DOMESTIC DEBT FINANCING AND ECONOMIC DEVELOPMENT OF NIGERIA (1990 – 2004).

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CERTIFICATION

We certify that this research work was carried out by **Nwachukwu Hyacinth Chidi** in the Department of Financial Management Technology, and that it has not been submitted in part or full for the degree of any other University.

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DEDICATION

This work is dedicated with love to my beloved wife, Beatrice and my children – Ifeoma, Uchenna, Onyekachi and Oluchi for their encouragement and support which made this work possible.

And my late father, Michael Nwachukwu and my mother Cecilia who struggled in life to give me good basic education and confidence to face the challenges of life.

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CONTENTS

PAGES

LIST OF TABLES

LIST OF FIGURES & CHARTS

PAGES

ABSTRACT

This study is on Domestic Debt Financing and Economic Development of Nigeria (1990 – 2004). The research considered the sources of domestic debt financing and their effect on economic development of Nigeria. The study employed a statistical framework to test four hypotheses. Secondary data were used for the study. Multiple regression analysis was used to test the relationship that exists between Gross Domestic Product (GDP) as the dependent variable and sources of domestic debt financing – value of treasury bills, value of treasury bonds, value of development stock and banking system's credit to the public sector as independent variables. The GDP is used as a yardstick for measuring economic performance. The result from our analysis and test revealed that over a 15 year period, there exist a high level of relationship between GDP and the four explanatory variables of domestic debt financing. The analysis showed that the use of treasury bill as a source of financing domestic debt has made significant positive impact on the level of economic development. The use of treasury bonds as a source of financing domestic debt has not made significant positive impact on the level of economic development. Development stock as a source of domestic debt financing has made significant contribution to economic development. Commercial banks credit to government as a source of domestic debt financing has not made significant positive impact on economic development of Nigeria. Based on these findings, it was recommended that the Federal government should keep to the statutory limits imposed by law on treasury bills. The government should make sure that the borrowed resources are productively utilized such that economic and social rate of return is higher than the future servicing cost. The government's fiscal deficits should be financed through capital market than through the banking system. The government should make adequate provision annually in the budget for the servicing and repayment of domestic debt. The banks should refuse to honour Federal government cheques once the statutory limit is reached. This will go a long way to restore sanity to the system and infuse greater budget discipline.

CHAPTER ONE

INTRODUCTION

1.1   BACKGROUND OF THE STUDY

One of the major functions of the Central Bank in an economy is to act as banker to the government. It keeps the finances and accounts of the government. The Bank is also involved in raising money from internal and external sources for the execution of various programmes of government. The money owed by government is usually referred to as Public Debt. Specifically, a public debt is an amount of money owed by the government to institutions and other agencies either resident in or outside the country.

According to Tariba (1985) a debt is internal when it is owed to the residents firms within the economy. On the contrary, it is called external when it is owed to foreigners. In the second case, when the debt matures, payments have to be made in foreign currencies. The payments on foreign debts automatically become a source of capital outflow. (Gbosi,1995).

In this study however, the focus is on Domestic Debt Financing and Economic Development of Nigeria. The origin of Nigeria's domestic debt dates back to 1948. It was in that year that the first Development Stock of ₦600,000 was floated by the Colonial

government. But the first Treasury Bills and Certificates worth ₦8 million and ₦20 million respectively were issued in 1960 and 1968. Since then, the volume of government domestic debt has risen from ₦1.04 million in 1970 up to ₦343,674 million by 1996 and ₦1.3 trillion by year 2003 (CBN 2004). This trend is made clearer on table 1.1 below.

Table 1.1: Increase in the volume of government domestic debt (1990-2004)

Years	Increase in domestic debt (N`m)
1990	84.12
1991	116.20
1992	161.90
1993	261.09
1994	341.27
1995	341.08
1996	343.67
1997	359.03
1998	523.49
1999	794.81
2000	898.25
2001	1016.97
2002	1161.00
2003	1329.70
2004	1422.16

Source: Central Bank of Nigeria, Lagos (CBN, 2004)

Several factors have contributed to the large size of domestic debt. First, the rapid expansion in development programmes and changes in the macroeconomic environment are reflected in the

increase in domestic debt. Another factor is the practice of rolling over of previous debt. There was also the need to finance the large fiscal deficits of the government after the oil boom period, which increased from ₦2bn in 1980 to ₦101.1bn in 1993 and ₦293bn in 2003. The decline in oil earnings has been identified as the major factor responsible for the large size of Nigeria's domestic debt. (CBN, 1993).

Other factors include the financing gaps in the government revenue-expenditure profile and other financing needs of the government. All these led to the enhanced domestic debt stock of the country.

Generally, domestic debts have had a phenomenal growth, although comparatively external debts trend tend to rise faster. In Nigeria, much attention has been focused on external debt management with little or no attention to domestic debt financing. There is no doubt a huge domestic debt likely to have an adverse effect on the macroeconomic environment just as an external debt does (Sanusi, 2004).

Total domestic debts relative to total public debts decreased from 65 percent in 1970 to 29.3 percent in 1993 and went up to 55.7 percent by 1996 and down to 29.7% by 2002. The largest source of

domestic debt is treasury bills especially for the period 1981 – 2003 (CBN, 2003). Table 1.2 below shows the trend from 1990 – 2004.

Table 1.2: Total domestic debt relative to total public debt (1990-2004)

Years	Total public debt (%)
1990	22.0
1991	26.2
1992	22.9
1993	29.3
1994	34.5
1995	32.2
1996	55.7
1997	37.6
1998	45.9
1999	23.6
2000	22.5
2001	24.2
2002	29.7
2003	23.9
2004	28.2

Source: Central Bank of Nigeria, Lagos (CBN, 2004), CBN Annual Report, CBN Statistical Bulletin, DMO Data Bank.

This was due to the fact that this class of instruments allows the holder a measure of short term liquidity and a measure of returns relative to other types of instruments. Treasury certificates also fall in this same category. Deposit money banks find these instruments attractive since it affords them the opportunity of investing in short term avenues.

4

One major problem that has hindered the attainment of macroeconomic stability and sustainable growth has been the excessive reliance by the Federal Government on borrowing from the banking system particularly the CBN to finance its large and unsustainable fiscal deficits. Such borrowing from the CBN amounts to the injection of high-powered money into the system, which has serious adverse implications on price and exchange rate stability. Similarly, it crowds out the private sector from the credit market thereby stalling investment and output growth. Empirical evidence has shown that fiscal adjustment is critical to successful stabilization effort in countries facing domestic debt overhang.

Over the years, the Federal government of Nigeria has relied largely on the money market and less on the capital market thus creating a mismatch between short-term funds and investment on capital projects. This points to the need to reactivate the dormant bond market to attract household and institutional savings. In addition, the borrowed money must be prudently utilized in the execution of productive projects in order to enhance the capacity for repayment of both the principal and interest elements as they fall due. An effective debt management requires that borrowed resources must be productively utilized such that the economic and social rate of

return is higher than the future servicing cost of the loan. A debt problem would naturally ensue when the resources that should have been deployed for the execution of productive projects are employed in the financing of current or past consumption. This raises two issues, first there is need to evaluate the economic and social rate of return of all government projects. Second, there is need to resolve the question of inter-generational equity which will arise when the present generation incurs debt that is left for the next generation to settle. This study therefore is to evaluate the extent domestic debt financing has influenced economic development in Nigeria from 1990 – 2004.

1.2 STATEMENT OF PROBLEM

The need to finance rising government expenditure has been identified to be responsible for the rapid increase in the stock of Nigeria's domestic debt. Domestic debt instruments were issued in the early 1960s and much of the 1970s to develop the money market, mobilize savings and to assist in macroeconomic management. In the early 1980s there was a sharp decline in government revenue, this was mainly due to the collapse of prices in the international oil market. Consequently, borrowing by government from the domestic economy became the main source of financing government expenditure.

Despite the various efforts made by the government to rationalize public expenditure, much success has not been achieved in reducing its spending. This has continuously raised the size of the domestic debt.

According to CBN (1993), Nigeria's total domestic debt outstanding stood at an average of ₦100 million during the period 1970 – 74. Between 1975 – 79, it rose significantly to ₦4,154.5 million. From then on, the debt stock recorded an average annual increase of 19.1 percent rising to ₦28,451.2 million in 1986. Thereafter, the debt stock assumed an even more astronomical growth rate rising to ₦61,883.1 million in 1992, ₦1,166.01 billion and ₦1,329.7 billion in 2002 and 2003 respectively. Domestic debt has been rising due mainly to the growing fiscal deficits financed mainly from domestic economy. Of the total outstanding domestic public debt averaging ₦50,685.4 million in 1986 – 1989, the share of the Federal government was 91.7 percent, while the balance of 8.3 percent was owed by State governments and other public agencies. In 2003, the banking system remained the dominant holder of Federal government securities. It held ₦1,085.6 billion or 10.8 percent over the level in 2002. Table 1.3 below shows Nigeria's total domestic debt outstanding from 1990 – 2004.

Table 1.3: Nigeria's total domestic debt outstanding (1990 – 2004)

Years	Outstanding debt stock (N`b)
1990	84.12
1991	116.20
1992	161.90
1993	261.09
1994	341.27
1995	341.08
1996	343.67
1997	359.03
1998	523.49
1999	794.81
2000	898.25
2001	1016.97
2002	1161.01
2003	1329.70
2004	1422.16

Source: Central Bank of Nigeria, Lagos (CBN, 2004), CBN Annual Report, CBN Statistical Bulletin, DMO Data Bank.

It is important to know that in terms of composition, the debts were mainly contracted through the issue of treasury bills, treasury certificates, treasury bonds, development stocks and as well as banking system's credit to the public sector.

The largest source of domestic debt is treasury bills, especially for the period 1981 – 2004 (Sanusi, 2005). This is due to the fact that this class of instrument affords the holder a measure of returns relative to other types of instruments.

However, the government resorted to the use of additional debt instruments such as treasury bonds. Despite the shift from short-term debt instruments available data still show that a huge domestic public debt is Nigeria's major macroeconomic problem today (Sanusi, 2005).

In view of the above statement, this work is geared towards evaluating the extent domestic debt financing has influenced the Nigerian economic development.

1.3   OBJECTIVE OF THE STUDY

The main objective of this study is to evaluate the effect of domestic debt financing on Nigerian economic development.

The specific objectives include to:

(1.)   Determine how treasury bills affect economic development.

(2.)   Ascertain the effect of treasury bonds on Nigerian economic development.

(3.)   Determine how development stock affects Nigerian economic development.

(4.)   Determine how banking system's credit to the public sector affects Nigerian economic development.

