

**EFFECT OF PUBLIC DEBT ON BANKING SECTOR PERFORMANCE IN
NIGERIA, 1995-2016**

BY

**ILIFU, KINGSLEY
PG/M.Sc/09/53954**

**DEPARTMENT OF BANKING AND FINANCE
FACULTY OF BUSINESS ADMINISTRATION
UNIVERSITY OF NIGERIA ENUGU CAMPUS**

AUGUST, 2018

**EFFECT OF PUBLIC DEBT ON BANKING SECTOR PERFORMANCE IN NIGERIA,
1995-2016**

BY

**ILIFU, KINGSLEY
PG/M.Sc/09/53954**

**DEPARTMENT OF BANKING AND FINANCE
FACULTY OF BUSINESS ADMINISTRATION
UNIVERSITY OF NIGERIA ENUGU CAMPUS**

**BEING A PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR AWARD OF MASTER OF SCIENCE (M.Sc) DEGREE TO THE
DEPARTMENT OF BANKING AND FINANCE**

SUPERVISOR: PROF. J.U.J. ONWUMERE

AUGUST, 2018

DECLARATION

I, Ilifu, Kingsley, a postgraduate student in the Department of Banking and Finance with Registration Number **PG/M.Sc/09/53954** do here by declare that the work embodied in this dissertation is original and has not been submitted in part or in full for Diploma or Degree of this University or any other institution of higher learning.

.....
ILIFU, KINGSLEY

PG/M.Sc/09/53954
(Student)

APPROVAL PAGE

This dissertation has been approval for the Department of Banking and Finance, Faculty of Business Administration, University of Nigeria, Enugu Campus by:

Prof. J.U.J. Onwumere
(Supervisor)

Date

Dr. Obiamaka Egbo
(Head of Department)

Date

DEDICATION

This research work is dedicated to God Almighty, the giver of Life and to my Family for their moral support.

ACKNOWLEDGEMENTS

With immersed joy and gladness in my heart I will like to appreciate several individuals whose assistance made it possible for the successful completion of this research.

It is a pleasure to offer my immense appreciation to my dear supervisor, Prof. J.U.J. Onwumere, not just for the academic guidance provided on the course of this study but his efforts (beyond academics) in trying to place me on the path of success. I am grateful! Sincerely, I have no doubt that I'm very fortunate to have you as a supervisor. You are truly a father in all sphere of endeavours and it's indeed a privilege to learn under your tutelage. God bless you abundantly.

I sincerely want to appreciate our head of Department, Dr. Obiamaka, E for her support and encouragement.

My appreciation goes to my Lecturers in department of Banking and Finance for their wonderful cooperation, support and contribution throughout the period of this study especially Dr.Imo Ibeh. My thanks also goes to the Staff of Faculty of Business Administration (academics and non-academics). They have always been ready to offer assistance and have displayed the highest standards of professionalism. A big thank you to my friends Dr. David Ugwunta, Dr. Edward Eleje and Charles Ubagwu for their invaluable support and encouragement.

I am also grateful to several authors whose works were consulted in this research. I am indebted to my colleagues at the University whose suggestions and reactions through the years have done much to sharpen my knowledge as well as my ideas on how to present this research.

Ilifu, Kingsley

ABSTRACT

This study sought to achieve the following objectives: (i) investigate the impact of federal government's external borrowings on the lending rates of deposit money banks in Nigeria, (ii) determine the effect of federal government's domestic borrowings on commercial banks total deposit liabilities in Nigeria, (iii) examine the effect of federal government's domestic borrowings on commercial banks total credit, and; (iv) evaluate the effect of federal government's domestic borrowings on the total assets of commercial banks in Nigeria. The study adopted *ex-post facto* research design. It was conducted using 16 year annualized time series data spanning the period, 1995-2016. Data were generated from the Central Bank of Nigeria Statistical Bulletin. Four research hypotheses were formulated in the process of the research as follows: (i) Federal Government's external borrowings had no positive and significant effect on the lending rates of deposit money banks in Nigeria, (ii) There was no significant positive effect of Federal Government's domestic borrowings on the commercial banks total deposit liabilities in Nigeria, (iii) Federal government's domestic borrowing did not have a significant positive effect on commercial banks' total credit in Nigeria, and (iv) federal government's domestic borrowing did not have a significant positive effect on the total assets of commercial banks in Nigeria. The dependent variable for the four hypotheses was the banking sector performance measured by commercial Banks lending rates, their deposit liabilities, their total credits, and their total assets. The explanatory variables were government external debt components for hypothesis one and government domestic debt components for hypotheses two to four. The four hypotheses were tested at 5% level of significance via IBM computer-based bi-variate linear regression model using the current statistical package for social science (SPSS) version 20. Findings show that there was no significant positive effect of federal government's external borrowings on the lending rates of deposit money banks in Nigeria; there was significant positive effect of federal government's domestic borrowings on commercial banks total deposit liabilities in Nigeria; Government's domestic borrowing had a significant positive effect on commercial banks' total credit in Nigeria; and Federal government's domestic borrowing had a significant positive effect on the total assets of commercial banks in Nigeria. Considering the findings, the following recommendations are made: Government should reduce her financing expenditure using external debt and should rather adopt more of domestic debt financing strategy as servicing external debt have been found to be more expensive. Secondly, the presence of a well-functioning autonomous domestic debt market could help reduce the rate at which government borrows from outside, therefore, such robust domestic debt market should be established in Nigeria.

TABLE OF CONTENTS

Title page	i
Declaration	ii
Approval page	iii
Dedication	iv
Acknowledgements	v
Abstract	vi
Table of Contents	vii
List of table	x
List of figures	xi

CHAPTER ONE: INTRODUCTION

1.1	Background to the study	1
1.2	Statement of the Problem	3
1.3	Objectives of the Study	5
1.4	Research Questions	5
1.5	Research Hypotheses	6
1.6	Scope of the Research	6
1.7	Significance of the Study	7
1.8	Operational Definition of terms	8

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1	Introduction	10
2.2	Conceptual Review	10
2.2.1	Concept of Public Debt	10
2.2.2	Concept of Banking Sector Performance	11
2.3	Contextual Review	12
2.3.1	Public Debt and the Nigeria Experience	12
2.3.2	Performance and Rationale of Public Debt in Nigeria	13
2.3.3	Effect of Public Debt in Nigeria	14
2.3.4	Debt structure and management in Nigeria	16
2.3.5	Genesis and Growth of Public Debts in Nigeria	18

2.3.6	Public Debt burden versus debt service burden in Nigeria	20
2.4	Theoretical Review	21
2.4.1	Capital Structure Irrelevance Theory	21
2.4.2	Trade-Off Theories	22
2.4.3	Signaling Theories	23
2.4.4	Debtcum – Growth Theory	25
2.4.5	Threshold School of Thought (Debt-Later Curve Thesis)	26
2.4.6	Profligacy Theory	26
2.5	Empirical Literature	29
2.6	Knowledge Gap	38
2.7	Summary of the Literature Review	39

CHAPTER THREE: RESEARCH METHDOLOGY

3.1	Introduction	42
3.2	Research Design	42
3.3	Area of the Study	43
3.4	Nature and Source of Data	43
3.5	Specification of Models	43
3.6	Justification of proposed models	45
3.7	Explanation of the Research Variables	46
3.8	Techniques of Data Analysis	47

CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS

4.1	Introduction	48
4.2	Data presentation and interpretation	48
4.3	Analysis and test of Hypothesis	53
4.4	Discussion/Implications of Findings	67

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1	Introduction	72
5.2	Summary of Findings	72
5.3.1	Conclusion	72

5.4	Recommendations	73
5.5	Contribution to Knowledge	74
	Bibliography	76

LIST OF TABLE

Table 4.1:	Annualized Values of the Research Variables1995 – 2016	49
Table 4.2:	Regression Results Summary for Hypothesis One A	54
Table 4.3:	Regression Results Summary for Hypothesis One B	57
Table 4.4:	Regression Results Summary for Hypothesis Two	61
Table 4.5:	Regression Results Summary for Hypothesis Three	63
Table 4.6:	Regression Results Summary for Hypothesis Four	66

LIST OF FIGURE

Figure: 4.1 Annualized Values of the Research Dependent Variables1995 – 2016	51
Figure: 4.2 Annualized Values of the Research Independent Variables1995 – 2016	53

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Generally, debt refers to the resources of money in use in either public or private organization which is not contributed by its owners and does not in any other way belong to them. It is a liability which could be represented by a financial instrument of other formal equivalents. When a government borrows, the debt is a public debt. According to Udoka and Ogege (2012), public debt constitute that amount of money owned by the government to institutions, government agencies and other bodies resident in or outside Nigeria. Again, public debt are debt owe by the government internally or externally whether interest-bearing or not and include bank-held debt and government currency, if any; less any claims held by the government against the private sector and foreigners. External debt as documented in Eleje, et.al., (2012) comprise obligations the government owe to multilateral bodies, London Club, Paris Club, foreign promissory notes and other unclassified external borrowings. On the other hand, Nigeria's domestic debt is defined mainly as debt instruments by the federal government and denominated in local currency. It consists mainly of Nigerian Treasury Bills, Nigerian Treasury Certificates, Treasury Bonds, Federal Government Development Stocks, Ways and Means, and recently considered are Contractor debts (Central Bank of Nigeria, 2010; Adofu and Abula, 2010; and Obademi, 2012).

Public debt oftentimes results in economic hardship or burden if not managed appropriately. The hardship may take the form of waste of productive efficiency for the economy as a whole or undesirable economic burdens imposed upon particular classes. The debt burden in Nigeria has resulted in various distortions in the macroeconomy. Essentially, these distortions are structural in nature, and thus affect the level of per capita incomes and are instrumental to the rising poverty in

the country (Nzotta, 2004). The latter has attracted the attention of various authors and Nigerian economic planners.

A country's debt structure could affect her individual citizens, institutions of government, privately owned corporate organizations like banks and consequently the economy at large. The debt structure in this context is the magnitude of the domestic debt as well as the magnitude of the external debts. The issue of Nigeria's public debt became important in recent times especially prior to the period of the debt forgiveness because of its magnitude and the amount which was required to service such debts as well as its attendant possible effects on different operating sectors of the economy especially the banking sector and the growth of the economy at large. As at year end, December 2005, Nigeria external debt was N2,696 Trillion of which about N2,029 Trillion or 85% was owed to the Paris club of fifteen creditor nations.

Apart from external debts, Nigeria's aggregate domestic debt as at 31st December, 2005 was N1,275 Trillion of which about N801B or about 63% was owed the banking institutions as reported by the debt management office (DMO, 2006). According to Obademi (2012), three reasons have been advanced for such growing government debt. First, government borrowed to finance emergencies such as natural disasters and economic depression. Secondly, government borrowed to finance important capital projects such as water dams, agricultural development projects, river basin development projects; and thirdly, she borrowed to finance current expenditure in anticipation of reasonable revenue collection.

The genesis of the market for public debt in Nigeria was the financial reforms introduced by the colonial government in 1958 which led to the creation of the Central Bank of Nigeria and the creation of marketable public securities to finance anticipated fiscal deficits. The Central Bank of

Nigeria ordinance 1958 explicitly stated inter alia that: “the Bank shall be entrusted with the issue and management of federal government loans publicly issued in Nigeria, upon such terms and conditions as may be agreed between the federal government and the Bank”. To the ordinary man however, public debt evidenced in budget deficit might not make sense. But different governments since independence have used budget deficit as a means of fostering policy agenda as occasion demands.

1.2 STATEMENT OF THE PROBLEM

Notable researchers and concerned academics like Islam and Biswas (2005), Onyeiwu (2012), Udoka and Ogege (2012) are yet to agree on the roles of public debt in economic development. While some argue that public debt is a credible instrument of growth and effective economic performance, others dismiss such position insisting that public debt rather triggers debt crisis and worsens economic situations. Drine and Nabi (2009), in agreement with the debt cycle thesis proposed by Avramovic (1964), argue that external debt is an important funding source for an economy characterized by low domestic savings. According to them, domestic savings in the long run should increase to finance a higher proportion of investment and to repay the external debt contracted in the first stage of development. But Obademi (2012) consistent with Krugman and Proot (1989) showed that there is limit to which debt accumulation stimulate investment and growth. He documents that at high levels of indebtedness, growth and investment would only improve if part of the current debt service obligations of a debtor country were forgiven.

On the other hand, studies including Islam and Biswas (2005), Onyeiwu (2012), Udoka and Ogege (2012) amongst others hold that public debt has negative effect on economic growth. They argue that high public debt leads to high taxes and puts upward pressure on real interest rates, which may crowd out private investment. Onyeiwu (2012) particularly document that

domestic debt holding of government was far above a healthy threshold of 35 percent over the period of his study presenting evidence of crowding out of private investments.

As the above universal debate is yet unsettled, there is presently another widespread argument in respect of the developing nations that excessive public indebtedness of these countries is a major impediment to their growth and stability. Recent studies including Bolle, et.al., (2006), Guscina and Anastasia, (2008), and Eleje, et.al., (2012), have documented that developing countries have contracted large amount of external debts, often at highly concessional interest rates particularly in the 1970s and 80s. The hope was that these loans would put them at faster development path through higher investment and faster growth. But as debt service ratios reached very high levels, it became obvious that for many of these countries, debt repayment became a major constrain to their economic performance.

Meanwhile, an extensive body of literature have attempted to examine how the structure of public debt could affect the stage of national development in a country and how fiscal policy and the resulting level of debt could affect macroeconomic stability (Audu, 2004; Reinhart and Rogoff, 2009; and, Udaibir, et. al., 2010). While most of these studies explicitly acknowledged the role of proper management of public debt in promoting overall economic growth of nations, major sectorial evidences such as the effect of public debt on the banking sector is still inadequate. This means that there is still a research gap that needs to be covered in this direction. Moreover, even in situations where research evidence exist, majority of the studies used data from the developed nations. The studies therefore could not capture the socio-political and business environmental differences in the developing countries. In Nigeria today, there is this popular opinion although lacking in empirical validation that external debt overhang is one of the major factors that has contributed largely to the poor bank credit accessibility by businesses due to

associated high interest rates within the last decade. This study is therefore an attempt to fill these research gaps.

1.3 OBJECTIVES OF THE STUDY

This research generally appraises the effects of public debt on the performance of the banking sector in Nigeria. Specifically, the study is set to achieve the following objectives:

- i. To investigate the impact of federal government's external borrowings on the lending rates of deposit money banks in Nigeria,
- ii. To determine the effect of federal government's domestic borrowings on commercial banks total deposit liabilities in Nigeria,
- iii. To examine the effect of federal government's domestic borrowings on commercial banks total credit, and;
- iv. To evaluate the effect of federal government's domestic borrowings on the total assets of commercial banks in Nigeria.

1.4 RESEARCH QUESTIONS

Based on the statement of research problem and the objectives of the study, this research will answer the following questions:

- i. To what extent did the federal government's external borrowings affect the lending rates of deposit money banks in Nigeria?
- ii. To what extent did the federal government's domestic borrowings affect commercial banks total deposit liabilities in Nigeria?

- iii. To what extent did the federal government's domestic borrowings affect commercial banks total credit in Nigeria?
- iv. How far had the federal government's domestic borrowings affected the total assets of commercial banks in Nigeria?

1.5 RESEARCH HYPOTHESES

Arising from statement of the problem, the research objectives, and the research questions, the following null hypotheses are formulated to guide the study:

- i. Federal government's external borrowings had no positive and significant effect on the lending rates of deposit money banks in Nigeria.
- ii. There was no significant positive effect of federal government's domestic borrowings on the commercial banks total deposit liabilities in Nigeria
- iii. Federal government's domestic borrowing did not have a significant positive effect on commercial banks' total credit in Nigeria, and;
- iv. Federal government's domestic borrowing did not have a significant positive effect on the total assets of commercial banks in Nigeria.

1.6 SCOPE OF THE RESEARCH

The timeframe for the analysis of this study will be the period 1995 – 2016. This is a twenty two (22) year period which will cut across the pre-debt cancellation era and the post-debt cancellation era. It could be recalled that in June 2005, following an initial move by the federal house of representative, a deal on Nigeria debt reduction emerged from the Paris club which led to the cancellation of 60% of Nigeria's bilateral debt amounting to \$18 billion (Webbler, 2007). The need to empirically evaluate the performance of the banking sector following the debt relief among others informed the choice of this period of study. The study therefore will be

comparative in nature and as such will be divided into two periods viz;eleven years before debt cancellation and eleven years after debt cancellation respectively.

