. and Yueh, L. (2006).Macroeconomics.London: Thomsom Publishers.

Chenery, H. and Syrquim, M. (1975).Patterns of Development, 1950 - 1970. London: Oxford University Press.

Christensen, J., (2004), Domestic debt market in Sub-Saharan Africa. IMF Working Paper Wp/0646.

Cohen, A. (2005) "Low Investment and Large LDC Debt in the 1980s" America Economic Review, 34: pp. 199-208.

De Castro, F. (2004). The Macroeconomic Effects of Fiscal Policy in Spain", Banco de Espana, Working Paper Series, http//www.bde.es

Diamond, J. (1990). Fiscal Indicators for Economic Growth: An Illusory Search. IMF Working Paper, August.

Dickey, D. A. and Fuller, W. A. (1979). "Distribution of the Estimators for Autoregressive Time Series with a Unit Root", *Journal of the American Statistical Association*, 74: pp. 427– 431.

Easterly, and Schmidt-Hebbel, K. (1993).Fiscal Adjustment and Macroeconomic Performance. Outreach 10 May, (World Bank Policy Research Department).

Easterly, W. and Rebelo, S. (1994), 'Fiscal Policy and Economic Growth: An Empirical Investigation', *Journal of Monetary Economics*, 32: 417-458.

Edwards, S. (2001) "Debt Relief and Fiscal Sustainability" NBER Working Paper 8939, Cambridge.

Ekpo, A. H. (1995). Public Expenditure and Economic Growth in Nigeria, 1960 - 1992. Fiscal Report, AERC, Nairobi, Kenya

Engel, R and Granger, C (1987) co-integration and error correction: representation estimation, testing, econometrics, 55:251-276

Engle, R. F., and Granger, C. W. J. (1987). Co-integration and Error Correction: Representation, Estimation, and Testing. *Econometrica*, 55, 251–276.

Eshang, E. (1983)An Expenditure Tax. Allen and Urwin, London.

Essien, E. A. andOnwioduokit, E. A. (2002) "Nigeria's Economic Growth and Foreign Debt: An Analytical Re-Examination" CBN Economic and Financial Review, 3(1), March.

Fatas, A. (2002) "The Effects of Business Cycles on Growth" Central Bank of Chile Working Papers No 156.

Gemmel, N. (2001). Fiscal Policy in a Growth Framework.World Institute for Development Economic Research, Discussion Paper No.2001/84, pp.1-23.

Granger, C. (1969).Developments in the Study of Cointegrated Economic Variables. Oxford Bulletin of Economics and Statistics, 48 (3), 355 - 369.

Gray, C. Tracey, L. and Varoudakis A. (2007): Fiscal Policy and Economic Growth. Lessons for Eastern Europe and Central Asia.World Bank; Washington, DC.

Grossman, H. and Elhannan, R. W. (1990) "Foreign Aid, Taxes and Public Investment" Journal of Development Economics, 24: pp. 355-369.

Grossman, P. J. (1997). Fiscal Decentralization and Public Sector Size in Austrialia.The Economic Record, 68(202), 240 – 246

Gunning, R. M. (1999)Economic Development. Allen and Urwin, London

Hnatkovska, V. and Loayza, N. (2005) "Volatility and Growth", the World Bank Working Paper Series, No 3184.

Horton, M. and El-Ganainy, A. (2009) "What is Fiscal Policy?" Finance and Development. IMF's Fiscal Affairs Department.

IMF (2001) Developing government bond markets: A Handbook (Washington).

Iyeli I. I. and Ijomah M. A. (2013), "A Re-examination of Fiscal Policy Applicability in Nigeria's Economic Growth Process: An Econometric Policy Evaluation from Empirical Evidence", AMERICAN JOURNAL OF SOCIAL ISSUES AND HUMANITIES, Vol. 3, Issues 4: pp. 180-

Iyoha, M. A. (1999) "External Debt and Economic Growth in sub-Saharan African Countries: An Economic Study", AERC Research Paper 90, Nairobi, Kenya.

Jhingan, M. L. (2003). Macroeconomic Theory.New Delhi: Vrinda Publishers.

