# EXTERNAL DEBT AND NIGERIAN'S ECONOMIC GROWTH, (1975 -1995).

**BY**

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## DEDICATION

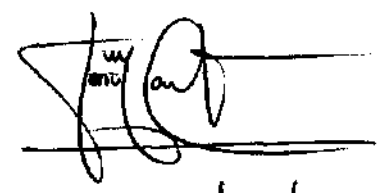
This work is dedicated to Almighty God for his Guidance and Protection.

Amen!

## DECLARATION

I hereby declare that this work is written by me and has not been previously presented in any application for a higher degree in another University. All quotations have been acknowledged by way of referencing.

NAME: MGBE INNOCENT



29/9/99

## CERTIFICATION

This thesis titled EXTERNAL DEBT AND NIGERIA'S ECONOMIC GROWTH, (1975 – 1995) meets the requirement governing the award of the degree of MASTER OF SCIENCE IN ECONOMICS, OF AHMADU BELLO UNIVERSITY, ZARIA, and is approved for its contribution to knowledge and Literary presentation.

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# ABSTRACT

This work traced the origin o Nigeria external debt to 1958 when a loan of U.S. $28 million was contracted for railway construction. The thesis established within theoretical framework the justification for external borrowing which is basically the existence of the saving-investment gap and that of the foreign exchange gap. Growth and development will seriously be retarded in any economy with these gap. Thus, the need to fill these gaps.

We have therefore consciously employed the external borrowing approach to sec how far external debt has contributed to economic growth in Nigeria and also to show the structure and magnitude of Nigeria's external debt as well as her debt servicing capacity.

We discovered that the structure has changed from what it was in late 1970s and early 1980s to what it is today. That is, borrowing pattern has been gradually shifting from short-term to medium and to long-term periods. We also noted that the source has changed significantly from mutilateral to private and international capital markets (ICM) which were characterised by high and floating interest charges and that this and other factors contributed to the astronomical increase in the magnitude of debt since 1980s.

We also, from the examination of various debt ratios, proved that the debt

Servicing capacity of the country has been on the decline since 1980s and this is as a result of poor economic planning, debt management and utilisation problems as well as corrupt practices.

From our empirical estimation we discovered that external debt exerted positive impact on real GDP from 1975 to 1995. On the other hand debt servicing exerted negative impact on real GDP. When the two effects were considered simultaneously it was found that the negative effect of debt servicing out weighted the positive effect of external borrowing..

Based on our findings, we recommended that debt management strategies that would adequately take care of the existing debt problems should be put in place for any meaningfully economic growth to take place and that further loans must be for viable projects. Finally, we suggest that debt servicing ratio be peged between 7% to 10% of export earnings.

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## CHAPTER ONE

## GENERAL INTRODUCTION

### 1.0 BACKGROUND TO THE STUDY

The genesis of Nigeria's external debt can be trace d to 1958 when a loan of U.S $28 million was contracted for railway construction. Thereafter, external borrowing was minimal until 1978 when oil revenue declined sharply as a result of the oil glut of 1978, consequently, it became imperative to borrow to support the balance of payments .

Subsequently, borrowing increased exponentially with federal and state governments contracting large external loans. Today, the country is smarting under the burden of an unprecedented debt crisis. Between 1980 and 1983, Nigeria's total external debt increased from U.S $8.9 billion to $18.5 billion, an increase of about $10 billion or 107 percent in only three years!

Following the second oil glut of 1981, the Nigeria economy went under considerable strains and stresses, culminating in persistent deficits in the balance of payments, dwindling external reserves, government budget deficits, and mounting external debts, inter alia.

It would be instructive to evaluate the impact of this debt crisis on the economy itself in terms of growth performance. Casual observation indicates that the impact has been negative. For example the growth rate of the economy fell from 6% in 1987 to 4% in 1992 (C.B.N Statistical Bulletin 1992). The channel through which the external debt burden affects economic growth is investment. If the loan borrowed is productively invested, growth accelerates, otherwise, the impact on growth becomes negative. It is these considerations that have inspire this study. It is an econometric appraisal of the impact of external borrowing on Nigeria's economic growth.

## 1.1. STATEMENT OF THE PROBLEM.

The logic of external borrowing by developing countries is to bridge the domestic dual resource gap in order to accelerate economic growth and development. This has formed the basis of development strategies of many countries as represented by the Harrod-Domar growth model. But resorting to external borrowing makes economic sense only if such loans are utilized in a productive manner that facilitates the eventual servicing and amortization of the debts.

Debt becomes problematic when it is accumulated at a rapid rate in excess of the debtor's capacity to service and amortize. In such cases, the magnitude of the debt and its servicing pose serious problems for the debtor nation. This is the present situation in Nigeria whose current debt crisis is not just in terms of its magnitude but more so in terms of its management. Efficiency of debt management plays an important role in its servicing and amortization.

The dual gap thesis is relevant in this regard. The Nigerian economy began experiencing "capital shortage" in the late 1970s and had to resort to external borrowing. The magnitude and servicing of this debt has become problematic. A systematic study of its impact on Nigeria's economic growth is required. This study seeks to investigate this problem.

## 1.2. OBJECTIVES OF THE STUDY.

The objectives of the study are, to examine:

a. The magnitude of Nigeria's external indebtedness from 1975 to 1995;

b. The impact of this indebtedness on Nigeria's economic growth; and

c. To prescribe appropriate policy recommendations based on our findings.

## 1.3. JUSTIFICATION

The justification for external borrowing is premised on basically two factors: The existence of savings-investment gap as a result of inadequate domestic savings mobilization, and that of the foreign exchange gap. Growth and development can not take place adequately in an economy bedeviled with these gaps.

In an attempt to fill these gaps and thus stimulate growth and development, Nigeria embarked on external borrowing with her first jumbo loan of U.S $1.00 billion contracted in 1978. Since then, the country has been in debt crisis situation. In order to curtail or if possible

eliminate this debt crisis, many debt management strategies have been adopted by various regimes of the Nigerian government. Yet the problem is far from being solve. It is the aim of this study to attempt to proffer some solutions to the Nigerian debt crisis.

This study is justified because it intends to investigate the contributions of external loans to the growth of real GDP and also, proffer solutions as to how the contributions can be maximized. Although, several studies have been conducted on Nigeria's external debt burden as evident in our literature review, the focus of the present study is unique in the sense that it disaggregated the effect of debt on growth, and in so doing, compared the positive impact of external finance and the negative impact of debt servicing and repayments on growth. This enabled us to know whether external finance had contributed positively to economic growth. If not what is responsible? And how could the problems be solved in order to eliminate the debt crisis situation?

## 1.4. RESEARCH HYPOTHESES

Three hypotheses derived directly from the research objectives and model were tested. These hypotheses are :

[illegible]

1(a) External debt acquisition has no effect on real GDP of the domestic economy. That is, there is no relationship between external debt (D) and economic growth.

(b). Alternatively, external debt acquisition is an injection into domestic economy and thus, should exert positive impact on real GDP.

2(a). Debt servicing, defined as principal payment (P) plus interest payment (R) have no effect on real GDP of domestic economy

(b). Alternative debt servicing is a withdrawal from the domestic economy and so, should exert negative impact on the real GDP.

3(a). The combined effects of the estimate of external debt (D) and debt servicing in terms of principal payment (P) and interest payment (R) are not statistically significant.

**(b).** Alternatively, the combined effects of estimates of the variables are statistically significant at 0.01 and 0.05 significant level. These hypotheses were stated symbolically as follows :

1a. $H_0 : D_t = 0$

b. $H_1 : D_t > 0$

2a. $H_0 : P_t = 0$

b. $H_1: P_t < 0$

c. $H_0 : R_t = 0$

$H_1: R_t < 0$

c. $H_0 : P_t + R_t = 0$ or $H_0 : DS_t = 0$

$H_1 : P_t + R_t < 0$ or $H_0 : DS_t < 0$

3. $H_0 : \beta_6, \beta_7, \beta_8 = 0$

$H_1: \beta_6, \beta_7, \beta_8 = 0$

where $D_t$ = External Debt acquisition at a given period of time

$P_t$ = principal payments at a given period of time

$R_t$ = interest payment at a given period of time.

The t- test and F-test were used to test the individual and combined statistical significance of the estimated parametric coefficients respectively.

## 1.5. SCOPE OF THE STUDY.

The study was limited to the period 1975 to 1995. The period was chosen principally because it was within this period that the country

witnessed astronomical increase in external debt and balance of payment deficits. Besides, 1975 to 1995 covers the critical period of Nigeria's external debt burden to date.

## 1.6. DATA SOURCES.

Secondary data were used for the study. Information was gathered mostly from CBN monthly, quarterly and annual reports, and statistical bulletin, as well as from world Bank and IMF publications.

## 1.7. LIMITATIONS OF THE STUDY.

The main limitation of the study relates to the usual limitations with official data, namely, reliability. Data used are official data published by the CBN and diverge significantly from those published by the World Bank and IMF. This discrepancy constitutes a problem.

## 1.8. METHODOLOGY.

The study examines the relationship between external debt and economic growth using Nigeria data for the period 1975 to 1995. The study raised important problems of concept and measurement.

### 1.8.1. CONCEPT OF GROWTH

We need to distinguish for example, between growth and development. Whereas development is growth plus structural shifts, growth on the other hand, refers to an increase in an economy's capacity to generate more goods and services. It results in an outward shift of the economy's production possibility frontier. Therefore, growth is part of development. How then do we measure growth ?

Growth can be measured using the Gross Domestic Product (GDP) of a country. However, growth in nominal GDP does not constitute real growth. Nominal GDP has to be deflated by the consumer price index (CPI) to obtain real GDP. This study applies changes in real GDP as the indicator of growth.

### 1.8.2. CONCEPT OF DEBT BURDEN

The debt burden depends on the total amount owed and its servicing. Debt servicing consists of installmental principal repayment, plus interest payment. As a country services its debt, it begins to feel the burden. However, the payment is spread over a period of time, hence, the burden of repayment is not felt all at once.

### 1.8.3. MODEL SPECIFICATION.

To verify the impact of external debt on Nigeria's growth, we hypothesized three functional relationships.

The first relationship measures the effect of total external debt from 1975 to 1995 on economic growth: with real GDP (Y) and total external debt (D) lagged for a period.

$$Y_t = \beta_0 + \beta_1 D_{t-1} + U_t \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(1)$$

Subject to the restriction :

$$dY_t/dD_t > 0$$

Where : Y represent real GDP

$\beta_0$ and $\beta_1$ are parameters of the function, and U is the stockhastic term.

The above restriction implies that we expect a positive relationship between economic growth and total debt. This is because debts when productively invested, should generate growth.

The second functional relationship measures the effect of debt servicing on economic growth, where debt servicing is defined as principal repayments (P) plus interest payments (R)

$$Y_t = \beta_2 + \beta_3 P_{t-1} + \beta_4 R_{t-1} + U_t \quad \text{.....(2)}$$

Subject to

$$\frac{\delta Y_t}{\delta P_{t-1}} < 0, \text{ and } \frac{\delta Y_t}{\delta R_{t-1}} < 0$$

Where : $Y_t$ represents real GDP

$\beta_2$ , $\beta_3$ and $\beta_4$ are the parameters of the function.

