

3-1996

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Recommended Citation

Ashinze, J. O. & Onwioduokit, E. A. (1996). Economic Growth and Foreign Debt: A Case Study of Nigeria. *CBN Economic and Financial Review*. 34(1), 523-540.

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Economic Growth and Foreign Debt: A Case Study of Nigeria

By

J.O. Ashinze (Mrs) and E.A. Onwioduokit

In this study, a macro-economic model is used to examine the relationship between external debt and economic growth in Nigeria. The study has established empirically that foreign credit only contributed positively to growth between 1988 and 1992 when the resources mobilized externally were used in directly productive activities. However, between 1979 and 1987 as well as the period 1993-1994, there was a negative relationship between foreign capital and growth. Among other factors, policy inconsistencies, drying up of external assistance and political instability were identified as the main factors that militated against foreign credit-induced growth of the Nigerian economy.

INTRODUCTION

The decades of the 1950s and 1960s are often described as "golden years" for developing countries in most economic development literature because the rate of growth of these economies was not just high, but was mostly internally generated. In these decades, the less developed countries (LDCs) increased their investment with least reliance on external resources. On the contrary, most of the growth in the 1970s was 'debt-led' as these countries maintained persistent current account deficits, and borrowed heavily on the international money and capital markets to finance payments gaps.

Between the 1960s and 1970s, deficits in the current account financed by borrowing abroad were highly favoured as a way of boosting economic growth. In the process, not very much attention was paid to the liabilities side of the recurring current account deficit which increased external indebtedness of these countries. The Mexican debt crisis of 1982, however, heralded the end of an era of belief in non-detrimental nature of an unrelieved current account deficit financed by external borrowing (Singer, 1989). Since then, the issue of external debt and its servicing has assumed critical dimensions. Growth in sub-Saharan Africa has been on the declining trend since the 1980s. This has been blamed on a number of factors including, constantly deteriorating terms of trade, high foreign interest rates, recession in developed countries, inappropriate domestic policies and natural calamities.

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Attempts to reverse the trend have taken various forms. The most prominent being the Structural Adjustment popularised by the Bretton Woods Institutions (the IMF and World Bank). The most crucial aspect of the economic restructuring, favoured by the Bretton Woods Institutions, is productive base and debt restructuring. While the developing countries favour debt write-off, the creditors insist on full repayment. The compromised position seems to be found in rescheduling. Some countries have, however, found from experience that the rescheduling of foreign debt is, as best, a palliative measure and does not offer a lasting solution.

In the debate about debt, an interesting issue and one that is seldom addressed or glossed over is how acquired loans were used by the debtors. The result of such an inquiry may offer a clue as to how to get out of the existing debt problem.

The objective of this paper is to attempt to answer this question. In this study a macro-economic model shall be used to examine the relationship between external debt and economic growth in Nigeria. The idea behind the model is that a country's rate of economic growth must at least match the annual rate of growth of its external debt if it is to avoid the problem of debt servicing. If the rate of growth of the latter is higher than that of the gross domestic product (GDP), the country transgresses the commonsense canon that at macro level it should create additional income from which to service the debt, if it is not to be over-burdened. The inevitable consequences of such transgression are that the debt will be serviced from existing wealth, an option many countries may find difficult, if not impossible, to pursue. Specifically, the study seeks to empirically establish the relationship between foreign debt and economic growth.

The origin of the economic theory on capital can be traced as far back as to the classical school, where it was included as an essential element of the production function. Although the recognition of the vital role of capital in the production process pre-dates the classical thrust, the controversy then was centred on the degree of its importance and the form it should take to provide maximum utility. Beginning from the 1960s, the Chicago School of thought down-played the role of physical capital in favour of human capital. This has helped to shift the focus from the former to the later. But whatever form it may take, the crucial role of capital in the production process is solidly established (Harcourt, 1972).