(5.)   Ascertain the relationship between domestic debt financing and Nigerian economic development.

1.4   RESEARCH QUESTIONS

The following research questions were formulated to guide the study:

1.   To what extent do treasury bills affect Nigeria's economic development?

2.   How do treasury bonds affect economic development of Nigeria?

3.   To what extent do development stocks affect Nigeria's economic development?

4.   To what extent does banking system's credit to the public sector affect the economic development of Nigeria?

5.   What is the relationship between domestic debt financing and economic development of Nigeria?

1.5   HYPOTHESES

The following hypotheses are formulated to guide the study after considering the statement of the problem and objectives of the study.

H_{01} : The use of treasury bills as a source of financing domestic debt in Nigeria has not made significant positive impact on the level of economic development.

H_{02} : The use of treasury bonds as a source of financing domestic debt in Nigeria has not made significant positive impact on the level of economic development.

H_{03} : Development stock as a source of financing domestic debt in Nigeria has not made significant contribution to economic development in Nigeria.

H_{04} : Commercial bank's credit to government as a source of financing domestic debt in Nigeria has not made significant positive impact on economic development in Nigeria.

1.6 JUSTIFICATION OF STUDY

In recent years, there has been a rapid increase in the internal component of Nigeria's public debt. Unfortunately no attention has been directed at this crucial issue by Nigerian Economists as well as the nation's policy makers.

This study is on domestic debt financing and economic development of Nigeria (1990 – 2004). There is the need to study the sources of domestic debt financing and their effect on economic development of Nigeria.

An escalating debt profile presents serious obstacles to a nation's path to economic growth and development. The existing

studies on domestic debt financing are few, and one of them is Gbosi (2000). In the Gbosi's study, an attempt was made to analyse the relationship of domestic debt and some key macroeconomic variables.

Other studies on Nigeria's domestic debt proper are Okunrounmu (1992), Garba (1998) and Odozi (1996). These focused on the analysis of the structure and composition of domestic debt. They all have not gone further to analyse the effect of the sources of domestic debt financing on economic development of Nigeria. This is therefore the justification of study.

1.7   SCOPE AND LIMITATION OF STUDY

The study examines domestic debt financing and Nigeria's economic development (1990 – 2004). There has been increasing concern over the rapid growth of Nigeria's domestic debt and its implications for economic stability. An escalating debt profile presents serious obstacles to a nation's path of economic growth and development.

Most studies are limited by a number of factors outside the control of the researcher. This study is not left out in these limitations, which created a barrier to the extensiveness of the topic under study. The topic is virtually a virgin area and the researcher had

problem of getting enough relevant materials as not much work had been carried out on domestic debt financing. Despite the constraint, the available materials have been utilized to produce the thesis that will stand the test of time.

CHAPTER TWO

LITERATURE REVIEW

2.1   INTRODUCTION

The chapter presents the theoretical background for this study by reviewing a number of related literature, especially those that have direct bearing with the topic of this study. It provides the conceptual and theoretical framework for the study. The review is presented under the following headings:

- Components of domestic Government debt financing in Nigeria: A historical evolution.

- Conceptual and theoretical framework.

- Relevant models.

- Contributions of related works.

- Literature gap.

2.2 COMPONENTS OF DOMESTIC GOVERNMENT DEBT FINANCING IN NIGERIA: A HISTORICAL EVOLUTION

In Nigeria domestic government debt is defined as debt instruments issued by the Federal government and denominated in local currency. In principle, States and Local Governments can also issue debt but they are still limited in their ability to issue debt

instruments. Therefore, government domestic debt refers to debt instruments issued by Federal government and include contractor debts and supplier credit by the government. It therefore consists of:

(1) Nigerian Treasury Bills

(2) Nigerian Treasury Certificates

(3) Federal government Development Stocks

(4) Treasury Bonds

(5) Ways and Means Advances

(6) Banking System's Credit to the Public Sector.

Out of these, 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 (CBN).

The beginning of the exiting market for domestic government debt in Nigeria is the Financial Reforms introduced by the Colonial government in 1958. The reforms saw to the creation of the Central Bank of Nigeria (CBN) and the creation of marketable public securities to finance fiscal deficits.

According to Paragraph 35 of the CBN Ordinance 1958:

"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".

The Central Bank in the course of discharging its functions with respect to debt management plays an important role in both the primary and secondary markets for government securities. In the primary market, the Central Bank readily guarantees the issue of these securities and absorbs any amount not subscribed by the banks and the non-bank public. Thus even if the non-Central Bank subscriptions were zero, mandatory take-up guarantees the government the full amount of any issues for treasury bills, treasury certificates or development stocks required to finance its budget (Sanusi, 2003).

The CBN also provides a secondary market for government securities whereby those securities held by the Bank are offered to the public for sale. The historical evolution of the instruments of domestic government debt in Nigeria, apart from treasury bonds, all the instruments have statutory limits (upper bounds) to the size of federal borrowing that they can support. But as Garba (1998) argues, since the CBN is not autonomous, it cannot effectively resist orders to issue new debt. One can analyse the evolution of the domestic debt

from its size, or by considering its different components. Often the stock of government debt is measured relative to national output. Appendix A1 shows the size of the domestic debt structure both in nominal terms, as a percentage of total debt and as a percentage of Gross Domestic Product (GDP). The outstanding level of government domestic debt has grown tremendously from N0.023 billion at inception in 1960 to N1.111 billion in 1970. In 1980 it stood at N8.23 billion when compared to the level of external debt, which moved from N0.094 billion in 1960 to N0.175 billion in 1970 and further to N1.86 billion in 1980. As shown in Appendix 1, it was in 1986 at the inception of the structural adjustment programme that the level of external debt for the first time became larger than the level of domestic debt. Ever since then, the stock of external debt has consistently been larger than domestic debt.

Table 2.1: Evolution of Domestic Debt Instruments in Nigeria

Debt instrument	Primary legislation	Statutory limit	Purpose	Amendment of borrowing limit	Maturity	Explicit cost
Ways and means advances	CBN Act 1958 (Cap 30 as amended)	25% of estimated recurrent expenditure	To finance the budget before government revenue starts accruing.	CBN Decree of 1991	Amount outstanding must be redeemed at end of year.	Interests
Treasury Bills	Treasury Bills Ordinance of 1959	10% of estimated Federal retained revenue.	To finance federal budget deficit	20% (1961) 40% (1962) 50% (1965) 85% (1968) 100% (1969) 150% (1970)	91 days	Interest
Treasury certificates	Treasury certificates Decree of 1968	50% estimated federal retained revenue.	To finance federal budget deficit	60%	1 – 2 years	Interest
Development Stocks	General Loans and Stock Ordinance of 1951.	N200 million (internal loans Act 1962)	Too finance development projects and on-lending to (regions) States.	75% of CBN's total demand liabilities (1969)	5 – 20 years	Interest
Treasury Bonds	1989	None	Reduce burden of debt service.	None	20 years	Interest

Source: Okorounmu, 1992; Omoruyi, 1993; Garba, 1998.

2.3 CONCEPTUAL AND THEORETICAL FRAMEWORK

2.3.1 THE CONCEPT OF DOMESTIC GOVERNMENT DEBT IN NIGERIA: STRUCTURE AND CHARACTERISTICS

Domestic government debt instruments play an important role in any economy, as they provide economic agents with alternative options to banking for allocating their savings accordingly. It is a key part of the collateral used in financial markets and as such plays an important role in monetary policy implementation.

Significant changes in the size, structure and composition of government debt instruments may influence financial stability. In order to maintain financial stability, it is therefore important to monitor the structure, characteristics and the level of risk inherent in the debt portfolio. Reliable statistics on the composition, investors' base and maturity structure is necessary to assess these risks.

Appendix A2 shows the changes in government domestic debt composition over the past decade. Treasury Bills constitute the main component of the outstanding stock of government debt accounting for 77.4 percent of total domestic debt in 1960, declining to 51 percent in 1970 but climbing up to 62 percent in 2003. The decline in the percentage share of treasury bills in the mid 1970's was as a result of the decision not to issue new treasury bills because of the boost in

government revenue in the mid 1970s as revenue from the oil sector improved substantially (Okorounmu, 1992). As soon as there was a decline in revenue from this source, government reliance on credit from the CBN through the issue of treasury bills resumed as from 1981.

The growth in the level of treasury bills also reflected the practice of rollover of maturing securities and continuous resource to conversion of ways and means advances outstanding at the end of the year to treasury bills as a way of funding the fiscal deficit.

Treasury certificates, which were first issued in 1968, constituted one of the largest securities between 1983 and 1988. It even surpassed treasury bills between the period 1976 – 1980. It was first issued to further deepen the domestic money market by increasing short-term investment options available. In 1995, the Federal government decided to convert treasury certificates outstanding to non-tradable treasury bonds in an attempt to further reduce its debt service obligations on domestic debt (Christensen, 2004).

In 1989, the monetary authorities at the auction bid system for flotation of treasury bills and certificates introduced treasury bonds, as another instrument in the portfolio of domestic debt. The objective

was to minimize debt service obligations on domestic debt arising from the liberalization policies. Thus, in 1989, 20 million Naira worth of treasury bills representing 58.6% of treasury bills outstanding were converted to treasury bonds of fixed interest rates. The bonds styled as "5% Federal Republic of Nigeria Treasury Bond 2004 – 2015" are to carry a fixed interest rate of 5% and are wholly held by the CBN. As a result of the flotation of new issues of treasury bonds and conversion of part of the treasury certificates outstanding, treasury bonds accounted for up to 69% of total domestic debt as at end of 1996 (DMO, 2004).

Development stocks were apparently the first government instrument to be issued. It was floated largely to provide development finance either directly to meet the needs of the federal government or as loan on lent to the State governments. The colonial administrations floated the first registered debt stocks 1956/61 in 1956. (Christensen, 2004).

Development stocks outstanding increased between 1960 and 1987. It started to decline as from 1988 as no new stocks were made. The development stocks were traded in the secondary market of the Nigerian Stock Exchange. In line with government's policy of reducing reliance on monetary financing of deficits, the Federal

government through the Debt Management Office (DMO) in 2003 raised funds through the capital market to meet its financing needs by issuing the 1st FGN Bonds. The government was able to raise N72.6 billion, out of the N150 billion worth of bonds issued, representing about 5.4% of total domestic debt stock.