$P_{t-1}$ = principal repayments lagged for a period.

$R_{t-1}$ = interest payment lagged for one period

$U_t$ = stochastic term.

The restrictions imply that, a prior, we expect a negative relationship between economic growth and principal repayments, and between interest payment and economic growth respectively. This is because interest payments and principal repayments are withdrawals from the domestic economy.

The third relationship investigates the combined effects of the three explanatory variables on growth performance of the economy.

$$Y_t = \beta_5 + \beta_6 D_{t-1} + \beta_7 P_{t-1} + \beta_8 R_{t-1} + U_t \quad \text{.....(3)}$$

Subject to

$$\frac{\delta Y_t}{\delta D_{t-1}} > 0, \qquad \frac{\delta Y_t}{\delta P_{t-1}} < 0 \text{ and } \frac{\delta Y_t}{\delta R_{t-1}} < 0$$

The variables are as previously defined.

## 1.9. STRUCTURE OF WORK.

The study is structured as follows : chapter I is an introduction, chapter II appraises the related literature, chapter III provides data on Nigeria's external indebtedness, chapter Iv econometrically estimates the impact of external debt on Nigeria's economic growth, Chapter V tests the hypotheses and chapter VI is summary and conclusion.

# CHAPTER TWO

# LITERATURE REVIEW.

## 2.0 INTRODUCTION

Many studies have been carried out by different scholars on debt and economic growth. A summary of the studies is given below.

## 2.1 THEORETICAL AND EMPIRICAL REVIEW

Economists world over, have attempted to explain how and why growth occurs in economies. Economic growth can be defined as a change in the real gross domestic product (GDP) of a country over time. This change must be sustained over a long period of time to distinguish it from mere cyclical fluctuations or a large harvest or transient phenomena (Kuznet, 1969). The theory of economic growth explains the level of output at any point in time and how each stage generates forces that propels the economy to the next stage (Heller, 1971) with emphasis on the importance of an economy's factors of production (land, labour, capital and entrepreneurship) and their rate of change as being the main determinant of each stage of economic growth.

Among these theories, the Harrod-Dommar model seems to be at the centre of the argument. The model stresses the importance of saving and investment, as well as growth in population as the main determinant of economic growth. The model rests on a production function that relates output to available capital stock through the capital output ratio.

$$\frac{K}{Y} = R$$

Where k = capital stock, Y = output and R = capital output ratio. Thus since savings (S) equal to investment (I), an increase in savings leads to an increase in investment and hence growth, depending on the capital output ratio. The theory assures constant rate of saving from the output.

$$S = sY.$$

Hence growth in output ($\rho Y/Y$) is a function of the ratio of saving and capital output ratio. This model attaches great importance to capital as an engine of growth.. Solow's growth model assumes basically two factors of production namely, capital and labour. The production function

is subject to constant returns to scale using two input. Hence, output increases proportionally to changes in input. The theory also assumes proportionate savings from output.

S = sY = investment

This shows that this model also assumes the capital – output ratio as assumed by the Harrod-Dommar and the constant propensity to save and the exogenous growth of labour. On the other hand, W. W Roston, attempts a historical approach in explaining the nature and causes of economic growth. He noted that there are basically five stages of growth and that all economies of the world lie in one of these stages.

These stages are :

a. the traditional society

b. the precondition take off

c. the take off stage

d. the drive toward maturity and

e. the stage of high mass consumption of durable goods.

According to Rostow, all economies must pass through these stages

for them to attain the highest level of development. By Rostow's classification all developing countries of Africa, Asia and Latin America still fall within the traditional stage or precondition for the take off. At this stage, he argued that what is important for the take off of an economy is the mobilization of savings (domestic and foreign) in order to generate sufficient investment for economic growth.

Generally, within the growth theories, either viewed from the Keynesian, neoclassical or the Marxian approach, one central issue that suffices in these theories is the centrality attached to capital accumulation for investment and growth. Capital accumulation arises from domestic savings, hence, required rate of investment and growth is to a large extent tied to domestic savings of a particular economy. There is therefore a positive relationship between domestic savings. Investment and growth. The ability to grow of any economy rests therefore on adequate savings mobilization. In a situation where saving equal investment, there is likely to be a normal growth process. The problem arises when the domestic savings are inadequate in meeting the required rate of investment, because this will invariably affect growth.

One major problem of developing countries the world over is their inability to generate enough savings which could be used for investment and hence growth. The explanation for this is that it is hardly adequate for personal consumption let alone savings. Another reason for low savings in these countries is the absence of adequate saving habit. Other factors such as the underdeveloped nature of the financial systems, government policies towards the mobilization of domestic savings also play a vital role (Nurkse 1960 : Rosentein Rodom 1943).

Lack of adequate savings in these countries create a difference between the actual level of required domestic savings for investment and actual investment. The implication of this is that investment will be low since the level of savings is inadequate. Thus, savings in this regard can be seen as a constraint to investment and hence growth, since it is the mechanism through which investment translates itself into economic growth according to orthodox growth theories. In this sense, a savings constraint can be seen as a shorthand expression for the constraint on increasing investment imposed by the "minimum level to which consumption can be squeezed" (Joshi 1976). This constraint is referred to as the savings gap.

The dependency nature of the third world economies is another factor to be considered. The nature of these economies makes it imperative for them to depend to a very large extent on external economies for the necessary machines and equipment and also for the raw materials that are used for domestic industries. These requirements are obtained by the ability of a nation to export (foreign exchange earnings). However, the ability of third world countries to export goods and services which will provide them the purchasing power to import the necessary inputs is very low by virtue of the nature of their products (primary agricultural goods), the nature of the market for their products and the restriction or protections of Western Developed Economies (Sam laid and Nogues, 1989). This is even more serious for a country that is highly indebted because it makes it more difficult for such country to acquire enough foreign exchange.

The foreign exchange gap or trade gap therefore arises as a result of the inability of these countries to raise enough foreign exchange to service their imports. That is, there is a shortfalls between the required foreign exchange and the available foreign exchange. The existence of these gaps (the foreign exchange gap and savings gap) in developing countries have

been shown to constitute two separate and independent constraint on the attainable rate of economic growth (Chenery and Strout, 1966 : Linder 1967: Lutle and Clifford 1965). It is based on this that Meier (1976) argued that when the foreign exchange gap is greater than the savings gap, foreign aid becomes the means of permitting the required imports so that the full saving potential can be realized and resources will not be left underutilized because of an import bottleneck.

This position has, therefore, made the developing countries who are caught in this gap to fall back on external financing for their development projects. However, one thing that seems to be lacking in this conclusion is whether or not such loans can be of much positive impact in the developing economies and/or have been as Meier (1976) pointed out. Studies in the early 1960s to date have shown that for a more rapid economic development to take place in an economy where both savings and foreign exchange gaps exist, substantial amount of external assistance is required (Chenery and Bruno : 1862 : MCKinnom, 1964, Adelma, 1970 : J.O Ashinze and E.A Onwioduokit 1996 : Toshi 1970). These studies have shown the possibilities of attaining rapid and sustained development by effective use of foreign assistance, especially in countries like Greece,

Taiwan, Israel and Philippines. They argued that these countries have received substantial amounts of assistance, have had on accelerated growth. This argument is primarily based on the contention that in an open economy where there is a shortfall in domestic savings such can be supplemented by the inflow of external resources. For example, an import surplus financed by foreign borrowing can supplement domestic savings directly or indirectly by providing foreign exchange to buy import which could be capital goods or substitutes for domestically produced goods (Thirwall, 1972 : Udom, 1978).

Ihimodu (1985) posited that foreign credit could be used even if saving gap problem does not exist but a trade gap exists. According to him, this is because developing countries can not readily transform their domestic savings into foreign exchange, hence the necessity for foreign exchange.

In this theoretical framework, empirical studies have shown that there is a positive relationship between foreign resources and domestic savings , thus, going by the relationship of saving and investment in the gap analysis, concluded that such resources are capable of stimulating growth (see Weiskpof, 1972 : Chenery 1970, Graffin and Enos, 1970). On

the contrary however, some empirical studies have shown that there is a negative relationship between foreign resources and domestic savings and consequently concluded that foreign resources tend to reduce savings and therefore, can not stimulate growth (Farzin, 1988; Bahman, 1967). Although this depends on the kind of savings functions that is assumed. Thus where savings mobilization is mainly determined by government policy, the savings effort may be pursued with less vigour if large amount of foreign resources are available; while when savings is a function of investment opportunities, then some opportunities may be pre-empted by inflow of foreign resources, leading to a decline in domestic savings (Houthakker, 1965).

However, Ashinze (1996) showed that foreign credit only contributed positively to growth in Nigeria between 1988 and 1992 when resources mobilized externally were used in directly productive activities, but between 1970 and 1987 as well as the period 1993 to 1994, there was a negative relationship between foreign capital and growth as a result of policy inconsistencies and political instability. This supports the argument that foreign credit could contribute to economic growth when used in directly productive ventures.

Chenery and Strout (1966) further argued that external finance also makes fuller utilization of domestic resources possible and hence accelerates growth apart from bridging the saving and foreign exchange gaps. This is because developing countries, though may be having a sizeable amount of natural resources the exploitation of such resources becomes absolutely difficult since the majority of these countries, depend to a very large extent on developed countries, both in terms of their technical and capital needs for the exploitation of such resources.

The importance of capital within the growth literature makes it imperative for all economies to obtain a source of investment financing. For the developed western economies, this could not be a problem, since the necessary financial structures are developed. This situation places them on a favourable position in terms of saving mobilization and as well credit syndication. In the developing countries however, internal sourcing of capital seems to be unattainable, principally because of the nature of the financial rudimentary stage as well as other reasons such as low income level, nature of consumption habit corruption etc.

The western developed economies are seen as a surplus spending unit on the one hand, the developing countries are regarded as deficit

spending units on the other hand. This therefore makes the developed countries to be seen as the vector of aid assistance without which growth of the less developed countries (LDCs) would be difficult to maintain (Kuznet, 1954; Polasek 1975; Baldwin, 1978). Thus the resort to foreign credit by the developing countries is viewed as a normal element of economic policy in the third world countries (Raheem, 1990).

This is the main reason for placing emphasis on external finance for growth by developing countries. Primarily, these countries are said to have satisfied the criterion for dependence on external source of finance for investment in their respective economies. This is because though with a high population growth rate per annum, the saving capacity of these countries is less than 10% of the GDP; thus, the chance of increasing their per capita income using only domestic resources available are low (Raheem 1990). Thus, the demand for foreign borrowing to supplement domestic savings and increase available foreign exchange has been a feature of many countries at particular point in their historical development (Howzard, 1980).