1.7 SIGNIFICANCE OF THE STUDY

This study will be of immense benefits to several groups of people including the government, banks and other financial institutions, business organizations and academics in diverse ways:

Government: The result of this study will aidthe federal government review its policies on external debt and adopt more of domestic debts, as servicing of external debt appears to be expensive.This will also improvethe implementation of the monetary and fiscal policy. It will serve as aguide to the government on budgetary allocations, debt management as well as management and control of budget deficits to ensure effective regulations of macroeconomic factors like inflation rate amongst others.

Banks and Other Financial Intermediaries: Banks and other financial intermediaries are expected to profit significantly from the outcomes of this research. The study will enable banks and other financial intermediaries have indepth knowledge of the effect of government borrowings on their deposit liabilities, assets, and their overall performance. Consequently, it will enable them to device appropriate negotiation strategies with the government monetary authorities as occassion demands.

Financial Market Regulators: The research will also provide required empirical and theoretical base concerning the effects of government debt to financial market regulators like the Central Bank of Nigeria (CBN), Ministry of Foreign Affairs, Debt Management Office, amongst others. Such insight will offer useful guide to these regulators in designing appropriate regulations for the economy.

Policy Analysts and Reading Public: The outcome of this research is also expected to be of significance to policy watchers and analyst. This group of people will utilize the platform of this study in their analysis on public debt and financial market performance in Nigeria. Similarly, the general public, through the findings of this research, will be better informed on the level, nature and impacts of government's domestic and external borrowings on the Nigerian economy.

Academics: Academically, this study will contribute to the enrichment of literature on debt management in Nigeria. It will empirically establish the significant impact of public debt on banking sector performance. The study is expected to provide important information to guide future researchers.

1.8 OPERATIONAL DEFINITION OF TERMS

Debt Structure: This is the composition of debt instruments and their maturities (Bolle, et.al., 2006)

Domestic Debt: The proportion of government debt or borrowing incurred internally such as treasury bills, bonds, etc (CBN, 2009).

Economic Growth: This is a rise in the productive capacity of a nation on a per capita basis. It involves the expansion of the economy on a simple widening process (Eleje, Nwokeji, and Onwumere 2008/09)

External Debt: The proportion of government debt or borrowing incurred outside the country such as Paris Club loans, London Club loans, etc (CBN, 2009).

Financial stability: Financial stability relates not only to the absence of financial crises but also to the inherent ability of the financial system to avoid, contain, and deal with imbalances that could pose a threat to the system or to economic processes (Guscina and Anastasia, 2008).

Per Capita Income: This is a measure of mean income within an economic aggregate such as a country or city. It is calculated by taking a measure of all sources of income in the aggregate such as GDP or GNI and dividing it by the total population (Wikipedia, 2012).

Performance: This is the accomplishment of a given task measured against preset known standard of accuracy and completeness. To a business organization, it implies the results of activities of the organization or investment over a given period of time (Hornsby, 2006).

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

This chapter generally reviews related literature on debt and the performance of the Nigeria economy but with special attention to how public debt has influenced the performance of banking system overtime. In order to achieve proper evaluation, both the conceptual framework as well as theoretical and empirical literature relevant to the research objectives were reviewed. The theoretical framework centred on theories of capital structure including Modigliani and Millers Irrelevance theory, Trade-off theory and Signaling theory. It further reviewed theories that are specific to government debt and the economy such as Debt-cum-growth theory, Threshold school of thought, and Profligacy theory respectively. Subsequently, numerous empirical studies concentrating on the main objectives of the research were also evaluated. The chapter concludes with summary of the literature review.

2.2 CONCEPTUAL REVIEW

2.2.1 CONCEPT OF PUBLIC DEBT

Public or government debt generally mean debt obligations owe by the government within its economy or externally. The Central Bank of Nigeria (2010) has defined foreign debt or external borrowings as debt obligations the government owe to multilateral bodies, London Club, Paris Club, foreign promissory notes and other unclassified external borrowings. Debt instruments are IOU certificates, that is, certificates that acknowledge indebtedness. They are the tools governments often use to borrow money from the public. In principle, state and local government can also issue debt instrument, but limited in their ability to issue such. In Nigeria, public domestic debt instruments consist of Nigerian Treasury certificates, Federal government

development stocks and treasury bonds (Adofu and Abula, 2010). The instruments are being held by banks and other financial institutions as well as other private non-banks institutions. Out of these instruments, treasury bills, treasury certificates 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. The Central Bank of Nigeria (CBN) is the banker and financial adviser to the federal government and as such, it is charged with the responsibility for managing the public debt.

2.2.2 CONCEPT OF BANKING SECTOR PERFORMANCE

Bank performance according to the European Central Bank (ECB, 2010) is measured in terms of the bank's capacity to generate sustainable profitability. Profitability is a bank's first line of defence against unexpected losses, as it strengthens its capital position and improves future profitability through the investment of retained earnings. An institution that persistently makes a loss will ultimately deplete its capital base, which in turn puts equity and debt holders at risk. Moreover, since the ultimate purpose of any profit-seeking organisation is to preserve and create wealth for its owners, the bank's return on equity (ROE) needs to be greater than its cost of equity in order to create shareholder value. Although banking institutions have become increasingly complex, the key drivers of their performance remain earnings, efficiency, risk-taking and leverage. These variables are directly influenced by the interest rates the banks pay depositors for their deposits or the interest rates the banks receive in their process of creating credits to the public. Bank performance could also be influenced by their total credit facilities as well as deposit liabilities (Ang and Clark, 1997; Dev and Rao, 2006/2007). While it is clear however that a bank must be able to generate earnings, it is also important to take account of the composition and volatility of those earnings. Efficiency refers to the bank's ability to generate

revenue from a given amount of assets and to make profit from a given source of income (Abuzayed and Molyneux, 2009). Risk-taking is reflected in the necessary adjustments to earnings for the undertaken risks to generate them (e.g. credit-risk cost over the cycle). Financial Leverage involves the introduction of debt in firms capital structure. It involves the use of debt to fund a firms investment in an attempt to magnify shareholders value. The rationale is often based on the understanding that interest funding is tax allowable unlike equity and as such, offers financial relief on its holder (Pandey, 2006). For the banking industry, leverage might improve results in the upswing in the way it functions as a multiplier but, it can also make it more likely for a bank to fail, due to rare, unexpected losses.

The use of debt in a firm's capital structure or investment proposals has been the subject of intensive theoretical modeling and empirical examination over the years. Much of the literature on this question takes its departure from the seminal writings of Modigliani and Miller (1958) and their Theorem of Irrelevance. Since this period, many researchers have subsequently argued their case for and against the firm's optimal value capital structure (Wen-Jhan; 2010; Muhammed and Qamar, 2010; Fabrizio, et.al, 2011; Meysam, Shaer, and Soleimani, 2012).

2.3 CONTEXTUAL REVIEW

2.3.1 PUBLIC DEBT AND THE NIGERIA EXPERIENCE

When the government spends more than it receives using some sort of security to cover the deficiency, it normally lead to debt as source of fund. The aggregate of securities over timeless redemption is called the national debt (Ajayi, 1991). The foregoing statement points to the fact that government accumulates debt simply by running deficits through borrowing on the distribution of such securities. National debt consists of all securities issued by the federal

government and held by the Central Bank of Nigeria, individuals and foreigners, government and trust funds, private sector as well as those held by commercial banks.

Various approaches have been adopted towards making public debt sustainable in Nigeria. Under the Structural Adjustment Programme (SAP), Nigeria adopted the following strategies to ameliorate domestic debt: acquisition of domestic debt, restructuring of domestic debt, and servicing of domestic debt. On the external front, the following strategies were employed: embargo on new loans, limit on debt servicing payments (maximum 30% of export earnings); debt restructuring through refinancing, rescheduling, buyback, issuance of collateralized bonds, and the provision of new money, and debt conversion schemes. In spite of these and international debt reduction strategies such as the Baker Plan (1985), the Paris Club plan (1987), the Africa Development Bank (ADP) plan, the Brady plan (1989), the IMF Facilities comprising the Structural Adjustment Facility, External Fund Facility, the Enlarged Access Policy, the Enhanced Structural Adjustment Facility, and Compensatory and Contingency Financing Facility have not change the picture from what it used to be for mostly Africa countries. Despite the World Bank facilities (structural adjusted lending, the reduction facility, the special programme of assistance and the trade investment and policy loan), Toronto and Trinidad terms, the Houston terms and the Naples term, Nigeria's public debt continued to grow like an avalanche (Ajayi, 1991; Ani, 1997; Anyanwu, 1997).

2.3.2 PERFORMANCE AND RATIONALE OF PUBLIC DEBT IN NIGERIA

Within period under review domestic debt grew astronomically averaging 114.98 percent of bank deposits (Obademi, 2012). In 1994, debt as percentage of bank deposits was 250 percent and reduced progressively to 74.94 percent in 2005 and was as low as 7.62 percent of bank deposits in 2008. In terms of tenor, the domestic debt was highly short tenured until recently. For instance

in 1994, treasury bills accounted for 42 percent of domestic debt, treasury bond accounted for 48 percent, treasury certificate accounted for 9.16 percent and development stock accounted for 8.22 percent of domestic debt and this was the trend until 2007. In 2002, treasury bill accounted for 62.93 percent, treasury bond accounted for 36.93 percent and development stock which is the long term instrument accounted for a mere 0.14 percent of domestic debt (Adofu and Abula, 2010). 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 percent, treasury bond accounted for 18.80 percent and federal government bonds which is the long term instrument accounted for 54.67 percent of the domestic debt.

Theoretically, there are three reason often advanced for government debt (Alison, et. al., 2003). The first, is for budget deficit financing, the second is for implementing monetary policy and the third, is to develop the financial sector by supplying tradable financial instrument so as to deepen the financial markets. But Ola and Adeyemo (1998) while explaining the reasons for increasing public debt on the part of the Nigerian government identified three factors: Government borrowed to finance emergencies such as natural disasters and economic depression; Government borrowed to finance important capital projects such as water dams, agricultural development projects, river basin development projects; and, government borrowed to finance current expenditure in anticipation of reasonable revenue collection.

2.3.3 EFFECT OF PUBLIC DEBT IN NIGERIA

Large public debt espacially, internal domestic debt tends to crowd out private investment. The process of crowding out arises from the fact that once the government borrows heavily from the domestic market, a shortage of loanable fund arise forcing interest rate up. Between 1994 and

2003, a period of large deficit financing, interest rate was on an average of 23.05 percent but between 2004 and 2008, a period of low deficit financing and lower debt ratio, interest on the average reduced to 19.23 percent (Onyeiwu, 2012).

Another significant effect of public debt is high rate of poverty. The welfare implication of public debt is the unemployment rate increase due to the closure of industries and decline in government finance on social service, infrastructure service since most part of government revenue are used to service the debt. The resultant effect of all these is that the rate of poverty continue to rise in the country (Olukole 1991). For instance in 1996 a period of high debt ratio, the poverty line was 65.6 percent whereas in 2004, a period of reducing debt ratio, the poverty line reduced to 54.4 percent, though it further increased to 63 percent in 2009 (NBOS, 2009).

Internal debt may also aid government development program if the government sells bonds and development stocks to members of the public to finance its capital expenditure thereby pulling out funds out of personal and corporate income which is effectively utilize in infrastructural projects which by a multiplier effect facilitate generation of a multiple of that income leading to economic growth. It is this situation that commends the switch from overtly preponderance of short term debt instruments in the 1990s to long term debt instruments from 2006.

An important component of debt management is to stimulate a diverse investor base and develop instruments, trading facilitation and distribution network that best suite the needs of the invertors (IMF, 2001). In fact, it is crucial to have a diversified investor base in term of time horizon, risk preference and trading motives, especially for fixed income securities (Sidaou 2003). This will help ensure high liquidity and a satisfactory demand. Between 1994 and 2003, CBN holding of domestic debt averaged 67.92%, while Deposit Bank holding averaged 19.11% and non bank holding averaged 12.03%. This situation changed between 2003 and 2009 as CBN holding

plummeted to an average of 18.56% and that of Deposit Money Bank skyrocketed to an average of 52.52% and that of non-bank public holdings of debt instrument averaged 27.45%. The situation where CBN holds more than 50 percent of debt instruments is a reflection of a shallow market with elements of financial repression and therefore a more active participation of the banks and non banks from 2003 is indicative of increase in depth, breath and liberalization which should improve the effectiveness of monetary policy. However, policies should be initiated to make the market more attractive for non bank public as the large pool of fund with the pension mangers could find a safe haven in the domestic debt market.

2.3.4 DEBT STRUCTURE AND MANAGEMENT IN NIGERIA

The debt structure of a country affects individual citizens, institutions of government, privately owned corporate organizations like banks and consequently the economy at large. The debt structure in this context is the magnitude of the domestic debt as well as the magnitude of the external debts. The issue of Nigeria's public debt became important in recent times especially prior to the period of the debt forgiveness because of its magnitude and the amount which was required to service such debts as well as its attendant possible effects on different operating sectors of the economy especially the banking sector and the growth of the economy at large. As at the month of July 2005, Nigeria external debt was US\$34 billion of which about \$28 billion or 85% was owed to the Paris club of fifteen creditor nations.

Apart from external debts, Nigeria's domestic debt as at 31st December, 2003 was N1.329 trillion and as at July 2006 it was N1.5 trillion as at July 2005 as reported by the debt management office. Nigeria's domestic debt is defined mainly as debt instruments by the federal government and denominated in local currency. It consists mainly of Nigerian Treasury Bills,

Nigerian Treasury Certificates, Treasury Bonds, Federal Government Development Stocks, Ways and Means and recently considered are Contractor debts.

At a point in year 2003 it was estimated that Nigeria needed approximately US\$3 billion yearly to fully service her external debt apart from her domestic debt and this was considered unthinkable to do as it will result in the economy getting almost grounded. In Nigeria, the genesis of the present existing market for domestic government debt was the financial reforms introduced by the colonial government in 1958 which led to the creation of the Central Bank of Nigeria and the creation of marketable public securities to finance anticipated fiscal deficits. This is explicitly stated in the Central Bank of Nigeria ordinance 1958 thus:

“The Bank shall be entrusted with the issue and management of federal government loans publicly issued in Nigeria, upon such terms and conditions as may be agreed between the federal government and the Bank. To the ordinary man, public debt evidenced in budget deficit might not make sense however different governments have used both budget deficit and budget surplus as a means of fostering policy agenda as occasion demands.” In Nigeria like so many developing countries, the government has assumed an active role in the development of the economy in trying to put in place the infrastructure and institutional superstructure necessary for economic growth and development. This necessitated borrowing from different sources with the aim of putting the funds on various projects believed to have the ability of driving the economy forward in which case they are supposed to be productive loans.

Also, over the years, the ever increasing Nigerian population has put some pressure on the government to spend more on public goods and merit goods. The contribution or provision of infrastructural facilities which is termed total factor productivity and often the responsibility of

the nation state has made borrowing on the part of government also inevitable. Since most of these infrastructures cannot be left in the hands of the private sector judging from the experience of market failures in different countries where this has been experimented, the public sector is then seen as the one better at handling issues of social overheads or infrastructural facilities. Essentially, the argument for the public sector activity is not because of its ability to run systems assigned to it efficiently but that the social marginal benefit derivable from state functions usually far exceeds their social marginal cost even if the ventures are run at a commercial loss.

2.3.5 GENESIS AND GROWTH OF PUBLIC DEBTS IN NIGERIA

Nigeria's external indebtedness dates back to pre-independence period. However, the quantum of the debt was small until 1978. The debts incurred before 1978 were mainly long-term loans from multilateral and official sources such as the World Bank and the country's major trading partners. The debts were not much of a burden on the economy because the loans were obtained on soft terms. Moreover, the country had abundant revenue receipts from oil, especially during the oil boom of 1973-1976. The total external debt outstanding as at 31st December 2004 stood at US\$35.94 billion as against US\$32.92 billion in December 2003, indicating an increase of US\$3.03 billion or 9.20 percent. As was the case in the year 2003, the increase in the debt stock was largely as a result of the interest component of additional payment arrears that accumulated, and continued depreciation of the US dollar against other currencies in which the debts were denominated.