An important component of debt management is to stimulate a diverse investor base and develop instruments, trading facilities and distribution network that best suits the needs of the investors (World Bank and IMF, 2001). In fact, it is crucial to have a diversified investor base in terms of time horizons, risk preferences and trading motives, especially for fixed incomes securities (Sidaou, 2000). This will help ensure high liquidity and a stable demand. During the period 1960 to 1980, non-bank holders comprising a wide range of both private and public institutions as well as individual investors dominated the investor base of domestic debt instruments in Nigeria. These include Insurance companies, Savings type institutions, State and Local governments. Between 1960 and 1977, non-bank public holdings of debt instruments averaged 52.1%, holdings by commercial banks averaged 26.7% and Central Bank, 20.8%, while Merchant banks held 0.4%.

Surprisingly, as from 1978, the investor base of domestic government debt instruments changed and from then onwards became dominated by the Central Bank of Nigeria (CBN) while the holding of other investors declined in relative terms. For example, between 1978 and 1989, the CBN holdings of government securities averaged 52.2%, holdings of the non-bank public and commercial banks averaged 24.3% and 22.4% respectively, while merchant banks held 1.1%. Between 1990 and 2001, there were further declines in the relative holdings of government securities by banks and non-bank public as CBN holdings averaged up to 75.5% of debt stock during these periods. One critical issue that arises is why the CBN has continued to dominate the investor base of domestic government debt in Nigeria. Several reasons have been advanced to explain this trend. According to Odozi (1996) the growing declines in the relative shares of bank and non-bank public of government securities has been attributed to the capped interest rate regime in 1991 – 1995 and the deregulation of the foreign exchange market as from 1995 which motivated banks to remain sufficiently liquid to participate in AFEM intervention sessions.

Besides interest rates and the foreign exchange market, other reasons have been advanced for the continued dominance of the CBN

in holding government securities (see Okorounmu, 1992, Oke, 1993). These include: statutory requirement that the instruments be underwritten by CBN, lack of institutional private organizations to underwrite the securities (i.e. before 1993), the illiquidity and insolvency of a large number of banks, inadequate expertise in government securities trading, large size of government securities issues very far above the absorptive capacity of the organized money market.

Other factors included the tendency by the commercial and merchant banks in the early years to invest in government securities when there was high liquidity in the economy and promising investment options were few. Again, the federal government reliance on the issue of treasury bills and certificates to finance its budget deficit tends to increase the holding by the Central bank, which is obliged to absorb any unsubscribed portion of any issue.

Another factor has been the relative unattractiveness of the interest rates paid on government securities compared with interest rates on alternative money market instruments. The problem however became acute in the wake of the adoption of deregulatory policies since 1987. Moreover, some of the monetary policy measures in the past have tended to encourage the dis-investment in domestic debt

instruments as the policy measures usually pinched the liquidity position of banks. For instance, the abolition of foreign guarantees or currency deposits as collateral for Naira loans. Another example is the restriction on placement of deposits by Federal government ministries and parastatals in the banks. All these affected the liquidity position of banks and the overall effects of these measures explain partly the continued domination of the holding by the Central Bank over a long period of time.

Maturity Structure: The maturity structure of government domestic debt can affect both costs ad risks of using domestic debt instruments. If the debt portfolio consists mainly of short-term debt, the government may face considerable risks (Christensen, 2004). The government therefore manages the maturity profile of the debt (i.e. the amount that matures or comes due) to limit the refinancing. A balanced maturity profile limits the need to refinance a large portion of the debt in a period of high interest rates.

The proportion of short-term government debt instruments (with not more than 2 year maturity) dominated the portfolio of the debt stock accounting for more than half of the debt instruments. From around 1993, the dominance of short-term debt instruments were significantly reduced as longer term treasury bonds were issued

or as existing short dated debt instruments were converted to bonds, in an attempt to reduce debt service obligations (Odozi, 1996). The share of short-term debt instruments fell from an average of 80.5% between 1981 and 1991 to 51.3% between 1992 and 1998, while the share of long term debt instruments of over 10 years maturity and above increased from 15.1% to 48.5% in the same period. The share of the medium term debt instruments of 2 – 5 years maturity dropped from 1.3% between 1981 and 1991 to only 0.3% between 1992 and 1995. However, it increased slightly to 2.9% in 2001. The low share of medium-term debt instruments reflected the absence of new issues of development stocks in the financial markets since 1987.

The dominance of short-term paper greatly increases rollover and market risk especially in countries with large outstanding domestic debt stocks. According to Christensen (2004) with interest rate flexibility the accompanied financial liberalization in Africa, many countries with large amounts of short-term debt became vulnerable to changes in market conditions.

In a bid to increase market participation in Nigeria, there have been attempts to shorten the maturity structure in the secondary market. The tenor of treasury bills prior to the financial liberalization policy in the late 1980s and early 1990s was 91 days. But in order to

enhance the competitiveness of these instruments in the money market, treasury bills of shorter tenors, ranging from 25 to 91 days have been introduced for trading at the bidding sessions of the open market operations (Christensen, 2003).

2.3.2 Implications Of The Current Domestic Debt Structure For Monetary Policy

The structural characteristics of government domestic debt including composition, investor base, and maturity structure have important implications for the conduct of monetary policy and for the development of the financial sector in general. Here we highlight some of the key structural characteristics and then discuss its wide implications.

First, the composition of the market has been mainly in favour of short-term treasury bills. A key question has been what are the implications of the higher ratio of short-term to long-term debt instruments for monetary and macroeconomic policy in Nigeria? Currently, the CBN could finance any deficit and refinance maturing debt easily with the frequent sales of large quantities of short-term treasury bills. But this simply concentrates government indebtedness to the most liquid sector of the market, short-maturing treasury bills,

issuing securities at longer maturities reduces to some extent the liquidity of the securities at longer maturities reduces to some extent the liquidity of the securities market. Large maturing debt is inherently less liquid than short-term debt (Sanusi, 2003).

At several times, the Central Bank of Nigeria has tried to control excess liquidity in the banking system either using stabilization securities to mop up the excess or by changing liquidity ratio requirements. However, this policy is always frustrated by the regular issuance of more short-term treasury bills which immediately restores high liquidity in the system thereby impeding monetary policy conduct. Generally, regular liquidity mop up exercises by the Central Bank are hampered by the frequent sales of short-term treasury bills (CBN, 2003).

Second, the investor base is still narrow with the Central Bank holding still by 2003 up to 52 percent of total domestic debt, while the deposit money banks hold 36 percent, and the non-bank public only about 12 percent. Several concerns over the Central Banks excessive holding of government debt securities point to its negative macroeconomic effect. As Hawtrey (1983) summarized:

"the acquisition of government securities by the Central Bank is

regarded as opening the door to inflation".

For monetary policy to be effective, both institutional investors and the public should hold sufficient proportions of the debt instrument. In fact the Central Bank can expand or contract liquidity in the system and ultimately the money supply effectively only if banks on the average hold a fairly large proportion of the instruments. Currently, there appear to be a close relationship between the Central Bank of Nigeria's holding of government security and the monetary base (defined as the currency in circulation). Basically, the CBN's purchase of government securities constitutes the principal source of the country's currency and part of the banks reserve balances, hence the monetary base. The implication is that with large CBN's holding of treasury securities, liquidity usually exceed targeted levels for several years with base and broad money persistently breached.

Besides, purchases of government debt by the Central Bank is seen as tantamount to "lending to the crown", which is regarded as a dangerous path for Central Bank policy (Marshall, 2002). Furthermore, large CBN holdings discourages the use of private securities in open market operations, a situation that retards financial market development, since CBN will only use the large government securities at its disposal for secondary trading.

2.3.3 Management of Domestic Debt

The issue of debt management has assumed significance because of its impact on the liquidity structure of the economy, the opportunity it provides monetary authorities to influence the pressure of total demand and its implication for fiscal policy.

The management of domestic debt in Nigeria is entrusted to the Central Bank of Nigeria under Section 35 of the Central Bank of Nigeria Act of 1958 and subsequent amendments. The Central Bank performs four main functions with respect to domestic debt management. These are:

(a) Advising the government as to the timing of floatation of debt instruments and terms of issue.

(b) Advertising for public subscriptions to the issue.

(c) Collecting the proceeds of issues on behalf of the government, supervising the issue of certificates and warrants and maintaining proper books of accounts in respect of receipts and disbursements.

(d) Paying interest and principal on due dates and managing a sinking fund set up to facilitate redemption.

In the course of performing the functions the Central Bank of Nigeria guarantees the issue of government securities or debt

instruments in the primary market by underwriting any amount not subscribed by the banks and non-bank public. The Central Bank thus extends credit to the Federal Government to meet under-subscription of any offer. The Bank also supports a secondary market to facilitate trading in government securities.

Although the present size of domestic debt is largely a reflection of the need to finance the budgetary gap of the government, domestic debt instrument have served an additional objective of being used to develop the money market by creating an avenue for investment of short-term funds (Asogwa, 2003).

Before the 1980s the ratio of domestic debt outstanding to Gross Domestic Product (GDP) was generally low, averaging only 10.7 percent between 1960 and 1979. However, there was a substantial increase in domestic debt obligations brought about by the need to finance the Nigerian civil war between 1967 and 1971 as the debt/GDP ratio averaged 17.1 percent during the war time period. Between 1980 and 1993, the ratio averaged 32.5 percent reflecting the increased reliance by the Federal government on funds from internal sources generally and credit from the Central Bank to meet it budget deficits (Asogwa, 2003).

In 1980, domestic debt outstanding comprising Treasury Bills, Treasury Certificates and Development Stocks amounted to N7.92 billion and represented 15.9 percent of GDP. Between 1984 and 1993, domestic debt outstanding increased by an annual average of 31.2 percent to N262.32 billion, while the debt/GDP ratio jumped to an average of 32.5 percent. The increase was largely accounted for by new issues of government securities, which were to provide finance for the budgetary gaps of the Federal and State Governments.

The practice of rollover whereby matured treasury bills and certificates are liquidated by re-issuing new ones of the same amount partly explains the continuous growth in the level of domestic debt generally (CBN, 2002).

Another factor that partly contributed to the rapid growth of domestic debt was the mode of servicing external debt obligations of the Federal Government. When the Central Bank services the external debt obligations that are due without the supply of necessary Naira cover by the Federal Government, the bank debits the Federal Sub-treasury Account at the Central Bank with the cost of servicing the external debt obligation thereby raising the level of ways and means advances. At the end of the year, when there are no funds to defray these advances, in accordance with statutory requirements, the

Federal Government often directs that the advances be liquidated by issuing debt instruments such as treasury bills, certificates or bonds to refinance the advances.

Before 1986, the major objective of domestic debt management in Nigeria centred on the need to provide corporate bodies with alternative investment outlets. This was an important move because such opportunities were absent in the private sector of the Nigerian economy. It was also aimed at restructuring the capital market and satisfying the Federal Government's needs for short-term financial accommodation (CBN, 1995).