Nigeria, being a developing country has, using this thesis, been borrowing since independence. This has therefore resulted in Nigeria

accumulating a staggering amount of debt which as at 1995 stood at US $32.6 billion. This position has made the servicing of the debt difficult. The main reason for this is that Nigeria's economy relies to a very large extent on oil revenue as a means of acquiring convertible currencies while non oil exports are merely seen to be playing the role of a supporter to the revenue drive. It is therefore not surprising to witness a rapid shortfall in government revenue when the prices of oil fell as witnessed in the late 1970s and early 1980s. Also, the excessive use of short term debts such as suppliers credit, in addition to lack of appropriate scheduling of obligations makes maturity of these loans frequently. With the vulnerable nature of exports and the nature of debt composition, servicing these debts obviously becomes more difficult. Apart from these, debt servicing problems may also be caused by contracting debts on relatively difficult terms, like high interest rates, grace period being too short (Ihimodu 1985).

The debt servicing problem by 1982 wedded the country into an economic crisis and Nigeria, had to adopt debt management strategies in order to curtail the effect of debt servicing on the economy. Nigeria had to adopt the structural adjustment programme recommended by the world

Bank and IMF.

The goal of adjustment in this case is, according to the IMF, to stimulate economic growth. If there is growth in the economy, it is expected that incomes are to increase alongside other variables which in turn will take care of both debt servicing and payment in the future. Thus, a basic way of solving debt problem is through growth, unless there is adequate impetus to growth, and debt servicing capacity rises faster than the debt, the vicious circle will continue and progress will be stifled (Wheeler 1989).

There are also debt management policies which are endorsed by the creditor to debtor countries. These policies include debt rescheduling, debt equity swap, debt refinancing, debt servicing, debt buy back and so on. These policies are expected to give the country a chance to plan for adequate economic growth that will aid in the long run to service and repay such debts.

## 2.2. THEOREITICAL FRAMEWORK.

Two familiar problems facing developing countries in their bid to grow are the savings and foreign exchange bottlenecks within this

context, external finance is seen as a panacea.

Basically, in trying to borrow, a justification for that will have to be made within a theoretical construct. Thus, it is argued that economic growth and development of a nation at any particular point in time is primarily premised on the existing growth theories. These theories generally, rely to a very large extent on some of the key variables that determine the ability of an economy to grow.

The ability of an economy to invest on viable ventures seems to be the key variable, although others such as other economic policies, political and social stability could be incorporated. Also, investment is seen as a function of the amount of capital that is available to a country. Hence, a country which has a high level of capital accumulation is in the best position to increase its investment and hence economic growth ,ceteris paribus:

In the narrow sense, capital accumulation refers to the process of sheer formation of savings with potential to finance investment. Thus, capital accumulation is a function of domestic savings and the availability of foreign exchange earnings where international trade exists. Hence, if a country can mobilise adequate domestic savings which can then be

translated into investment such a country can be said to have potentials for economic growth. Also, if a country can raise enough foreign currency for its imports of goods and services, especially in terms of machines and equipment, and as well as raw materials for its domestic industries, such a country can be said to be on the threshold of economic growth. This position however, seems to be an abstraction from reality. This is because in all developing countries, and to some extent the so-called developed economies, there exist the problem of either shortages in domestic savings or foreign exchange earnings, or both.

There is therefore, a link between economic growth and capital accumulation as demonstrated by the Harrod Dommar growth model in the classical economy. This model posited that economic growth is a function of the rate of saving and capital output ratio.

$g = s/v$ where g = growth rate of GDP

S = savings ratio in GDP

V = incremental capital output ratio

(ICOR).

The ICOR is reflecting efficiency of production. It is assumed to be fixed or constant in the shortrun. With a constant ICOR, an expanding saving ratio would lead to positive shifts in output frontier, that is economic growth (Enwere Dike 1991).

The economic problems of developing countries are mainly the inadquacy of capital both physical and human. Solution to these problems is impeded by a number of bottleneck, namely : domestic savings, forcign exchange, and human skills. Within this context external finance can help to relax two of these, and the growth literature has tended to put particular emphasis on the savings bottlenecks. Thus, external finance is seen as a source of increased resources for investment (MCDONALD, 1982).

In the growth literature, the savings and foreign exchange bottlenecks are referred to as the dual-gap. It is within this framework that developing countries incur foreign finance to fill these gaps. The theory asserts the existence of these in all developing countries. Conversely, developed countries are seen as those that have excess capital which can be transferred to the developing countries to fill their dual gaps (see Chenery and Strout, 1966; Chenery, 1963).

The Harrod Domnar growth model emphasizes the shortage of

capital in these developing economy and the need for the injection of foreign capital. It is within this framework that the problems of Nigeria's external debt and growth can best be appreciated.

# CHAPTER THREE

## THE STRUCTURE AND MAGNITUDE OF NIGERIA'S EXTERNAL DEBT.

### 3.0 INTRODUCTION.

In the previous chapter, we reviewed some of the available literature on external debt and economic growth in Nigeria. The focus of this chapter is to analyse the structure and composition of Nigeria's external debt as well as the magnitude and extent of Nigeria's external indebtedness. We also showed the country's debt servicing capacity by critically examining the various debt ratios.

The structure for instance seems to have changed from what it was in the late 1970s and early 1980s to what it is today. The borrowing pattern has shifted from short-term to long-term and even the source has changed significantly from private to international; capital market (ICM), other financial institutions to the world Bank and IMF.

The extent and magnitude of Nigeria's external indebtedness on the other hand, have been on the increase since 1978 coupled with variations and arbitrary increase in interest charges. The high proportion of interest payments is a reflection of the indiscriminate increase in the interest rates

variable in the capital market. This has adverse, implications on the economy.

To determine the debt servicing capacity of the economy, the ratio of total external debt to the GDPs, external debts to export as well as the ratio of debt service to GDP, export earnings and federally collected revenue have been examined. These are measures of debt burden on the economy.

## 3.1 THE STRUCTURE/COMPOSITION OF NIGERIA'S EXTERNAL DEBT.

External debt can be classified into private and official debt. The private constitutes universal short term trade debts arrears that were contracted through loans and/or letters of credits. They are often referred to as London club debts. Official debt on the other hand, comprises Paris club debt, that is the debt insured by export credit agencies of Paris club members. Others include multilateral and bilateral debts. Multilateral debts are debts owed to regional and international financial institutions such as World bank, IMF, ADB, EIB etc. Bilateral debts on the other hand, refer to debts owed to country governments which are non members

of the Paris club group of creditors.

The Nigeria debt structure witnessed a change from the official creditors to private creditors between 1978 to 1983. The share of private creditors of Nigeria external debts started declining in 1983. In 1976, the official creditor's share of the total debt outstanding was 93.2%, leaving the remaining 6.8% to private creditors (see table 3a). Out of this 93.2% share of official creditors in 1976, ultilateral institutions accounted for 48.5% while bilateral accounted or 44.7%. Out of the 6.8% share of the private creditors, financial markets accounted for only 1.8% while other suppliers accounted for 5.0%. But with the floodgate opened by the Obasanjo administration borrowing from the International Capital Market (ICM) of US $1.00b, Nigeria's debt structure witnessed a significant change from official creditors to private creditors as from 1978. For instance between 1978 and 1982, the percentage share of debt contracted from private institutions increased from 61.3% to 86.4%. While the debt declined from 38.7% to 13.6%. Between 1983 to 1994, the private debt outstanding witnessed a very significant change. It amounted to US$9,965m or 56.1% of the total debt stock outstanding in 1983, out of which London club debts accounts for 35.3% and promissory notes/letters

of credits accounts for 20.8%. It declined marginally and later sharply to US$9,121 million or 52.6% and to US$7,815 million or 41.3% in 1984 and 1985 respectively.

Even though the private debt increased in absolute term in 1986 compared with the figures in 1985, its percentage share in the total debt stock remained relatively stable at 41.4% it declined gradually to US$10,770million or 35.1% and US$10,467million or 31% in 1988 and 1991 respectively. Private debts dropped further to US$15,366million or 19.5% in 1992 and US$5,235million or 17.8% in 1994 (see tables 3a and 3c).

The official debts on the other hand, witnessed very significant changes as from 1983. In 1983, official debts as a proportion of total debt outstanding accounted for 43.9%. It then trended upward monotonically accounting for 47.4%, 58.6%, 67.6% and 80.5% in 1984, 1986, 1989 and 1992 respectively. It peaked at its highest level in 1994 when it absorbed 82.2% of the total debt stock outstanding, out of which multilateral debts accounted for 15.0%, Paris club debt accounted for 62.0% and other accounting for 4.9% (see table 3a and 3c)

The structure and compositions of Nigeria external debt could also be looked at in terms of maturity of the loans and the average borrowing terms of the loans Credit from official sources are usually associated with long term maturity with longer grace period and lower interest charges, than credits from private sources which are associated with shorter grace period, short term maturity and higher interest charges. In 1982, the short term loans constituted 22.5% while medium term loans settled for 77.5% of the total external debt outstanding. By 1985, the former constituted 35.7%, representing an increase of about 13.2%, while the later fell by 11.2%, constituting about 64.3%. However from 1985, to 1988, the table was turned in favour of the medium/long term loans. For, whereas the medium/long term component of the loans rose from 64.3% to 79.6%, 87.1% in 1985, 1986 and 1988 respectively, the short term component witnessed a gradual decline from a record of 35.7% in 1985 to 14.6% in 1987 and to 12.9% in 1988 (see tables b and 3f).

The long term component of the loan witnessed a decline in 1990 (63.3% and increased significantly to 86.3% and 89.8% in 1991 and 1992 respectively. It declined to US$24,603million or 85.7% in 1993 and to US$23,727.5million or 80.6% in 1994 (see tables 3d and 3e).

The borrowing terms of both the official creditors and private creditors is given in table 3b. As noted earlier, credits from official sources has a longer maturity period, low interest charges and longer grace period than credits from private sources. So, there is economic implication of raising loans from either official sources or/and private sources.

## 3.2 THE MAGNITUDE OF NIGERIA'S EXTERNAL DEBT.

In whatever, perspective one looks at Nigeria's external debt magnitude, the fact remains that the situation is able to get out of hand . This is because the country is seen to be more externally indebted than average developing country as can be evaluated from 1988 estimations. Nigeria's total debt outstanding stood at US$30.693billion in 1988 constituting 2.3% of the total debt outstanding of all the developing countries (World Bank report 1988). As at 1988, Nigeria had the fifth largest debt outstanding in the heavily-indebted countries (HIC) category (see table 3a).

It should be noted that whereas Nigeria accounted for mere 5.8% of total debt outstanding among the HICs in 1988, the largest four indebted

countries accounted for an average of 15.2% of the same group. However, Nigeria's debt looks small, especially when compared with those of Brazil (22.7%), Mexico (20.3%), and Argentina (11.3%). Inspite of this, it will be appropriate to appreciate the fact that the country's external debt outstanding has astronomically grown since 1970s.

As shown in table 3ai, Nigeria's external debt outstanding which was US$308.9million in 1971 rose to US$13,121million in 1982 and to US$27,564.8million or #544,261.1million in 1992. The growth of Nigeria's external debt has been rapid since 1978. From #214.5milliom in 1971, it gradually increased to #496.9million in 1977. But from the end of 1977, the increase has been astronomical, due to significant shift of debt profile from the traditional concessional bi-lateral and multilateral sources to market sources, coupled with the oil glut.