Johansen, S. and Juselius, K. (1990).Maximum Likelihood Estimation and inference on Cointegration, with Applications for the Demand for money.Oxford Bulletin of Economics and Statistics (52), 169 - 210.

Johansen, S., (1988).A Statistical Analysis of Co-integration Vectors.Journal of Economic Dynanmics& Control Vol. 12, pp. 231–254.

Kraay, A. and Vikram, N. (2004) "What is External Debt Sustainability", World Bank Policy Research Working Paper 3200, February.

Lewis, W. A. (1955) the Theory of Economic Growth. Allen and Urwin, London.

Medee, P. N. and Nenbee, S. G. (2011), "Econometric Analysis of the Impact of Fiscal Policy Variables on Nigerian's Economic Growth", (1970 - 2009)", International Journal of Economic Development Research and Investment, 2(1): pp. 171-186.

Mihaljek, D.Scatigna, M. and Villar, A. (2002). Resent trend in bond markets BIS Working Paper 11,13-41

Mjema, G. D. (1996) "The Impact of Foreign Debt and Servicing in the Economic of Tanzania" African Journal of Economic Policy, 3(1).

Mohammed, S. T. (2009) "Domestic Debt Dynamics and Fiscal Sustainability in Nigeria: An Empirical Evidence" MPRA Paper No.18452, November. http://mpra.ub.uni- muenchen.de/18452/

Munongo, S. (2012), "Effectiveness of Fiscal Policy in Economic Growth: The Case of Zimbabwe", International Journal of Economic Review 3(6): pp. 93 - 99

Musgrave, R. A and Musgrave P. B. (2005).Public Finance in Theory and Practice.(5th ed.) New Delhi: Tata McGraw Hill publishing company.

Nathan, P. A. (2012), "The Impact of Fiscal Policy on the Nigerian Economy", International Review of Social Sciences and Humanities 4(1): pp. 142-150.

Ndekwu, E. C. (1996) "Government Borrowing, Money Supply and Monetary Policy in Nigeria", NISER, Ibadan.

Newey, W. and K. West (1994).Automatic Lag Selection in Covariance Matrix Estimation. Review of Economic Studies, Vol. 61, pp. 631-653.

Nurske, R. (1953)Problems of Capital Formation in Underdeveloped Countries.Oxford University Press.

Nwankwo, A. (2011). Federal government plans N794billion local debt to finance 2012 deficit, The Nation News Paper of 17th Dec. 2011.

Obadan, M. I. (1988) "External Loans and National Development: The Nigerian Experience" New Nigerian Bank Economic and Business Review, 1(2).

Obadan, M. I. and Uga, E. O. (2004) "Public Policies for Economic Development in a Deregulated Economy", NCEMA Policy Analysis Series, 1.

Obiyeluaku, M. (2006) Fiscal Policy in Nigeria; fixed or Variable?University of KwaZulu-Natal.

Odozi, V.A (1996), Nigeria's domestic public debt stock, an assessment CBN Debt Trend. 20(2)

Oke, M. O. (2012) External Debt, Economic Growth and Investment in Nigeria: European Journal of Business and Management Vol. 4, No. 11

Okonjo-Iweala N. and Osafo K. P. (2007) 'Nigeria's Economic Reforms: Progress and Challenges', The Brooking Institution, Washington, DC. www.brookings.edu/global

Okonjo-Iweala, (2011) "Frets over rising domestic liabilities", The Nation News Paper of 25th August, 2011.

Olukole, R(1991) Management of external debt of Nigeria, CBN Bullion,Vol.15, No 2

Omitogun, O. and Ayinla, T.A (2007) "Fiscal Policy and Nigeria Economic Growth". Journal of research in national development volume 5 no 2, December 2007.

Oyejide T.A., Soyede A. and M.O. Kayode (2004): *Nigeria and the IMF*. Heinemann Educational book Nig. Ltd Ibadan.

Pattillo, C. A., Poirson, H., and Ricci, L. A. (2002).*External debt and growth* (IMF Working Papers No. 02/69).International Monetary Fund.

Perotti R (2004). Estimating the effects of fiscal policy in OECD Countries.IGIER-University Bocconi and Centre for Economic Policy pp 1-43.