In addition to establishing its uncontroversial role, economic theory explains the factors that determine increased accumulation of capital. Provided the reward is sufficient, income recipients are expected to transfer their consumption from the present to the future, and the unconsumed part of this income would become the source of capital.

On the demand side, the savings of the community, mobilized through various means, including deposits in financial institutions, transactions in money and capital markets, etc, would be made available to potential investors, who again if the reward is right, (i.e. the difference between the cost of borrowing and the return on investment is sufficiently high), would convert these resources into means of production.

The generalized condition of allocative efficiency dictates the employment of capital in the most profitable and productive activities. Thus, the most efficient investment is where its marginal efficiency (under macro conditions) or net present value of expected

cash flows (in the micro case) is higher than the initial investment outlay or where the return on investment is greater than the cost of capital. This simple rule has grown into one of the most important axioms in economics. No resource (borrowed or own-fund) should be invested in any activity unless the cost of capital is less than the rate of return on investment. However, this view is valid only if one looks at investment purely on profitability basis but we also have investment based on the welfare of the state, which may not necessarily conform on this rule.

The final point links the wealth of nations and their capital stock. Since capital contributes to output, the conclusion is reached that the more of it a country has, the larger its output (income) will be. The increased income will lead to larger volume of savings which will result in higher rates of investment, which increases the capital stock, and thus catapults the country into the virtuous circle of "riches".

The remaining part of the paper is organised as follows: Part II examines theoretical issues and reviews recent literature. In part III, a macro model relating external debt and growth is used to examine their relationship. Part IV contains summary and some concluding remarks.

PART II

THEORETICAL ISSUES AND REVIEW OF THE LITERATURE

Early post-war reflections on the problems of developing countries led to the identification of insufficient capital stock as the cause of their low income. Among economists who made such prognoses are Hans Singer and Ragnar Nurkse. In the words of Singer (1949), the less developed countries suffer from "a dominant vicious circle of low production", no surplus for economic development leads to no tools and equipment which in turn cause low standard of production. An underdeveloped country is "poor because it is poor". According to Nurkse (1953), the problem of these countries was that "... there is small capacity to save resulting from low level of real income. The low level of real income is a reflection of low productivity, which in turn is due largely to the lack of capital. The lack of capital is a result of small capacity to save". It is evident that to break out of this vicious circle of poverty, the country must increase its savings. "The country's incremental saving ratio... is the crucial determinant of growth ... the general problem is to maximise the marginal saving ratio. i.e., the proportion of any increment in income that is saved".

Increased savings as a panacea for under development was also emphasized by Dorman (1937) who indicated that "in underdeveloped countries it is clearly capital rather than labour that is the factor limiting growth". Other development economists who aligned with this view included Arthur Lewis, Rostow, Galenson and Leibenstein. Arthur Lewis (1954) Observed that "... the central problem in the theory of economic development is to understand the process by which a community which was previously saving and investing 4 or 5 per cent of its national income or less converts itself into an open economy where voluntary saving is running at about 12 to 15 per cent of national income or more. This is the central problem because the central fact of economic development is rapid capital accumulation". This position was further advocated by Rostow, who, as a condition for take-off, underlined

the need to increase savings from 5 to 10 per cent or more of national income (Rostow, 1985).

These early diagnosis included various strategies as to how the savings rate could be increased. Lewis (1955) argued that since the users and sources of the savings are the private sector, the government should develop and implement policies which would encourage saving, including tax exemptions and granting monopoly rights, while Galenson and Leibenstein suggested redistribution of income from workers whose propensity to save was zero to capitalists who propensity to save was high (Galenson and Leibenstein, 1955). Where the private sector cannot discharge this responsibility the government (whose propensity to save was assumed to be close to unity) was urged to shoulder the burden of mobilizing the necessary volume of saving by diverting resources to itself through higher taxes (Kaldor, 1955).