In 1978, the first Jumbo loan of US$1.00billion was contracted from the international capital market (ICM) and this increased the debt stock by 183.6% from 1977 figure of $762.9million to $2,163.9million in 1978. This action can be seen as a result of a general consensus by analysts which viewed capital flows to less developed countries (LDCs) and the apparatus shift from official to private sources as a healthy

development. The capital flow from rich countries with relatively low rates of return on investment and high savings rates to poor ones with higher rates of returns on investment and lower savings rates was seen as an efficient allocation of world resources (Krueger, 1987). As a result of involvement with other sources of loans, Nigeria's external debt peaked at US$33.770million in 1991. Though it declined to $27.6billion in 1992, by October 1993 it had risen again to $28.7billion. The increase is partially attributed to changes in the value of the dollar, debt service defaults charges, and the capitalisation of unpaid interest and other arrears.

The figure for 1992 which represents a decrease of 18.3% and 16.9% from the level at the end of 1991 and 1990 respectively was due to the closing of the London club refinancing deal. In this deal, 62% of eligible debt owed to the London club was bought back at 40% face value while $2.051million or 32% was collaterized with US treasury zero coupon per bonds. In addition, promissory notes worth $1,384million were made (CBN Annual reports and statement of accounts, 1992). However, external debt increased in naira value to #716.866billion in 1995 largely as a result of the depreciation of the exchange rate of the naira visa vis the dollar (see table 3ai).

## 3.3. DEBT SERVICING CAPACITY.

Nigeria's debt servicing capacity were within manageable limits until 1982. With the sharp increase in the magnitude of the debt in 1983, the total debt service payment correspondingly increase by 72.2%

The ratios are some of the quantifiable indicators of debt servicing capacity. The debt servicing ratio relates total external debt service payments to exports of goods and services. It is the most commonly used indicator of debt burden and debt servicing capacity. It indicates the proportion of currents exports earnings devoted to servicing the external debt, thus revealing the portion of resources available to service the rest of the economy. Table 3I indicates that debt servicing ratio has been on the increase since 1982. From a mere 0.7% in 1975 and 0.3% in 1977 it rose to 4.7% in 1981 and to the peak of 31.7% in 1985, though it gradually declined to 17.2% in 1994.

The rule of thumb is that a debt service ratio ranging between 10% and 20% is a problem, going by this, Nigeria is in debt crisis situation because the debt service ratio has exceeded the critical level. The high ratio of exports earnings used in servicing debt will not only prevent the

importation of necessary industrial machineries and spare Parts for industries but will also prevent the disbursement of foreign exchange for other economic uses.

External debt/GDP ratio measures the extent to which total domestic output can be deployed to wipe out outstanding external debts obligations. The higher the ratio the more difficult external debt management becomes. Table 31 showed that this ratio has exceeded the World Bank critical level of 50%. For instance, from a mere 1.4% in 1976 it rose to 94.3% in 1987 and to a peak of 165.2% in 1994. The high ratio meant, that the loans were not directed at raising the nations production level and perhaps, that Nigeria borrowed more than its productive structures could sustain.

The ratio of external debt service to GDP showed the same trend. In 1980 for instance, the ratio rose from 0.2% to 14.0% in 1992 and declined slightly to 9.7% in 1994.

The interest payment to export ratio relates annual interest payments to exports earnings. A high ratio or rapid increase in the ratio could indicate excessive consumption and/or low productivity of investment. The ratio showed an increasing trend. From 0.2% in 1977 it

rose to 5.6% in 1983 and to the peak of 17.6% in 1988, although it declined to 12.6% in 1994.

These indicators show the degree of severity or intensity of Nigeria's external debt burden. The ratios suggest that the burden has been on the increase over the last 14 years. However, the underlying economic condition of a country is the best indicator of its ability to meet its current and future obligations.

These conditions are determined by the economic and financial policies of the country.

During the period under review, Nigeria has pursued economic and financial policies which have tended to constrain economic growth and development. Economic mismanagement and corruption have become virtually endemic. Since no meaningful growth and development seems to have taken place the capacity to generate adequate foreign exchange to meet maturing debt obligations and domestic requirements has substantially reduced. Even when renegotiations have taken place, Nigeria has been unable to discharge all obligations as they fall due. The accumulation of payment arrears is indeed a good indicator of reduced debt servicing capacity.

# CHAPTER FOUR

## ANALYSIS OF EMPIRICAL RESULTS.

### 4.0. INTRODUCTION.

Earlier chapters have shown that the existence of the savings-investment gap and trade gap justify the contraction of external debt by developing countries, and that such debts should generate growth provided they are productively invested. In this chapter, empirical estimates are used to measure the impact of Nigeria's external debt on the growth of the economy for the period 1975 to 1995. The growth of the economy is represented by the growth of the real GDP.

### 4.1. RESULTS PRESENTATION

After some experimentation with several lagged structures, the following equations yielded the best results. The standard errors are in brackets.

1. $\blacklozenge_t =$ 68.596 + 0.055D ---------- (1).

(1.457) (0.0046)

t-calculated t-table

$\beta_o = 47.095$ 2.093

$\beta_1 = 11.838$ 2.093

$R^2 = 0.92$

Durbin Watson = 1.12

No of observation 21

1. $\blacklozenge_t = 66.608 - 0.199P - 1.583R$ ------ (2)

(2.268) (0.152) (0.306)

F- calculated = 46.286 F-table = 3.55

t-calculated t-table

$\beta_2 = 29.373$ 2.101

$\beta_3 = 1.309$ 2.101

$\beta_4 = 5.173$ 2.101

Adjusted $R^2 = 0.88$

Durban Watson = 1.91

Number of observation 21.

1. $\blacklozenge_t = 67.337 + 0.031D - 0.158P - 0.595R$ -------(3)
(0.994) (0.005) (0.0.078) (0.237)

F – calculated = 140.13 F – table = 3.20

T – calculated t- table

$\beta_5 = 67.722$ 2.110

$\beta_6 = 5.167$ 2.110

$\beta_7 = 2.026$ 2.110

$\beta_8 = 2.511$ 2.110

Adjusted $R^2 = 0.96$

Durbin Watson = 2.053

## 4.2 TESTING THE SIGNIFICANCE OF THE ESTIMATED PARAMETERS.

a. $\blacklozenge_t = 68.596 + 0.055D$ -------(1)

(1.457) (0.0046)

The numbers in brackets are standard errors of the estimated parameters ($\beta_s$). We are testing the statistical significance of the estimated $\beta_1 = 0.055$ at 5% significance level using t statistic test. The null and the alternative hypotheses are :

Ho : $\beta_1 = 0$

H1 : $\beta_1 \neq 0$

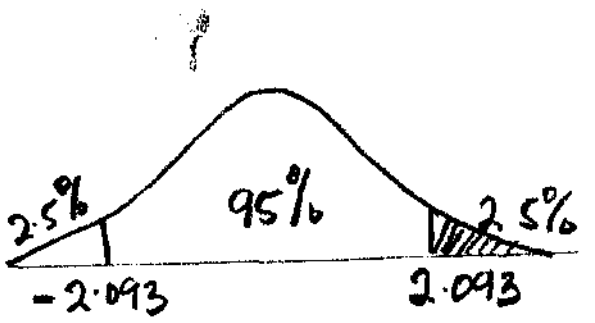
Choosing the 5% level of significance for our test, we tolerate to make the wrong decision of rejecting $H_0$ when it is actually true, 5 times out of hundred. We choose a two-tail critical region since the alternative hypothesis is expressed in the form $\beta_1 \neq 0$.

Given that the population variance is unknown and our sample size is small ($n = 21 < 30$) we apply the t- statistic.

$$T - \text{calculated (tc)} = \frac{\beta_1 - 0}{S(\beta_1)} = \frac{\beta_1}{S(\beta_1)} = \frac{0.055}{0.0046}$$

$$= 11.838$$

t-table ($t^T$) = N-2 = 21 – 2 = 19 degrees of freedom from the t – table we found that – t 0.025 = -2.093 and + t 0.025 = +2.093.




The result of the test showed that t – calculated is clearly greater than t – table (11.938 > 2.093); hence we reject the null hypothesis and infer that $\beta_1$ has a value different from zero. We conclude that estimated $\beta_1$ is statistically

significance at 5% significance level.

a. $\blacklozenge_t = 66.608 - 0.199P - 1.583R$ ---------(2)
(2.268) (0.152) (0.306)

The numbers in brackets are standard errors of $\beta_5$. In testing the overall significance of the estimated parameters we applied the F – statistic test.

$H_0 : \beta_3., \beta_4. = 0$

$H_1 : \beta_3., \beta_4. \neq 0$

$$F - \text{calculated} = \frac{\frac{\Sigma \blacklozenge^2}{K-1}}{\frac{\Sigma e^2}{N-K}} = \frac{1170.94600}{25.29791} \approx 46.28627$$

$F - \text{table} = F^t 0.05, V_1, V_2$

$V_1 = K - 1 = 3 - 1 = 2$

$V_2 = N - K = 21 - 3 = 18$

Where K = number of explanatory variables including the intercept

N = number of observations in the sample.

$F^t$ 0.05, 2,18 = 3.55.

Since F- calculated (46.28627) is greater than F- table (3.55), we conclude that estimated $\beta_s$ are statistically significance at 5% significance

level.

The individual statistical significance tests of the estimated parameters ($\beta_s$) are shown below :

$H_0 : \beta_3 . = 0$

$H_1 : \beta_3 . \neq 0$

$$\text{T – calculated} = \frac{\beta_3 - 0}{S(\beta_3)} = \frac{\beta_3}{S(\beta_3)} = \frac{0.199}{0.152}$$

$$= 1.309$$

t – table = $t_{0.025} = 2.101$

n – 3 = 21 – 3 = 18

Here, t – calculated (1.309) is less than t – table (2.101) hence we reject the alternative hypothesis and conclude that the estimated parameter is not statistically significance.

$H_0 : \beta_4 . = 0$

$H_1 : \beta_4 . \neq 0$

$$\text{T – calculated} = \frac{\beta_4}{S(\beta_4)} = \frac{0.199}{0.306} = 5.173$$

t – table = $t_{0.025} = 2.101$

T – calculated is greater than t- table (2.101), hence we conclude that the estimated parameter ($\beta_4$) is statistically significance at 5% significance level.

$\blacklozenge_t = 67.337 + 0.031D - 0.158P - 0.595R$ -------(3)

(0.994) (0.005) (0.078) (0.237)

The numbers in bracket are standard errors of estimated parameters $\beta_5$. Here, the significance of all the estimated parameters of the combined effects of all the explanatory variables is tested using the F- test.

$H_0 : \beta_6, \beta_7, \beta_8 = 0$

$H_1 : \beta_6, \beta_7, \beta_8 \neq 0$

$$F - \text{calculated} = \frac{\frac{\Sigma\hat{e}^2}{K-1}}{\frac{\Sigma e^2}{N-K}} = \frac{943.79511}{6.7360.3} = 140.13$$

$F - \text{table} = F^t 0.05, V_1, V_2 = 3.20$

$V_1 = K - 1 = 4 - 1 = 3$

$V_2 = N - K = 21 - 4 = 17$

$F0.05, 3, 17 = 3.20$

F – calculated (140.13) is greater than F- table (3.20). We conclude that

the estimated parameters of the combined effects of all the explanatory variables are statistically significance at 5% significance level.