Philips, A. O (1997) "Nigerian Fiscal Policy, 1998 –2010", Nigerian Institute of Social Economic Research (NISER), Monograph Series No. 17, Ibadan.

Phillips, P.C.B. and Perron, P. (1988)..Testing for a Unit Root in Time Series Regression. Biometrika, Vol.75, pp.335–346.

Rapu , S (2003) Assessment of Nigerian domestic debt sustainability- CBN Economic and Financial Review, Vol 42 No2, 41-66.

Richard, W. K., Geoffrey, M. B. and Robert, K. T. (2009); "The Macroeconomics of Fiscal Policy", Cambridge: MIT Press.

Salawu, A. (2004),"The Budget Deficit and Economic Performance: A Survey", University of Wollongong, Economic Working Paper Series.

Sanusi, J (1988), Genesis of Nigerian debt problems and prospect of debt conversion; A Lecture delivered on Debt Conversion/ Asset Trading organized by Continental Merchant Bank of Nigeria Limited.

Sowa, N.K. (1994) Fiscal Deficit, Output Growth and Inflation Target in Ghana", World Development 22(8).

Vincent N. E., Ioraver N. T. and Ezi-Herbert W. (2012) "Economic Growth and Fiscal Deficits: Empirical Evidence from Nigeria", Economics and Finance Review 2(6): pp. 85 – 96.

World Bank, (2003) “Nigeria Policy Options for Growth and Stability”, Report No. 26215-NGA, Washington DC: The World Bank.

Wosowei E. (2013), “Fiscal Deficits and Macroeconomic Aggregates in Nigeria”, Kuwait Chapter of Arabian Journal of Business and Management Review Vol. 2, No.9; May, 2013 : pp. 72-

Zaglar, M. &Durnker, G. (2003) “Fiscal policy and economic growth” *Journal of Economic Surveys, 17(3.)*

Zhattau, V. S. (2013) “Fiscal Policy as an Engine of Economic Growth in Nigeria”, International Journal of Arts and Humanities (*African Researches Review*) 2 (2): pp. 282-298.

APPENDIX I: VECTOR ERROR CORRECTION MODEL ESTIMATION

LGDP = LNDF, LNEXD LNDMD, LNGCE LNGRV

Vector Error Correction Estimates

Date: 11/15/14 Time: 09:26

Sample (adjusted): 1983 2012

Included observations: 30 after adjustments

Standard errors in ( ) & t-statistics in [ ]

Cointegrating Eq:	CointEq1
LNGDP(-1)	1.000000
LNDF(-1)	-0.009565
	(0.00294)
	[-3.25361]
LNDMD(-1)	-0.192063
	(0.03615)
	[-5.31353]
LNEXD(-1)	0.083652
	(0.01037)
	[8.07022]

LNGCE(-1)	-0.112377
	(0.03458)
	[-3.24951]
LNGRV(-1)	0.675628
	(0.03182)
	[21.2302]
C	-1.465186

Error Correction:	D(LNGDP)	D(LNDF)	D(LNDMD)	D(LNEXD)	D(LNGCE)	D(LNGRV)
CointEq1	-0.398141	-15.68030	0.053027	1.971664	0.421998	2.186346
	(0.27191)	(15.4445)	(0.32830)	(0.91185)	(0.38826)	(0.45035)
	[-1.46422]	[-1.01526]	[0.16152]	[2.16227]	[1.08690]	[4.85481]
D(LNGDP(-1))	0.134823	9.767444	0.335661	-1.369727	-0.058227	-0.490631
	(0.36409)	(20.6799)	(0.43959)	(1.22095)	(0.51987)	(0.60300)
	[0.37030]	[0.47232]	[0.76358]	[-1.12186]	[-0.11200]	[-0.81365]
D(LNGDP(-2))	-0.619723	4.791764	0.455930	-0.749295	0.687783	-1.375880
	(0.31871)	(18.1024)	(0.38480)	(1.06877)	(0.45507)	(0.52785)
	[-1.94449]	[0.26470]	[1.18486]	[-0.70108]	[1.51137]	[-2.60659]
D(LNDF(-1))	0.007109	-0.220442	-0.013363	0.006697	-0.004777	0.024516
	(0.00599)	(0.34027)	(0.00723)	(0.02009)	(0.00855)	(0.00992)
	[1.18675]	[-0.64785]	[-1.84751]	[0.33338]	[-0.55842]	[2.47093]
D(LNDF(-2))	-0.001216	-0.136558	-0.014664	0.004264	-0.009613	0.001759
	(0.00420)	(0.23868)	(0.00507)	(0.01409)	(0.00600)	(0.00696)