These considerations were based on the assumption that a developing economy has the potential to finance its investment requirement, if only the government would create an environment conducive for its mobilization and effective utilization. Unfortunately, the optimistic expectations were not realized since the volume of savings was too low on account of the low income, or was not mobilized for lack of appropriate policies and/or lack of essential mechanism such as financial institutions, or was inappropriately utilized, etc., thus, giving rise to new approaches.

Given the need for larger capital stock and the inadequacy of domestic saving to finance investment that would make this possible, it was concluded that domestic savings should be supplemented by foreign resources. This shifted the issue from whether external resources are useful to developing countries, to how much was sufficient to help them realise their growth potential.

However, the general case for borrowing abroad is to add to total resources, not just to acquire specific resources (Kindleberger, 1965). Foreign borrowing performs two roles in development (Eshag, 1983); First, it can increase resources available for investment by supplementing domestic savings, second, it can augment foreign exchange resources by supplementing export earnings. A country's foreign borrowing requirements depend on its total expenditure in relation to total domestic production. Accordingly, in national income accounting, an excess of investment (I) expenditure over domestic savings (S) is equivalent to a surplus of imports (M) over exports (X). At equilibrium the following identities hold.

$$I - S = M - X \quad (1)$$

$$S - I = X - M \quad (2)$$

Expression (1) or (2) says that the domestic resource gap (S - I) is identical to the foreign exchange or external sector gap (X - M). (The identity between the two gaps follows from the nature of the accounting procedures). An excess of imports over exports necessarily implies an excess of resources used by an economy over resources generated by it, or an excess of investment over savings. This means that the need for foreign borrowing over time is determined by the rate of investment in relation to domestic savings. However, foreign borrowing (negative investment or -I) is not only the difference between domestic

investment (I_d) and savings but includes the difference between exports and imports:

$$-I_f = I_d - S \quad (3)$$

$$-I_f = M - X \quad (4)$$

Combing equation 3 and 4, we have

$$I_f = (I_d - S) + (M - X) \quad (5)$$

The condition for national income to be in equilibrium is that domestic investment plus exports must equal imports plus domestic savings. For the balance of payments to be in equilibrium with no foreign borrowing, exports must be equal to imports and domestic investment limited to domestic savings. Any increase in domestic investment that is unaccompanied by an equal shift in the savings schedule must be financed in part by borrowing from abroad. This is because part of increased income will spill over into imports (assuming a positive marginal propensity to import). The only condition for investment to increase without adversely affecting the balance of payments is if exports expand simultaneously in the correct proportion or the saving schedule shifts upward or the import schedule downward.

However, the two gaps in equations (1) and (2) above may not be equal. Where there is complete substitutability between imports and domestic resources, theoretically, there is one gap *ex ante* as well as *ex post* (Thirwall, 1978). However, where factor proportions may be slow to adjust and substitutability between foreign and domestic resources may be a long drawn out process then the possibility exists for shortages of foreign exchange and domestic savings at particular points in time as well as over time.

For a country desiring to achieve a particular target rate of growth, such growth may be limited by lack of domestic savings (investment limited growth) or foreign exchange (trade limited growth) (Obadan, 1988). Growth it is argued, is limited by the larger of the two gaps and foreign borrowing is required to meet the larger gap. If foreign exchange is the dominant constraint, dual-gap analysis stresses the additional role of foreign borrowing in supplementing foreign exchange, without which a fraction of domestic savings might be unutilized because actual growth would be constrained by the inability to import necessary input.

To the extent that domestic resources may not be enough to achieve a desired rate of economic growth and the foreign resources may be applied to provide the bridging resources, external debt necessarily impacts positively on economic growth when productively deployed.