As Gbosi (1993) observed, since 1986, the CBN has dramatically increased its holding to the Federal Government. This was done through ways and means advances which averaged N1,708.8 million a month in 1986 compared with N798.5 million in 1985. He also contended that a large proportion of government debt obligations was unloaded by commercial and merchant banks on the Central Bank in an effort to augment their cash position during the year 1986.

The problem of debt management continued to pose various challenges to both budgetary formulation and implementation in Nigeria during the period 1991 – 93. The debt service here was in

two categories. First, we have the debt owed to local customers. In the second category we have loans by way of debt instruments. Specifically, the debt owed to local customer arose from the inability of government agencies to settle bills for work done as and when they fell due. Others arose from making down payments without additional funds to meet contractual obligations. The exact amount of debt owed to local customers was not immediately determined in 1993. To this effect a committee was set up in the Ministry of Finance in 1993 whose primary function was to compile total outstanding instruments due to the local customers. However, a sum of N1.0 billion was set aside to liquidate part of the debts owed to local customers.

The internal loans by way of debt instruments arose from the need to liquidate the ways and means (credit facility granted to the Federal Government by the Central Bank of Nigeria) at the end of each fiscal year. During the period 1991 – 93, there was little or no foreign capital inflow to finance the government programmes. As a result of this development, the total internal loans by way of debt instruments stood at N116.2 billion at the end of the 1991 fiscal year. This was composed of Treasury bills (N57.8 billion), Treasury certificates (N34.2 billion), Treasury bonds (N20.0 billion) and

Development loan stock (N4.2 billion). At the end of 1992, the total internal loans by way of debt instruments was expected to rise from N116.2 billion when the ways and means of N42.0 billion for 1992 fiscal year was liquidated. The interest rate structure was deregulated and the rates on debt instruments were made to be sufficiently attractive to the non-bank public. The intended purpose was to reduce the reliance on high-powered money, which could easily trigger-off the rate of inflation. The actual amount required to service internal loans by ways of debt instruments in 1993 could not be predicted because of continuous fluctuation in oil income. However, a sum of N16.9 billion was set aside for this purpose (Bullion, 1993).

2.3.4 Important Aspects of Domestic Debt Management

The need to issue domestic debt can arise both from government deficits that are not fully foreign financed and from implementation of monetary policy. Generally a deficit leads to a change in government net assets. Hence, a budget deficit can be financed by either drawing down assets entails selling property or reducing deposits. This type of financing, however, is constrained by the stock and attractiveness of assets (the feasibility of privatization) and governments, therefore, normally resort to domestic or foreign

borrowing to finance large part of fiscal deficits. The choice between foreign and domestic borrowing in turn, depends on cost (interest rates) maturity structure and risks. Most countries have access to foreign financing at very low interest rates (well below market interest rates) and at very long maturity from international aid agencies or on grant terms. These terms are often more favourable than for domestic borrowing, since domestic debt instruments carry much higher interest rates and have shorter maturities. Another advantage of foreign borrowing is that it increases the supply of foreign exchange, which is critical to meet import requirements. One drawback to foreign borrowing is currency risk, which may increase along with foreign indebtedness given that a growing foreign debt service increases the demand for foreign exchange. However, Beaugrand, Loko and Mlachila (2002) found that highly concessional foreign loans, when available are still the most attractive way to finance budget deficits even if there are significant devaluation risks, given the high levels of domestic interest rates.

Despite the attractiveness of foreign borrowing governments may still consider domestic borrowing for a number of reasons. First, the supply of foreign (concessional) financing may be determined by the aid agencies' budgets and their assessment of the economic

performance of the recipient country. Second, international aid is very often linked to project financing and therefore cannot finance a government's recurrent expenditures or capital projects not supported by donors. Hence deficits may be forced to tap domestic savings, including through issuance of domestic debt, to close their budget gaps. Domestic debt can also be used to achieve monetary policy targets. This is particularly the case in countries with large balance of payment surpluses, created by large aid inflows or oil exports. In those situations, the inflows of foreign exchange increase liquidity, which can undermine macroeconomic stability and the Central Banks often decide to intervene by selling government or Central Bank bills to stem inflationary pressures from excess liquidity (Okunrounmu, 1992).

2.3.5 Government Borrowing and "Crowding Out Effect" on Private Sector Investment

An extensive use of domestic borrowing can have severe repercussions on the economy. When issuing domestic debt, government taps domestic private savings that would otherwise be available to private sector for investment. This is normally followed

by an increase in domestic interest rates, if these are flexible it will adversely affect private investment (World Bank and IMF, 2001).

Nigeria's huge domestic debt has led to a decline in the nation's total output of goods and services. Available data showed that fiscal deficits were often financed by a large proportion of money supply. Consequently, the money supply exceeded the money demanded thereby fuelling inflationary pressures in the Nigerian economy. Inflation robs the people of the real value of their savings by lowering the purchasing power of the money saved.

When government expenditures are financed by issuing bonds, this usually pushes up interest rate thereby discouraging private investment spending. This phenomenon is usually referred to as "Crowding Out Effect" in Keynesian economies. However, even when interest rates are controlled, domestic borrowing can lead to credit rationing, and crowding out of private sector investment (Fischer and Easterly, 1990).

As more money is borrowed from the banks and other financial institutions by the government, little funds are available to these financial institutions for their effective operations. It was however argued that the high incidence of distress in the Nigerian banking and

finance industry in recent years is partly caused by large size of the domestic debt.

When the total real expenditure is unchanged, the increase in government expenditure must have crowded out an exactly equivalent amount of private expenditure.

If there are unemployed resources a debt financed increase in government expenditure combined with a constant money supply will cause some crowding out effect on the private sector investment.

When there is full employment of resources any increase in government expenditure will crowd out exactly the same amount of real private expenditure through an increase in the price level and the rate of interest. The crowding out effect may therefore, be more pronounced in the absence of non-bank investors such as pension funds and retirement funds to which the government could sell its debt without necessarily crowding out private sector credit. Hence, a diverse investor base prevents excessive reliance on commercial bank funds and thereby reduces the risk of crowding out (World Bank and IMF, 2001). The impact of government borrowing will, to some extent be aggravated if there are capital account restrictions, since banks cannot as easily circumvent higher domestic interest rates through foreign borrowing.

The government debt portfolio should adequately comprise short and long-term securities. If the debt portfolio consists mainly of short-term debt, the government may face considerable risks. First, with more frequent rollovers, the government is highly vulnerable to a sudden increase in the interest rates, which can raise debt service significantly. This can lead to further deterioration in the market's confidence in government bonds, prompting even high interest rates on government debt. Second, administrative costs tend to be higher with a short maturity structure, because the government must frequently rollover large parts of its debt notably in countries without an automated book entry system. The growing public sector debt may cause a crisis of confidence as investors begin to doubt the government's ability to repay.

This work is geared towards examining the effect of public domestic financing on economic development only. However, it is also good to know the crowding out effect of public domestic debt financing on financing of private sector investment. This problem will be examined in further studies. This will involve examining the effect of public domestic debt financing on private sector investment financing.

2.3.6 Debt and Development Issues: The Debt Management Office (DMO)

With a debt stock of $28 billion (as at March 2001), Nigeria's average annual debt service from 1998 through 2000 amounted to about 1.5 billion. Indeed, the projected debt services between 2001 and 2020 (after rescheduling and without new commitments) averages two billion dollars per annum, a total of about $43 billion for the period. About 65 percent of the nation's Gross Domestic Product (GDP) is swallowed up by debt.

The Debt Management Office (DMO) was set up in 2000 as a semi-autonomous unit of the Federal Government. Its assigned tasks is centralizing and coordinating the nation's debt recording and management activities. Providing debt service forecast, making debt service payment, advising government on debt negotiations as well as new borrowings.

The role of the Debt Management Office (DMO) will coordinate the activities of numerous management agencies that have sprung up in recent years. In 2000 the eight agencies:

> ➤ The External Finance Department of the Ministry of Finance;

- ➢ The Multi-lateral Institution Department of the Ministry of Finance;

- ➢ The African and Bilateral Economic Relations Department of the Ministry of Finance;

- ➢ The Home Finance Department of the Ministry of Finance;

- ➢ The Treasury Department of the Accountant General's Office;

- ➢ The Debt Management Department of the Central Bank.

- ➢ The Debt Conversion Committee Secretariat of the Central Bank.

- ➢ The Public Debt Office of the Central Bank.

These departments lacked functional co-operation and collaboration. Their debt data recording was weak while their loan records were incomplete. As a result, their ability to reconcile debt statements, with creditors was very difficult. Also, their service/payment arrangement was so unwieldy and inefficient that the delays caused by this situation often resulted in severe penalties (DMO, 2003).

The coordinating role of the DMO includes:

- ➢ Maintaining a comprehensive inventory of loans, together with forecasts of debt service.

- Providing timely and accurate information on the national debt to assist policy makers publishing up-to-date debt statistics so as to improve transparency in debt management.

- Effecting debt service payments accurately and on time.

- Managing the country's debt portfolio so as to minimize costs to an acceptable risk profile.

- Conducting risk analysis and developing appropriate risk management policies.

- Conducting debt sustainability analysis to assess optimal borrowing levels.

- Assessing lending terms from various source and negotiating best possible terms for future borrowing.

- Helping to inform and craft a debt management strategy with appropriate linkages to fiscal and monetary policies and overall macroeconomic management (CBN, 2003).

Steps have been taken to provide the DMO with the proper legal framework under which it can operate. A bill was sent to the National Assembly by the President on May 13, 2002 entitled "a bill for an Act to provide for the establishment of the Debt Management

Office related matter. It gives the DMO mandate of being the sole agency responsible for external and domestic debt management.

The Debt Management Office (DMO) is divided into five departments. These are:

- Portfolio Management and Strategy

- Loan Administration and Data Management

- Legal Services

- Finance and Administration

- The Domestic Debt Department

The core staff members of the DMO were drawn from the Central Bank and the Ministry of Finance. They include a Director General who is assisted by Departmental Directors. The Directors in turn, supervise the work of Group and Team Leaders. At the apex of the office is a Supervisory Board that is headed by the Vice President as Chairman. The Minister of Finance is the Deputy Chairman, other members of board include, the Governor of the Central Bank, the Accountant General of the Federation, the Director General of Securities and Exchange Commission and the Director General of the Debt Management Office (DMO).

Since inception in 2000, the Debt Management Office has recorded success in:

- Auditing Nigeria's debt portfolio, updating and computerizing the debt database and reconciling figures.

- Negotiating the rescheduling of external debts by arriving at agreements with the Paris Club.