	[-0.28939]	[-0.57214]	[-2.89031]	[0.30258]	[-1.60221]	[0.25277]
D(LNDMD(-1))	0.148515	2.999285	-0.054429	0.636510	0.707817	0.235711
	(0.17381)	(9.87246)	(0.20986)	(0.58287)	(0.24818)	(0.28787)
	[0.85445]	[0.30380]	[-0.25936]	[1.09202]	[2.85200]	[0.81881]
D(LNDMD(-2))	0.025786	-3.244790	-0.028516	0.969969	0.330709	0.579247
	(0.18400)	(10.4511)	(0.22216)	(0.61704)	(0.26273)	(0.30474)
	[0.14014]	[-0.31047]	[-0.12836]	[1.57198]	[1.25875]	[1.90077]
D(LNEXD(-1))	0.075230	5.306032	-0.138297	0.069177	-0.162066	0.043913
	(0.07867)	(4.46836)	(0.09498)	(0.26381)	(0.11233)	(0.13029)
	[0.95628]	[1.18747]	[-1.45602]	[0.26222]	[-1.44277]	[0.33704]
D(LNEXD(-2))	-0.111673	4.283507	0.119182	-0.129615	-0.012725	-0.366618
	(0.08795)	(4.99548)	(0.10619)	(0.29494)	(0.12558)	(0.14566)
	[-1.26973]	[0.85748]	[1.12238]	[-0.43947]	[-0.10133]	[-2.51689]
D(LNGCE(-1))	0.194710	6.548970	-0.095505	-0.445925	-0.237285	-0.117484
	(0.16300)	(9.25822)	(0.19680)	(0.54661)	(0.23274)	(0.26996)
	[1.19455]	[0.70737]	[-0.48529]	[-0.81580]	[-1.01952]	[-0.43519]
D(LNGCE(-2))	0.030436	15.28523	0.010839	0.057564	0.256029	-0.402070
	(0.14161)	(8.04327)	(0.17097)	(0.47488)	(0.20220)	(0.23453)
	[0.21493]	[1.90038]	[0.06340]	[0.12122]	[1.26622]	[-1.71434]
D(LNGRV(-1))	-0.054008	-16.83267	-0.009397	0.134228	0.027026	0.246775
	(0.15097)	(8.57500)	(0.18228)	(0.50627)	(0.21557)	(0.25004)
	[-0.35774]	[-1.96299]	[-0.05155]	[0.26513]	[0.12537]	[0.98695]

D(LNGRV(-2))	0.356966	-1.887684	-0.143292	0.094671	-0.012941	0.636728
	(0.16501)	(9.37229)	(0.19922)	(0.55334)	(0.23561)	(0.27329)
	[2.16334]	[-0.20141]	[-0.71925]	[0.17109]	[-0.05492]	[2.32989]
C	0.073838	-1.310938	0.052072	0.118089	-0.066343	0.165603
	(0.03310)	(1.87999)	(0.03996)	(0.11100)	(0.04726)	(0.05482)
	[2.23084]	[-0.69731]	[1.30303]	[1.06391]	[-1.40377]	[3.02095]
R-squared	0.542119	0.463912	0.499373	0.478541	0.628179	0.704347
Adj. R-squared	0.170090	0.028340	0.092613	0.054855	0.326075	0.464129
Sum sq. resids	0.066054	213.1025	0.096290	0.742825	0.134673	0.181189
S.E. equation	0.064253	3.649508	0.077577	0.215468	0.091745	0.106416
F-statistic	1.457197	1.065063	1.227685	1.129471	2.079344	2.932119
Log likelihood	49.20896	-71.97679	43.55566	12.90923	38.52335	34.07304
Akaike AIC	-2.347264	5.731786	-1.970378	0.072718	-1.634890	-1.338202
Schwarz SC	-1.693372	6.385678	-1.316485	0.726610	-0.980998	-0.684310
Mean dependent	0.086785	0.343333	0.087970	0.068870	0.067239	0.098979
S.D. dependent	0.070530	3.702346	0.081439	0.221633	0.111757	0.145370