The additional interest of US\$1.54 billion was made up of contractual interest of US\$1.30 billion and late/penalty interest of US\$0.233 billion, but the increase due to the effect of the depreciation of the US dollar was approximately US\$1.49 billion. A further breakdown of the total debt outstanding showed that the principal balance was US\$30.29 billion; principal arrears amounted

to US\$1.94 billion, interest arrears and late interest were US\$3.36 billion and US\$0.357 billion respectively. The increase in the external debt stock was due primarily to arrears that were incurred as a result of non-servicing of the non-official development assistance bilateral debt. Arrears on this debt accounted for 96.6 percent of total arrears.

The management of domestic debt in Nigeria has hitherto been conducted by the Central Bank of Nigeria (CBN) through the issuance of government debt instruments, which consisted of Nigerian Treasury Bills; Nigerian Treasury Certificates; Federal Government Development Stocks; Treasury Bonds; and, Ways and Means Advances respectively. It is important to note that the above given position does not include contractor debts and supplier credit owed by the government, which are estimated at about N650 billion. Neither does it include contingent liabilities, which are loans guaranteed by the Federal Government, nor inter-agency debt. In the year 2004, the DMO made plans to build on the success of the 1st FGN Bonds floatation that were first issued in 2003. The DMO embarked on the arrangements to commence the issuance of bonds on a regular basis in small tranches that the market could accommodate. The DMO commenced the smoothening and restructuring of the Treasury Bills in 2004. The restructuring entailed extending the maturities of the existing Treasury Bills by issuing tenors of 6, 12, 24, and 36 months, to refinance part of the existing 91-day Treasury Bills.

2.3.6 PUBLIC DEBT BURDEN VERSUS DEBT SERVICE BURDEN IN NIGERIA

Cohen (1992) posits that external debt does not constitute a burden when contracted loans are optimally deployed and the returns on investment is enough to meet maturing obligations, while the surviving of the domestic economy is not undermined. Rather, he argues that where the reverse is the case, then a debt service burden will emerge. To properly gauge the gravity of debt burden on Nigerian economy, Anyanwu (1997) argues that neither the overall level of

indebtedness nor the aggregate level of debt service payment is an adequate measure of a region or country's problem. He suggested that they should be used in combination with other debt indicators to get a more accurate picture of the situation.

According to Nzotta (2004), these other indicators include: the external debt of GDP ratio of debt service to federally collected revenue, the ratio of interest payments to debt stock, and the ratio of outstanding debt stock to GDP. These indicators according to him show the degree of the severity or intensity of external debt burden. Nzotta (2004) described debt service burden as the weight of debt service payment relative to the proportion of national income devoted to servicing of economy. They concluded that debt service problem would arise when maturing obligations cannot be redeemed owing to either bad leadership or insolvency problem.

The total external debt service payment for the year 2004 was US\$1.75 billion compared to US\$1.81 billion in 2003, reflecting a decrease of US\$0.054 billion or 3.01 percent. The external debt service payments of US\$1.75 billion comprised of principal repayments of US\$1.17 billion, and interest payments and commitment charges of US\$0.589 billion. It is important to note that the US\$1.75 billion debt service paid in 2004 is actually well below the debt service due for the year of US\$2.99 billion. This arises because Nigeria has not fully serviced its Paris Club debts, as an amount of US\$2.23 billion was due but only US\$0.99 billion was paid. The shortfall transforms into arrears and attracts severe penalty interest. This very process has contributed to the explosion in Nigeria's external debt stock over the years (DMO, 2010).

2.4 THEORETICAL REVIEW

A. Capital Structure Theories

There are many competing capital structure theories, that it becomes necessary to classify them into some broad groups. Harris and Raviv (1991), for example organized their survey of literature around the “driving force” behind financing, government policy and capital structure. They came out with a classification of theories based on times and bankruptcy cost, theories based on agency cost, theories based on taxes and bankruptcy cost, theories based on asymmetric information, theories based on interaction with import and, or product markets and theories based on corporate control consideration. Another classification could be based on whether particular theory presumes the existence of optimal financing policy and how the theory describes it. This was one of the classifications adopted by Sanders (1998). According to this classification, there are theories stating that there is an optimal debt-equity mix (trade-off theories); that there is an optimal financing hierarchy (pecking order theories) and the capital structure irrelevance theory (Modigliani and Miller, 1958). Modigliani and Miller (1958) points out that there is optimal financial structure permitting the maximization of the value of the firm. This theory becomes widely known as capital structure irrelevance theory.

2.4.1 Capital Structure Irrelevance Theory: The Modigliani and Miller Theory

Modigliani and Miller (1958) provide the fundamental impulse to the study of capital structure problem by showing that under some strong assumptions (an ideal world of pure and perfect competition without taxes) the choice between debt and equity financing has no effect on a firms values. They showed that capital structure is irrelevant to a firm’s value when assets earnings and future investment opportunities remain constant. The theory says that since financial leverage has no effect neither on the size of operating income nor on the level of business risks, then dividing

the operating income into two (dividends and interests) should not affect the value of the company.

2.4.2 Trade-Off Theories

Opponents of irrelevance theory have criticized it by arguing that assumptions used by Modigliani and Miller, are not realistic. The trade-off theory determines an optimal capital structure by adding various imperfections including taxes, cost of financial distress and agency cost, but retains the assumptions of market efficiency suggest that firm target leverage is driven by three competing forces: (i) taxes (ii) costs of financial distress (bankruptcy costs), and agency conflict. The trade-off theory says that companies have optimal debt-equity ratios, which they determine by trading-off the benefits of debt-against its cost (Scott, 1976). In the traditional or original form of the model, the chief benefit of debt is the tax advantage of interest deductibility (Miller, 1977). The traditional view did not take into account that shareholders required rate of return would increase as soon as financial leverage will rise. Modern versions of trade-off theory are based on capital market imperfections (taxes, bankruptcy, cost, agency cost) and argue that there is a trade-off advantages and disadvantages associated with the use of debt capital. The earlier modern versions of the theory were static. The static trade-off theory of capital structure explain observed capital structure, as its name implies, as a static trade-off of costs and benefits of debt.

2.4.3 Signaling Theories

Though the Modigliani and Miller (1958) theorem suggested that the financial structure has no influence on firm value, a number of theoretical works have provided arguments in favor of the non-neutrality of financial structure in economic terms. Among the works contesting the relevance of Modigliani-Miller theorem, a major strand suggests a relation between leverage and

corporate performance. The studies on the link between leverage and corporate performance can in fact be classified in two categories. The first one includes the works based on information asymmetries and signalling. Firm insiders (managers or shareholders) possess some private information about the characteristics of the firm. It has then been demonstrated that these information asymmetries between borrowers and lenders induce some adverse selection problems: the impossibility of lenders to price a loan according to the borrower's quality results in an imperfect pricing, leading to credit rationing (Stiglitz and Weiss (1981). Therefore, "high-quality" borrowers have incentives to show their quality. However, they need to provide this private information by using a credible signal, meaning a signal that can not be provided by "low-quality" borrowers. Debt can then be adopted as this signal as the choice of financing by debt rather than by equity conveys valuable information to the lenders (Leland and Pyle, 1977). In particular, Ross (1977) advanced that a "good-quality" company can issue more debt than a "low-quality" one, because the issue of debt leads to a higher probability of default due to the debt-servicing costs which represent a costly outcome for firm insiders. As a result, debt is a credible signal of the quality of firms and "good-quality" firms are more inclined to issue debt. Thus, this theory suggests that the most performing firms, those having the more profitable investments, ask for more debt: there should then exist a positive relation between corporate performance and leverage.

The second category of studies on the relationship between leverage and corporate performance is linked to the agency costs literature. As mentioned by Jensen and Meckling (1976), significant agency costs can indeed arise from conflicts of interest between categories of agents (managers, shareholders, debtholders). These authors identify in fact two types of conflicts that have different implications leading to opposite theories on the link leverage-performance. Firstly,

agency costs result from the conflicts of interest between shareholders and managers. The key problem is here the moral hazard behavior of managers that can waste firm resources or minimize their effort rather than increasing firm value, as they have their own objectives. In this way, debt financing raises the pressure of managers to perform (meaning to reduce their waste of resources and to increase their effort) as it reduces “free cash-flow” at the disposal of managers (Jensen, 1986). Indeed, debt implies interest payment obligations that must be satisfied by managers, under the threat of a bankruptcy if these obligations are not satisfied. Grossman and Hart (1982) also argue that debt financing provides better incentives for managers to perform as they aim to avoid the personal costs of bankruptcy. Consequently there should exist a positive influence of leverage on corporate performance.

Secondly, agency costs also arise because of the conflicts of interest between shareholders and debtholders. Indeed shareholders have incentives to take actions that benefit themselves at the expense of debtholders, and consequently that do not necessarily maximize firm value. This divergence of interests has two manifestations. On one hand, it gives incentives to shareholders to invest in riskier projects than those preferred by debtholders (Jensen and Meckling, 1976). This “asset substitution” comes from the asymmetry of gains for shareholders: if an investment provides returns above the debt value, gains are for shareholders. Whereas if the investment fails, losses are shared between debtholders that do not receive the repayment and shareholders that suffer from the loss of capital, because of limited liability for shareholders. On the other hand, conflicts between shareholders and debtholders can also create underinvestment, as demonstrated by Myers (1977). As a result, the agency costs resulting from the conflicts of interest shareholders-debtholders suggest that a higher leverage is correlated with a lower corporate performance.

To sum it up, theoretical literature provides opposite arguments on the relationship between leverage and corporate performance. Whereas theories based on signalling and the agency costs resulting from the conflict of interests shareholders managers provide arguments in favor of a positive relation, the stream of research analyzing the agency costs from the diverging interests between shareholders and debtholders suggests a negative relation. Therefore, has empirical literature decided between theories?

Determinants of Corporate Performance

There are sets of explanatory variables that are commonly documented in the literature that affect firms' leverage. One of the variables is growth opportunity. According to Galai and Masulus (1976), Jensen and Meckling (1976), and Myers (1977), when firms issue debt, managers have incentive to engage in asset substitution and transfer wealth away from bondholders to shareholder. Uniqueness is another variable. Accordingly to Titman (1984), a firm's liquidation decision is causally related to its bankruptcy status. Again, non-debt tax shield is another variable, the main incentive for borrowing is to take advantage of interest tax shield. The other variables are tangibility and profitability and earnings volatility. The agency models of Jensen and Meckling (1976), Easterbrook (1984), and Jensen (1986) state that higher leverage helps to control agency problem by forcing managers to payout more of the firm's excess cash.

B. Government Debt And Economic Growth Theories

2.4.4 Debtcum – Growth Theory

The first stand of thought in the debtcum – growth theory is the substituting school of thought. It considers external debt as a substitute for domestic savings and investment and therefore domestic savings and investment are crowded out as a result (Krugman, 1988; Alesina

&Tabellini, 1990; Tornell & Velasco 1992). The thinking is that the returns from investing in a country are seen as being subjected to a high marginal tax by creditors and this may discourage domestic and foreign investors. This is the familiar debt overhang theory. It is also argued that foreign savings may be used for consumption rather than for investment. However, studies by Cohen and Sachs (1986) and Cohen (1992) present endogenous growth models where capital accumulation is the driving force for growth.

2.4.5 Threshold School of Thought (Debt - Laffer Curve Thesis)

The burden of external debt is the concern of threshold school of thought which emphasizes the non-linear relationship between debt and growth (Calvo, 1998). It links debt and growth to the problem of capital flight where at high debt levels growth falls. According to the threshold theory, the fall in growth is due to the higher distortionary tax burden on capital required to service the debt. It leads to lower rate of return on capital, lower investment and, hence, lower

growth. It maintains that low debt regimes have higher growth rate and lower level of thought in the debt – growth nexus sees external debt as capital inflow with positive effect on domestic savings and investment and thus on growth which leads to poverty reduction via appropriate targeting of domestic savings and investment (Calvo, 1998). Such foreign capital inflows help to finance a chronic shortfall of domestic savings over investment, the gap in the current account. There should be no problem with the theory as the funds are channeled into production investment which allows the country to grow and generate future export earnings to repay the loan.

2.4.6 Profligacy Theory

The profligacy thesis attempts to correct the weakness of growth – cum debt theory by focusing on the institutional arrangement under which a loan was contracted. The profligacy thesis, a component of the system stability theory, recognizes that the debt crisis arose from weak institutions and policies that have wasted resources through unbridled official corruption and damaged living standards and development. These policies led to distortions in relative prices and encouraged capital flights – as seen in substantial external liquid funds of private citizens of debtor countries in foreign banks (Nyong, 2005).

C. Sovereign Debt-Cum Domestic Bank Liquidity Theory

Sovereign debt and domestic bank liquidity theory as recently formalized in the work of Perez (2015) explains two mechanisms through which debt default can disrupt the domestic economy via its financial system and affect the government's repayment incentives, using a model of endogenous default enriched with a financial sector. The first mechanism is related to banks' balance-sheet exposure to public debt. As argued by existing research, a sovereign default has a negative impact on banks' wealth, which reduces their ability to raise funds and prevents the flow of resources to productive investments. The second and novel effect is related to the liquidity value of public debt. Banks that do not have good investment opportunities invest in public debt to transfer their wealth across time. After a default the domestic supply of public debt is scarce and these banks substitute away from the use of government securities to investments in their less productive projects.

The theoretical framework of sovereign debt features an economy with heterogeneous banks and a government that can issue external and internal public debt and choose to default on it ex-post.

Banks can finance projects with idiosyncratic productivity, lend to the government by investing in public debt, or lend to other banks using interbank deposits. The joint analysis of domestic and external debt gives rise to a new insight that is the dual role of sovereign debt. First, public debt is a security that allows the government to transfer aggregate resources across time when the holders of this security are foreign investors. Second, it provides liquidity to the domestic financial system given the presence of financial frictions in the domestic economy that prevent the banking sector from satisfying its demand for liquidity with privately issued securities. Accordingly, the government issues public debt to front-load and smooth consumption for a representative household and at the same time provide public liquidity to the domestic financial system. A negative liquidity effect arises following a sovereign default as the supply of public debt is relatively scarce and its expected return low.

Consider a bank with low-productivity investment projects that finds it profitable to invest in public debt. After a default the aggregate supply of public debt is low and so is its return; therefore, this bank will now prefer to make loans to its low-productivity projects. These projects demand labor, which will now be allocated to projects that are, on average, of lower productivity. This in turn, translates into a lower level of aggregate output. The balance-sheet effect of default arises due to the presence of a borrowing constraint for banks that links the maximum amount that banks can borrow from each other to their wealth (net worth). Consider again a bank that is invested in public debt and currently has the opportunity to finance high-productivity projects. A sovereign default reduces the wealth of that bank, which in turn limits the amount of credit it can obtain from other banks to finance its projects. This reduces the amount of labor demanded for these projects, thereby reducing the aggregate demand for labor and equilibrium wages. The reduction in wages increases the expected return on projects and induces banks with lower-

productivity projects to invest in them. As a result, there is a drop in the average productivity of the economy through a less efficient allocation of labor.

The presence of these effects gives rise to an internal cost of default that the government will take into account when making repayment decisions. The optimal repayment decision entails a trade-off. On the one hand, a sovereign default precipitates an output cost, in this case endogenous, as well as an exogenous cost of a temporary exclusion from external financial markets. On the other hand, by defaulting, the government saves resources from being paid back to foreign investors. The attractiveness of default will thus depend on the composition of the residence of the government's creditors.

2.5 EMPIRICAL REVIEW

Public debt problems in Nigeria have been traced to the collapse of the international oil price in 1981 and the persistent suffering of the international oil market and partly due to domestic lapses (Adofu and Abula, 2010). Credit facilities during this period gradually dried up, which led to a number of projects getting staled. Ahmed (1984) documented the causes of debt problem as related to both the nature of the economy and the economic policies put in place by the government. He articulated that the developing economies are characterized by heavy dependence on one or few agricultural and mineral commodities and export trade is highly concentrated. The manufacturing sector is mostly at the infant stage and relies heavily on imported inputs. The overdependence on the developed countries for supply of other input and finance for economic development have made them vulnerable to external shocks.