However, the modern view of the dual-gap analysis is that a number of goods necessary for growth cannot be produced by many developing countries themselves and must therefore be imported with the aid of external assistance. A pertinent question, therefore, is: will a foreign loan which may be entirely justified in terms of its cost also make a contribution to growth? The answer is not quite self-evident. In general, however, the rate of growth of output will be faster with capital imports, provided new inflows of foreign capital exceed the loss of domestic savings to pay interest. This is a rather stringent condition. If, however, interest charges are met by new borrowing, capital imports should have a favourable effect on the rate of growth of output. Furthermore, the rate of growth of income with capital

imports will be faster as long as the productivity of capital imports exceeds the rate of interest on foreign loans.

Although the validity of the two gap model has been questioned in academic circles, nevertheless, this approach is currently being used by donor agencies and multilateral organizations (of which the World Bank is best known). The model has grown to assume a life of its own as the Revised Minimum Standard Model (RMSM) and does not only serve "as a means to establish consistent approach to projection for all countries and facilitate inter-country comparison" (Gupta, Schwartz and Padura, 1979), but it is also used extensively by national planning agencies. The World bank model, which is summarized below, is conceptually different from Chenery - McKinnon - Vanek two-gap type model, in that, while foreign resources have the dual role of removing the foreign exchange and/or savings constraint in the latter approaches, the former model concentrates on the foreign gap. In the World Bank Model, the client is expected to mobilize domestic resources by adopting appropriate policies to overcome the savings constraint, while the foreign resource inflow is used to cover the external shortcomings.

Whether in the World Bank version or others, the two-gap approach rests on the simple extension of the Harrod-Domar model, the essence of which is presented below following Khan, Montiel and UI Haqu (1986).

- (a) Calculate the incremental capital output ratio (ICOR) either historically or technologically:

$$k = \Delta K / \Delta Y \quad (6)$$

Where

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

- (b) Determine the desired level of output Y^* and, using this obtain the amount of additional investment (I^*) necessary to achieve this output:

$$I^* = kY^* \quad (7)$$

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

$$S = (Y - T - CP) + (G - C_g) + (M - X - R) \quad (8)$$

Where S is total resources made up of:

- (i) private sector domestic saving which equal income (Y) less taxes (T) and private consumption (CP);
- (ii) government saving which equals revenue (G) less government consumption (C_g); and

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

The beneficial impact of foreign resources on the economy of developing countries was taken both as an article of faith and the logical conclusion of analytical models until the early 1970s, when some economists were inundated with doubts. Some economists criticised the promoters of the idea that foreign resources boost the growth efforts of developing countries by removing the foreign exchange and/or savings constraint. First, they contend that the presumed positive impact of foreign resources on the volume of savings is not supported by empirical evidence. Cross-country and time series studies suggest that there is a negative correlation between domestic savings and foreign resource inflow (Rahman, 1968; Chenery and Eckstein, 1970; Griffin, 1970; Griffin and Enos, 1970; Weisskopf, 1972). According to Griffin and Enos, "... foreign resource inflow may have retarded development by lowering domestic savings, by distorting the composition of investments and thereby raising the capital output ratio, by frustrating the emergence of indigenous entrepreneurial class, and by inhibiting institutional reforms". Weisskopf (1972) concluded from his time-series study that "the numerical results support the hypothesis that the impact of foreign capital inflow on ex - ante domestic savings ... is significantly negative".

A surprising conclusion, and one that increases the credence of the critique, is that of a study of sixteen Latin American countries which showed that "in twelve out of sixteen cases, the impact of additional foreign capital on saving was found to be negative". This finding is astonishing, not only because it tallies with that of the critics of the two-gap model, but also because it was arrived at by Chenery, the person who seems to be most closely associated with the two-gap model.

PART III

MODEL SPECIFICATION AND ANALYSIS OF RESULTS

To gauge the relationship between the external debt and growth of the Nigerian economy, a simple open macro economic/debt-growth model was applied. The model is based on the assumption that the savings - investment gap or the foreign exchange gap is financed by foreign capital inflow which may be in the form of loans which in turn should positively impact on economic growth (output) when productively deployed. The model is derived from Taylor (1985), with adjustment to reflect the Nigerian situation. This is different from Onah (1994) who merely simulated the impact of debt on growth in some African countries using different interest rates.