Determinant resid covariance (dof adj.)	2.67E-11
Determinant resid covariance	6.14E-13
Log likelihood	166.3734
Akaike information criterion	-5.091558
Schwarz criterion	-0.887966

APPENDIX II: IMPULSE RESPONSE (Figure)

Response of LOGGDP: Period	LOGGDP	LOGDF	LOGDMD	LOGEXD	LOGGRV	LOGGCE
1	685867.5	0.000000	0.000000	0.000000	0.000000	0.000000
2	1146656.	-22407.86	490017.3	176611.5	-374210.1	280725.1
3	1711082.	-389289.6	141597.4	160200.9	-63992.13	97416.30
4	1941838.	-455550.4	472842.9	324262.7	-291876.5	252088.8
5	2170160.	-1030653.	962821.2	222497.7	130446.6	-8660.067
6	2614934.	-1541188.	1592688.	-59430.70	-207712.5	346743.7
7	3397367.	-2074265.	1931315.	24021.96	-258084.4	475125.9
8	3987775.	-2903990.	2053797.	121273.3	319312.6	59712.69
9	4385355.	-3731786.	3210575.	-28488.32	148528.2	289740.3

Response of LOGDF: Period	LOGGDP	LOGDF	LOGDMD	LOGEXD	LOGGRV	LOGGCE
1	0.596874	4.224945	0.000000	0.000000	0.000000	0.000000
2	0.963461	3.300207	1.054401	-0.099660	-0.014579	0.211523
3	-0.209701	2.570294	1.268056	-0.564768	0.396273	0.053193
4	-0.582406	1.628817	1.823122	-0.777107	0.950381	-0.346546
5	-0.907491	1.027903	3.113749	-0.968769	0.500492	0.024913
6	-0.358026	0.451728	2.858029	-1.239113	0.418171	0.246489
7	-0.081846	0.252763	2.820783	-0.915684	0.680151	0.026509
8	-0.096247	-0.803935	3.813540	-1.158922	1.646342	-0.637305
9	0.448591	-1.831276	5.482024	-2.027388	0.927876	0.210528

Response of LOGDMD: Period	LOGGDP	LOGDF	LOGDMD	LOGEXD	LOGGRV	LOGGCE
1	-23159.02	-40926.42	142426.1	0.000000	0.000000	0.000000
2	26599.54	-134122.7	204068.5	-59531.38	-5519.605	20349.50
3	134129.0	-148698.7	211431.8	-40232.99	-93166.81	94772.09
4	198828.9	-219650.9	157850.9	13665.10	39498.22	-11292.50
5	186343.7	-307079.7	297585.7	-20303.34	46131.01	-11406.73
6	259572.1	-412570.4	489173.4	-101581.7	-16916.59	74080.00
7	433903.7	-572613.1	526682.1	-123248.5	47651.30	48101.72

8	582656.1	-747232.6	630572.0	-82315.14	80027.04	26404.06
9	692067.7	-951304.5	780527.9	-106188.0	110273.1	29507.12

Response of LOGEXD:

Period	LOGGDP	LOGDF	LOGDMD	LOGEXD	LOGGRV	LOGGCE
1	104679.2	-108165.0	224053.8	197583.0	0.000000	0.000000
2	-373094.2	-323504.6	409958.4	281811.9	-15649.31	-52347.55
3	-720812.5	-370262.2	731225.3	234310.7	-332354.5	162552.5
4	-761494.9	-240819.2	707245.3	186596.3	-500199.0	285876.9
5	-592886.6	-67137.57	449290.7	264250.8	-503613.7	257990.4
6	-512734.7	135915.7	244725.3	355338.4	-498259.7	229606.0
7	-546053.7	292112.8	93815.21	340813.5	-436035.8	187769.2
8	-638075.7	390969.7	124623.6	303493.0	-409752.6	169803.7
9	-678345.6	420415.6	124652.0	277608.4	-424739.8	177306.7