Similarly, Sanusi (1988) asserts that faulty domestic policies which range from project financing mismatch, inappropriate monetary and fiscal policies were responsible for the government debt problem. He argues that some of the policies were of little significance because of the perceived

temporary effect of the external shocks. The expansionary policies led to stupendous macroeconomic fallout, which encouraged import and discourage export. Ajayi (1989) advocated the revival of the economic growth as the best and most durable option to the debt burden. He however observed that the needed growth is disturbed by two factors including limitation imposed by inappropriate domestic policies and the external factors beyond the control of the economy.

James (2006) argues that public debt has no significant effect on the growth of the Nigeria economy because the fund borrowed were not channeled into productive ventures, but diverted into private purse. He suggested further, that, for the gains of the debt forgiveness to be realized the War Against Corruption should be fought to the highest. Adofu and Abula (2010) result is consistent with Oshadami (2006). Both studies concluded that the growth of public debt has affected negatively the growth of the economy. The situation is premise on the fact that majority of the market participant are unwilling to hold longer maturity and as a result the government has been able to issue more of short term debt instruments. This has affected the proper conduct of monetary policy and affected other macroeconomic variables.

Other studies have attempted to explain the rationale for the changing debt profile in Nigeria between the 1960s and now (Odozi, 1996; Rapu, 2003; and Obademi, 2012). The major factors common to these studies include high budget deficits, low output growth, large expenditure growth, high inflation rate and narrow revenue base witnessed since the 1980s. The fiscal operation of the federal government resulted in large deficit averaging 1.93 percent of GDP between 1994 and 2008. From an average deficit of 1.56 percent of GDP for the period 1994-1979, it increased on average to 3.35 percent in 1999-2003 and then reduced to 0.86 percent of GDP in 2004-2008. A very remarkable feature of the government fiscal expansion was the

financing of the excess expenditure from domestic debt averaging 114.98 percent of bank deposit between 1994 and 2008.

Cross country relationship between fiscal deficits (as a percentage of GDP) and the size of government debt markets confirm that countries with large fiscal deficits have issued more government securities in domestic markets (Mihaljek et al 2002). Generally declines in government revenue were met by borrowing from the central bank through the instrument of ways and means advances. These advances according to Adofu et. al. (2010) were never defrayed by the federal government but refinanced by the flotation of new treasury bills and treasury bonds to pay holders of maturing debt instruments thereby contributing to the continued growth of the debt stock.

An extensive body of empirical literature exists that tries to examines how public debt affects the structure and performance of banks as well as other financial institutions in a country and how a country's fiscal policy and the resulting level of debt affect macroeconomic stability. Majority of the studies agree that different sources of vulnerabilities may arise from the debt profile, depending primarily on the debt structure, that is, the composition of debt instruments and their maturities (Borensztein, et.al., 2004; Bolle, Rother, and Hakobyan 2006; and Udaibir, et. al., 2010). Inappropriate debt structures could become channels or sources of vulnerabilities to the real economy and the financial system.

Perez (2015) quantified government debt and domestic bank liquidity theory using aggregate macroeconomic and banking data for Argentina. He quantified the output costs of default and found that the two mechanisms can generate a deep and persistent fall in output of 5.5% in the two years following a default. These endogenous output costs of default are important in inducing government's incentives to repay its debt as they generate all the commitment necessary to

explain observed levels of external public debt issuance. Data on aggregate exposure of banks to public debt and on banks' liquidity management before and after default allowed the researcher to identify and disentangle the strength of each mechanism. The balance-sheet effect explained 65% of the output cost of default, while the remaining 35% is explained by the liquidity effect. The dynamics of the model are consistent with business cycle facts. The model is then used to explore the implications of allowing for post-default bailouts of the banking system and implementing a minimum requirement of public debt holdings in banks. Although desirable ex-post, post-default bailouts are welfare reducing ex-ante since they weaken government commitment. On the other hand, imposing a minimum requirement of public debt on banks is welfare improving as it enhances government's commitment by increasing the output cost of default.

Some literature have focused on two sources of vulnerabilities, foreign currency-denominated liabilities and the short maturity of liabilities (Guscina 2008, and Papaioannou 2009). Inappropriate debt structures can lead to higher interest payments. In general, lower-cost debt structures such as the excessive use of foreign currency-denominated debt are subject to higher risk in the event of an unexpected shock. In the past, many emerging market countries, especially in Latin America, relied heavily on the issuance of instruments linked to the exchange rate. Mexico's case during 1994 is a good example. According to Jeanneau and Verdia (2005), the Tesobonos (domestic bonds linked to the U.S. dollar) represented almost the entire stock of Mexico's public debt, up from just 4 percent a year earlier. This increase alarmed international investors. At the end of 1994, the domestic currency was devalued. The devaluation led to a significant increase in the debt stock and consequently to significant financial instability. This episode is a clear example of how a poor debt structure can have adverse financial consequences. After the crisis many Latin American countries improved the composition of their debt structure

and developed their domestic debt markets, in order to become less vulnerable to debt-related shocks, a pattern also seen in Asia after the financial crisis that hit that region.

In Turkey crisis-triggered retooling of policies on debt management enhanced resilience to financial shocks. Keller, et.al., (2007) document that Turkey's public balance sheet was severely weakened as a result of the banking and exchange rate crises in 2001. The bailing out of the banking sector, through the issuance of foreign exchange-linked government bonds led to a surge in public debt, a shortening of maturities, and greater exposure to foreign currency risks. In the aftermath of the crisis, reducing the risks from high public debt became a necessary condition for ensuring financial stability. Prudent debt management, against the backdrop of strong fiscal and growth performance, contributed to the improvement in the country's sovereign balance sheet and prospects for financial stability. Although a virtuous combination of tight fiscal policy, falling interest rates, and strong economic growth helped reduce debt ratios, the Turkish authorities also took advantage of the favorable macroeconomic tailwind to improve the debt structure, reduce risks, and increase financial stability, including through reductions in the level and volatility of interest rates. For example, foreign currency-indexed domestic debt was halved between 2002 and 2006, from 32 percent to 16 percent, significantly reducing sovereign debt exposure to exchange rate risk. The fixed rate share of domestic debt over the same period increased from 25 percent to more than 40 percent, and the share of short-term debt declined to less than 5 percent of total debt in mid-2006, down from more than 20 percent four years earlier.

In general, debt structures that rely heavily on short-term instruments are sources of vulnerability, because short average maturities entail high rollover and refinancing risk. In such cases, an increase in interest rates can have an adverse fiscal impact. Debt structures that are too short or allow for bumps in the maturity profile can potentially generate confidence crises, fueled

by investors' concerns that the government will not have sufficient funds to redeem maturing bonds when they fall due. Depending on the extent of these fears, they could translate into lower demand for the country's instruments in auctions, thus triggering a self-fulfilling prophecy. It is the debt manager's responsibility to design policies and schemes that reduce these risks. This could be done by preemptively building large cash buffers, ensuring efficient coordination with cash-management policies, and, at times, absorbing the higher cost of prefunding liability tranches maturing in the near future in order to extinguish the risk of a market call on solvency at the point of redemption.

Some studies also examined the contribution of the use of public debt as a strategic component of policy directed at increasing the level and pace of economic growth. For example, Abbas and Christensen (2007) develop a model that shows that moderate levels of debt can increase growth and higher levels can undermine it. They conclude that if domestic debt is marketable and part of it is held outside the banking system, it can contribute to economic growth.

Many scholars in Africa and Nigeria have conducted researches into public debt and its impact on the economy of different countries. Iyiola and Iyare (1994) examined the causes of Africa's debt problems and Nigeria in particular and grouped them into four categories as follows:

- those arising from fundamental or structural causes
- those due to cyclical causes
- those arising from a hostile economic and political environment
- those due to inappropriate domestic policy

They affirmed that structural weakness in the typical African economy like Nigeria assume a commanding position in causing the debt problem because it made the economy extremely vulnerable to cyclical shocks such as oil price shocks, instability of primary commodity prices and declining terms of trade. Taking a good look at Nigeria's debt problem in the years considered in this study in relation to the existing theories of growth in literature like the Big Push Theory, The doctrine of balanced growth, Solow's growth model, Rostow's stages of economic growth, the new endogenous growth theory, some insight can be gotten into Nigeria's predicament.

Considering the amount needed to service Nigeria's debt as it relate to the big push theory it is obvious that Nigeria had a serious problem to contend with. The Big Push Theory hinges on the fact that a large comprehensive programme is needed in the form of high minimum amount of investment to overcome the obstacles to development in an underdeveloped economy and to launch it on the path of steady progress. Consequently, resources have to be freed to achieve this. The scenario however is such that the debt overhang over the years did limit the amount of resources required to achieve enviable growth for kick-starting and sustaining economic growth and development.

As earlier mentioned, increasing population growth and the creation of states have necessitated the provision of services of social overhead capital comprising good transportation facilities, communications, power generation etc to drive the economy. For this to be done, there is always the need for a sizeable initial lump-sum of investment that leads to government borrowing money from many sources. Also looking at it from the perspective of the Balanced Growth Theory, in designing an economic agenda for the desired growth of the Nigerian economy, government has on different occasions employed the theory of balanced growth popularized by Ragnar Nurkse as

deemed fit from the viewpoint that all sectors of the economy i.e., education, agriculture, health, housing, power generation etc. has to grow in their productive capacity simultaneously.

Expectedly, this approach has its cost implications that have often resulted in government borrowing and thereby contracting more debts. Though this approach to economic growth is commendable, in Nigeria, there has been a problem with balancing the demand side and supply side to make balanced growth benefit the economy on a sustainable basis. Ordinarily, the theory of balanced growth states that there should be a simultaneous and harmonious development of different sectors of the economy so that all sectors grow together. However, for this to be achieved, a balance is required between the demand and supply sides. The supply side has to do with the simultaneous development of all inter-related sectors which help in increasing the supply of goods which comprises of issues such as investment in power, agriculture, irrigation, transport while the demand side concerns the provision of employment opportunities and increasing incomes so that the demand for goods and services may rise on the part of the consumers. The balanced growth theory has a similar focus with the Solow's model of long run growth but it is instructive to say that they cannot be simply substituted for one another.

The interest in the Solow's theory of long run growth is the savings component. Solow takes output as a whole and as the only commodity in the economy with the annual rate of production designated as Y_t which represents the real income of the economy of which part of it is consumed and the remaining is saved or invested. That portion that is saved represented as K_t i.e. the stock of capital is often less than what is required for investment in the larger economy due to demographic and structural changes in the country that were not anticipated and as a result government has to borrow to make up for the shortfall.

Looking at it again from the perspective of the growth theory propounded by Rostow popularly known as the Rostow's stages of economic growth, in the periods between 1970-1980, Nigeria was making steady progress and it could be said that we had conveniently consolidated our position on the Rostow's precondition for take-off stage of economic growth and moving into the next stage of what is known as the take-off stage with the peculiar characteristics of the need for an increase in the rate of productive investment. Thus the Nigerian government tried to do by investing in capital projects like the Ajaokuta Steel Project and other projects that required much money to prosecute that the government did not have readily. It then meant that financial assistance had to be sought.

Over the years until recently when Nigeria was granted some debt relief, the nation has been accumulating debts through successive governments. These debts have to a large extent affected economic growth with its attendant effects on the retrogressive standard of living of Nigerians. Talking about public debt and Nigeria's economic growth and performance, another area of interest is the impact of debts on foreign investment. In a study carried out by Borenstein(1989) as well as Froot and Kringman (1990), they asserted that the presence of large external debt burden plays a vital role in reducing investment activities because the higher debt service payments associated with large external debt reduce the funds available for investment.

They also pointed out that the existence of a large debt overhang in the form of high ratio of external debt to GDP can reduce the incentive for investment because much of the returns from investment must be used to pay existing debt. Another angle to it is that external debts lead to difficulties in meeting debt-service obligations which may strain relations with external creditors and make it harder or more costly to finance or attract private investments. Essien and

Onwioduokit (1999) also confirmed in their study the existence of relationships between the foreign direct investment inflow to Nigeria and variables such as credit rating, debt service, interest rate differential, nominal effective exchange rate and real income. This they expressed in a functional form and analyzed using the ordinary least square technique.

Though there have been some studies on Nigeria's debt and other economic variables such as that of Egwaikhide (1996) who appraised the implication of Nigeria's debt profile on inflation and current account balance, this study though seeks to do a similar thing with the whole economy in mind. Egwaikhide (1996) appraised the implication of Nigeria's budget deficit profile on inflation and current account balance and the findings of the study indicated that fiscal indiscipline in terms of lack of control over expenditure is the major determinant of budget deficits in Nigeria while its mode of financing has aggravated inflation. The study also showed that budget deficits correlate highly with current account deficits implying that the external equilibrium is partly attributable to endogenous factors.

In Nigeria where budget deficit and financial gaps have existed between savings and investment, it becomes absolutely necessary to contract debt either from external sources or domestically when one considers the thinking of Rosenstein-Rodan who postulated the Big Push Theory of growth and development. The main thrust of this theory is that there is a minimum level of resources that must be devoted to a government development programme if it is to have any chance of success. This is more relevant when one considers one of the indivisibilities and external economies articulated by Rosenstein-Rodan as necessary.

2.6 KNOWLEDGE GAP

An extensive body of literature have attempted to examine how the structure of public debt could affect the stage of national development in a country and how fiscal policy and the resulting level of debt could affect macroeconomic stability (Audu, 2004; Reinhart and Rogoff, 2009; and, Udaibir, et. al., 2010). While most of these studies explicitly acknowledged the role of proper management of public debt in promoting overall economic growth of nations, major sectorial evidence such as the effect of public debt on the banking sector is still inadequate. This means that there is still a research gap that needs to be covered in this direction. Moreover, even in situations where research evidence exist, majority of the studies used data from the developed nations. The studies therefore could not capture the socio-political and business environmental differences in the developing countries. In Nigeria today, there is this popular opinion although lacking in empirical validation that external debt overhang is one of the major factors that has contributed largely to the poor bank credit accessibility by businesses due to associated high interest rates within the last decade. This study is therefore an attempt to fill these research gaps.

2.7 SUMMARY OF THE LITERATURE REVIEW

Public debt generally means debt obligations owe by the government within its economy or externally. External borrowings are debt obligations the government owe to multilateral bodies, London Club, Paris Club, foreign promissory notes and other unclassified external borrowings. Public domestic debt on the other hand are debt owe locally and denominated in local currency. The instruments consist of Nigerian Treasury certificates, Federal government development stocks and treasury bonds amongst others.

The use of debt in a firm's capital structure has been the subject of intensive theoretical modeling and empirical examination over the years. Much of the literature on this question takes its departure from the seminal writings of Modigliani and Miller (1958) and their Theorem of Irrelevance. Since this period, many researchers have subsequently argued their case for and against the firm's optimal value capital structure and that of the government. The debt-cum-growth theory is the substituting school of thought. It considers external debt as a substitute for domestic savings and investment and therefore domestic savings and investment are crowded out as a result. The thinking is that the returns from investing in a country are seen as being subjected to a high marginal tax by creditors and this may discourage domestic and foreign investors. On the other hand, The burden of external debt is the concern of threshold school of thought which emphasizes the non-linear relationship between debt and growth. It links debt and growth to problem of capital flight where at high debt levels growth falls. According to the threshold theory, the fall in growth is due to the higher distortionary tax burden on capital required to service the debt. It leads to lower rate of return on capital, lower investment and, hence, lower growth. The profligacy thesis attempts to correct the weakness of growth – cum debt theory by focusing on the institutional arrangement under which a loan was contracted. The profligacy thesis, a component of the system stability theory, recognizes that the debt crisis arose from weak institutions and policies that have wasted resources through unbridled official corruption and damaged living standards and development.