The Production Function

The familiar production function is specified and estimated. Goods and services (Q) in this simple economy are produced by using imported (M) and domestically produced inputs (Id) and Labour (L):

$$Q = f (M, Id, L) \quad (10)$$

The labour input is divided into two, skilled (L_s) and unskilled (L_u). It is assumed that the supply of unskilled labour is no constraint given the huge unemployment pool, and that the demand for skilled labour is satisfied from domestic sources. This later assumption may seem implausible for a country at a low level of development. The aggregate production function could therefore be simplified to:

$$Q = \text{Min} (I/\lambda (K), I/B (Mb)) \quad (11)$$

Where K is the capital stock, B is imported intermediate goods per unit of output, λ is the capital/output ratio which is assumed to be equal to the incremental capital output ratio (ICOR).

This capital stock, as well as additions to it, are obtained from domestic source (α), and the balance $(1 - \alpha)$ is imported.

$$\begin{aligned} K &= K_d + K \\ K_d &= (\alpha K) \\ K_i &= (1 - \alpha)k \end{aligned} \quad (12)$$

The imported portion of the capital stock, as well as intermediate good (M_i) and consumer goods (M_c) are paid for by exports (X) whose proportion i.e. X/GDP , is given by

$$\pi Q = (1 - \alpha) K_i + M_i + M_c \quad (13)$$

The economy augments the foreign exchange earned from exports of goods and services (Q), by transfer payments (both privates and public) (T), and foreign borrowing, whose net flows (i.e. borrowing less amortization) is represented by (B). Thus B is the amount by which the stock of the debt (D) increases annually. The overall external balance of the economy can now be presented as:

$$(B + T) = \pi Q - \theta Q - I(1 - \alpha) - M_c - rD \quad (14)$$

i.e. net flows (B) plus transfer (T) are equal to exports (πQ)

less imported capital goods $(1 - \alpha)$, less imports of consumer goods (M_c), and less interest payment on debt (rD). Equation 14 assumes that no payment is made from reserves and that there are no arrears.

To convert the variables in Equation 14 into a common measure, we divide it by Q to obtain equation (15)

$$\frac{B}{Q} + \frac{T}{Q} = \frac{\pi Q}{Q} - \frac{\theta Q}{Q} - \frac{I}{Q} (1 - \alpha) - \frac{M_c}{Q} - \frac{rD}{Q} \quad (15)$$

Letting $T/Q = t$, $D/Q = \Delta$, $M_c/Q = \Delta_c$ represents the ratios of net transfer (public and private), the stock of debt and import of consumer goods to GDP, respectively. Equation 16 is obtained:

$$(B + t)/Q = \pi - \theta - I/Q(1 - \alpha) - \Delta_c - r\Delta \quad (16)$$

Assuming that the rate of growth of the stock of debt increases at the same rate as GDP, so that the debt/output ratio remains constant, i.e.

$$B/D = g_D = \underline{D}/D = g \quad (17)$$

and substituting this, and noting that the economy under the circumstance mentioned earlier attains a growth rate equal to the growth rate of capital stock, i.e.

$$g = (Q_t - Q_{t-1})/Q = 1 = (K_t - K_{t-1})/K = 1/\lambda \quad (18)$$

where $(t-1)$ is the previous and (t) is the current period and solving for the growth rate of the economy from Equation 11, yields.

$$g = (\pi + t - \theta - Mc - r\Delta)/\lambda(1-\alpha) - \Delta \quad (19)$$

Since our interest is in gauging the effect of external borrowing on economic growth, we should consider the partial derivative of growth (g) in equation 19, with respect of (Δ) , which yields equation (20)

$$\delta g / \delta \Delta = (\pi + t - \theta - Mc - r(1-\alpha)\lambda)/(\lambda(1-\theta) - \Delta)^2 \quad (20)$$

This is the marginal condition relating to growth rate of the economy (g) when the debt to GDP ratio increases over time. Since the denominator is positive, the necessary condition for the positive impact of external debt on growth of the economy follows from equation 20, giving $\delta g / \delta \Delta > 0$, if and only if

$$\pi + t - \theta - Mc > (1-\alpha)\lambda \quad (21)$$

Thus interpretation of equation (16) is as follows.