Response of LOGGRV:

Period	LOGGDP	LOGDF	LOGDMD	LOGEXD	LOGGRV	LOGGCE
1	387478.3	72.56754	-70727.80	-146368.1	97264.98	0.000000
2	597098.1	-34129.53	179060.7	-12107.15	1293.076	50763.61
3	779864.8	-302835.2	99002.36	67803.57	118033.1	-53398.39
4	769568.6	-180073.0	42188.01	178734.7	-240424.0	192987.6
5	667820.9	-175362.8	32107.38	271545.1	12174.77	-20120.64
6	579645.0	-295020.8	372996.1	91249.27	14467.86	-18117.85
7	889951.2	-294118.8	618577.2	-30288.61	-422623.6	381135.7
8	1305100.	-328236.7	60514.43	160541.2	-173284.4	184606.7
9	1232681.	-362129.3	16313.07	397757.9	43452.38	-61647.88

Response of LOGGCE:

Period	LOGGDP	LOGDF	LOGDMD	LOGEXD	LOGGRV	LOGGCE
1	-8836.601	6945.003	17695.47	6740.455	-24229.97	15431.48
2	-9665.646	-212.5057	20532.04	6188.002	-14151.01	7294.740
3	-950.7860	4890.137	20974.44	1457.796	-30958.29	20286.95
4	15287.72	12002.46	14018.69	8359.236	-32978.58	22484.36
5	21014.84	7238.054	339.7023	11147.99	-11861.23	5275.031
6	19009.51	6514.242	22359.00	8048.526	-25360.77	16325.54
7	27305.21	-2164.161	25213.74	1433.179	-21934.68	17284.40
8	36864.03	-8996.936	23693.49	5160.241	-20213.53	15166.71
9	40442.45	-17443.29	31398.23	10338.03	-18644.34	13211.87

Cholesky Ordering: LOGGDP LOGDF LOGD

MD
LOGEX
D
LOGGR
V
LOGGC
E

APPENDIX III: GRANGER CAUSALITY

Pairwise Granger Causality Tests

Date: 11/13/14 Time: 14:12

Sample: 1980 2012

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
LNDF does not Granger Cause LNGDP	31	1.40974	0.2623
LNGDP does not Granger Cause LNDF		1.56428	0.2283
LNEXD does not Granger Cause LNGDP	31	1.33466	0.2807
LNGDP does not Granger Cause LNEXD		0.06000	0.9419
LNDMD does not Granger Cause LNGDP	31	7.75739	0.0023
LNGDP does not Granger Cause LNDMD		5.37902	0.0111
LNGCE does not Granger Cause LNGDP	31	0.14064	0.8695
LNGDP does not Granger Cause LNGCE		2.58915	0.0543
LNGRV does not Granger Cause LNGDP	31	11.0523	0.0003
LNGDP does not Granger Cause LNGRV		11.2843	0.0003
LNEXD does not Granger Cause LNDF	31	1.22694	0.3096
LNDF does not Granger Cause LNEXD		0.47273	0.6286

LNDMD does not Granger Cause LNDF	31	1.76778	0.1906
LNDF does not Granger Cause LNDMD		0.11576	0.8911
LNGCE does not Granger Cause LNDF	31	3.11928	0.0411
LNDF does not Granger Cause LNGCE		0.08078	0.9226
LNGRV does not Granger Cause LNDF	31	1.54923	0.2314
LNDF does not Granger Cause LNGRV		1.01005	0.3780
LNDMD does not Granger Cause LNEXD	31	0.39479	0.6778
LNEXD does not Granger Cause LNDMD		2.87466	0.0545
LNGCE does not Granger Cause LNEXD	31	0.48775	0.6195
LNEXD does not Granger Cause LNGCE		3.73711	0.0374
LNGRV does not Granger Cause LNEXD	31	0.41789	0.6628
LNEXD does not Granger Cause LNGRV		1.39448	0.2659
LNGCE does not Granger Cause LNDMD	31	8.71391	0.0013
LNDMD does not Granger Cause LNGCE		14.3404	6.E-05
LNGRV does not Granger Cause LNDMD	31	1.31753	0.2851
LNDMD does not Granger Cause LNGRV		14.7749	5.E-05
LNGRV does not Granger Cause LNGCE	31	3.18837	0.0478
LNGCE does not Granger Cause LNGRV		4.86886	0.0160