- Structuring the above agreements on Houston Terms, which provides for the rescheduling of debt totaling $2.4 billion over an 18 – 20 year period?

- Meeting with individual creditor countries to negotiate bilateral agreements.

- Working with a team of financial advisers to explore options for the restructuring of the nation's commercial debt.

The incorporation of domestic debt management functions into the Debt Management Office commenced in the second half of 2001. Domestic indebtedness is simply debt denominated in local currency. It consists of debt accruing from treasury bills, bonds and development stocks issued by the Central Bank of Nigeria (CBN). Other sources of domestic debt include:

- Direct borrowing by some Government-owned agencies from commercial banks.

- Debt arising from local money owed contractors.

As at the end of 31 December 2001, the domestic debt amounted to over one trillion Naira, half of which is in the form of 91-day treasury bills, which are continuously rolled-over. The rest include N433 billion in treasury bonds and development stocks. Approximately N596 billion or close to 60 percent of the outstanding public domestic debt stock is owed the CBN. Another N340 billion or 34 percent is owed public investors.

Treasury bonds were introduced in 1989 mainly to avoid the payment of market interest rates on treasury bills. These bills had risen significantly in the wake of interest rate deregulation, following the adoption of the Structural Adjustment Programme (SAP) at the time. The strategic objectives of the Debt Management Office's domestic debt programme are:

- To finance domestic debts at the least cost.

- To develop policies on management of the public debt that will help to lower the cost of domestic debt service.

- To enhance transparency by disseminating key information in a timely manner and ensuring openness and productivity.

- To develop and expand government securities market.

These objectives are achievable by the implementation of the following:

- Restructuring domestic debts

- Establishing clear objectives for debt management and security issuance.

Conducting revenue expenditure and cash forecasting and implementing borrowing needs based upon the foregoing:

- Developing new proposals targeted at investors needs (like pension funds).

- Developing a market-based financing plan and eliminating distortions arising from below-market-rate funding.

- Gradually extending the maturity of government securities.

- Reviewing legal and regulatory framework for primary and secondary market securities.

- Collecting and organizing non-secure domestic debt data.

- Developing guidelines for State and Local Government borrowing.

- Providing consultation to all interested parties and stakeholders, regarding domestic debt issuance and management.

- Conducting seminars on appropriate fiscal and monetary institutional relationships.

- Promoting investor awareness of the opportunities available in investing in such securities.

- Disseminating key, debt-related data to the public and key stakeholders (DMO, 2003).

2.3.7   THEORETICAL FRAMEWORK

A critical look at the dependent and independent variables will be of benefit for a good understanding of this research. Basically, a dependent variable, Gross Domestic Product (GDP) and four independent variables: Treasury bills, Development stocks, Treasury bonds and Banking systems credit to public sector.

DEPENDENT VARIABLE:

GROSS DOMESTIC PRODUCT (GDP):

Basically, the financial system to an extent influences the savings and the method the economy of any nation operates. This has a direct link to development, if investment is high, the production of goods and services increase and Gross Domestic Product will be influenced positively. The catalyst that influences this is the small and medium scale enterprises, economic policies as agreed by Olashore (1988) and Shonekan (1990) should revolve around these enterprises. There is no other way other than through monetary and fiscal policies, which should determine the volume of credit to this vital area of the economy.

The Gross Domestic Product (GDP) is represented as the values of goods and services produced within the domestic territory of a country over a given time. Changes in consumption expenditure (private and public) investment expenditure (private and public) and the net of export and import, would have a direct effect on the GDP. Hence, it can be given that GDP is affected by these other variables: Treasury bill, treasury certificates, development stock and treasury bond.

The level of growth in an economy is determined by the level of its GDP, that is to say that if the value of the goods and services produced within an economy increases one can conclude that the economy is progressing.

The dependent variable in this study is the Gross Domestic Product (GDP); it is represented by Y. The GDP is used as the dependent variable because the GDP is used as a measure of economic development. Economic development is simply the increase in the GDP in a given year, Ogwuma (1996). A firm of growing economy produces more and more goods and services each successive time period.

Nigeria's internal debt is made up of securitised and non-securitised debts. The securitised or official public debt stands at the Naira equivalent of US$10 billion. This is mostly comprised short term treasury bills. By 31st December 2005, total internal debts was N1.37 trillion to N1.5 trillion about US$56 billion and represents 83.6 percent of the Gross Domestic Product (GDP).

Of this amount, over 50 percent of the debt portfolio is made up of short-term 91 days treasury bills issued by the Central Bank of Nigeria (CBN) with a bulk held by retail banks debt to local creditors and public sector pension arrears (DMO, 2006). Ordinarily, the

treasury bill should not exceed more than 25 percent of the total stock. In 2003, treasury bills made up of a 63 percent of total Nigeria domestic debts. Securitised domestic debt has been rising as a proportion of GDP. By 2003, it was equivalent to 22.2 percent of GDP up from 18 percent in 2002.

INDEPENDENT VARIABLES:

- *TREASURY BILLS:*

Treasury bill is defined as debt instrument used by the Federal Government to borrow internally (domestic debt) for short period of 91 days pending the collection of its revenues. The treasury bill allotment are presently issued by an auction based system and multiples of N1000 per tender.

Prior to the establishment of the auction-based system of treasury bill issue, the treasury bills were issued to subscribers on application. This system required the authorized dealers to apply to Central Bank of Nigeria for allocation. No prices were specified. Allocations were then made by the monetary authorities to the authorized dealers at a given rate of interest. The Central Bank of Nigeria took up the unallocated portions. The bills are extensively used as an instrument of monetary management by the CBN. The

banks use the Open Market Operations to influence the level of money supply.

Treasury bills were first introduced into the country in 1960 essentially to develop the money market and create an avenue for investment in short term funds. But instead of the treasury bills playing the role for which it was established by statue, the Federal Government took advantage of the availability of cheap funds it provided (low interest rate) to even out seasonal variations in the normal flow of its revenue (Azuka, 2006). Government in most cases releases for capital expenditure some of the funds it receives from this source as working capital. Further deposit in the treasury bills account enables the government finance expenditure in anticipation of the receipts of loan monies such as taxes, grants from foreign governments, royalties. The outstanding balance in this account as at 31st December 2004 was N871,577 billion.

- *TREASURY CERTIFICATES:*

Treasury certificates are medium term government securities, which have a maturity of between one to two years. It serves as a bridge between treasury bills and long-term government development stocks. Treasury certificate were introduced in Nigeria in 1968 and

are similar to the treasury bills in all respect except that the tenure is different. Both instruments are eligible for rediscounting at the secondary market.

In 1980, treasury certificates outstanding amounted to N2.73 billion and accounted to 34.5 percent of the total domestic debt. (CBN, 2003). By 1985, treasury certificates outstanding had almost tripled to N6.65 billion while its share of domestic debt dropped to 18.1 percent. In 1990, there was a special issue of treasury certificates of N27.3 billion which brought the level of treasury certificates outstanding to N34.22 billion representing 40.7 percent of outstanding domestic debt. Treasury certificates outstanding stood at N36.58 billion at the end of 1993.

The issue of treasury certificates is also governed by statutory limits. The Treasury Certificate Decree No. 40 of 1968 stipulated that treasury certificates outstanding at any time should not exceed 50 percent of the estimated revenue of the Federal Government during the year. This was raised upward to 60 percent by the Treasury Certificate Decree No. 32 of 1969. Treasury certificates like treasury bills are issued to meet the budgetary deficits of the federal government and are subject to the practice of rollover, which results in its continuous growth.

-   DEVELOPMENT STOCKS:

Development stocks were first floated in 1946 by the British Colonial Administrators to provide finance for economic development. A sinking fund was established for redemption of both the principal and interests on the securities. After independence, successive administrations continued to float development stocks to provide development finance. From a paltry sum of N5.3 million in 1960, development stocks outstanding rose to N3.1 billion by 1980 and accounted for 38.8 percent of the domestic debt outstanding. The level peaked at N4.8 billion in 1987 and started to decline as a result of the decision by the Federal Government in 1988 not to float new ones for on-lending to State Governments. In addition, the State governments were granted moratorium of these years on the repayment of outstanding development stocks. At the end of 1993, development stocks outstanding declined to N3.7 billion and accounted for 1.5 percent of the outstanding domestic debt (CBN, 2001).

The issue of Development stocks is subject to statutory limitations. Section 2 of the Finance Decree No. 32 of 1969 stipulated that the level of Development stocks outstanding at any given time should not be more than 75 percent of the Central Bank of Nigeria's

total demand liabilities. Over the years, there has been compliance with the statutory limit.

- *TREASURY BONDS:*

Treasury bonds were introduced in 1989 in an attempt to minimize debt service payments that would arise from the policy of interest rate deregulation adopted under the Structural Adjustment Programme (SAP). When the auction system for the floatation of Treasury bills and certificates was to be introduced in November 1989, the Federal Government requested that part of the outstanding short term securities be converted to fixed interest bonds. Consequently, N20 billion of treasury bills outstanding were converted to bonds, "styled as the 5 percent Federal Republic of Nigeria Treasury Bonds 2004 – 15". The bonds carry a fixed interest rate of 5 percent and are wholly held by the Central Bank of Nigeria (CBN). A sinking fund was established for the redemption of the bonds on the same basis as Development stock. A moratorium of 15 years was proposed while no redemption would be effected until February 2004.

In the same manner, treasury bills of N11.79 billion were converted to 10 percent fixed interest bond in 1992, to partly finance

Ways and Means Advances granted to the Federal Government. At the end of 1993, new issues of treasury bonds amounting to N86.89 billion were made to refinance ways and means advances outstanding. This brought the level of treasury bonds outstanding to N118.68 billion, representing 45.2 percent of total domestic debt.

2.4 RELEVANT MODELS

- *Loan-Pushing Models:*

There is no unique definition of loan pushing, yet a growing literature recognizes it as a real phenomenon (Kindleberger, 1989; Gwyne, 1983; Taylor, 1985, Darity, 1986; Eaton and Taylor, 1986; Darity and Horn, 1988). Broadly speaking we can say that loan pushing occurs whenever lending banks try to supply more credit to borrowing countries than the latter would voluntarily take at the prevailing interest rate. A more formal definition is problematic because once a loan has been made and accepted, both sides may be described as favouring it, whatever the prior arguments, bargains and threats. Yet, just as consumers are sometimes persuaded to buy more breakfast cereal than they would in the absence of advertising, so borrowers may borrow more at the urging of lenders. There is an enormous amount of anecdotal evidence to this effect.