Assuming other things remain constant, foreign borrowing would contribute to the growth of the economy provided:

- (a) the share of export in GDP (π) is high;
- (b) transfer payments as a share of GDP (t) is high;
- (c) imports of intermediate inputs (θ) are low;
- (d) imports of consumer goods (Mc) are low;
- (e) the share of imported capital $(1-\alpha)$ is small;
- (f) interest rates on foreign debt (r) are low;
- (g) capital is used efficiently, i.e. ICOR (λ) is low.

Empirical Results

In what follows, we will use the condition provided by equation (21) to examine the extent of foreign credits' utilization in Nigeria. The details of growth to debt relationship is provided below.

The table on page 73 relates exports (π), private and public transfer (t), import of consumer

goods (Mc), as share of GDP in 1990 prices i.e. raw material, semi-finished goods and consumer goods, deflated by the import unit value index (1990 = 100). The value of α is calculated as $(1 - MI/GFCF)$ where MI is import of capital goods, and GFCF is gross fixed capital formation. The ICOR λ was obtained by OLS since the year - to - year data exhibited considerable variations including negative values for some years. The figure obtained for ICOR following this method is 9.0, which was used for the entire period.

The empirical results which seems very plausible indicate that the external capital contributed positively to economic growth in Nigeria only between 1988 and 1992. The result shows that between 1975 and 1987, foreign capital contributed negatively to growth in Nigeria, a trend which was repeated in the years 1993 and 1994. The point should be made here, that what matters really is not foreign debt per se but rather how it was utilized. In other words, the country failed to make effective use of the resources it mobilized.

However, since the foreign debt profile of Nigeria prior to the first Jumbo loan of 1978 was relatively low, the growth or decline in the economy between 1975 - 1977 could not be attributed strictly to foreign capital. Indeed, Nigeria had no real problem of foreign exchange constraint during this period, the level of debt was low and acquired loans were not strictly project - tied. There was thus a negative relationship between debt and growth during this period.

For the period 1979 - 1987 which also showed negative relationship between foreign capital and growth, the tentative explanations are as follows: It has been observed that foreign capital is directed towards improving the infrastructure of the country. These are not directly productive, but are catalytic in the growth process. A cursory perusal of the purpose of debts contracted by Nigeria during the period reveal that over 75.0 per cent of the foreign capital mobilized was directed towards improvement of certain basic infrastructure ranging from water supply to road construction, sea ports, power generation, river basin projects, etc.

The remaining percentage, which supposedly was to be utilized in the directly productive activities such as Ajaokuta Steel Complex, Delta Steel Complex, etc, which have either been abandoned, have not taken off or have been producing at an epileptic manner, thus impinging on growth when a discount of the debt servicing requirement is taken into account has not been efficiently deployed.

That the combination of these developments resulted in a negative correlation between growth and external debt does not come as a surprise. It should again be borne in mind that foreign debt hardly had anything to do with the negative results. The real problem lies in how it was used. On the other hand, the positive contribution of external debt to growth observed between 1988 and 1992 could be explained partly by some measures - the policy of the Structural Adjustment Programme (SAP) adopted by the government, during which foreign capital were not just targeted at productive sectors, but were also monitored by their donors. Evidence showed that most of the foreign resource inflows within this period were utilized largely in financing the foreign exchange market (FEM), especially imports, which translated into increased economic activities and, thus, contributed to the positive growth of the economy. The reversed trend observed between 1993 and 1994 could be

explained by numerous policy inconsistencies that characterised the period: the drying up of external assistance, political impasse and consequent stagnation of economic activities during the period.