The individual t – tests are as follows :

I $H_0 : \beta_6 = 0$

$H_1 : \beta_6 \neq 0$

$$t - \text{calculated} = \frac{\beta_6}{S(\beta_6)} = \frac{0.031}{0.005} = 5.167$$

t – table = 2.110

n – 4 = 21 – 4 = 17

t0.025 = 2.110

t – calculated (5.167) is greater than t – table (2.110) hence, the estimated parameter of the explanatory variable (D) is statistically significant at 5% significance level.

ii $H_0 : \beta_7 = 0$

$H_1 : \beta_7 \neq 0$

$$t - \text{calculated} = \frac{\beta_7}{S(\beta_7)} = \frac{0.158}{0.078} = 2.026$$

t – table = 2.110

t – calculated is less than t – table (2.026 <2.110)

Therefore, estimated parameter $\beta_7$ is not statistically significant at 5% significance level.

iii. $H_0 : \beta_8 = 0$

$H_1 : \beta_8 \neq 0$

$$t - \text{calculated} = \frac{\beta_8}{S(\beta_8)} = \frac{0.595}{0.237} = 2.511$$

t – table = 2.110

t – calculated (2.511) is greater than t – table (2.110) hence, the estimated parameter $\beta_8$ for explanatory variables (R) is statistically significant at 5% significance level.

## 4.3 INTERPRETATIONS OF RESULTS.

Equation (I) shows a positive relationship between external debt (D) and real GDP (Y). This is because external finance is an injection into the domestic economy. The $R^2$ which is a measure of the "goodness of fit' of the regression plane shows that 92% of the total variation of real

GDP is explained by the regression plane. The t – statistic test showed that the regression co – efficient is statistically significant at 5% significant level and hence, can be used as a measure of impact. (t – calculated = 11.838 as against t – tabulated = 2.093). To illustrate this, let us assume that external debt (D) has increased by US$100. Y which denotes the real GDP will also increase by 0.055 of $100 which is $5.5. This means that the impact of this increase in external debt of $100 will extert on real GDP is $5.5 ceteris paribus. This shows that external debt contributed positively to the growth of the economy. The Durbin Watson statistic is 1.12. This indicates slight auto – correlation which is as a result of omission of some explanatory variables such as money supply, foreign and domestic investment etc.

Equation (2) is a multiple regression which shows the impact of principal payments (P) and interest payments (R) on Nigeria growth performance (Y). Principal payments and interest payments are leakage's or withdrawals from the economy. They are therefore negatively signed. The result showed that about 88% of the total variation of real GDP (Y) is explained by the regression plane ($R^2$ adjusted = 0.88301). The F – statistic test showed that the equation as a whole is statistically

significance at 5% significant level (F – calculated = 46.286 against F – table = 3.55). Hence, the regression co-efficient of the explanatory variables can be used as a measure of impact. We illustrate by assuming a US$100 increase in principal payments and 20% increase in interest payments. The negative impact these increases will have on real GDP will be 0.199 of $100 and 1.583 of 20% which is $19.9 and 31.66% respectively.

This showed that principal payments and interest payments exerts negative impact on real GDP with interest payment exerting the most impact. The Durbin-Watson statistics is 1.91 which indicate the absence of serial – correlation. The individual t – statistics showed that the parametric co-efficient for principal payment (P) is not statistically significant at 5% significant level (t – calculated = 1.312 as against t – table of 2.101). However, that of interest payment (R) is statistically significant at 5% significant level (t – calculated = 5.168 as against t – table of 2.101).

Equation (3) shows the combined effects of external debt (D), principal payments (P), and interest payments (R) on Nigeria's growth performance (Y). The equation shows the negative impact of principal

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payments and interest payments on real GDP and also the positive impact of external debts on real GDP. The co-efficient of multiple determination ($R^2$Y.DPR) which is a measure of the `the goodness of fit' of the regression plane is 96%. The F- test carried out showed that the combined effect of external debt (D), principal payments (P) and interest payment (R) on real GDP are statistically significance at 5% significant level (the result showed that F – calculated is 140.13 against F – table of 3.20)

Also, the individual t – tests showed that the co-efficient are statistically significance at 5% significant level, except that of principal payments (P). (t – calculated for each explanatory variable is $\beta_6 = 5.332$, $\beta_7 = 2.018$, $\beta_8 = 2.510$ as against t- table of 2.101). Therefore, the co-efficient could be used as a measure of impact. Using the regression equation co-efficient , we could easily know the variable that exerts the most impact on real GDP. To illustrate this let us assume a US$100 increase in external debt (D) acquisition, a $100 increase in principal payments (P) and a 100% increase in interest payments (R) using the co-efficient of the various explanatory variables , the impact these increase will exert on real GDP will be 0.031 of $100 in respect of external debt, 0.158 of $100 in respect of principal payments and 0.595 of 100% in

respect of interest payments, or $3.1, $15.8 and 59.5% respectively. It is clear from the analysis that interest payments (R) exerts the most impact on real GDP, followed by principal payments and lastly, external debt (D). The Durbin Watson statistic is 2.053 which shows the absence of serial correlation.

## 4.4. DISCUSSIONS OF THE FINDINGS.

The investigation of the impact of external debt on real GDP showed that external debt contributed positively to the growth of real GDP from 1975 to 1995, although the positive contribution is not much when compared to the negative impact of principal payments and interest payments on real GDP during the same period. The not too impressive contribution of external debt to the growth of real GDP is as a result of these two main reasons :

**a.** The types of debts and the conditionalities attached to them. The Nigerian external debts are mostly contracted from private monetary or financial institutions such as Paris – club and London club. Such debts are usually associated with higher interest rates and short term maturity as noted in earlier chapter. The implication of these is that the project

financed with such debts hardly get completed before the loans are due to be repaid.

b. The utilization and management of external debts. The debt are not productively utilized, rather are used to service importation of consumer goods. The debts are also poorly managed.

Equation (1) showed that external debt exerted a positive impact on real GDP growth, but for us to quantify the contribution of external debt to the economy, we must also look at the withdrawal aspect of it. Principal payments and interest payments constitute the withdrawal aspect of it. As we have illustrated on page 47 external debt adds $5.5 to the real GDP out of every $ 100 new loan. On page 48, it was also shown that principal payments subtracts $19.9 from real GDP out of ever $100 payment made. Interest payments also withdrawals 31.66% from the real GDP out of every 20% increment. This analysis showed that the withdrawal aspect out weighs the injection aspect. Hence, there is a problem of debt crisis situation in Nigeria. This must be checked to prevent the situation worsening.

One of the reasons for the low contribution of foreign credit to the growth of the economy is that foreign capital was directed towards

improving infrastructures of the country between 1977 and 1987. These are not directly productive but a catalytic in the growth process. A casual observation of the debt contracted during this period reveals that over 75% of the capital mobilized was directed towards improvement of certain basic infrastructures, ranging from water supply to construction of road and after-war rehabilitation programmes. The remaining percentage which supposely was to be utilized in directly productive activities such as Ajaokuta steel Complex, Delta steel complex etc. have either been abandoned, have not taken off or have been producing at epileptic manner, thus impinging on growth when a discount of debt repayment and servicing is taken into account.

In equation (2) the t – test for principal payment showed that its co-efficient $\beta_3$ is not significant (t – calculated = 1.312 against t – table of 2.101). The reason for this is that Nigeria have not spent much for debt repayment because of the various strategies adopted to defer the burden, although government have continued to pay the interest without laying enough emphases on the principal repayment. This accounts for the significant negative impact exerted on real GDP by interest payment alone.

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The main strategies adopted by government to postpone debt payment include:

**a.** Debt rescheduling

**b.** Debt conversion programme (DCP)

**c.** Placing upper limit on debt repayment and servicing.

**d.** Structural adjustment programme.

**e.** DEBT RESCHEDULING : This can be defined as changing the original repayment terms of a loan, usually by extending the repayment period and introducing a grace period, within the total repayment period before capital repayments' starts. Debt rescheduling enabled the country to reduce its debt service ratio from as high 42% to 21.6% in 1986 and in 1987 from as high as 81.1% to 24.3% of the arrears that had built up in the interim (see table 4a). Debt rescheduling has enabled the country to devote more foreign exchange earnings towards more pressing and growth oriented sectors. Despite the importance of this tool of policy, it is however, a temporary panacea. It usually leads to a situation whereby, the debtor country struggles to settle the interest payments on loans than principal itself. Hence, the rescheduling continues "ad infinitum", thereby increasing the total debt outstanding.

f. Debt conversion programme (DCP): DCP is the process by which institutions, corporate bodies and persons to whom Nigeria is indebted abroad, exchange their debt for equity stocks of Nigerian enterprises. Such enterprises must however, be publicly quoted on the Nigerian Stock Exchange and ultimately on International Stock Exchange. Nigeria in February 1988 instituted a debt conversion committee (DCC) to prepare a DCP to enable the country reduce its external debt burden; stimulated foreign investment inflow and repatriate capital flight thereby promoting exports. The DCP took off formerly in July 1988 after the guidelines for its implementation were made public. Between July 1988 and June 1989, a total of 135 applications values at US$438.9million were received out of which 51 applications were successful. And about US$160.7million was redeemed (see table 4b). Between 1990 and 1995 a total of #713.18million was concealed through debt conversion programme (CBN statistical bulletin 1995).

g. Placing upper limit on debt repayments : The federal government in a bid to forestall debt repayments usually place upper limit on debt repayments. For instance in 1986 the government placed the limit of its obligation to debt servicing at a level not exceeding 30% of Nigeria's

foreign exchange earnings (see CBN 1989). Since then, the federal government set aside 2 billion dollars for debt servicing yearly, although it hardly meets this target at the end.

h. The structural Adjustment Programme was designed in 1986 to create a conducive atmosphere to enable the economy, to grow in order to enable the government to pay back the debt. The key tools here are privatization and commercialization of public enterprises.

The result of the multiple regression in equation (3) showed us the combined effect of external debt (D), principal payment (P) and interest payments (R) on real GDP. The result of tests proved that interest payments exerted the most significant impact on real GDP. However, the little contribution of external debt (D) to economic growth could be attributed to policy measures adopted between 1986 and 1992 such as the debt management strategies and the structural adjustment programme (SAP).