Finally, the sovereign debt and domestic bank liquidity theory expounds two mechanisms through which a debt default can disrupt the domestic economy via its banking system. This particular theory of course has a direct bearing to the subject matter of this research. First, the theory argues that a sovereign debt default creates a negative balance-sheet effect on banks, which reduces

their ability to raise funds and prevents the flow of resources to productive investments. Secondly, default undermines internal liquidity as banks replace government securities with less productive investments. This theory has been tested using some emerging economies data. For instance, Perez (2015) quantified the model using Argentinean data and found that these two mechanisms can generate a deep and persistent fall in output post-default, which accounts for the government's commitment necessary to explain observed levels of external public debt. The balance-sheet effect is more important because it generates a larger output cost of default and a stronger ex-ante commitment for the government. Post-default bailouts of the banking system, although desirable ex-post, are welfare reducing ex-ante since they weaken government's commitment.

Meanwhile, to the best of the researcher's knowledge, sovereign debt theory has not received adequate empirical evaluation in developing countries in Africa generally and particularly in Nigeria. Many scholars in Africa and Nigeria have focused research attention into public debt and its impact on the economy of countries but few on the banking system per se. This basically constitute the major platform for this investigation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter presents the method and procedure which will be followed to achieve the objectives of this research. It includes the research design, the nature and sources of data, justification of chosen models; the model specifications, and the method of data analysis. The chapter also explains the descriptive statistics and the computational method which will be employed to test the four major hypotheses formulated in chapter one.

3.2 RESEARCH DESIGN

A research design, according to Onwumere (2009:111), is a format which the researcher employs in order to systematically apply the scientific method in the investigation of problem. They could manifest in three major ways viz; survey, experimental, and ex-post facto designs.

The research will employ the *ex-post facto* (after the fact) design. The justification for the choice is that ex-post facto design allows the researcher the privilege of observing one or more variables over a period of time. For this reason, the research explanatory variables comprising government external and internal debt components will be observed over the period 1995 – 2016. Data collected will be used in plotting trends to determine their variations. The same data will further be analyzed and tested using computer based OLS regression models to determine the effect of their fluctuations on the banking sector performance measured by commercial banks lending or prime rates, their deposit liabilities, their total credits, their total assets over the same period.

3.3 AREA OF THE STUDY

Basically, this study will focus on the Nigeria economy generally with special interest on government finance and the banking sector. It is not a primary data research and as such does not target any particular geographical location, state, or community in Nigeria and beyond.

3.4 NATURE AND SOURCES OF DATA

This study will purely make use of secondary data. In line with the data source employed by Audu (2004), Adofu and Abula (2010), Obademi (2012) and Eleje, et.al., (2012) in a similar study, the researcher will utilize in his empirical evaluation, secondary data on commercial banks lending rates, their deposit liabilities, their total credits, their total assets, as well as government internal and external debt profiles derived from the Central Bank of Nigeria Statistical Bulletin.

Other secondary data for the literature review will be sourced from both bank articles and Magazines, as well as foreign and locally recognized Journals, dailies, seminar and workshop papers, conference papers, unpublished materials in the form of project works earlier done in this area amongst others. The main instruments for the data will be the libraries and internet facilities.

3.5 SPECIFICATION OF MODELS

Obademi (2012) employed the augmented Cobb-Douglas production function while Eleje, et.al., (2012) adopted the logged bivariate linear regression technique to capture both the direct impact of the two types of debts on growth and their respective elasticities. Patterning Obademi (2012), the models of this study are specified in augmented Cobb-Douglas functional form as follows:

Hypothesis One Model:

$$\text{BnkPrimRts} = \alpha_0 (\text{MultiDebt}) \alpha_1 (\text{OtherDebts}) \alpha_2 (\text{TotalExDebt}) \alpha_3 \dots (3.1)$$

Hypothesis Two Model:

$$\text{BnkDepoLiab} = \alpha_0 (\text{GovTBill}) \alpha_1 (\text{GovTCert}) \alpha_2 (\text{GovDevStck}) \alpha_3 \dots (3.2)$$

Hypothesis Three Model:

$$\text{BnkTtalCrtd} = \alpha_0 (\text{GovTBill}) \alpha_1 (\text{GovTCert}) \alpha_2 (\text{GovDevStck}) \alpha_3 \dots (3.3)$$

Hypothesis Four Model:

$$\text{BnkTtalAsst} = \alpha_0 (\text{GovTBill}) \alpha_1 (\text{GovTCert}) \alpha_2 (\text{GovDevStck}) \alpha_3 \dots (3.4)$$

Furthermore, for easy estimation of the above equations, the logged linear regression technique employed by Eleje, et.al., (2012) is subsequently adopted to generate the multiple linear regression models below:

Hypothesis One Model:

$$\text{LBnkPrimRts} = \alpha_0 + \alpha_1 \text{L}(\text{MultiDebt}) + \alpha_2 \text{L}(\text{OtherDebts}) + \alpha_3 \text{L}(\text{TotalExDebt}) + e \dots (3.5)$$

Hypothesis Two Model:

$$\text{LBnkDepoLiab} = \alpha_0 + \alpha_1 \text{L}(\text{GovTBill}) + \alpha_2 \text{L}(\text{GovTCert}) + \alpha_3 \text{L}(\text{GovDevStck}) + e \dots (3.6)$$

Hypothesis Three Model:

$$\text{LBnkTtalCrtd} = \alpha_0 + \alpha_1 \text{L}(\text{GovTBill}) + \alpha_2 \text{L}(\text{GovTCert}) + \alpha_3 \text{L}(\text{GovDevStck}) + e \dots (3.7)$$

Hypothesis Four Model:

$$\text{LBnkTtalAsst} = \alpha_0 + \alpha_1 \text{L}(\text{GovTBill}) + \alpha_2 \text{L}(\text{GovTCert}) + \alpha_3 \text{L}(\text{GovDevStck}) + e \dots (3.8)$$

Where:

BnkPrimRts	=	Commercial Banks Lending or Prime Rates
BnkDepoLiab.	=	Commercial Banks Deposit Liabilities
BnkTtalCrdt.	=	Commercial Banks Total Credits
BnkTtalAsst.	=	Commercial Banks Total Assets
MultiDebt	=	Government Debt Outstanding to Multilateral Institutions
OtherDebts	=	Government External Debt Outstanding to other Unclassified Bodies
TotalExDebt	=	Total Government External Debt
GovTBill	=	Government Treasury Bills Outstanding to Commercial Banks
GovTCert.	=	Government Treasury Certificate Outstanding to Commercial Banks
GovDevStck	=	Government Development Stock Outstanding to Banks
α_0	=	Constant of the Regressions
$\alpha_1, \alpha_2, \alpha_3,$	=	Coefficients of the Explanatory Variables
e	=	Disturbance or Error Term

3.6 JUSTIFICATION OF PROPOSED MODELS

The above proposed models for this research draw theoretical strength from Endogenous growth models. Endogenous growth models among other things demonstrate the channel by which government fiscal policies could affect financial system growth and development. Accordingly, the model chosen is consistent with previous local and foreign studies on public debt and economic growth including Ghirmay (2004), Islam and Biswas (2005), Adofu and Abula (2010), and Omorogie and Erah (2010) respectively.

Meanwhile, it has been known that the analytical techniques and testing procedures employed to measure the effect of fiscal policy on economic performance often determines the conclusion. The above highlighted previous studies have majorly focused attention on the direct test of

Frankel-Romer (1962) endogenous growth model. As such, they concentrated on studying economic performance from aggregate viewpoint. The previous studies however have recognised the dynamic nature of the Nigerian economy. They have often concurred that government financing pattern is a major phenomenon that changes continuously and in relation to time. Rather than replicating the methodology of the above previous researchers, this study will pattern recent modified models employed in Obademi (2012), and Eleje, et.al., (2012) which capture some factors that are considered sensitive and relevant to the Nigerian economy in recent time.

This study however differs from the previous studies in three respects. First, it utilizes a model that has been recently modified to investigate the government debt financing policy of Nigeria. Second, some of the variables to be used in the study to the best of the author's knowledge have not so much been tested empirically in Nigeria in a study of this nature as it is in the advanced economies. The outstanding variables that satisfy this description are government outstanding debt to multilateral agencies, treasury bills as well as total asset of commercial banks respectively. Third, the period covered by this research (1995 - 2016) is unique to this study and substantially encompasses the pre and post debt cancellation period of the federal government.

3.7 EXPLANATION OF THE RESEARCH VARIABLES

There are two major research variables that will be used in this investigation: the dependent variables that will measure bank performance and the explanatory or independent variables that will measure public debts.

Bank Performance (Dependent) Variables: For the purpose of this study bank performance will be measured using commercial bank prime rates, commercial banks deposit liabilities, commercial banks total credits, and commercial banks total assets.

Public Debt (Independent) Variables: On the otherhand, public debts will be grouped into domestic and external debts. Domestic debts that will be used will include government treasury bills outstanding to commercial banks, government treasury certificates outstanding to commercial banks.

3.8 TECHNIQUES OF DATA ANALYSIS

The data which will be generated for this study will first be presented using different descriptive statistical tools such as tables, graphs and charts. The essence will be to capture spot-pictures of the behavioural patterns of the variables over the timeframe for the study. Meanwhile, an on-the-spot assesement of each of these tables, graphs and charts will be made for ease of understanding by the intended users.

Subsequently, the data relevant for the four hypotheses formulated in chapter one will be subjected to computer regression inferencial statistics to determine the effect of their fluctuations on the banking sector performance measured by commercial banks lending or prime rates, their deposit liabilities, their total credits, their total assets over the same period.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

This chapter analyzed and tested the generated statistical data in respect of the dependent and independent variables. Descriptive averages of the variables were compared. Further, regression results arising from the study were also presented. The presentation and interpretation of data concentrated on the discussion of the significant dimensions in explaining variations in bank performance. The degrees of agreement as revealed in the model summaries are also discussed. The main aim was to draw certain conclusions on the impact of government debt on the performance of banks in Nigeria.

4.2 DATA PRESENTATION AND INTERPRETATION

The data employed in this research are presented below. Precisely, the dependent variables which constitute measures of bank performance are made up of commercial banks prime rates (BPR), commercial banks deposit liabilities (BDL), commercial banks total credits (BTC), and commercial banks total assets (BTA). The independent variables are government debt outstanding to multilateral institutions (GDM), government external debt due to other unclassified bodies (GDU), total government external debt (TED), and government treasury bills outstanding to commercial banks (GTB) respectively. The annualized values of these set of data are as shown in table 4.1.

Table 4.1: Annualized Values of the Research Variables1995 – 2016

YEAR	BPR %	BDL (N' Billion)	BTC (N' Billion)	BTA (N' Billion)	GDM (N' Billion)	GDU (N' Billion)	TED (N' Billion)	GTB (N' Billion)
1995	20.18	99.5	144.6	385.1	97.04	28.85	716.87	17.7
1996	19.74	118.5	169.4	458.8	102.63	2.66	617.32	46.8
1997	13.54	141.7	385.6	584.4	96.20	1.74	595.93	38.1
1998	18.29	172.1	272.9	694.6	93.21	1.45	633.02	40.8
1999	21.32	274.2	322.8	1070.0	361.19	6.36	2577.37	186.1
2000	17.98	357.1	508.3	1568.8	379.04	15.75	3097.38	275.8
2001	18.29	499.2	796.2	2247.0	313.50	13.58	3176.29	199.3
2002	24.85	653.2	954.6	2766.9	375.70	7.06	3932.88	460.2
2003	20.71	759.6	1210.0	3047.9	413.88	7.02	4478.33	430.8
2004	19.18	932.9	1519.2	3753.3	384.25	6.46	4890.27	595.8
2005	17.95	1089.5	1976.7	4515.1	330.65	60.54	2695.07	585.0
2006	17.26	1747.3	2524.3	7172.9	332.22	54.41	451.46	499.0
2007	16.94	2693.6	4813.5	10981.7	374.30	64.59	438.89	525.8
2008	15.14	4309.5	7799.4	15919.6	464.56	58.70	523.25	325.9
2009	18.99	5763.5	8912.1	17522.9	524.20	66.23	590.44	585.4
2010	17.59	5954.3	7706.4	17331.6	635.45	54.39	689.84	925.3
2011	16.02	6531.9	7312.7	17698.7	723.12	173.73	896.85	1458.3
2012	16.79	8062.9	8150.0	21288.1	828.72	198.18	1026.90	1419.6
2013	16.72	8656.1	10005.6	24301.2	986.84	400.49	1387.33	1317.9
2014	16.55	12008.2	12889.4	27526.4	1142.29	489.23	1631.52	1927.7
2015	16.85	28369.0	13086.2	28173.3	1489.41	622.12	2111.53	1027.4
2016	16.87	32130.4	16117.2	31682.8	2436.41	1042.51	3478.92	1248.2

SOURCE: Central Bank of Nigeria Statistical Bulletin, 2017

Table 4.1 is a schedule representing the values of the explained and explanatory variables investigated in this study. Generally, the eight major variables used in the study revealed various degrees of fluctuations. Meanwhile, figure 4.1 are graphs depicting spot pictures of the behavioral

characteristics of each of the explained variables over the sampled period. A cursory look at the graphs show that each of the explained variables exhibited variant behaviour over the period of study.

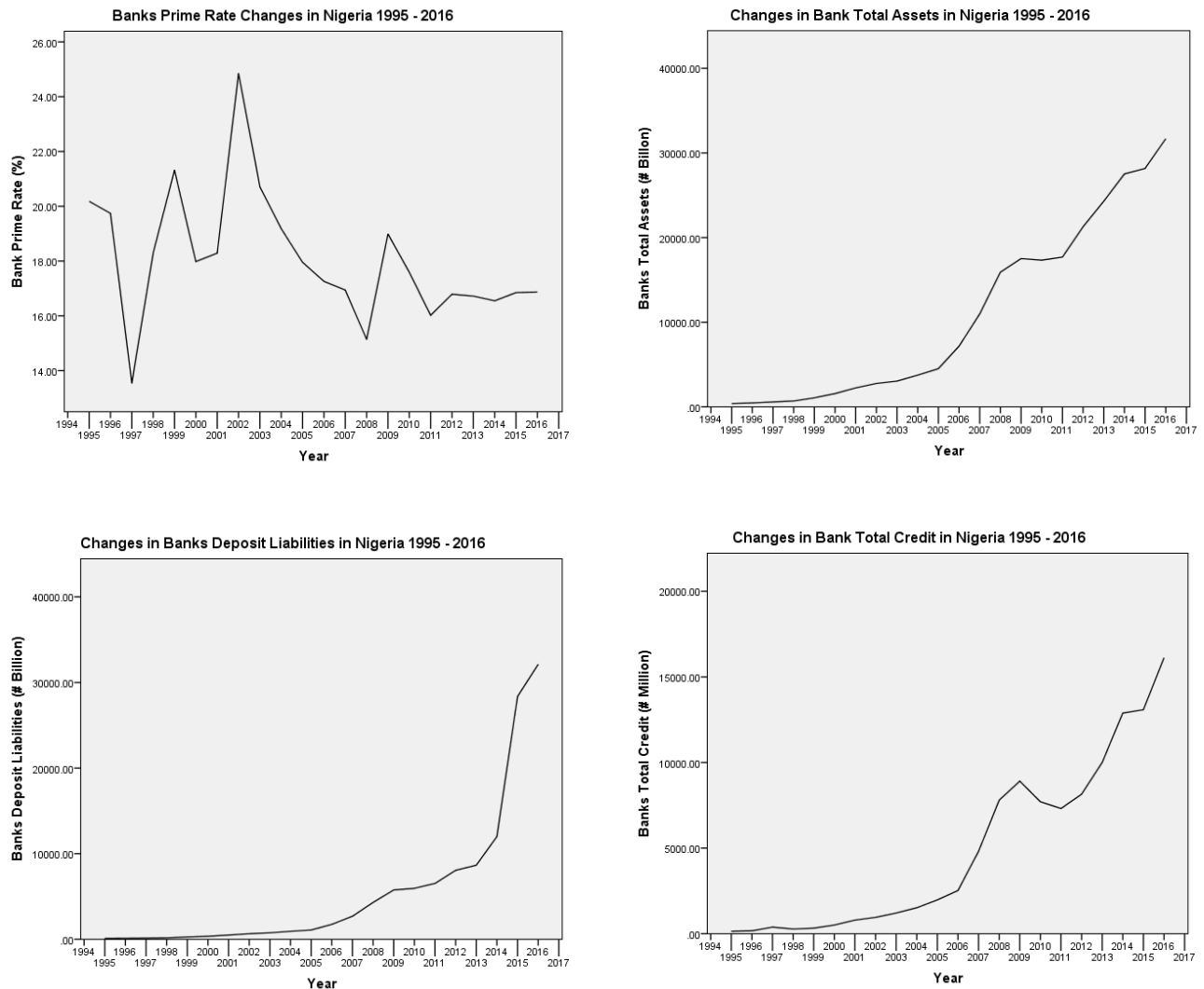
Commercial banks prime rates for instance manifested sharp hike at the inception of the period under study and precisely in 2002. The scenario immediately reversed downward exhibiting creeping and gradual movements from 2002 up to 2008 when it again adjusted upwardly and subsequently fluctuated till the end period.