APPENDIX IV: DATA

Year	Real GDP growth rate	GDP at current basic prices	Federal Government Revenue (GRV)	Fiscal deficit/GDP	Domestic debt (DM)	External debt (EXD)	Federal government consumption expenditure (GCE)
1980	4.2	79,533.26	15,233.50	-3.9	10,536.40	1,948.60	5,897.00
1981	-13.1	94,325.02	13,290.50	-7.7	11,192.60	2,331.20	6,619.00
1982	-0.2	101,011.23	11,433.70	-11.8	15,007.60	8,819.40	6,816.00
1983	-5.3	110,064.03	10,508.70	-5.9	22,221.40	10,577.70	7,489.00
1984	-4.8	116,272.18	11,253.30	-4.2	25,672.10	14,808.70	6,925.00
1985	9.7	134,585.59	15,050.40	-4.2	27,949.10	17,300.60	7,342.00
1986	3.2	134,603.32	12,595.80	-11.3	28,438.70	41,452.40	7,488.00
1987	0.5	193,126.20	25,380.60	-5.4	36,789.10	100,789.10	7,395.00
1988	9.9	263,294.46	27,596.70	-8.4	47,029.60	133,956.30	9,253.30
1989	5.2	382261.49	53,870.40	-6.7	47,049.60	240,393.70	10,076.40
1990	6.2	472,648.75	98,102.40	-8.5	84,093.10	298,614.40	11,468.70
1991	4.7	545,672.41	100,991.60	-11	116,198.70	328,453.80	12,689.00
1992	3	875,342.52	190,453.20	-10.4	177,961.70	544,264.10	20,431.80
1993	2.7	1,089,679.72	192,769.40	-15.3	273,836.40	633,144.40	27,583.00
1994	1	1,399,703.22	201,910.80	-7.7	407,582.71	648,813.00	88,513.20
1995	2.4	2,907,358.18	459,987.30	0.1	477,733.93	716,865.60	123,152.30
1996	3.4	4,032,300.34	523,597.00	1.6	419,975.56	617,320.00	143,086.30
1997	3.2	4,189,249.77	591,151.00	-0.2	501,751.15	595,931.90	171,270.40
1998	2.4	3,989,450.28	463,608.80	-4.7	560,830.21	633,017.00	204,339.10
1999	2.8	4,679,212.05	949,187.90	-8.4	794,806.60	2,577,374.40	252,552.60
2000	3.8	6,713,574.84	1,906,159.70	-2.9	898,253.90	3,097,383.90	260,335.70
2001	4.6	6,895,198.33	2,231,600.00	-4.7	1,016,974.00	3,176,291.00	275,461.20
2002	3.5	7,795,758.35	1,731,837.50	-5.6	1,166,000.70	3,932,884.80	343,582.70
2003	10.2	9,913,518.19	2,575,095.90	-2.9	1,257,120.00	4,478,329.30	285,870.00
2004	9.6	11,411,066.91	3,920,561.10	-1.5	1,297,765.20	4,890,269.60	281,340.00
2005	8.2	14,610,881.45	5,547,029.50	-1.1	1,275,076.56	2,695,072.20	301,989.18
2006	9.9	18,564,594.73	5,967,372.10	-0.6	2,082,007.30	451,461.70	246,518.79

2007	9.7	20,657,317.67	6,034,615.60	-2.3	2,941,813.48	431,079.85	460,539.99
2008	8.5	24,296,329.29	7,866,590.38	-5.7	2,320,310.00	523,254.09	453,716.95
2009	6.4	24,794,238.66	4,844,592.34	-3.4	3,228,030.00	590,437.13	445,086.51
2010	6.3	33,984,754.13	7,303,671.55	-0.3	4,551,820.00	689,837.49	587,664.67
2011	7.8	37,409,860.61	11,116,900.00	-1.3	5,622,800.00	896,849.62	654,437.09
2012	8.5	40,544,099.94	10,654,724.87	-1.5	6,537,536.31	1,026,903.92	709,090.81