PART V

SUMMARY AND CONCLUDING REMARKS

In this paper, we have attempted a review of the role of foreign credits in economic growth, and examined the utilization of foreign credit in Nigeria. Empirical evidence has shown that foreign credit only contributed positively to growth between 1988 and 1992. The paper has indicated that the major portion of resources mobilized externally was used in areas that were not directly productive. Even the few projects in the directly productive sector, financed by foreign capital, were either abandoned half way or were operating at less than optimal capacity. The lesson one draws from the Nigerian experience is that while external factors could be contributory to growth, major responsibility seems to lie in domestic factors. The main stumbling block in the Nigerian case is found to be inconsistency in government policy which exacerbated macroeconomic instability.

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GROWTH CUM DEBT TEST (1975-1994)

	Y_1 (1)	t (2)	$((1)+(2))$ (3)	Q (4)	Mc (5)	$Q+Mc$ $((4)+(5))=(6)$	$L-Side$ $((3)-(6))=(7)$	r (8)	$1-\alpha$ (9)	$r(1-\alpha) v$ (10)	Growth-Debt $((7)(10))=(11)$
1975	0.222	0.149	0.371	0.118	0.052	0.170	0.201	7.600	0.715	0.490	-
1976	0.240	0.133	0.373	0.129	0.057	0.186	0.187	8.500	0.736	0.565	-
1977	0.233	0.142	0.375	0.155	0.067	0.222	0.153	8.200	0.673	0.497	-
1978	0.175	0.143	0.318	0.161	0.066	0.227	0.091	10.100	0.605	0.550	-
1979	0.241	0.156	0.397	0.124	0.049	0.173	0.224	10.700	0.621	0.598	-
1980	0.279	0.238	0.517	0.136	0.054	0.190	0.327	10.600	0.585	0.558	-
1981	0.217	0.218	0.435	0.141	0.113	0.254	0.181	9.200	0.653	0.541	-
1982	0.159	0.075	0.234	0.141	0.101	0.242	-0.008	10.000	0.577	0.519	-
1983	0.131	0.035	0.166	0.091	0.065	0.156	0.010	10.200	0.577	0.530	-
1984	0.143	0.039	0.182	0.070	0.042	0.112	0.070	9.800	0.458	0.404	-
1985	0.155	0.043	0.198	0.084	0.024	0.108	0.090	9.000	0.460	0.373	-
1986	0.124	0.050	0.174	0.057	0.024	0.081	0.093	9.000	0.687	0.556	-
1987	0.272	0.028	0.300	0.124	0.040	0.164	0.136	7.900	0.212	0.151	-
1988	0.215	0.071	0.286	0.122	0.049	0.171	0.115	7.600	0.153	0.051	+
1989	0.258	0.063	0.321	0.010	0.037	0.047	0.274	7.100	0.251	0.160	+
1990	0.422	0.095	0.517	0.129	0.047	0.176	0.341	6.600	0.405	0.241	+
1991	0.375	0.084	0.459	0.207	0.068	0.275	0.184	6.100	0.045	0.025	+
1992	0.374	0.071	0.445	0.171	0.088	0.259	0.186	4.600	0.230	0.095	+
1993	0.314	0.074	0.388	0.154	0.083	0.237	0.151	6.100	0.947	0.520	-
1994	0.230	0.057	0.287	0.115	0.064	0.179	0.108	6.300	0.527	0.299	-

TABLE 1

NIGERIA'S EXTERNAL DEBT STRUCTURE (US \$ MILLION)