# CHAPTER FIVE

# TEST OF HYPOTHESES

## 5.0. INTRODUCTION

We analysed the results of the regression analyses in Chapter IV. This chapter tested the research hypotheses in order to validate on one hand, or invalidate on the other hand, the Harold Dommar growth model earlier discussed in chapter II as it applies to developing countries. The various tests carried out are follows:

## 5.1 HYPOTHESES TESTING

In the first test carried out it was hypothesized that external debt (D) acquisition has no effect on the real GDP of domestic economy. Therefore, the study tested null hypothesis :

$H_0 : D_t = 0$

Against the alternative hypothesis

$H_1 : D_t > 0$

where D = external debt acquisition

The tests were carried out using 1% significant level and 5% significant level. The sample size is less than 30, so a student's 't' was

used to test the hypothesis using this formula adopted fron Λ Koutsoyiannis (1977) (page 88).

$$t^* = \frac{X - \mu_0}{\sqrt{S^2X/N}}$$

where $S^2X = \frac{\Sigma(x - x)^2}{n - 1}$

Hence

$$t^* = \frac{D_t - 0}{\sqrt{S^2D_t/n}}$$

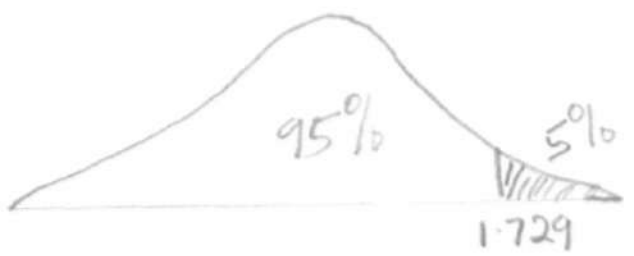
where $S^2D_t$ = Standard deviation of the variable D

$D_t$ = mean of D

$$t^* = \frac{178.25}{15.81} = 11.20$$

We choose a right tail critical region since the alternative hypothesis is expressed in the form $D_t>0$. At 5% level of significance t – value with 19 degrees of freedom given in the t – distribution table is 1.729. Thus, the rejection region for external debt $D_t = 0$ is $t^* > 1.729$. The observed value of $t^* =$ 11.27 is greater than the value of t from the t – distribution table. Hence, the study rejected the null hypothesis and accepted the alternative hypothesis. It

could be said that external debt ($D_t$) exerts significant positive impact on real GDP, at the $\alpha = 0.05$ level of significant.




At 1% level of significant the t – value as given in the t – distribution table is 2.539. The observed value of t = 11.27 is greater than t – table value. Hence the conclusion is the same as above.

2.i. The second test carried out was designed to test the null hypothesis :

$H_0 : P_t = 0$

Against the alternative hypothesis :

$H_1 : P_t < 0$

Where $P_t$ is principal repayment.

*To obtain the t – statistic for testing H0 : $P_t = 0$ this formula was used*

$$t^* = \frac{P_t - 0}{\sqrt{S^2 P_t / n}}$$

where $S^2P_t$ = standard deviation of the variable $P_t$.

$$t^* = \frac{-10.30}{\frac{}{\sqrt{14.024}}} \qquad \frac{-10.30}{3.74} = -2.75$$

We choose a left – tail critical region since the alternative hypothesis is expressed in the form $P < 0$. Using 5% level significance the t – value with 18 df as given in the t – distribution table is 1.734. The rejection region for principal repayment ($P_t = 0$) is t* less than – 1.734. The observed value of t* = -2.75 is less than t – value for 0.05 with 18df (-1.734). Hence, we rejected the null hypothesis at 0.05 significant level and accepted the alternative hypothesis. The conclusion is that principal repayment exerts significant negative impact on real GDP at 5% level of significant.

At 1% level of significance the t – value with 18df as given in the t - distribution table is –2.552. The observed value of t* = -2.75 is still less than –2.55. Hence, the conclusion is the same as above.

2.ii. The third test tested the null hypothesis :

$H_0 : R_t = 0$

Against the alternative hypothesis

$H_1 : R_t < 0$

Where $R_t$ = interest payments on debt.

The formula used for student's t calculated is

$$t^* = \frac{R_t - 0}{\sqrt{S^2 R_t / n}}$$

where $S^2(R_t)$ = standard deviation of the variable $R_t$.

$$t^* = \frac{-5.44}{1.55} = -3.51$$

Choosing a left tail critical region for our test at 0.05 level of significance, the t value with 18df, given in the t – distribution table is – 1.734

The rejection region for interest payment ($R_t = 0$) is t* less than – 1.734. The observed t* = -3.51 is less than t – value for 0.05 with 18df (= -1.734). Hence, we rejected the null hypothesis and accept the alternative hypothesis. The conclusion being that interest payments on debt exerts significant negative impact on real GDP at 5% significance level.

At 1% significance level the t – value with 18df in the t – distribution table is –2.552. The observed value of t* = -3.51 is still of less than –2.55. Hence, the conclusion is the same as above.

2.iii. The fourth test carried out tested the combined impact of debt servicing on real GDP. Hence the study tested the null hypothesis :

$H_0 : P_t + R_t = 0$ or $H_0 : DS_t = 0$

Against the alternative hypothesis:

$H_1 : P_t + R_t < 0$ or $H_1 : DS_t < 0$

Where $P_t$ and $R_t$ are principal repayment and interest payments respectively.

This formula was used for the test.

$$t^* = \frac{DS_t - 0}{\sqrt{S^2 DS_t / n}}$$

where $DS_t$ = debt servicing comprising of principal repayment and interest payments (R) .

$S^2 DS_t$ = standard deviation for the variable $DS_t$

$$t^* = \frac{-15.83}{4.53} = -3.49$$

We choose a left – tail critical region since the alternative hypothesis is in the form DSt < 0. At 5% level of significance the t – value with 18df as given in the t – distribution table is –1.734. The rejection region for debt servicing ($DS_t = 0$) is t* less than $-t_{0.05} = -1.734$.

The observed value of t* = -3.49 is less than –1.734. Therefore, we rejected the null hypothesis and accepted the alternative hypothesis at 0.05 significant level. We conclude that debt servicing ($DS_t$) exerts significant negative impact on real GDP.

At 1% level of significance the t – value in the t- distribution table is –2.552. The observed value of t* = -3.49 is still less than the t – table value, hence, the conclusion remains the same as above.

- The test for the estimated variables has already been done in chapter IV.

## 5.2. DISCUSSIONS ON THE RESULTS OF HYPOTHESIS TESTING.

The first test proved that external debt contributed positively to the growth of the Nigerian economy from 1975 to 1995. This result is in line with Harold Domnar growth model which stresses the importance of external finance in filling the dual – gap existing in developing countries. This is also in line with the argument of Chenery and Strout (1966) that external finance makes fuller utilization of domestic resources possible and hence accelerates growth, apart from bridging the savings and foreign exchange gap.

The second, third and fourth hypothesis tests carried out proved that debt servicing in terms of principal repayments and interest payments are withdrawals from the domestic economy. Therefore, they exerts significant negative impact on real GDP thereby retarding economic growth. Solutions must be found for this problem otherwise the positive contributions of external finance will be eroded by the negative impact of debt servicing.

# CHAPTER SIX

## SUMMARY, POLICY RECOMMENDATIONS AND CONCLUSION.

### 6.0 SUMMARY

This work has examined Nigeria's external debt and economic growth from 1975 to 1995. The impacts of external debt and debt servicing on Nigeria's economic growth were evaluated for the same period.

In the course of the work, we traced the origin of Nigeria's external debt to 1958 when a loan of US$28million was contracted for railway construction. We also examined the rationale for external borrowing in the country. We noted that external borrowing arose as a result of the existence of both the foreign exchange and savings – investment gap. This we argued could only be the viable option left to an economy where the dual – gap exist, in trying to forge ahead with economic growth stimulation.

A review of the literature on external debt and economic growth in Nigeria has shown that indeed, the shortage of foreign exchange and as

well as the existence of savings- investment gap led to external borrowing. It was shown that within the context of the neoclassical economics, economic growth in the countries with these gap can only be achieved through the elimination or reduction of these gaps. this therefore, provided a justification for external borrowing in Nigeria. This is what has also inspired this study, to see how far external debt has contributed to economic growth in Nigeria.

The study attempted also to show the structure and magnitude of Nigeria's external debt as well as her debt servicing capacity. We noted that the structure has changed from what it was from late 1970s, and early 1980s to what it is today. That is, borrowing pattern is gradually shifting from short – term to medium and to long – term periods. We also noted that the source has changed significantly from multilateral to private and international capital markets (ICM), which were characterized by high and floating interest charges, and that this and other factors were responsible for the astronomical increase in the magnitude of the debt since 1980s.

We also, through the examination of various debt ratios, proved that the debt servicing capacity of the country has been on the decline

since 1980s , and that this is as a result of poor economic planning, poor debt management and utilization as well as corrupt practices.

We have also tried to show the impact of external debt, principal payments, and interest payments on Nigeria's economic growth. In the case of external debt, we noted that its positive contribution to economic growth is not as expected because not much of it was productively invested. We also noted that principal payments and interest payments constitute a withdrawal from the economy and hence exert a negative impart on economic growth. We however, discovered that the negative impact of principal payment and interest payment on real GDP is more than the positive impact of external debt. (From the regression analysis results).

Interest payments on the other hand, continued to exert significant negative effect on economic growth due to its floating nature and for the fact that in debt rescheduling, government continue to pay interest because rescheduling does not include interest.

## 6.1. POLICY RECOMMENDATIONS.

Having shown that the nation is saddled with debt crisis and also established the fact that external debts have not contributed much to

economic growth and also that debt repayment and interest payments are able to affect economic growth negatively, we at this level wish to proffer some policy recommendations.

In the first place, we discovered the problem of debt management and utilization. In this regard, we recommend an effective debt management at two levels. The administrative level and macro level. The macroeconomic level is most important because the management of the economy as a whole is the main factor in determining the volume of foreign debt. However, emphasis must be placed on the administrative level of debt management because, going by the recommendations of the creditors with regards to the conditionalities, the macroeconomic variables are seriously affected.

As noted earlier, there exist a management gap in the economy. This gap must be closed. The administrator of Nigeria's external debts must ensure that this gap is closed by effectively and truthfully utilizing these debts on the projects that they are meant for. They should make sure that the projects are productive ones. Also, when receiving foreign loans, plans must be made on how such loans are to be repaid especially by the projects they are meant for and the limits such debts will impose on future

economic policy must be made. The growth in consumption must administratively be kept within bounds if the savings needed for increasing investment and debt – servicing are to be generated.

The investment projects financed with the aid of foreign credits must be in a position to yield enough foreign exchange in order to cover the servicing aspects of the debts in the short-run and its amortization in the long run. This study has shown that credits from official sources has a longer maturity period, lower interest charges and longer grace periods than credits from private sources. This should be taken into consideration when contracting future loans.

Above all, it is recommended that government should try as much as possible to minimise, if not eliminate corrupt practices among its administrators. There should be effective check and balances to monitor the excesses of these corrupt administrative officials and also to monitor the utilisation of foreign credits, and to actually determine how much we owe because we believe that some of the claims are not authentic.

At the macroeconomic level, government should put in place a sound and effective macroeconomic policy to monitor other variables that affect economic growth such as money supply, interest rates, investment

behaviour etc. The economy should be politically stable in order to attract foreign investors and also, economic policies should be such that are conducive for both domestic and foreign investors. The capacity utilisation of our domestic industries must be enhanced.

Government should not stop future contraction of foreign finance, but should be mindful of the source, type and the conditionalities of such finances to be contracted. This is because the study has shown that external debt finance exerts positive contribution to economic growth, moreover, foreign credit has nothing to do with the poor contribution to economic growth. The real problem lies on how it was used, how it was contracted and the conditionalities attached to it.