Kindleberger (1989) observed with regard to the buildup to the current international debt crisis, for example that "multinational banks, swollen with dollars created through a serious mistake in monetary policy (i.e. cheap money initiated in the United States to help with Nixon's Presidential re-election campaign while the Deutsche Bundesbank was tightening money to curb inflation) tumbled over one another in trying to uncover new foreign borrowers and practically forced money on the less-developed countries".

Darity and Horn (1988) cited several similar experiences and mentioned one instance taken from Winkler (1933) of a Bavarian hamlet seeking $125,000 from U.S. lenders in the 1920s. The lenders soon persuaded the Mayor of the hamlet that this was too little to borrow and he ended up borrowing $3,000,000.

Two broad views about loan pushing emerge from historical writings. First, loans have often been used to promote exports for the borrowing country usually ends up buying goods from the lending country. The view that "trade follows loans" is discussed in the context of U.S. lending to Latin America by Winkler (1928) and in a more personal account by Gwyne (1983) who pushed loans to the Philippines from "a medium-sized Midwestern bank" to please a U.S.

client, a manufacturer of earth moving machines. It was known that the Philippines would use the bank's loan to buy those machines.

The loan-pushing model is further based on the assumption that lenders are supplying more credit in the borrowing low-income countries than the latter would voluntarily take at the prevailing interest rate. In practice the assumption that countries are persuaded to take more loans than they are willing to take might not be realistic as loans are typically given with conditionality, which may be politically costly to the borrower. In certain cases, political economy considerations can be an important factor in contracting loans. For instance, when the number of (new) loan, Basu (1991) observes that the interest rate is not the only factor involved, debt maturity and default provisions are also important.

There is scope for modeling excess lending on the basis of these arguments, but we shall focus on two models that we find more tractable at this stage. The equilibria exhibited excess demand for credit and we can think of them as exhibiting loan hunger. A prerequisite for loan pushing is an equilibrium with excess supply and the models to be constructed will fulfill this requirement. In the first, loan pushing occurs in that borrower would prefer to take a smaller loan than they take at the going interest rate but their options are

limited by lenders who make all-or-nothing offers. In the second, loan pushing does not actually succeed, but there is excess supply in equilibrium, so it is a model of potential loan pushing. This is the interesting case. The first model developed is derived by reversing the assumption that n > m. If borrowers are perfectly competitive and lenders are relatively few, borrowers may use more credit than they "want to". The model formalizes this notion.

There is room for debate about the correct market structure for analyzing international credit. It is therefore worth asking whether loan pushing can be explained without abandoning the market structure assumption (perfect competition among lenders) used in the existing literature.

The Extorpionate Lender

Consider the case in which there are more borrowers than lenders. We shall take this assumption to imply that borrowers compete with each other up to the point at which the "profit from borrowing (in this case, additional utility) is driven down to zero.

For linguistic simplicity, let us assume several identical borrowers face one monopoly lender and that default never occurs, because that complication adds nothing here. Let an individual

borrower's demand curve be given by DD^I in Figure I. It can be derived from the utility function. $U = U(\hat{C}_1 + L, C_2 - (1 + i) L)$.

Let us now complicate the lender's story a bit, compared to the description above, when the lender lends L units, the opportunity cost is $C = C(L)$, where $C(L) > 0$ and $C''(L) > 0$. If this monopolistic lender lends L units at interest rate i, then his profit is $\pi(L, i) = (1 + i) L - C(L)$.

If the monopolist must charge every borrower or buyer the same price, for reasons of law or politics, the textbook model serves well. In other cases, however, such as rural credit markets (Basu, 1987) the monopolist can use discriminatory prices to extract the borrowers' entire surplus.

In the international debt market as well, where each transaction is separately packaged and the loan agreement takes the form "take L and payback R", the traditional monopoly model is inadequate. A rate of interest is implied of course, but it is entirely notional; for example let the lender offer a loan package (L,i) the borrower has to take L and pay back $R = (1 + i) L$. In making this offer, the lender must keep in mind that, if it is unsatisfactory from the borrower's viewpoint, the borrower will turn it down. If the borrower turns down the offer, his welfare will be $U(\hat{C}_1, \hat{C}_2) = U^0$, his reservation utility. The lender's problem then is

$$\text{Max } \pi(L, i) = (1 + i) L - C(L).$$

Subject to

$$U(\hat{C}_1 + L, \hat{C}_2 - (1 + i) L) \geq U^0$$

We have already pointed out that a demand curve like DD^1 in Figure I can be treated as a line joining the peaks of ISO-utility curves like KL and DJ. Note that the borrower takes zero loan at D, so that his utility is U^0 and the whole ISO-utility curve DJ relates to that reservation utility. Hence any offer (L, i) from the lender that lies to the northwest of DJ will be rejected by the borrower, and any offer on or below DJ will be accepted.
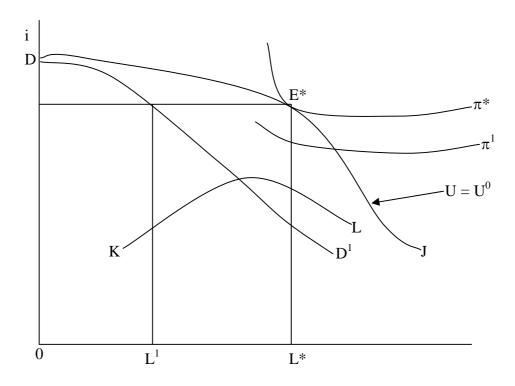

Fig. I: Excess-Supply Equilibrium

Superimpose on this diagram the iso-profit curves of the lender, derived by choosing a k in the equation.

$$(I + i) L - C (L) = K$$

Two such iso-profits curves π^1 and π^* are shown inn Figure I. Under reasonable assumptions regarding C(L), we can expect these curves to be U-shaped. It is now clear that equilibrium will occur at E* where the borrowing country takes L* credit at an interest rate i*.

At this equilibrium, the lender extorts the borrower's whole surplus and the borrower takes a larger loan than it would like to take. Its demand curve says that it would like to take L^1 at the interest rate L* but it succumbs to what may be described as loan pushing.

-   Lender Interdependence And Excess Supply

Once we allow for a certain kind of lender interdependence, we can explain loan pushing and excess-supply equilibria. The model we shall use for this purpose is particularly interesting because it can explain these phenomena even within the market

structure assumed in the standard model in which n > m. We shall in fact, consider a polar case in which a single borrower confronts several lenders. Suppose that the single borrower announces (L, i) where L is the amount it want to borrow and i is the interest rate it is willing to pay. At first sight, an excess-supply of loans, the borrower merely has to lower the interest rate i. It can be shown, however that when there is a certain kind of interdependence among lenders, the supply curve of credit has a discontinuity, so that a slight lowering of the interest rate could cause a sharp decline in supply, making an excess-supply equilibrium entirely plausible. The strength of the model lies in the fact that the discontinuity is explained endogenously even though all the primitive behaviours functions in the model are continuous.

Let H be the set of potential lenders to this borrowing country, and assume that each lenders supplies either one unit of credit or nothing (an argument based on the fixed cost of lending can be used to justify this indivisibility). Each lender j in H, however, has doubts about the quality of the borrower and

therefore tries to ascertain whether other are willing to lend to the borrower. A good indicator for this is the excess supply of credit faced by the borrower. To formalize this notion, let w^e be the expected excess supply of credit and r_j be the lowest interest rate at which lender j is willing to lend to the borrower. Then, r_j can be treated as being related inversely to w^e, that is

$$r_j = r_j (w^e), \ r_j \leq 0$$

Given w^e and the interest rate i, the total supply of credit to the borrower is

$$S = S (w^e, i) = \pi (j \in H \mid r_j (w^e) \leq i)$$

Where π denotes the number of elements in set A. Note that this function is bounded above, because each lender has an upper bound on its own potential lending and the total number of lenders is finite, that $\partial s / \partial w^e \geq 0$ and that $\partial s / \partial t \geq 0$.

If the borrower announces (L, i) where L is its total demand for credit and i the interest it is willing to pay, then supply, Y, can be said to represent rational expectation if

$$Y = S (Y - L, i)$$

If supplier expects that the Y will be the total supply of credit to the borrower (i.e. they expect excess supply to be Y – L) they will end up supplying Y units of credit.

The borrowing country must choose (L, i) to achieve

$$\text{Max U } (\hat{C}_1 + \text{Min } \{L, Y(L, i)\}, \hat{C}_2 - (1 + i) \text{ Min } \{L, Y(L, i)\})$$

The solution (L*, j*) is equilibrium in the credit market, it is easy to see that this equilibrium can occur where Y(L*, j*) > L* that is where there is excess supply.

Although there is an excess supply of credit the borrower cannot lower the interest rate because this will cause supply to tumble down. This tumble-down phenomenon arises from the interdependence between lenders and is a well-known feature of credit markets. Lipton and Griffith-Jones (1987) explain the booms and slumps in international credit by a very similar argument that relies on the differences between the perceptions of banks as a group and as individual banks.

Fig. 2: Lender Interdependence and the Supply of Credit

Even if we do not work with Y(L, i) but with any supply compatible with rational expectations, then barring the trivial case, discontinuities in supply are bound to appear. Hence, the possibility of excess-supply equilibrium cannot be ruled out.

Note further that this equilibrium will be charaterised by loan pushing, because lenders will fall all over each other to lend OD[1] when the borrower wants no more credit than OL. The borrower limits the amount of credit it will take in order to maintain its credit rating in the international market.

2.5   CONTRIBUTIONS OF RELATED WORKS

Existing studies on domestic debt analysis in Nigeria are still scanty. Few that exist, focus on the analysis of the structure, especially the composition and investor base (see for example Okoronmu, 1992; Odozi, 1996 and Garba 1997, 1998).

In a study, Domestic Government Debt Structure, Risk Characteristics and Monetary Policy Conduct: Evidence from Nigeria (Asogwa, 2004) he addressed a number of central issues that are important to understanding the evolution and basic characteristics of government domestic debt portfolio in Nigeria. Very importantly, he analysed several aspects pertaining to the management of government domestic debt in Nigeria. Since short-term debt constitute over 60% of total domestic debt in Nigeria, he focused on market and rollover risks, which mainly affect such short-term government instruments. Moreover as these shorter debt instruments are about the only interest bearing financing instruments in the money market, changes in its risk characteristics can have far reaching impact on monetary policy conduct. This study contributes to the general literature by analyzing the implications of the structural and risk characteristics of government domestic debt for monetary policy conduct. The issues raised herein are therefore germane for financial sector development in general.