Commercial banks deposit liabilities on the other hand exhibited contrary feature over the period studied. The trend showed persistently upward movement throughout the period of study. The rationale for this upward flow however could be attributable to policies of the regulatory authorities which were aimed at boosting savings and instituting mega banks for national development. Precisely, the period 2004 marked an indelible era in the history of commercial banking in Nigeria following the massive consolidation of the industry by the Central Bank of Nigeria (CBN) up to N25 billion capital adequacy requirements for banks in Nigeria (CBN, 2004; Okafor, 2011). Of course, the aftermath of this policy implementation was doubled banks deposit liabilities between 2005 and 2008. This is pictured in the steep upward movement of the graph of commercial banks deposit liabilities in Figure 4.1.

The behaviour of banks total credits well as total assets over the timeframe was not inconsistent with earlier empirical evidence. Banks total credits and total assets moved in similar direction with deposit liabilities thus confirming theory and existing studies that deposits positively influence loanable funds (Levine, 2003; Cem, 2010; and Eleje and Ani, 2013). A cursory observation of total credit and total asset graphs in figure 1 reveal gentle upward movement of

both graphs at the early 2000s before 2004 capital adequacy reform. But from 2005 upwards, banks had more financial vitality to loan out more funds for investments. This gave rise to sharp upward movements of both total credit and total asset of banks as depicted in figure 4.1 below.

Fig. 4.1 Annualized Values of the Research Dependent Variables 1995 – 2016

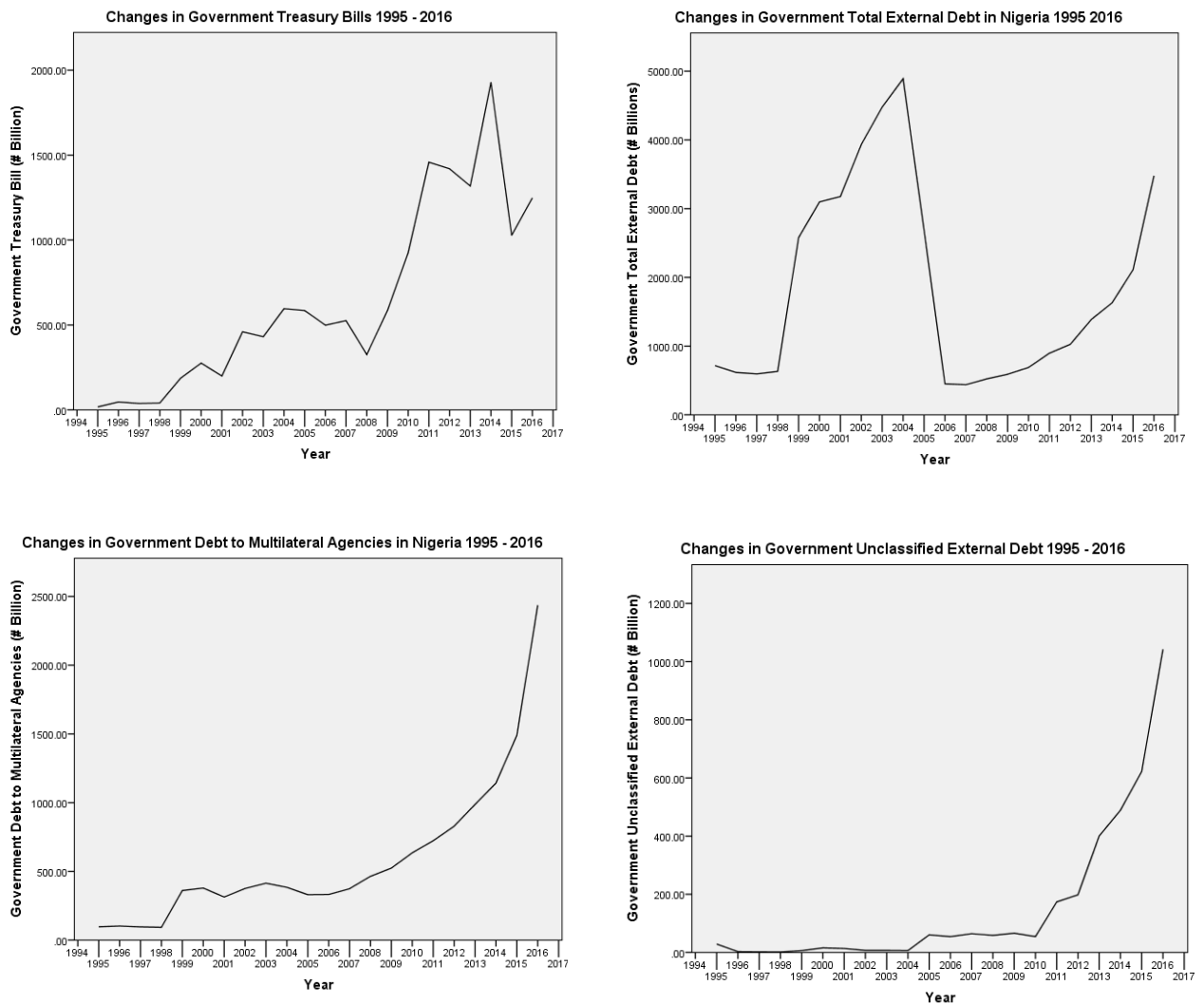


Furthermore, figure 4.2 below are graphs depicting the behavioral characteristics of each of the explanatory variables of the study. A cursory look at the graphs show different behaviours manifested by each of the variables over time. Government debt to multilateral agencies exhibited slight fluctuation at the early stage of the research period from 1995 up to 2007 when it suddenly took a sharp hike and remained steadily upward until 2016. Precisely, government borrowing from multilateral agencies only dropped immediately after the debt cancellation in 2005 but soon after, it became intensified and even worsened than the pre-debt cancellation era as the figures rose continuously until the end of the research period.

Again, for unclassified debt, anecdotal evidence (CBN, 2012) shows that government unclassified debt also worsened in the later period after debt cancellation when compared with its levels in the early 90s. A closer look at the graph of unclassified debt in figure 4.2 is confirmatory to this submission. Clearly, the graph reveals gentle fluctuation and occasional hike between 2000 and 2010. Thereafter, it took a sharp rise and continued over the research timeframe. But the behaviour of total external debt was somewhat different. Total external debt in the late 1990s took a sharp upward rise and peaked to its maximum in 2004. This was preceded by immediate sharp drops and subsequent gradual fluctuations throughout the remaining period. Unarguably, the Paris club debt relief of 2005 gave rise to the sudden drop of total debt to its lowest minimum in year 2005.

Meanwhile, domestic debt proxied by government treasury bills over the period of investigation also revealed fluctuation. Although there was creeping and dwindled movement at the first half of the period up to 2008, the tempo changes with a sharp hike at the eve of the present administration and remained at increase throughout the period covered. In fact, provisional data from the National Bureau of Statistics (NBS, 2012) show that the estimated government treasury bills due to the banking sector stood at approximately ₦2 billion in 2012.

Fig 4.2 Annualized Values of the Research Independent Variables 1995 – 2016



4.3 ANALYSIS AND TEST OF HYPOTHESES

The four main hypotheses formulated in chapter one were tested along the line of the models specified for the purpose in chapter 3.5. They were tested using multiple linear regression technique. The rationale was to generate optimal multivariate estimators of the coefficient parameters at 95% confidence level. Meanwhile, all the operations were performed with the aid of Special Package for Social Sciences (SPSS) IBM computer version 20 and results were analysed as follows:-

Hypothesis One A (Before Debt Cancellation):

The null and the alternate forms of hypothesis one are hereunder stated thus:

H₀: Federal government's external borrowings had no positive and significant effect on the lending rates of deposit money banks in Nigeria before debt relief.

H₁: There is significant positive effect of federal government's external borrowings on the lending rates of deposit money banks in Nigeria before debt relief.

Decision Rule

The decision rule is to reject the null hypothesis when the computed t-value is greater than the critical t-value and accept the null if otherwise.

Analysis of the SPSS Regression Results for Hypothesis One (A)

Table 4.2 represents the summary output of the multiple linear regression tests. The estimated coefficients of the explanatory variables in the equation are as presented in equation 4.1:

Table 4.2: Regression Results Summary for Hypothesis OneA

Correlations

		BPRb4	GDMb4	GDUb4	TEDb4
Pearson Correlation	BPRb4	1.000	.407	-.449	.424
	GDMb4	.407	1.000	-.550	.726
	GDUb4	-.449	-.550	1.000	-.705
	TEDb4	.424	.726	-.705	1.000
Sig. (1-tailed)	BPRb4	.	.211	.186	.201
	GDMb4	.211	.	.129	.051
	GDUb4	.186	.129	.	.059
	TEDb4	.201	.051	.059	.
N	BPRb4	6	6	6	6
	GDMb4	6	6	6	6
	GDUb4	6	6	6	6
	TEDb4	6	6	6	6

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	.491 _a	.241	-.897	3.68171	.241	.212	3	2	.882	2.137

a. Predictors: (Constant), TEDb4, GDUb4, GDMb4

b. Dependent Variable: BPRb4

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations		
	B	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Part
(Constant)	14.547	20.492		.710	.551	-73.621	102.714			
1 GDMb4	1.351E-005	.000	.188	.209	.854	.000	.000	.407	.146	.129
GDUb4	-3.621E-005	.000	-.285	-.327	.775	-.001	.000	-.449	-.225	-.201
TEDb4	-2.696E-007	.000	-.087	.082	.042	.000	.000	.424	.058	.051

a. Dependent Variable: BPRb4

Source: SPSS Processed 2018

$$\text{BPRb4} = 14.54 + 1.35\text{GDMb4} - 3.62\text{GDUb4} - 2.69\text{TEDb4} \dots\dots\dots 4.1$$

The result in the above equation shows an intercept of 14.54. This value is positive but statistically insignificant with sig. value of 0.71 greater than 0.05. Hence this is an indication that bank prime rate before debt forgiveness was approximately constant at 14.54% when there was no change in the adopted explanatory variables. The coefficient of government debt to multilateral agencies before debt cancellation (GDMb4) is positive but not significant wherein sig. value of 0.21 is greater than 0.05. This positive coefficient is an indication that for every one per cent (1%) increase in government debt to multilateral agencies, commercial banks prime rate increased by 1.35% over the period of study holding other variables constant. In other words, a direct relationship existed between bank prime rates and government debts to multilateral agencies before debt cancellation. The GDMb4 result is however discouraging as it is not consistent with existing theory of sovereign debt (Mark and Wright, 2011). The implication is that the more government borrows from external sources, the more expensive internal borrowing becomes in Nigeria. Ideally, more external borrowing will result in less domestic debt and invariably fall in the prime rates of local banks. However, the reverse result may be due to influence of other debt factors such as Paris club not captured in the model.

Controlling for other forms of foreign debt variables capable of impacting bank prime rate in Nigeria, unclassified external debt before debt relief (GDUb4) showed negative but insignificant result. A one percent (1%) increase in foreign unclassified debt over the period of study decreased banks prime rates by 3.62%. Similarly, a one percent (1%) increase in total external debt before relief (TEDb4) over the period of study depleted banks prime rates by 2.69%.

The coefficient of determination (R^2) measures the goodness of fit of the regression equation. For equation 4.1, the coefficient revealed that 24.1% variation in banks prime rates over the period covered were explained by the regression model, while the remaining 75.9% variation may be as a result of other variables not included in the regression model.

Validation of Hypothesis One (A) using t-statistic

The critical t-statistics from the statistical table at 95% confidence interval is 1.9432. This value is greater than the computed t-statistics of 0.209, -0.327, and 0.082 respectively for the explanatory variables in the regression output for hypothesis one (a). Based on the above decision rule therefore, we reject the alternate hypothesis and accept the null hypothesis which states that; there is no significant positive effect of federal government's external borrowings on the lending rates of deposit money banks in Nigeria.

Hypothesis One B (After Debt Cancellation):

The null and the alternate forms of hypothesis one are again restated hereunder thus:

H_0 : There was no significant positive effect of federal government's external borrowings on the lending rates of deposit money banks in Nigeria after debt relief.

H_1 : There was a significant positive effect of federal government's external borrowings on the lending rates of deposit money banks in Nigeria after debt relief.

Decision Rule

The decision rule is to reject the null hypothesis when the computed t-value is greater than the critical t-value and accept the null if otherwise.

Analysis of the SPSS Regression Results for Hypothesis One B

Table 4.3 represents the summary output of the multiple linear regression tests. The estimated coefficients of the explanatory variables in the equation are as presented in equation 4.2:

Table 4.3: Regression Results Summary for Hypothesis OneB

		Correlations			
		BPRafr	GDMafr	GDUafr	TEDafr
Pearson Correlation	BPRafr	1.000	-.059	-.325	-.123
	GDMafr	-.059	1.000	.671	.967
	GDUafr	-.325	.671	1.000	.813
	TEDafr	-.123	.967	.813	1.000
Sig. (1-tailed)	BPRafr	.	.456	.265	.408
	GDMafr	.456	.	.072	.001
	GDUafr	.265	.072	.	.025
	TEDafr	.408	.001	.025	.
N	BPRafr	6	6	6	6
	GDMafr	6	6	6	6
	GDUafr	6	6	6	6
	TEDafr	6	6	6	6

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	.420 _a	.176	-1.059	1.90344	.176	.143	1	.420 _a	.176	-1.059

a. Predictors: (Constant), TEDafr, GDUafr, GDMafr

b. Dependent Variable: BPRafr

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations		
	B	Std. Error				Lower Bound		B	Std. Error	Beta

1	(Constant)	16.273	3.903		4.169	.053	1	(Constant)	16.273	3.903	
	GDMafr	-5.965E-006	.000	-.686	.168	.882		GDMafr	-5.965E-006	.000	-.686
	GDUafr	-2.559E-005	.000	-.900	.505	.664		GDUafr	-2.559E-005	.000	-.900
	TEDafr	-9.660E-006	.000	1.273	.244	.830		TEDafr	9.660E-006	.000	1.273

a. Dependent Variable: BPRafr

Source: SPSS Processed 2018

$$\text{BPRafr} = 16.27 - 5.96\text{GDMafr} - 2.56\text{GDUafr} - 9.66\text{Tedafr} \dots\dots\dots 4.2$$

The result in the above equations shows an intercept of 16.27. This value is positive and statistically significant at approximately 0.05. This is an indication that bank prime rate after debt forgiveness was constant at 16.27% when there was no change in the adopted explanatory variables. The coefficient of government debt to multilateral agencies after debt cancellation (GDMafr) is now negative but still not significant wherein sig. value of 0.88 is greater than 0.05. This negative coefficient is an indication that for every one per cent (1%) increase in government debt to multilateral agencies, commercial banks prime rate decreased by 5.96% over the period of study holding other variables constant. This second result after debt relief is inverse and therefore consistent with existing theory of sovereign debt. The implication is that the more government borrows from external sources, the less expensive internal borrowing becomes in Nigeria. Ideally, more external borrowing will result in less domestic debt and invariably fall in the prime rates of local banks. Hence, this second outcome is in line with a priori expectation.

While controlling for other forms of foreign debt variables capable of impacting bank prime rate in Nigeria, unclassified external debt after debt cancellation (GDUafr) showed negative but insignificant result. A one percent (1%) increase in foreign unclassified debt over the period of study decreased banks prime rates by 2.56%. Similarly, a one percent (1%) increase

in total external debt before relief (TEDb4) over the period of study depleted banks prime rates by 9.66%.