Finally, we recommend that government should continue with the already existing debt management strategies and also find a way of improving on them. This is because, the study showed that as a result of the management strategies such as debt rescheduling, debt conversion etc, principal payment did not exert much negative impact on economic growth. But government should try as much as possible to repay these debts as they fall due in order not to accumulate much in the future or else they will adversely affect economic growth in the future. Moreover,

debt rescheduling will enable the projects financed with such debts to mature, so that the proceeds can be used to pay back such debts.

However, we noted that no meaningful progress can be made to reduce increasing debt burden if appropriate policies to raise the tempo of growth and development in the economy are not well designed and implemented. In this regard, the government must not only make case for debt rescheduling on highly concensionary terms but must also press for a significant reduction in external debt stock through debt cancellation. This is because Nigeria is one of the poorest heavily indebted countries in the world and thus, have access to concessionary assistance from multilateral institutions. Above all, the government must be prudent in its spending.

## 6.2. CONCLUSION

In conclusion, within the realms of the theories, we acknowledged that Nigeria being a developing country needed to grow and develop. However, we realised that this could not be possible without adequate investment, thus given the capital inadequacy of the nation both in terms of foreign exchange and domestic savings, the only option available is the

use of foreign finance. According to Roberts (1980), " the long – run economic prospects for most developing countries were bright provided that external loans combined with domestic savings could be wisely invested by applying effective organizational and managerial expertise ". Along with this line, however, we affirmed that borrowing should be restricted to the ability of the nation to pay and be strongly tied to projects that could be able to repay them. Debt management strategies that would adequately take care of the existing debt must be put in place for any meaningful economic growth to take place and that any further loans must be for viable projects and finally, we must peg the debt servicing ratio between 7 to 10% of export earnings, if the economy is to grow as expected in the near future.

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3a. External Debt Outstanding (U.S.$ Million)

| Creditor Category | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Multilateral | 884.00 | 1097.00 | 1317.00 | 1887.00 | 2985.00 | 2838.00 | 3171.00 | 3842.00 | 4016.00 | 4518.00 | 3694.70 | 4402.27 | |
| Paris Club | 5390.00 | 5811.00 | 7833.00 | 10228.00 | 12589.00 | 14400.00 | 15871.00 | 17171.00 | 17793.00 | 16454.70 | 18160.50 | 18160.5 | |
| London Club | 6263.00 | 4996.00 | 3560.00 | 6088.00 | 5860.00 | 5960.00 | 5680.00 | 5861.00 | 5988.00 | 2120.00 | 2055.80 | 2057.79 | |
| Promisory | 3702.00 | 4125.00 | 4255.00 | 4498.00 | 4850.00 | 4810.00 | 4553.00 | 4550.00 | 44790.00 | 3246.00 | 3159.90 | 3178.17 | |
| Note | | | | | | | | | | | | | |
| Others | 1526.00 | 1318.00 | 1939.00 | 2873.00 | 2032.00 | 2685.00 | 2311.00 | 1675.00 | 1454.00 | 1226.10 | 1647.30 | 1456.31 | |
| Total | 17765.00 | 17347.00 | 18904.00 | 25574.00 | 28316.00 | 30693.00 | 31586.00 | 33.099.00 | 33730.00 | 27564.00 | 28718.20 | 29428.86 | |
| Official | 7800.00 | 8226.00 | 11089.00 | 14988.00 | 17606.00 | 19923.00 | 21353.00 | 22688.00 | 23263 | 22198.00 | 23502.50 | | 63.92 |
| % share | 43.91 | 47.42 | 58.66 | 58.61 | 62.18 | 64.91 | 67.60 | 68.55 | 68.97 | 80.53 | 81.84 | | 33.08 |
| Private | 9965.00 | 9.121.00 | 7815.00 | 10.586 | 10710.00 | 10770.00 | 10233.00 | 10411.00 | 10467.00 | 5366.00 | 5215.70 | | |
| % share | 56.09 | 52.58 | 41.34 | 41.39 | 37.82 | 35.09 | 32.40 | 31.45 | 31.03 | 19.47 | 18.16 | | |

1975: External debt stood at N349.9 million in December 1975. Of this amount, the World Bank Group (IBZD and IDA), the united Kingdom, USAID and West Germany held 36.0, 14.5, 14.5, 14.4 and 11.2% respectively. While other held 23.9% (Mainly Italy, Japan Netherlands etc.)

Sources: CBN Statistical Bulletin 1995, World Bank . al Report 1994

Table 3b. Nigeria External Debts – Average Borrowing Terms

| | 1980 | 1982 | 1984 | 1986 | 1988 | 1990 | 1991 | 1992 | 1993 | Average |
|---|---|---|---|---|---|---|---|---|---|---|
| Official Creditors | | | | | | | | | | |
| a. Interest rate (%) | 8.2 | 9.2 | 9.9 | 8.5 | 7.2 | 6.1 | 4.6 | 4.6 | 2.8 | 6.8 |
| b. Maturity (Years) | 16.8 | 14.1 | 16.6 | 19.6 | 18.4 | 22.5 | 22.2 | 22.3 | 27.6 | 22.0 |
| c. Grace Period (Years) | 4.1 | 4.7 | 4.1 | 5.1 | 4.9 | 5.6 | 6.0 | 6.6 | 7.7 | 5.4 |
| Private Creditors | | | | | | | | | | |
| Interest rate % | 11.4 | 10.1 | 9.8 | 8.5 | 8.3 | 7.9 | 7.3 | 0 | 7.3 | 8.8 |
| Maturity (Years) | 8.6 | 9.0 | 9.8 | 10.7 | 9.6 | 12.7 | 12.2 | 0 | 13.5 | 10.8 |
| Grace Period (Years) | 3.2 | 3.3 | 1.9 | 3.0 | 3.5 | 3.7 | 2.7 | 0 | 3.8 | 3.1 |
| % share | | | | | | | | | | |

**Sources: CBN Annual** Report/**Quarterly report,**: CBN Statistical Bulletin 1995,

Table 3c: Nigeria's External debt outstanding (Percentage Shared)

| S/No | CREDITOR CATEGORY | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1993 | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MULTILATERAL | 5.0 | 6.3 | 7.0 | 7.4 | 10.5 | 9.2 | 10.0 | 11.6 | 11.9 | 16.4 | 12.9 | 15.0 | 10.3 |
| 2 | PARIS CLUB | 30.3 | 33.5 | 41.4 | 40.0 | 44.5 | 46.9 | 50.2 | 51.9 | 52.8 | 59.7 | 63.2 | 62.3 | 48.1 |
| 3 | LONDON CLUB | 35.3 | 28.8 | 18.8 | 23.8 | 20.7 | 19.4 | 18.0 | 17.7 | 17.8 | 7.7 | 7.2 | 7.0 | 18.5 |
| 4 | PROM NOTES | 20.8 | 23.8 | 22.5 | 17.6 | 17.1 | 15.7 | 14.4 | 13.7 | 13.3 | 18.8 | 11.0 | 10.0 | 16.0 |
| 5 | OTHERS | 8.6 | 7.6 | 10.3 | 11.2 | 7.2 | 8.7 | 7.3 | 5.1 | 4.3 | 4.4 | 5.7 | 4.9 | 7.1 |
| | TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Sources: CBN Annual Report/Quarterly report,: CBN Statistical Bulletin 1995,

Table 3D: Maturity Structure of Nigeria's External Debt Outstanding (US$ Million)

| Period | 1990 | 1991 | 1992 | 1993 | 1994 |
|---|---|---|---|---|---|
| Short term | 12191.0 | 4613.1 | 2931.0 | 4109.2 | 5701.39 |
| Long Term | 20988.0 | 29116.9 | 25843.0 | 24602.9 | 23727.51 |
| Total | 33179.0 | 33730.0 | 28774.0 | 28712.0 | 29428.9 |

Table 3E: Percentage of Total

| Period | 1990 | 1991 | 1992 | 1993 | 1994 |
|---|---|---|---|---|---|
| Short term | 36.7 | 13.7 | 10.2 | 14.3 | 19.4 |
| Long Term | 63.3 | 86.3 | 89.8 | 85.7 | 80.6 |
| Total | 100 | 100 | 100 | 100 | 100 |

Source C.B.N.: Debt Trends Vol I, No. I Sept 1995

Table 3: Nigeria's External Public debt Outstanding (U.S.$ Million)

| Holders | 1990 | 1991 | 1992 | 1993 | 1994 |
|---|---|---|---|---|---|
| Multilateral | 3845.10 | 4016.00 | 3518.00 | 3694.70 | 4402.27 |
| Paris Club | 17172.10 | 17793.00 | 17680.00 | 18160.50 | 18160.50 |
| London Club | 5936.60 | 5988.00 | 2126.00 | 2055.80 | 2057.79 |
| P. Notes | 4550.00 | 4470.0 | 3246.00 | 3159.90 | 3178.17 |
| Others | 1675.00 | 1454.00 | 1210.00 | 1647.30 | 1456.31 |
| Total debt Outstanding | 33179.00 | 33730.00 | 28774.0 | 28718.20 | 29428.86 |

Source C.B.N.: Debt Trends Vol I, No. I Sept 1995

Table 3F : Nigeria's External Debt Outstanding (End of Period) [N ' Million]

| | 1971-1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988* | 1989** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total debt outstanding | 328.4 | 1265.7 | 1611.5 | 1866.5 | 2331.2 | 8819.4 | 10577.7 | 14536.0 | 17290.0 | 41451.9 | 100789.1 | 133956.3 | 212750.8 |
| Breakdown by source(%) | | | | | | | | | | | | | |
| Bilateral | 58.6 | 16.6 | 25.2 | 25.9 | 28.1 | 1.9 | 1.7 | 2.4 | 2.1 | 2.8 | 2.0 | 2.5 | 2.49 |
| Multilateral | 32.8 | 12.2 | 10.2 | 9.7 | 7.8 | 6.0 | 5.4 | 8.7 | 7.4 | 11.3 | 8.7 | 7.5 | 8.49 |
| Internal Capital Market | - | 50.6 | 63.8 | 58.4 | 56.5 | 62.1 | 47.5 | 41.5 | 44.7 | 52.4 | 40.2 | 40.0 | 34.13 |
| Refinanced arrears | - | - | - | - | - | - | 14.4 | 7.9 | 7.4 | 10.0 | 32.6 | 32.8 | NA |
| Unrefinanced arreas | - | - | - | - | - | 22.5 | 26.1 | 37.4 | 35.7 | 20.4 | 14.6 | 12.9 | NA |
| Others | 8.6 | 20.6 | 0.8 | 6.0 | 7.6 | 7.5 | 4.9 | 2.1 | 2.7 | 3.1 | 1.9 | 4.3 | NA |
| Breakdown by type (%) | | | | | | | | | | | | | |
| Medium/Long-term | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 77.5 | 73.9 | 62.6 | 64.3 | 79.6 | 85.4 | 87.1 | NA |
| Short-term | - | - | - | - | - | 22.5 | 26.1 | 37.4 | 35.7 | 20.4 | 14.6 | 12.9 | NA |
| Dollar value of debt Outstanding (US $ million) | 509.9 | 2163.8 | 2824.6 | 3444.8 | 3667.7 | 13124.1 | 14130.7 | 18034.1 | 17297.5 | 1863.3 | 23445.1 | 31947.0[2] | 32832.0[1] |

- Figures as at September 1988, except those of trade arrears which were as at December 1988.