APPENDIX V: FIGURE 3

Year	Real GDP growth rate	GRV % GDP
1980	4.2	0
1981	-13.1	-12.75478386
1982	-0.2	-13.97088146
1983	-5.3	-8.090119559
1984	-4.8	7.085557681
1985	9.7	33.74210232
1986	3.2	-16.30920108
1987	0.5	101.5005002
1988	9.9	8.731472069
1989	5.2	95.20594854
1990	6.2	82.10817072
1991	4.7	2.945085951
1992	3	88.5832089
1993	2.7	1.21615179
1994	1	4.742142684
1995	2.4	127.8170856
1996	3.4	13.82857744
1997	3.2	12.90190738
1998	2.4	-21.57523205
1999	2.8	104.7389739
2000	3.8	100.8200589
2001	4.6	17.07308679
2002	3.5	-22.39480642
2003	10.2	48.69154294
2004	9.6	52.24912983
2005	8.2	41.48560266
2006	9.9	7.577796368
2007	9.7	1.126852807
2008	8.5	30.35777092
2009	6.4	-38.41560186
2010	6.3	50.75925976
2011	7.8	52.20974716
2012	8.5	-4.157410159

APPENDIX VI: FIGURE 2

Year	Real GDP growth rate	EXD % OF GDP	DMD % GDP
1980	4.2	0	0
1981	-13.1	19.63460946	6.22793364
1982	-0.2	278.3201784	34.08502046
1983	-5.3	19.93673039	48.06764573
1984	-4.8	39.99924369	15.52872456
1985	9.7	16.82727046	8.869550991
1986	3.2	139.6009387	1.75175587
1987	0.5	143.1441847	29.36280491
1988	9.9	32.90752671	27.83569046
1989	5.2	79.45680793	0.042526409
1990	6.2	24.21889592	78.73286914
1991	4.7	9.992619244	38.17863772
1992	3	65.70491801	53.15291823
1993	2.7	16.33036241	53.87378295
1994	1	2.474727724	48.8416843
1995	2.4	10.4887849	17.2115299
1996	3.4	-13.88622916	-12.09007072
1997	3.2	-3.464669863	19.47151163
1998	2.4	6.223043271	11.77457391
1999	2.8	307.1572169	41.71964809
2000	3.8	20.17593951	13.01540526
2001	4.6	2.5475402	13.21676421
2002	3.5	23.82004042	14.65393412
2003	10.2	13.86881457	7.814686561
2004	9.6	9.198526334	3.233199695
2005	8.2	-44.88908751	-1.748285437
2006	9.9	-83.24862317	63.28488542
2007	9.7	-4.514635461	41.296982
2008	8.5	21.38217316	-21.12654267
2009	6.4	12.83946772	39.12063474
2010	6.3	16.83504559	41.00922234
2011	7.8	30.0088257	23.52861053
2012	8.5	14.50123823	16.26834157

APPENDIX VII: FIGURE 1

Year	Real GDP growth rate	Fiscal deficit/GDP
1980	4.2	-3.9
1981	-13.1	-7.7
1982	-0.2	-11.8
1983	-5.3	-5.9
1984	-4.8	-4.2
1985	9.7	-4.2
1986	3.2	-11.3
1987	0.5	-5.4
1988	9.9	-8.4
1989	5.2	-6.7
1990	6.2	-8.5
1991	4.7	-11
1992	3	-10.4
1993	2.7	-15.3
1994	1	-7.7
1995	2.4	0.1
1996	3.4	1.6
1997	3.2	-0.2
1998	2.4	-4.7
1999	2.8	-8.4
2000	3.8	-2.9
2001	4.6	-4.7
2002	3.5	-5.6
2003	10.2	-2.9
2004	9.6	-1.5
2005	8.2	-1.1
2006	9.9	-0.6
2007	9.7	-2.3
2008	8.5	-5.7
2009	6.4	-3.4

2010	6.3	-0.3
2011	7.8	-1.3
2012	8.5	-1.5