The coefficient of determination (R^2) measures the goodness of fit of the regression equation. For equation 4.2, the coefficient revealed that 17.6% variation in banks prime rates over the period covered were explained by the regression model, while the remaining 82.4% variation may be as a result of other variables not included in the regression model. Again, this result confirms the reason while the sig. values of all the explanatory variables were not significant.

Validation of Hypothesis One (B) using t-statistic

The critical t-statistics from the statistical table at 95% confidence interval is 1.9432. This value is greater than the computed t-statistics of -0.168, -0.505, and 0.244 respectively for the explanatory variables in the regression output for hypothesis one (b). Based on the above decision rule therefore, we still reject the alternate hypothesis and accept the null hypothesis which states that; there was no significant positive effect of federal government's external borrowings on the lending rates of deposit money banks in Nigeria.

Hypothesis Two

The null and the alternate forms of hypothesis two are hereunder stated thus:

H_0 : There was no significant positive effect of federal government's domestic borrowings on commercial banks total deposit liabilities in Nigeria

H_1 : There was a significant positive effect of federal government's domestic borrowings on commercial banks total deposit liabilities in Nigeria.

Decision Rule

The decision rule is to reject the null hypothesis when the computed t-value is greater than the critical t-value and accept the null if otherwise.

Analysis of the SPSS Regression Results for Hypothesis Two

Table 4.4 represents the SPSS output of the multiple linear regression tests. The estimated coefficients of the explanatory variables in the equation are as presented in equation 4.3:

Table 4.4: Regression Results Summary for Hypothesis Two

Correlations		
	BDL	GTB
Pearson Correlation	1.000	.718
	.718	1.000
Sig. (1-tailed)	.	.004
	.004	.
	12	12
N	12	12

Model Summary^b

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.516 ^a	10.640	1	10	.009	.566

a. Predictors: (Constant), GTB

b. Dependent Variable: BDL

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations		
	B	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Part
(Constant)	-252930.55	1009741.3		-.250	.807	-2502774.5	1996913.4			
GTB	5.05	1.55	.718	3.262	.009	1.599	8.493	.718	.718	.72

a. Dependent Variable: BDL

Source: SPSS Processed 2018

$$\text{BDL} = -252930.55 + 5.05\text{GTB} \dots\dots\dots 4.3$$

Equation 4.3 shows a regression line intercept of -252930.55. The value is negative and statistically not significant with sig-value of 0.807 greater than 0.05. The coefficient of government Treasury bill (GTB) is positive and statistically significant with sig-value of 0.009 lesser than 0.05. The positive coefficient (5.05) of government Treasury bill revealed that for every one per cent (1%) increase in government Treasury bill to commercial banks over the period of study holding other variables constant, bank deposit liabilities (BDL) in Nigeria increased by approximately 5.05%. In other words, a direct relationship exists between BDL and GTB in Nigeria. This result agrees with Abbas and Christensen (2007) who develop a model that shows that moderate levels of debt can increase financial market growth.

Measuring the goodness of fit of the regression equation, the coefficient of determination (R^2) for equation 4.3 revealed that 51.6% variation in bank deposit liabilities were explained by the regression model, while the remaining 48.4% variation were due to other variables not included in the regression model.

Validation of Hypothesis Two Using t-statistics

The critical t-statistics from the statistical table at 95% confidence interval is 1.7823. This value is less than the computed t-statistics of 3.262 for government treasury bill in the regression output for hypothesis two. Based on the above decision rule therefore, we reject the null hypothesis and accept the alternate hypothesis which states that; there is significant positive effect of federal government's domestic borrowings on commercial banks total deposit liabilities in Nigeria.

Hypothesis Three:

The null and the alternate forms of hypothesis one are hereunder stated thus:

H₀: Government's domestic borrowing did not have a significant positive effect on commercial banks' total credit in Nigeria.

H₁: Government's domestic borrowing had a significant positive effect on commercial banks' total credit in Nigeria.

Decision Rule

The decision rule is to reject the null hypothesis when the computed t-value is greater than the critical t-value and accept the null if otherwise.

Analysis of the SPSS Regression Results for Hypothesis Three

Table 4.5 represents the SPSS output of the multiple linear regression tests. The estimated coefficients of the explanatory variables in the equation are as presented in equation 4.4:

Table 4.5: Regression Results Summary for Hypothesis Three
Correlations

		BTC	GTB
Pearson Correlation	BTC	1.000	.552
	GTB	.552	1.000
Sig. (1-tailed)	BTC	.	.031
	GTB	.031	.
N	BTC	12	12
	GTB	12	12

Model Summary^b

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.304 ^a	4.375	1	10	.063	.519

a. Predictors: (Constant), GTB

b. Dependent Variable: BTC

Coefficients ^a										
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations		
	B	Std. Error				Beta	Lower Bound	Upper Bound	Zero - order	Partial
1 (Constant)	835004.4	1661328.2		.503	.626	-2866665.53	4536674.4			
GTB	5.32	2.545	.552	2.092	.063	-.35	10.995	.552	.552	.552

a. Dependent Variable: BTC

Source: SPSS Processed 2018

BTC=835004.4+ 5.32GTB..... 4.4

Equation 4.4 reveals a regression line intercept of 835004.4. The value is positive but statistically not significant with sig-value of 0.626 greater than 0.05. The coefficient of government Treasury bill (GTB) is positive but statistically not significant with sig-value of 0.063 greater than 0.05. However, the positive coefficient (5.32) of government Treasury bill revealed that for every one per cent (1%) increase in government Treasury bill to commercial banks over the period of study holding other variables constant, commercial bank total credits (BTC) in Nigeria increased by approximately 5.32%. Again, a direct relationship exists between BTC and GTB in Nigeria. This result agrees with Adofu and Abula (2010) who argue that moderate levels of domestic debt can enhance financial market performance.

Measuring the goodness of fit of the regression equation, the coefficient of determination (R^2) for equation 4.3 revealed that 30.4% variation in banks total credit were explained by the regression model, while the remaining 69.6% variation were due to other variables not included in the regression model.

Validation of Hypothesis Three Using t-statistics

The critical t-statistics from the statistical table at 95% confidence interval is 1.7823. This value is less than the computed t-statistics of 2.092 for government treasury bill in the regression output for hypothesis three. Based on the above decision rule therefore, we reject the null hypothesis and accept the alternate hypothesis which states that; government's domestic borrowing has a significant positive effect on commercial banks' total credit in Nigeria.

Hypothesis Four

The null and the alternate forms of hypothesis four are hereunder stated thus:

H_0 : Federal government's domestic borrowing did not have a significant positive effect on the total assets of commercial banks in Nigeria.

H_1 : Federal government's domestic borrowing had a significant positive effect on the total assets of commercial banks in Nigeria.

Decision Rule

The decision rule is to reject the null hypothesis when the computed t-value is greater than the critical t-value and accept the null if otherwise.

Analysis of the SPSS Regression Results for Hypothesis Four

Table 4.6 represents the SPSS output of the multiple linear regression tests. The estimated coefficients of the explanatory variables in the equation are as presented in equation 4.5:

banks over the period of study holding other variables constant, commercial banks total assets (BTA) in Nigeria increased by approximately 12.38%.

The above result confirms a direct relationship between BTA and GTB in Nigeria. This result again agrees with Abbas and Jacob (2007) who found positive evidence of debt on financial market growth.

Measuring the goodness of fit of the regression equation, the coefficient of determination (R^2) for equation 4.3 revealed that 39.0% variation in banks total assets were explained by the regression model, while the remaining 61.0% variation were due to other variables not included in the regression model.

Validation of Hypothesis Four Using t-statistics

The critical t-statistics from the statistical table at 95% confidence interval is 1.7823. This value is less than the computed t-statistics of 2.530 for government treasury bill in the regression output for hypothesis four. Based on the above decision rule therefore, we again reject the null hypothesis and accept the alternate hypothesis which states that; Federal government's domestic borrowing had a significant positive effect on the total assets of commercial banks in Nigeria.

4.4: Discussion /Implications of Findings

There are evidences from the research analysis which confirm the achievement of the objectives sought in chapter one of this investigation. Objective one for instance was to investigate the impact of federal government's external borrowings on the lending rates of deposit money banks in Nigeria.

Apparently, results arising from the descriptive statistics and t-test of hypothesis one confirmed that this objective was achieved. The equation of the relationship between bank's

prime rates and government external debt both before and after debt cancellation in Nigeria showed insignificant values when explanatory variables were zero. The coefficient of government debt to multilateral agencies before debt cancellation (GDMb4) was not significant wherein sig. value of 0.21 is greater than 0.05. Unclassified external debt before debt relief (GDUb4) was also not significant. A one percent (1%) increase in foreign unclassified debt over the period of study decreased banks prime rates by 3.62%. Similarly, a one percent (1%) increase in total external debt before relief (TEDb4) over the period of study depleted banks prime rates insignificantly by 2.69%.

In the post debt cancellation period, the coefficient of government debt to multilateral agencies (GDMAfr) showed negative but still insignificant result wherein sig. value of 0.88 is greater than 0.05. The negative coefficient is an indication that for every one per cent (1%) increase in government debt to multilateral agencies, commercial banks' prime rate decreased by 5.96% over the period of study holding other variables constant. The implication is that the more government borrows from external sources, the less expensive internal borrowing becomes in Nigeria. Ideally, more external borrowing will result in less domestic debt and invariably fall in the prime rates of local banks. Testing the hypothesis at 95% confidence level, for both the pre and post debt cancellation period, the t-statistics was used to validate the stated hypothesis. Consistent with the t-statistics rule, the study rejected the alternate hypotheses and accepted the null hypotheses for the two periods which states that; there is no significant positive effect of federal government's external borrowings on the lending rates of deposit money banks in Nigeria.

For objective two which tried to verify the significant effect of federal government's domestic borrowings on commercial banks total deposit liabilities in Nigeria, results arising from the descriptive statistics and t-test of hypothesis two confirmed that this objective was

also achieved. The equation of the relationship between government Treasury bill and bank deposit liabilities showed positive and statistically significant result with sig-value of 0.009 lesser than 0.05. The positive coefficient of government Treasury bill revealed that for every one per cent (1%) increase in government Treasury bill to commercial banks over the period of study holding other variables constant, bank deposit liabilities (BDL) in Nigeria increased by approximately 5.05%. In other words, a direct relationship exists between BDL and GTB in Nigeria. This result agrees with Abbas and Christensen (2007) who develop a model that shows that moderate levels of debt can increase financial market growth. Testing the hypothesis at 95% confidence level, the t-statistics was used to validate the stated hypothesis. Consistent with the t-statistics rule, the study rejected the null hypothesis and accepted the alternate hypothesis which states that; there is significant positive effect of federal government's domestic borrowing on commercial banks total deposit liabilities in Nigeria.

Objective three was to verify the significant impact of government's domestic borrowing on commercial banks' total credit in Nigeria. Similarly, results arising from the descriptive statistics and t-test of hypothesis three confirmed that this objective was achieved. The equation of the relationship between government Treasury bill and banks total credit showed positive and statistically not significant result with sig-value of 0.06 lesser than 0.05. The positive coefficient of government Treasury bill revealed that for every one per cent (1%) increase in government Treasury bill to commercial banks over the period of study holding other variables constant, commercial banks total credits (BTC) in Nigeria increased by approximately 5.32%. Again, a direct relationship exists between BTC and GTB in Nigeria and agrees with Adofu and Abula (2010) who argue that moderate levels of domestic debt can enhance financial market performance. Testing the hypothesis at 95% confidence level, the t-statistics was used to validate the stated hypothesis. Consistent with the t-statistics rule, the study rejected the null hypothesis and accepted the alternate hypothesis which states that;

government's domestic borrowing has a significant positive effect on commercial banks' total credit in Nigeria.

The significant effect between government's domestic borrowing and the total assets of commercial banks in Nigeria was the focus of objective four. Emanating results from the descriptive statistics and t-test of hypothesis four points to the fact that this objective was also achieved. The equation of the relationship between government Treasury bill and banks total asset showed a positive and statistically significant result. The positive coefficient (12.38) of government Treasury bill revealed that for every one per cent (1%) increase in government Treasury bill to commercial banks over the period of study holding other variables constant, commercial banks total assets (BTA) in Nigeria increased by approximately 12.38%. The above result confirms a direct relationship between BTA and GTB in Nigeria. Validating the stated hypothesis at 95% confidence level, the t-statistics was used. Consistent with the t-statistics rule, the study again rejected the null hypothesis and accepted the alternate hypothesis which states that; federal government's domestic borrowing has a significant positive effect on the total assets of commercial banks in Nigeria.

The findings of this study have certain major implications. The significant negative effect of total external debt on commercial banks' lending rates before debt cancellation and the no significant positive effect of total external debt on commercial banks' lending rates after debt cancellation are informative to policy. The findings imply that the more government borrows from external sources, the less expensive internal borrowing becomes in Nigeria. Ideally, more external borrowing will result in less domestic debt and invariably fall in the prime rates of local banks. The results are consistent with related studies in this regard (Bolle, Rother, and Hakobyan 2006; Keller, et.al, 2007; and Udaibir, et. al., 2010). It is also consistent with foreign debt theory (Perez, 2015) that a sovereign debt default has a negative impact on banks' wealth, which reduces their ability to raise funds and prevents the flow of resources to productive investments in the economy.

Meanwhile, the further findings on the effect of domestic debt on deposit liabilities, total assets, and total credits of banks in Nigeria are also very implicative. The positive coefficient

of government treasury bill indicated that for every unit increase in government treasury bill to commercial banks over the period of study, bank deposit liabilities, bank total assets and their total credits increased. This of course corroborates the credit creation theory of banks that “every loan creates a deposit” (Baye and Jansen, 2006). Apparently, when a bank buys government securities, it does not pay the purchase price at once in cash. It simply credits the account of the government with the purchase price. The government is free to withdraw the amount anytime. Hence, by crediting government account, the bank total deposit liabilities and total assets are magnified. Besides, its total credit also increases through multiple credit-expansion process. On this premise therefore, a direct relationship is said to exist between deposit liabilities, total assets and total credits of banks and government domestic debt in Nigeria. This implies that domestic debt enhances bank performance. It further means by extension that domestic debt is positive to economic development going by McKinnon and Shaw (1962) financial market led economic growth hypothesis. This implication is consistent with Abbas and Christensen (2007) who developed a model that shows that moderate levels of debt can increase financial market growth. It is also consistent with Adofu and Abula (2010) who argue that moderate levels of domestic debt can enhance financial market performance.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter summarizes the various research results which emerged from the study. The results are aligned with the various objectives and hypotheses set out in chapter one of the dissertation. Conclusions are drawn and necessary recommendations made from the research findings.

5.2 SUMMARY OF FINDINGS

1. Federal government's external borrowings did not have a significant positive effect on the lending rates of deposit money banks in Nigeria.
2. There was significant positive effect of federal government's domestic borrowings on commercial banks total deposit liabilities in Nigeria.
3. Government's domestic borrowing had a significant positive effect on commercial banks' total credit in Nigeria.
4. Federal government's domestic borrowing had a significant positive effect on the total assets of commercial banks in Nigeria.

5.3 CONCLUSION

This research evaluated the effects of public debt on the performance of the banking sector in Nigeria. Specifically, the study sought to investigate the impact of federal government's external borrowings on the lending rates of deposit money banks in Nigeria. It further evaluated the effect of federal government's domestic borrowings on commercial banks total deposit liabilities, total credits, and total assets in Nigeria. The essence here was to determine if external debt has impacted positively on bank performance and by extension, the overall economy.

While utilizing data on certain identified variables over a twelve year period and applying major econometric tools, the study made useful findings. The study found among other things that there is no significant positive effect of federal government's external borrowings on the lending rates of deposit money banks in Nigeria both in the pre and post external debt cancellation era. Secondly, there is significant positive effect of federal government's domestic borrowings on commercial banks total deposit liabilities in Nigeria. Again, government's domestic borrowing has a significant positive effect on commercial banks' total credit as well as total asset in Nigeria. Based on these findings, the researcher concludes that government debt impacts bank performance. While such impact may not be significant for external debt, bank performance can be significantly and positively enhanced through domestic debt.