	(1) Long term	(2) 1 as % of (3)	(3) Short-term	(2) as % of (3)	Total
1980	5,381	60.2	3,553	39.8	3,553
1983	13,481	72.7	5,059	27.3	18,539
1984	12,793	69.0	5,744	31.0	18,537
1985	14,555	74.5	4,995	25.5	19,550
1986	19,861	84.2	3,719	15.8	23,580
1987	29,249	94.7	1,644	5.3	30,893
1988	29,857	94.7	1,682	5.3	31,540
1989	32,067	97.9	701	2.1	32,769
1990	34,100	94.5	1,968	5.5	36,068

SOURCE: World Debt Table (various issues)

TABLE 1A

NIGERIA'S EXTERNAL DEBT STRUCTURE (US \$ MILLION)

Year	PUBLIC AND PUBLICITY GUARANTEED	PRIVATE NON-GUARANTEED
1980	4,284	1,097
1983	12,181	1,300
1984	11,393	1,400
1985	13,139	1,416
1986	19,261	600
1987	28,697	552
1988	29,320	537
1989	31,661	406
1990	33,709	391

SOURCE: World Debt Table (various issues)

TABLE 1

NIGERIA'S EXTERNAL DEBT STRUCTURE (US \$ MILLION)

	(1) Long term	(2) 1 as % of (3)	(3) Short-term	(2) as % of (3)	Total
1980	5,381	60.2	3,553	39.8	3,553
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1988	29,857	94.7	1,682	5.3	31,540
1989	32,067	97.9	701	2.1	32,769
1990	34,100	94.5	1,968	5.5	36,068

SOURCE: World Debt Table (various issues)

TABLE 2

DEBT INDICATORS

	1980	1985	1986	1987	1988	1989	1990	1991	1992
EDI/XGS (%)	32.2	144.6	370.4	392.1	427.8	372.8	233.8	256.78	251.3
EDT/GNP (%)	10.1	25.1	60.5	125.9	107.3	111.9	107.3	108.6	110.7
TDS/XGS (%)	4.2	33.3	32.7	14.2	30.4	26.1	22.8	25.2	30.6
INT/XGS (%)	3.3	12.8	12.9	8.3	20.9	18.2	12.7	16.8	13.6
INT/GNP	1.0	2.2	2.1	2.7	5.2	5.5	5.8	7.1	6.1
RES/EDT (%)	119.1	9.7	5.8	4.9	3.0	6.4	12.0	13.6	3.9
RES/MGS (MONTHS)	5.8	2.1	2.8	2.3	1.5	3.2	5.0	4.4	1.0
SHORT-TERM /EDT (%)	39.8	25.5	15.9	5.3	5.3	1.9	4.5	2.6	7.1
CONCESSIONAL /EDT (%)	6.1	2.3	2.1	1.8	1.7	1.7	1.7	3.0	3.9
MULTILATERAL /EDT (%)	6.4	7.3	9.5	10.0	9.1	9.9	10.8	11.6	13.2

SOURCE: Computed from World Debt Table, 1992.

TABLE 3
SECTORAL ALLOCATION OF DISBURSEMENTS ON LONG-TERM DEBT

	1980	1983	1984	1985	1986	1987	1988	1989	1990
AGRICULTURE	52	128	107	87	85	98	86	147	157
B.O.P DUPPORT	0	450	0	0	250	200	101	443	293
COMMUNICATION	1	37	8	41	23	17	36	45	30
EDUCATION	9	36	2	10	12	21	1	3	1
ENERGY	111	560	464	707	399	549	256	453	92
INDUSTRY AND TRADE	23	89	113	8	0	28	6	30	12
MANUFACTURING	685	604	511	212	207	77	64	197	7
SOCIAL SERVICE	138	295	169	191	137	70	109	125	82
TRANSPORT	145	205	92	274	50	6	11	3	38
OTHER	24	269	257	40	134	219	299	0	16
TOTAL	1,188	2,673	1,723	1,570	1,297	1,285	969	1,446	728

SOURCE: Federal Ministry of Finance, Abuja.