There is also some very detailed descriptive work on African domestic debt and financial markets that have been completed in the last few years (see Ndikumana, 2001 and Christensen, 2004 for instance). However, the policy recommendations emanating from such studies are often uninteresting for the least developed countries and are at best a reiteration of the underlying academic thinking. Domestic debt markets are nascent and therefore cannot serve the function that they normally perform in rich economies.

2.6   LITERATURE GAP

The existing studies on domestic debt financing are few, one of them is Gbosi (2000). In the Gbosi's study, an attempt was made to analyse the relationship of domestic debt and some key macroeconomic variables.

Other studies on Nigeria's domestic debt proper are Okunrounmu, (1992), Garba (1998), and Odozi, (1996). They all focused on the analysis of the structure and composition of

domestic debt. None has gone further to analyse the effect of the sources of domestic debt financing on economic development. This thesis is an attempt to fill this gap.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This section of the research is concerned with the framework that dictates the type of information to be collected, the source of data and data collection.

A good research design guarantees that the information and data gathered is consistent with the objectives of the study, accurate, economical and dependable. The section borders on statistical techniques that will be used in analyzing the data. It gives a simple and precise description of dependent and independent variables identified in this study.

3.2 SOURCES OF DATA AND METHOD OF COLLECTION

The major source of data is the secondary data. These are data published by the Central Bank of Nigeria, Federal Ministry of Finance and Statistics, Debt Management Office (DMO) over the review period (1990 – 2004). The data collected are figures on domestic debt financing – value of treasury bills; value of treasury bonds, value of development stock and banking system's credit to the public sector and Gross Domestic Product (GDP) over the review period.

Although the research did not make use of questionnaires as a source of primary data, this is because data collected may not be consistent and reliable for the research. However, oral interviews with key personnel of Central Bank of Nigeria and Federal Ministry of Finance were carried out on issues that require more explanation.

3.3   METHOD OF DATA ANALYSIS

The statistical techniques used in the evaluation are:

a)   Multiple Regression Analysis, b) Coefficient of determination (R^2)

b) Correlation coefficient (r), d) Analysis of variance (ANOVA)

c) The T-test and The F-test

3.4   MULTIPLE REGRESSION ANALYSIS

The multiple regression is given by

$$Y = b_0 + b_1X_1 + b_2X_2 + \ldots + b_kX_k + e \quad \text{and } E(e) = 0$$

$b_0, \quad b_1 \ldots$ and b_k are parameters referred to as regression coefficient.   This study, having four independent variables and a dependent variable, the multiple regression is designed as:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

The dependent variable is the Gross Domestic Product (GDP) and is denoted by Y. The Gross Domestic Product (GDP) is used as a measure of economic development.

The independent variables are those components of domestic debt financing. They are as follows:

i) Value of Treasury bills denoted by X_1, ii) Value of Treasury bonds denoted by X_2, iii) Value of Development stocks denoted by X_3 and iv) Banking system's credit to the public sector denoted by X_4

3.5   COEFFICIENT OF DETERMINATION (R^2):

Coefficient of determination (R^2) is for a more meaningful interpretation and result, the ratio of explained, to total variation is computed. Thus R^2 is used to explain the degree of variation increase or decrease in Gross Domestic Product (GDP) explained by its association with sources of domestic debt. The multiple coefficient of determination measures the proportion of the total variation in the dependent variable Y that is explained by the independent variables X_1, X_2, X_3 and X_4.

3.6 CORRELATION COEFFICIENT (r)

We use this tool to measure the degree of the relationship between Gross Domestic Product (GDP) and domestic debt financing. Generally, correlation coefficient and coefficient of determination measure reliability and explanation. Perfect positive correlation will give $r = +1$ and all points will lie along a straight line with a positive radiant, where $r = -1$ there is a perfect negative correlation with one variable declining as the other rises and all points lying on a straight line

However a significant correlation lies between -1 and $+1$, that is $-1 < r < 1$. Thus a correlation coefficient with a value, so near to one shows a very high degree of positive association and one with a value so near to -1 shows a very high degree of negative association.

3.7 ANALYSIS OF VARIANCE (ANOVA)

The analysis of variance is given by:

Source of variation	Sum of Squares	Degree of freedom	Mean Squares	F-Ratio
Regression	$SSR = R^2 \sum Y^2$	k	$MSR = \dfrac{SSR}{K}$	$F^* = \dfrac{MSR}{MSE}$
Error	$SSE = SST - SSR$ $= \sum Y^2 - (1 - R^2)$	n-k-1	$MSE = \dfrac{SSE}{n\text{-}k\text{-}1}$	
Total	$SST = \sum Y^2$	n-1		

where

$$R^2 = \frac{\hat{b}_1 \sum X_1 Y + \hat{b}_2 \sum X_2 Y}{\sum Y^2}$$

where SSR = Sum of Squares of Regression

SSE = Sum of Squares of Error

SST = Sum of Squares of Total variation (Y)

K = Number of independent variables

n = Number of observation (n = 15)

We are often interested in testing whether or not there is a significant relationship between the dependent variable Y and the independent variables $X_1, X_2, \ldots X_k$ in multiple regression.

In the multiple regression, the coefficient of determination (R^2), the correlation coefficient (r), the T-test and F-test were obtained using the computer.

3.8 THE SIGNIFICANT TEST

The F-test was used to test the significance of all the independent variables. It shows whether there is a significant relationship between the dependent variable Y and the independent variables X_1, X_2, X_3 and X_4.

THE T-TEST OR STUDENTS' TEST

If the null hypothesis is rejected, the students t-test is carried out to find out which of the independent variables contributes to the significance and therefore worth to be included in the equation.

DECISION RULES:

The decision rule is to accept the null hypothesis if the critical tabulated value is greater than the calculated value otherwise reject.

The Significant Test:

H_0 is accepted at the α significance level, if $F^* < F_{1-\alpha}$ (n-k-1)

Otherwise, H_0 is rejected in favour of H_A.

T-Test:

H_0 is accepted at the 5% significant level if $|t| \leq t_{0.05}$ (n – 2)

Otherwise, H_0 is rejected in favour of H_A.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 DATA PRESENTATION

The main thrust of this section is to convert the series of data gathered into descriptive statements from where inferences pertaining to their relationship could be adduced.

DOMESTIC DEBT FINANCING AND GROSS DOMESTIC PRODUCT (1990 – 2004)

Year	GDP	X_1	X_2	X_3	X_4
1990	92238.50	25476.00	20000.00	4402.50	30345.50
1991	94235.30	57763.00	20000.00	4221.00	38498.50
1992	97019.90	103326.5	19006.50	3961.00	92624.90
1993	99604.20	103326.0	117139.7	3731.70	186711.40
1994	100936.7	103326.5	115341.7	3350.00	290354.5
1995	103078.6	103326.5	118681.7	3170.00	265936.7
1996	106600.6	103326.5	237387.6	2960.00	113995.8
1997	109972.5	221801.5	134387.6	2840.00	47840.30
1998	113509.0	221801.5	179620.1	2680.00	140857.5
1999	116655.5	361758.4	430608.2	2440.00	178906.7
2000	121207.8	465535.8	430608.2	2110.00	-116426
2001	126323.8	584535.8	430608.2	1830.00	20789.90
2002	131489.8	733763.0	430608.2	1630.00	390965.8
2003	136460.0	825054.5	430608.2	1470.00	572804.2
2004	145380.0	871577.0	424938.2	1250.00	510357.3

Source: Central Bank of Nigeria and Debt Management Office Data Bank

The procedure is the gathering of the data for analysis and the calculation of descriptive statistics. The period of analysis in this research is drawn from 1990 – 2004. A period of 15 years.

4.2   DATA ANALYSIS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.995	.990	.985	1961.60678	1.582

a. Dependent variable: Annual GDP
b. Predictors: (Constant), Value of Treasury Bills, Value of Treasury Bonds, Value of Development Stock, and Banking system's credit to the public sector.

Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.67E+09	4	918194480.7	238.622	.000
	Residual	38479011	10	3847901.148		
	Total	3.71E+09	14			

a. Dependent variable: Annual GDP
b. Predictors: (Constant), Value of Treasury Bills, Value of Treasury Bonds, Value of Development Stock, and Banking system's credit to the public sector.

Coefficients

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	132388.58	7892.585		16.774	.000
Value of treasury bills	2.79E-02	.005	.510	5.284	.000
Value of treasury bonds	-8.911E-03	.009	-.095	-.951	.364
Value of Dev. Stock	-9.456	1.914	-.588	-4.940	.001
Banking systems credit to the public sector	4.992E-04	.004	.006	.131	.899

a. Dependent variable: Annual GDP

Residual Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted value	91307.227	141412.20	112980.81	16196.95281	15
Residual	-2364.654	3967.8037	.0000	1657.86031	15
Std. Predicted value	-1.338	1.755	.000	1.000	15
Std. Residual	-1.205	2.023	.000	.845	15

a. Dependent value: Annual GDP.

Relationship model =

$$GDP = 132388.58 + 2.80 \times 10^{-2} X_1 - 8.91 \times 10^{-3} X_2 - 9.46 X_3$$

$$+ 4.99 \times 10^{-4} X_4 \qquad \text{-------------------- (4.1)}$$

where

X_1 = Value of Treasury Bills

X_2 = Value of Treasury Bonds

X_3 = Value of Development Stock

X_4 = Banking System's Credit to the Public Sector

Interpretation:

1. Equation (4.1) shows that the level of relationship existing between Gross Domestic Product (GDP) and the four explanation variables (X_1, X_2, X_3 and X_4) is strong (the multiple R of 0.995) indicates that 99.5% correlation exist between the dependent variable GDP and the four independent variables.

2. Equation (4.1) further shows that 98.5% of the annual variation in GDP can be explained by the cumulative variations in the four independent variables when all possible error in estimation is taken into consideration.

3. The standardized error in the estimation of GDP using the four variables (X_1, X_2, X_3 and X_4) of 1961.61 is not significant as the Durbin-watson statistics of 1.582 is less than 2.0 benchmark.

4.   Equation (4.1) is considered a significant predictor of GDP as the F-value calculated of 238.622 is far greater than the critical value of $F_{0.05}$ (4, 10) = 3.48.

4.3   TESTING OF HYPOTHESES

Hypothesis One:

H_0 :   The use of treasury bills as a source of financing domestic debt in Nigeria has not made significant positive impact on the level of economic development.

In testing this hypothesis equation 4.1 is used but with specific attention on the impact of X_1 on GDP.

The t-calculated value of 5.284 is greater than the critical value of $t_{0.05}$ (10) = 2.228. We therefore reject H_0 with a conclusion that the use of treasury bills as a source of financing domestic debt in Nigeria has made significant positive impact on the level of economic development.