5.4 RECOMMENDATIONS

Considering the above findings and potential research avenues, the following recommendations are made:

- Government should reduce her financing expenditure using external debt. They should rather adopt more of domestic debt financing strategy as servicing external debt have been found to be more expensive.
- Secondly, the presence of a well-functioning autonomous domestic debt market could help reduce the rate at which government borrows from outside. This study suggests that such robust domestic debt market be established in Nigeria.
- Finally, actions taken, and policies implemented by debt managers can promote financial market development and macroeconomic stability. Their relevance cannot be overemphasized. The role of debt managers has gained elevated status in the context

of managing the effects of the recent crisis, during which debt levels in many countries rose significantly in a relatively short period of time. They should therefore be encouraged in Nigeria.

5.5 Contributions to Knowledge

This work makes three contributions to knowledge.

This study has shown that the sovereign debt and domestic bank liquidity theory as recently formalized in the work of Perez (2015) explains two mechanisms. Debt default can disrupt the domestic economy via its financial system and affect the government's repayment incentives using a model of endogenous default enriched with a financial sector. The first mechanism is related to banks' balance-sheet exposure to public debt whereby a sovereign default has a negative impact on banks' wealth, which reduces their ability to raise funds and prevents the flow of resources to productive investments, and secondly, the novel effect is related to the liquidity value of public debt.

Finally, this study patterns recently modified models employed in Obademi (2012), and Eleje, et.al., (2012) which capture some of the factors that are considered sensitive and relevant to the Nigerian economy in recent times. Obademi (2012) employed the augmented Cobb-Douglas production function, while Eleje, et.al., (2012) adopted the logged bivariate linear regression technique to capture both the direct impact of the two types of debts on growth and their respective elasticities. Patterning Obademi (2012), the models of this study are specified in augmented Cobb-Douglas functional form as captured in chapter 3.5. The proposed models for this research draw theoretical strength from the Frankel-Romer (1962) Endogenous growth models. However, most of these past studies in Africa in general and Nigeria in particular had focused research attention into public debt and its impact on the economy or economic growth of countries but few on the banking system per se. Findings from this study have shown that while federal

government's external borrowings do not have significant positive effect on the lending rates of deposit money banks in Nigeria, federal government's domestic borrowings have significant positive effect on commercial banks total deposit liabilities, commercial banks' total credit and the total assets of commercial banks in Nigeria.

BIBLIOGRAPHY

- Abbas, S., Ali, M., and Jacob, E. C. (2007). The role of domestic debt markets in economic growth: an empirical investigation for low-income countries and emerging markets. *IMF Working Paper* No. 07/127.
- Abuzayed, B., and Molyneux, P. (2009). Market value, book value and earnings: is bank efficiency a missing link? *Managerial Finance*, Vol. 35 No 2, Pp. 156-179.
- Adofu, I., and Abula, M. (2010). Domestic debt and the Nigerian economy. *Current Research Journal of Economic Theory* 2(1): 22-26.
- Ahmed, A. (1984). Short and medium term approaches to solving African debt problems. (ed) *Bull. J. Central Bank Nigeria*, 12(22).
- Ajayi, E. A. (1989). Nigerian debt management experience. *Central Bank Nigeria Publication*, 13(2).
- Ajayi, S. I. (1991). Macroeconomic approach to external debt: The case of Nigeria. *AERC Research paper* 8, Nairobi, December.
- Alesina, A., & Tabellini, G. (1990). *External debt, capital flight and political risk*. Oxford: Oxford University Press.
- Alison, J. (2003). Key issues for analysing domestic debt sustainability and debt relief. *International Publication*, ISBN: 1-903971-07-1.
- Ang, J. and Clark, J. (1997). The market valuation of bank shares with implications for the value additivity principle. *Financial Markets, Institutions and Investments*, 6, New York University Salomon Center, 1-22.
- Ani A. (1997). Details of budget 1997: Text of the 1997 Federal budget breakdown presented in Abuja, Monday, January 20, Daily Champion, January 21.
- Anyanwu, J.C. (1997). *Monetary Economics: Theory, Policy and Institutions*. Hybrid Publishers LTD, Onitsha.
- Audu, Isa (2004). The impact of external debt on economic growth and public investment: the case of Nigeria. African Institute for Economic Development and Planning (IDEP).
- Avramovic, D. (1964). *Economic growth and external debt*. Baltimore: The Johns Hopkins Press.
- Bolle, M., Bjorn R., and Ivetta H. (2006). The level and composition of public sector debt in emerging market crises. *IMF Working Paper* No. 06/186.
- Borensztein, E. (1989). *Debt overhang, credit rationing and investment*. IMF Working Paper WP/89/74 Washington D.C.

- Borensztein, E., Marcos, C., Olivier, J., Paolo, M., and Jeromin, C. J. (2004). *Domestic debt market in Sub-Saharan Africa*. IMF Working Paper WP/0646.
- Calvo, G. (1989). *Growth, debt and economic transformation: the capital flight problem*; in Coricelli, F. and Hahn, F. (eds), *New theories in growth and development*, St. Martins Press, Pp. 847-868.
- CBN. (2009). Central Bank of Nigeria Annual Report, Government Printer.
- CBN. (2010). Central Bank of Nigeria statistical bulletin, Government Printer.
- CBN .(2016). Central Bank of Nigeria statistical bulletin, Government Printer.
- CBN. (2004). Central Bank of Nigeria annual report, Government Printer.
- CBN. (2012). Central Bank of Nigeria Annual Report, Government Printer.
- CBN. (2013). Central Bank of Nigeria Annual Report, Government Printer.
- CBN. (2014). Central Bank of Nigeria Annual Report, Government Printer.
- CBN. (2015). Central Bank of Nigeria Annual Report, Government Printer.
- CBN. (2017). Central Bank of Nigeria Annual Report, Government Printer.
- Cem, D. (2010). Analyzing the bank credit-economic growth Nexus in Turkey. *European Journal of Economics, Finance and Administrative Sciences*, 23(2), .
- Cohen, D. (1992). Large external debt and (Show) domestic growth: a theoretical analysis. *Journal of Economic Dynamics and Control*, 19, 1144-1163.
- Cohen, D., & Sachs, J. (1986). Growth and external debt under risk of debt repudiation. *European Economic Review*, 30, 529-550.
- De Wet, J. H., and De Toit, E. (2007). *Return on equity: a popular, but flawed measure of corporate financial performance*. Department of Financial Management, University of Pretoria.
- Dev, A., and Rao, V. (2006). *Performance measurement in financial institutions in an ERM framework: a practitioner guide*. Risk Books.
- DMO (2006). *Debt Management Office Bulletin*, Government Printer.
- DMO (2016). *Debt Management Office Bulletin*, Government Printer.
- Drine, I., and Nabi, S. (2009). *Public external debt, informality and production efficiency in developing countries*. UNU-WIDER and LEGI-EPT & IHEC Sousse
- Easterbrook, F. (1984). Two-agency cost explanations of dividends. *American Economic Review*, 74: 650-659.

- ECB (2010). *Beyond ROE – How to measure bank performance*. European Central Bank Report Retrieved Online 21/12/12 via <http://www.ecb.europa.eu> .
- Egwaikhide, F. O. (1997). *Effects of budget deficits on the current account balance in Nigeria. A Simulation Exercise*. AERC Research Paper 70.
- Eleje, E. O., Ani, W., and Ikenna, E. (2012). External borrowings and economic performance in developing nations: empirical evidence from Nigeria. *Global Research Analysis; India Journal of Research*, Issue 15.
- Eleje, E. O., and Ani, W. U. (2013). Banks' credit and economic performance in developing nations: empirical evidence from the production sector of the Nigerian economy. *Nigerian Journal of Management Sciences*, 3:1 & 2: 172-186.
- Eleje, E. O., Ani, W. and Ikenna, E. (2012). External borrowings and economic performance in developing nations: empirical evidence from Nigeria. *Global Research Analysis; India Journal of Research*, Issue 15.
- Eleje, E. O., Nwokeji, N. N. C., and Onwumere, J. U. J. (2008/09). Commodity exchange market and economic development. *Nigerian Journal of Banking and Finance*, 8:132-146.
- Essien, E., & Onwioduokit, E. (1998). Nigeria's economic growth and foreign debt: an analytical examination. *CBN Economic and Financial Review*, 3(1), 78 - 98.
- Fabrizio, C., Nigel, D., Sarmistha, P., and Isabelle, R. (2011). Optimal leverage and firm performance: an endogenous threshold analysis. CEDI Working Paper No. 11-05.
- Frankel, J.A., Romer, D. (1999). Does trade cause growth? *American Economic Review*, 89 (3), 379– 399.
- Front, K., & Krugman, P. (1990). *Market-based debt reduction for developing countries; principles and prospects*. Massachusetts National Bureau for Economic Research.
- Galai, D., and Masulis, R. (1976). The option pricing model and risk factor of stock. *Journal of Financial Economics*, 3: 631-644.
- Ghirmay, T. (2004). *Financial development and economic growth in Sub-Saharan African countries: evidence from time series analysis*. African Development Bank.
- Grossman, S., and Hart, O. (1982). *Corporate financial structure and managerial incentives*. In *The Economics of Information and Uncertainty* (Editor: J. McCall), University of Chicago Press.
- Guscina, A. (2008). *Impact of macroeconomic, political, and institutional factors on the structure of government debt in emerging market countries*. IMF Working Paper No. 08/205.

- Harris, M., and Raviv, A. (1991). The Theory of Capital Structure. *Journal of Finance*, 49: 297-355.
- Hornsby, A. S. (2006). *Oxford Advanced Learners Dictionary*, Sixth Edition, London, Oxford University Press.
- IMF (2001). *Developing government bond markets: a handbook* (Washington).
- Islam, E., and Biswas, P. B. (2005). Public debt management and debt sustainability in bangladesh. *The Bangladesh Development Studies* Vol. Xxxi Nos.1&2.
- Iyoha, M.A., & Iyare, S. (1994). Africa's debt problems in African debt burden and economic development, *Nigeria Economic Society Publication*, 1-13.
- James, F. (2006). *The effects of public debt on the growth of Nigerian economy*. Unpublished B.Sc Project Department of Economics, Kogi State University, Anyigba.
- Jeanneau, S., and Verdia, C. P. (2005). Reducing financial vulnerability: the development of the domestic government bond market in Mexico. *BIS Quarterly Review*, 95–107.
- Jensen, M. (1986). Agency cost of free cash flows, corporate finance and takeovers. *American Economic Review*, 76: 323-339.
- Jensen, M. C., and Meckling, W. H. (1976). *Specific and general knowledge and organizational structure* in L. Werin and H. Wijkander (ed), *Contract Economics*, Massachusetts, Blackwell.
- Keller, C., Peter K., and Marcos S. (2007). *Measuring sovereign risk in Turkey: an application of the contingent claims*. IMF Working Paper No. 07/23.
- Krugman and Proot (1989) in Audu, Isa (2004). *The impact of external debt on economic growth and public investment: the case of Nigeria*. (Abstract), African Institute for Economic Development and Planning (IDEP).
- Krugman, P. (1988). Financing vs forgiving a debt overhang. *Journal of Development Economics*, 22, 253-268. [http://dx.doi.org/10.1016/0304-3878\(88\)90044-2](http://dx.doi.org/10.1016/0304-3878(88)90044-2).
- Leland H., and Pyle D. (1977). Information asymmetries, financial structure and financial intermediation. *Journal of Finance*, 32, 371-387
- Levine, Rose (2003). *Finance and growth: theory, evidence, and mechanisms*. University of Minnesota and NBER Paper.
- Meysam, K., Shaer, B., and Soleimani, A. (2012). Study of and explain the relationship between the financial leverage and new performance metrics (EVA, MVA, REVA SVA and CVA) evidence from automotive industry Tehran stock exchange. *Journal of Risk and Diversification*– 4: 45-60.

- Mihaljek, D., Scatigna, M., and Villar, A. (2002). Recent trend in bond markets. *BIS Working Paper* 11,13-41.
- Miller, M. (1977). Debt and taxes. *The Journal of Finance*, 46: 297-355.
- Modigliani, F., and Miller, M. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review*, 48: 261-297
- Myers, S.C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5: 147-175
- NBS, (2016). Nigeria Bureau of Statistics Annual Report, Government Printer”
- Nyong, M. O. (2005). *International economics: theory, policy and application*. Calabar.
- Nzotta, S. M. (2004). *Money, banking and finance*. Owerri;Hudson-Jude Nigeria Publishers.
- Obademi, O. E. (2012). An empirical analysis of the impact of public debt on economic growth: evidence from Nigeria 1975-2005. *Canadian Social Science Journal*, 8(4), 154-161.
- Odozi, V.A. (1996). *Nigeria's domestic public debt stock, an assessment* CBN Debt Trend. 20(2)
- Okafor, F. O. (2011). *50 years of banking sector reforms in Nigeria (1960-2010): past lessons and future imperatives*. Enugu, Ezu Books Nig. Ltd.
- Ola, C. S., & Adeyemo, J. (1998). *Public finance in Nigeria*. Lagos: CSS Publishing Company.
- Olukole, R. (1991). Management of external debt of Nigeria. *CBN Bullion*,15(2); 55 - 67.
- Omorogie, A. N., and Erah, D. O. (2010). Capital structure and corporate performance in Nigeria: an empirical investigation. *AAU JMS*, 1(1); 25 - 40.
- Onwumere, J. U. J. (2009). *Business and economic research methods*. Enugu, Vougasen Ltd.
- Onyeiwu, C. (2012). Domestic debt and the growth of Nigerian economy. *Research Journal of Finance and Accounting*, 3(5); 105 - 120.
- Oshadami, O. L. (2006). *The impact of domestic debt on Nigeria's economic growth*. Unpublished B.Sc Project, Department of Economics, Kogi State University, Anyigba.
- Pandey, I. M. (2006). *Financial management*. Ninth Edition, New Delhi, India, Vikas Publication.
- Papaioannou, N. (2009). Exchange rate risk measurement and management: issues and approaches for public debt managers. *South-Eastern Europe Journal of Economics*, 7(1); 7–34.

- Perez, D. J. (2015). *Sovereign debt, domestic banks and the provision of public liquidity*. Stanford University, Job Market Paper, Retrieved Online 12/12/2014 via http://stanford.edu/~dperez1/Perez_JMP.pdf.
- Rapu, S. (2003). Assessment of Nigerian domestic debt sustainability. *CBN Economic and Financial Review*, 42(2), 41-66.
- Reinhart, C. and Kenneth R. (2009). *This time is different: eight centuries of financial folly*. Princeton, New Jersey: Princeton University Press.
- Ross, S. (1977). The determination of financial structure: the incentive signalling approach. *Bell Journal of Economics* 8, 23-40.
- Sanders, P. (1998). *Kapitali Strktuuri Valik Ja laenukapitali Maksueelis*. Unpublished MA Thesis, Tartu, 137.
- Sanusi, J.O., (1988). *Genesis of Nigeria's debt problems, problems and prospects for debt conversion*. A Lecture Delivered on Debt Conversion/Asset Trading Organized by Continental Merchant Bank of Nigeria.
- Scott, J.H. (1976). A theory of optimal capital structure. *Bell Journal of Economics*, 7(1): 33-54.
- Titman, S. (1984). The effect of capital structure on the firm's liquidation decision. *Journal of Financial Economics*, 13: 137-152.
- Tornell, A., & Velasco, A. (1992). The tragedy of the commons and economic growth; why does capital flow from poor to rich countries. *Journal of Political Economy*, 100, 1208-1231.
- Udaibir, S. D., Michael, P., Guilherme P., Faisal A., and Jay S. (2010). *Managing public debt and Its financial stability implications*. IMF Working Paper, December.
- Udoka, C. O., and Ogege, S. (2012). Public debt and the crisis of development in Nigeria econometric investigation. *Asian Journal of Finance & Accounting*, 4(2); 35-50.
- Webbler (2007). *The debt crisis: country information; Nigeria*. Jubilee Debt Campaign UK, Retrieved online, 18/12/12 via; www.jubileedebtcampaign.org.uk
- Wen-Jhan, J. (2010). The effects of equities on organizational performance in Chinese professional baseball league. *African Journal of Business Management*, 5(15); 6132-6137.