** Figures as at September 1989

Sources: 1. Nigeria Federal Ministry of Finance and Economic Development, Lagos and CBN

2. Africa Recovery based on World Bank, World Debt Table, 1990-1991, October-December, 1990

Table 3G : Nigeria Selected Economic Indicators and Prinicipal Debt Rations [N ' Million]

| | Average 1971-1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988* | 1989 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total debt outstanding | 328.4 | 1265.7 | 1611.5 | 1866.5 | 2331.2 | 8819.4 | 10577.7 | 14536.0 | 17290.0 | 41451.9 | 100789.1 | 133956.3 | 2127 |
| Total debt service | 30.4 | 160.8 | 182.9 | 110.4 | 518.5 | 775.2 | 1335.2 | 2640.5 | 3718.0 | 2502.2 | 3590.6 | 8012.5 | 1557 |
| Principal | 14.7 | 66.1 | 65.7 | 6.2 | 211.3 | 321.2 | 899.6 | 1856.9 | 2737.5 | 1515.0 | 1208.8 | 2663.5 | 6987 |
| Interest | 15.7 | 94.7 | 117.2 | 104.2 | 307.2 | 454.0 | 435.6 | 783.6 | 980.5 | 987.2 | 2365.8 | 5477.2 | 8590 |
| GDP at current factor Cost | 17457.4 | 34540.1 | 41974.3 | 49632.3 | 57569.8 | 58830.1 | 60679.0 | 68662.1 | 78775.6 | 81292.8 | 107640.0 | 136958.7 | 1582 |
| Total exports | 4310.0 | 6064.4 | 10836.8 | 14077.0 | 10470.1 | 8722.5 | 7502.5 | 9088.0 | 11720.8 | 88920.5 | 30239.9 | 31192.8 | 5797 |
| External reserves | 1931.3 | 1192.5 | 3043.0 | 5445.2 | 2424.8 | 1026.6 | 725.2 | 1080.0 | 1641.1 | 3587.4 | 4643.3 | 3428.3 | 1347 |
| Debt/DGP(%) | 1.9 | 3.7 | 3.8 | 3.8 | 4.0 | 14.9 | 17.4 | 21.2 | 21.9 | 51.0 | 93.6 | 97.8 | 134. |
| Debt/exports(%) | 7.6 | 209 | 14.9 | 13.3 | 22.3 | 101.1 | 141.0 | 160.0 | 154.2 | 486.9 | 333.3 | 429.4 | 367. |
| Debt service ration (%) | 0.7 | 2.7 | 1.7 | 0.8 | 5.0 | 8.9 | 17.8 | 29.1 | 31.7 | 28.0 | 11.9 | 26.1 | 26.3 |
| Interest/Exports(%) | 0.4 | 1.6 | 1.1 | 0.7 | 2.9 | 5.2 | 5.8 | 8.6 | 8.4 | 11.1 | 7.4 | 17.1 | 14.8 |
| Reserve/debt (%) | 588.1 | 94.2 | 188.0 | 291.7 | 104.0 | 11.6 | 6.9 | 7.4 | 9.5 | 8.7 | 4.6 | 2.6 | 6.3 |
| Reserves/Imports (No. of months) | 7.73 | 1.74 | 4.89 | 6.77 | 2.42 | 0.98 | 0.98 | 1.81 | 2.48 | 7.19 | 3.12 | 1.58 | 2.8* |

- Figures from World Bank Debt Table 1990-1991, Vol 2, p267.

** Computed from IMF International Financial Statistics, 1990

Sources: Nigeria Federal Ministry of Finance and Economic Development, Lagos and CBN

Table H: N Million Nigeria External Debt (1975 – 1995).

| Year | $NB_t$ NM External debt | NM $DS_t$ | NM $IP_t$ | Net transfer NM $NB_t$ - $DS_t$ | EX NM | GDP at current factor cost |
|---|---|---|---|---|---|---|
| 1975 | 349.9 | 32.7 | 23.2 | 317.2 | 4988.4 | 20.96 |
| 1976 | 374.6 | 34.4 | 13.4 | 340.2 | 6622.4 | 26.66 |
| 1977 | 496.9 | 25.6 | 15.2 | 471.3 | 7881.7 | 31.52 |
| 1978 | 1265.7 | 160.8 | 94.7 | 1104.9 | 6380.5 | 34.54 |
| 1979 | 1611.5 | 182.9 | 117.2 | 1425.6 | 10397.5 | 41.96 |
| 1980 | 1866.8 | 110.4 | 102.2 | 1756.4 | 14198.7 | 49.63 |
| 1981 | 2331.2 | 513.6 | 307.2 | 1817.6 | 11033.8 | 50.46 |
| 1982 | 8819.4 | 775.2 | 454.0 | 8044.2 | 9196.4 | 51.57 |
| 1983 | 10577.7 | 1335.2 | 435.6 | 9242.5 | 7751.8 | 56.71 |
| 1984 | 14536.6 | 2640.5 | 783.6 | 11896.1 | 9138.8 | 63.01 |
| 1985 | 17290.6 | 3718.0 | 980.5 | 13572.6 | 11720.8 | 71.37 |
| 1986 | 41451.9 | 2502.2 | 987.2 | 38949.7 | 9047.5 | 72.13 |
| 1987 | 100787.8 | 3574.6 | 2365.8 | 97213.2 | 30360.6 | 106.88 |
| 1988 | 133956.3 | 8140.7 | 5477.2 | 125815.6 | 31192.8 | 142.68 |
| 1989 | 240393.6 | 15577.7 | 8590.2 | 224815.9 | 57971.2 | 222.46 |
| 1990 | 298614.3 | 30855.8 | 15360.2 | 267758.5 | 109886.1 | 252.87 |
| 1991 | 325496.4 | 35334.2 | 15914.3 | 290162.2 | 121533.7 | 320.25 |
| 1992 | 544264.1 | 47290.9 | 13065.1 | 496973.2 | 205613.1 | 544.33 |
| 1993 | 631796.0 | 25500.0 | 10900.0 | 606296.0 | 231220.0 | 695.98 |
| 1994 | 648813.0 | 19600.0 | 20900.0 | 627913.0 | 221716.0 | 908.99 |
| 1995 | 716865.6 | 18400.0 | 17300.0 | 708465.0 | 286791.0 | 1430.58 |

Source: C.B.N. Bullion 10(6) 1986

Ii C.B.N.,Annual report ans statement of account, various issues

iii. C.B.N. Statistical bulletin 3(1) June 1992

Table 3I: Selected External debt Ratio, (1975 – 1995).

| Year | NB/GDP | NB/EX | DS/GDP | DS/EX | IP/EX | DS/FR |
|---|---|---|---|---|---|---|
| 1975 | 1.7 | 7.0 | 0.2 | 0.7 | 0.5 | 0.6 |
| 1976 | 1.4 | 5.7 | 0.1 | 0.5 | 0.2 | 0.6 |
| 1977 | 1.6 | 6.3 | 0.1 | 0.3 | 0.2 | 0.4 |
| 1978 | 3.7 | 19.8 | 0.5 | 2.5 | 1.5 | 2.2 |
| 1979 | 3.8 | 15.5 | 0.4 | 1.8 | 1.1 | 1.7 |
| 1980 | 3.8 | 13.1 | 0.2 | 0.8 | 0.7 | 0.7 |
| 1981 | 4.6 | 21.4 | 1.0 | 4.7 | 2.8 | 4.1 |
| 1982 | 17.1 | 95.9 | 1.5 | 8.4 | 4.9 | 7.5 |
| 1983 | 18.7 | 136.5 | 2.4 | 17.2 | 5.6 | 12.4 |
| 1984 | 23.2 | 159.1 | 4.2 | 28.9 | 8.6 | 23.2 |
| 1985 | 24.2 | 147.5 | 5.2 | 31.7 | 8.4 | 24.7 |
| 1986 | 57.5 | 458.2 | 3.5 | 27.7 | 10.9 | 20.3 |
| 1987 | 94.3 | 332.0 | 3.3 | 11.8 | 7.8 | 14.3 |
| 1988 | 93.9 | 429.4 | 5.7 | 26.1 | 17.6 | 29.3 |
| 1989 | 124.1 | 414.7 | 8.0 | 26.9 | 14.8 | 31.1 |
| 1990 | 128.0 | 271.7 | 13.3 | 28.1 | 14.0 | 45.0 |
| 1991 | 114.0 | 267.8 | 12.4 | 29.1 | 13.1 | 40.1 |
| 1992 | 161.7 | 264.7 | 14.0 | 23.0 | 6.4 | 34.1 |
| 1993 | 163.4 | 273.2 | 9.8 | 16.4 | 15.7 | |
| 1994 | 165.2 | 292.0 | 9.7 | 17.2 | 12.6 | |
| 1995 | | | | | | |

Note:Note:NB = External debt Ex: = Total Exports value DS = Debt Service

IP = Interest payments FR = Federally collected revenue

Computed from table 3H

Table 4A: Nigeria's External debt, Principal Repayment and Interest Repayment

| Year | GDP (Y) | EXTERNAL DEBT (D) | PRIN. REPAYMENT (P) | INTEREST PAYMENT (R) |
|---|---|---|---|---|
| 1975 | 82.425 | 0.350 | -0.033 | -0.023 |
| 1976 | 79.989 | 0.375 | -0.034 | -0.013 |
| 1977 | 88.854 | 0.497 | -0.026 | -0.015 |
| 1978 | 96.099 | 1.266 | -0.161 | -0.095 |
| 1979 | 89..021 | 1.612 | -0.183 | -0.117 |
| 1980 | 96.187 | 1.867 | -0.110 | -0.104 |
| 1981 | 70.396 | 2.331 | -0.514 | -0.307 |
| 1982 | 70.157 | 8.819 | -0.775 | -0.454 |
| 1983 | 66.390 | 10.578 | -1.335 | -0.436 |
| 1984 | 63.006 | 14.537 | -2.641 | -0.784 |
| 1985 | 68.916 | 17.291 | -3.718 | -0.981 |
| 1986 | 71.076 | 41.452 | -2.502 | -0.987 |
| 1987 | 70.741 | 100.788 | -3.575 | -2.366 |
| 1988 | 77.752 | 133.956 | -8.141 | -5.477 |
| 1989 | 83.495 | 240.394 | -15.578 | -8.590 |
| 1990 | 90.342 | 298.614 | -30.856 | -15.365 |
| 1991 | 94..614 | 325.496 | -35.334 | -15.914 |
| 1992 | 97.431 | 544.264 | -47.291 | -13.065 |
| 1993 | 99.649 | 633.144 | -25.500 | -10.900 |
| 1994 | 100.982 | 648.813 | -19.600 | -20.900 |
| 1995 | 103.217 | 716.866 | -18.400 | -17.300 |

Note:Note:NB = External debt  Ex: = Total Exports value  DS = Debt Service

IP = Interest payments  FR = Federally collected revenue

Computed from table 3H