Hypothesis Two:

H_0 :   The use of treasury bonds as a source of financing domestic debt in Nigeria has not made significant positive impact on the level of economic development.

This hypothesis is tested using equation 4.1 is used but with specific focus on the significance of X_2 on the model.

The t-calculated absolute value of –0.951 is less than the critical value of $t_{0.05}$ (10) = 2.228. We therefore accept H_0 with a conclusion that the use of treasury bonds as a source of financing domestic debt in Nigeria has not made significant positive impact on the level of economic development. In fact, the impact has been negative.

Hypothesis Three:

H_0 :   Development stocks as a source of financing domestic

debt financing has not made significant contribution

to economic development in Nigeria.

In testing this hypothesis equation 4.1 is used but with specific focus on variable X_3.

The t-calculated absolute value of –4.940 is greater than the critical value of 2.228 at $t_{0.05}$ (10). We therefore reject H_0 with a conclusion that development stocks as a source of financing domestic debt financing has made significant contribution to economic development in Nigeria, though negative.

Hypothesis Four:

H$_0$:   Commercial banks credit to government as a source of

financing domestic debt financing has not made

significant positive impact on economic development

in Nigeria.

Equation 4.1 is used in testing this hypothesis but with X$_4$ in focus.

The t-calculated value of 0.131 is less than the critical value of 2.228

at t$_{0.05}$ (10).   We therefore accept H$_0$ with a conclusion that

commercial banks' credit to government as a source of financing

domestic debt financing has not made significant positive impact on

economic development in Nigeria.

4.4   DISCUSSION OF RESULTS

Results of our analysis in this chapter are discussed here in the

context of the research questions presented in chapter one.

Question One: To what extent do treasury bills affect Nigeria's
economic development?

The test of hypothesis on this research question showed that the

use of treasury bills as a source of financing domestic debt in Nigeria

have made significant positive impact on the level of economic

development.   The conclusion was drawn from the result of the

statistic test in which the t-calculated value of 5.284 is greater than the critical value of $t_{0.05} (10) = 2.228$. Hence the null hypothesis (H_0) is rejected.

The result is in consonance with Asogwa (2003) conclusion that treasury bills constitute over 60% of total domestic debt financing in Nigeria. The purpose of treasury bills is to finance federal budget deficit. There are possible explanations for the result, firstly, the treasury bills perform an important role in the implementation of monetary policy since the Central Bank of Nigeria (CBN) influences the reserve positions of commercial banks primarily through the purchase and sale of bills. Currently, the CBN could finance deficit and refinance maturing debt easily with the frequent sales of large quantities of short-term treasury bills. But this simply concentrates government indebtedness to the most liquid sector of the market, short maturing treasury bills. Secondly, the private sector has great demand for the treasury bills because of their high degree of liquidity and nearness to money.

Question Two: To what extent do treasury bonds affect economic development?

The result of the test of hypothesis on this research question showed that the use of treasury bonds as a source of financing

domestic debt in Nigeria have not made significant positive impact on the level of economic development. The statistic test in which t-calculated of absolute value 0.951 is less than the critical value of $t_{0.05}$ (10) = 2.228, hence the null hypothesis (H_0) is accepted.

The purpose of treasury bonds is to reduce the burden of debt service. The possible explanations are:

Firstly, the government dominates the bond market whereas the private enterprises dominate the share market, there is the tendency that the level of awareness of treasury bonds market is still low.

Secondly, the objective for the introduction of treasury bonds as a debt instrument was to minimize debt service payment rather than provide deficit finance to meet budgetary gaps.

Thirdly, the maturity structure is important for investors as they seek to diversify their asset portfolios, the market may not be willing to hold long-term treasury bonds in view of significant inflation and default risks.

Finally, there is the possibility that the investor may not be sufficiently advanced to demand long-term treasury bonds, especially in the absence of institutional investor. Impavido (2003).

Question Three: To what extent do development stocks affect economic development?

The result of the test of the hypothesis on this research question showed that the use of development stocks as a source of financing domestic debt has made significant contribution to economic development in Nigeria.

The validity of the result was drawn from the statistic test in which t-calculated absolute value of 4.940 is greater than the critical value of 2.228 at $t_{0.05}$ (10), hence the null hypothesis (H_0) is rejected.

The purpose of development stocks is to finance development projects and on lending to States. Development tocks were apparently the first government instrument to be issued. It was floated largely to provide development finance to meet the needs of the Federal government or as loan on lent to the State governments. The colonial administrators floated the first registered debt stocks 1956/61 in 1956. Development stocks outstanding increased between 1960 and 1987. It started to decline as from 1988. The development stocks are traded in the secondary market to the Nigerian Stock Market.

Question Four: To what extent does banking system's credit to the public sector affect the economic development?

The result of test of the hypothesis on the research question showed that the use of banking system's credit to the public sector as a source of domestic debt financing has not made significant positive impact on economic development in Nigeria. The validity of the result was drawn from the statistic test in which t-calculated value of 0.131 is less than the critical value of 2.228 at $t_{0.05}$ (10).

This non-securitized portion of the domestic debt arises from huge arrears built up on unpaid salaries of public sector workers, pension liabilities and arrears to contractors. It also involves direct borrowing by some government-owned agencies from the commercial banks.

The problem of this source of domestic debt financing is the inability to be complied accurately (IMF, 2002). This may be responsible for the non-significant positive relationship between the banking system's credit to the public sector and economic development of Nigeria.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1   INTRODUCTION

We would in this chapter give a brief but comprehensive summary of our findings on the study of domestic debt financing and economic development of Nigeria. We would also arrive at some conclusions; make recommendations and suggestions for further research.

The study however assessed the impact the impact of sources of domestic debt financing, such as treasury bills, treasury bonds, development stocks and bank system's credit to public sector on Gross Domestic Product. The Gross Domestic Product was used as a yardstick for measuring economic performance. The data used for the analysis was drawn over 15- year period (1990 – 2004).

5.2   SUMMARY OF FINDINGS AND CONCLUSIONS

From our analysis of secondary data presented in chapter four, we found that:

(1)   The level of relationship existing between Gross Domestic Product (GDP) and the four explanatory variables (X_1, X_2, X_3, and X_4) is strong (the multiple R value of 0.995) indicate that

99.5% correlation exist between the dependent variable GDP and the four independent variables.

(2) Equation 4.1 shows that 98.5% of the annual variation in GDP can be explained by the cumulative variation in the four independent variables when all possible error in estimation is taken into consideration.

(3) The standardized error in the estimation of GDP using the four variables (X_1, X_2, X_3, and X_4) of 1961.61 is not significant as the Durbin-Watson statistics of 1.582 is less than 2.0 benchmark.

(4) Equation 4.1 is considered a significant predictor of GDP as the F-value calculated of 238.622 is far greater than the critical value at $F_{0.05}$ (4, 10) = 3.48.

(5) In testing hypothesis one, the t-calculated value of 5.284 is greater than the critical value of $t_{0.05}$ (10) = 2.228. We therefore reject H_0 with a conclusion that the use of treasury bill as a source of financing domestic debt in Nigeria has made significant positive impact on the level of economic development.

(6) In testing hypothesis two, the calculated t-value of –0.951 is less than the critical value at $t_{0.05}$ (10) = 2.228. We therefore accept H_0 with a conclusion that the use of treasury bonds as a source of financing domestic debt in Nigeria has not made significant positive impact on the level of economic development. In fact the impact has been negative.

(7) In testing hypothesis three, equation 4.1 is used in this testing but with variable X_3 in focus. The calculated t-value of –4.940 is greater than the critical value of 2.228 at $t_{0.05}$ (10). We

therefore reject H_0 with a conclusion that development stock as a source of domestic debt financing has made significant contribution to economic development in Nigeria, though negative.

(8)   Equation 4.1 is used in testing hypothesis four but with X_4 in focus. The calculated t-value of 0.131 is less than critical value of 2.228. We therefore accept H_0 with a conclusion that commercial bank credit to government as a source of domestic debt financing has not made significant positive impact on economic development of Nigeria.

Based on our findings, the following conclusions can be drawn.

(1)   The use of treasury bills as a source of financing domestic debt in Nigeria has made significant positive impact on the level of economic development.

(2)   The use treasury bonds as a source of financing domestic debt in Nigeria has not made significant positive impact on the level of economic development. In fact the impact has been negative.

(3)   The development stock as a source of domestic debt financing has made significant contribution to economic development in Nigeria.

(4)   That commercial bank credit to government as a source of domestic debt financing has not made significant positive impact on economic development of Nigeria.

5.3 RECOMMENDATIONS

Having conducted this study as carefully as we can in view of our findings, we make the following recommendations.

(1)   It was quite obvious that the use of treasury bills as a source of domestic debt financing has made significant positive impact on economic development of Nigeria. The short-term maturity of this debt instrument, held mostly by the banking system, in particular the Central Bank, also had a debilitating effect on the economy.   That the Federal government should keep to the statutory limits imposed by law on treasury bills.

(2)   There is the need to ensure that borrowed resources are productively utilized, such that economic and social rate of return is higher than the future servicing cost.

(3)   Nigeria's huge domestic debt has led to a decline in total outputs of goods and services, rising inflation and interest rate and defers in the Nigerian financial service industry. Consequently, the Nigeria's rising debt has led to a poor and worsening macroeconomic environment.   To remedy this situation, it is recommended that government fiscal deficit should no longer be financed through the banking system, rather the government should finance the expenditure through the capital market.

(4)   To demonstrate its commitment towards seriously addressing the problem of domestic debt management, the Federal Government should make adequate provision annually in the budget for the servicing and repayment of domestic debt.

(5)   The Bank is an institution assigned with the responsibility to manage public debt. Therefore it should demonstrate its ability to do so by invoking the provision of section 33 sub-section 3 of the Central Bank of Nigeria Decree No. 24 of 1991, which clearly states the upper limit of ways and means advances. One way of doing this is to refuse to honour Federal Government cheques once the statutory limit is reached. This will go a long way to restore sanity to the system and infuse greater budget discipline.

5.4 SUGGESTION FOR FURTHER RESEARCH

From the present study, it is evident that much still has to be done to understand, appreciate and develop the topic Domestic Debt Financing and Economic Development in Nigeria (1990 – 2004). Researchable areas of domestic debt financing and economic development that could pose serious challenges to scholars in the Nigeria context include:

1.)   Domestic Government Debt Structure and Monetary Policy Conduct.

2.)   A Review of Developments in Domestic Debt in Nigeria. We have no doubt that carefully planned and executed research on the above topics which primarily relate to domestic debt financing would increase our knowledge and understanding of domestic debt and possible ways of reducing the rising rate of domestic debt in Nigeria.

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