GLOBAL JOURNAL OF SOCIAL SCIENCES VOL 6, NO. 2, 2007: 111-118
COPYRIGHT BACHUDO SCIENCE CO. LTD PRINTED IN NIGERIA. ISSN 1996-4316

IMPACT OF EXTERNAL DEBT SERVICES ON NIGERIA’S ECONOMIC GROWTH

B. M. ALI AND S. I. MSHELWA
(Received 14, August 2007; Revision Accepted 11, September 2007)

ABSTRACT

Nigeria, over the years has negotiated and collected loans from abroad for economic and social development. These loans have grown out of control as a result of several factors which eventually made the loans difficult to manage, at a point US$3.0 billion was required to service the debt annually. This research therefore, is an attempt at quantitative analysis of the effect of external debt service payments on the economic growth. To achieve the objective of this research, five variables were thoroughly subjected to statistical analysis to determine whether they have inverse relationship with the GDP. Results revealed a mixed outcome. Two variables showed some level of positive relation while others indicated negative. The paper recommends among other things that, debt buy-back, debt rescheduling, debt relief and debt cancellation should be a permanent pursuit to avoid debt overhang. Interest rate conversion from floating to fixed should be pursued during negotiations with creditors.

KEYWORDS: External debt, Debt servicing, Economic growth.

I. INTRODUCTION

The quest for accelerated economic growth among developing economies compel them to resort to borrowing externally given the inadequacies between domestic resources (savings) and the investment capacity. Todaro and Smith (2004) opined that, the problems of sub-Saharan Africa are made more troublesome by low and declining per capita incomes and stagnating economies. The debt-to-export and debt service ratios are both well above the overall LDCs average and in some cases even above the ratio of other Severely Indebted Countries (SICs) such as Brazil, Mexico, Argentina and Venezuela.

Despite this justification to borrow externally, developing countries borrow so much that it usually becomes very difficult (odious) to manage, so that, what was considered a way out of embarrassing economic difficulties became perceived as a serious burden, which they could not survive, consequently engendering severe economic implications both to immediate and future generations of such countries (see http://www.punchng.com).

It is important, therefore that borrowing countries, especially Less Developed Countries (LDCs) should evaluate the general implication of the loans in terms of its nature, conditions of repayment, internal political and economic atmosphere, attitudes and economic conditions of the citizens, uncertainty of the world economic conditions, international relations and policies (e.g. trade policies, official development assistance flow such as grant policies from donor nations) before collecting loans.

In Nigeria, by 1977, during the oil boom, the total external debt was about $1.0 billion (Anyanwu, 1997), but given the collapse in price of oil in the 1980s as precipitated by oil glut in the international oil market several loans were acquired by successive governments to meet up the already broad based and robust recurrent and capital expenditures. Okonjo-Iweala (2005) revealed that, by 31st December, 2004, external debt stock in Nigeria stood at $34.0 billion. With this huge amount (which appeared odious), servicing such debt would certainly requires and represents heavy capital flight from the economy. According to DMO (2004) Nigeria required $3.0 billion to service external debt annually. This is a threat to the growth and development of an economy that is best describe as mono-cultural, with over 76% of its revenue comes from oil sector alone.

This condition is an index to the situations in most developing countries. Of interest, is the apparent changes in the structure of financial flow to developing countries; the international creditor nations took the advantage of the weak position of many LDCs, for example, Nigeria, especially after the oil price crisis of 1981, flow of such capitals were usually on a very harsh terms to the LDCs and often backed by calculated industrial development policies which has developed into net flow of capital from the LDCs and consequently leaving behind severe economic problems. Due to these problems Nigeria convincedly adopted Structural Adjustment Programme (SAP) in 1986 which led to the decline in standard of living, gross social and economic overhead depreciation, high external dependence, currency depreciation, balance of payment disequilibria, exchange rate depreciation, raising inflationary rate, hence government dominating involvement in poor economic growth.

These scenarios made most LDCs’ sustainable growth very difficult, because they had experienced one form of economic crisis or the other which was translated into a heavy toll on their economies. No wonder so many of the LDCs are devising means of reducing debt relief through the search for debt reduction, debt relief, debt buy-back, debt cancellation and through every available avenue.

Similarly, this is true of Nigeria in view of the Obasanjo economic team’s efforts through the former finance minister (Dr. Ngozie Okonjo-Iweala) to seek debt cancellation from the fifteen creditors nations of the Paris club, to which Nigeria owed the largest share of its external debt, the effort which has yielded a positive result. Before this deal, however, the external debt stock stood at $34.0 billion in December, 2004. Nigeria has 85% of the debt owed to the Paris club, 8% to multi-lateral financial institutions such as the World Bank and African Development Bank (ADB), while the remaining 7% is owed to London club of commercial creditors, holders of promissory notes and others (see DMO, 2004).

As a result of this deal, which favoured Nigeria, the Paris club of creditors first agreed on the outline of a debt relief package for Nigeria. about $18billion of debt was written off, and by April, 2006, Nigeria was free from the club (see http://www.punchng.com) and as highlighted earlier in the 2006 budget speech (Obasanjo, 2005).

In Nigeria, the promissory notes ordinance was enacted in 1960 and the external loans act in 1962 to fill the

B. M. Ali, Department of Economics, School of Management and Information Technology, Federal University of Technology, Yola, Adamawa, State – Nigeria.
S. I. Mshelwa, Department of Agricultural Economics, School of Agriculture and Agricultural Technology, Federal University of Technology, Yola, Adamawa, State – Nigeria.
domestic saving gap, the foreign exchange gap and the technological gap in development. A banking fund for loan redemption was established under the promissory notes ordinance while the external loans act required the external loans be used for development programmes not on-lending to regional governments. The 1962 act was amended in 1965 to broaden the end use of external loans (see Anyanwu et al, 1997). These scenarios provided the policy guidance for the magnitude, direction and end-use of external loans to support the nation’s development effort. According to Anyanwu et al. during the period 1960 to 1971 Nigeria’s external debt grew from ₦82.4 Million in 1960 to ₦435.2 Million in 1965 and ₦488.8 Million (including a short-term debt of ₦9.8 Million) in 1970.

**OBJECTIVES OF THE RESEARCH**

This research attempts to establish the relationship between poor economic growth and external debt services in Nigeria. The broad aim of this paper is to examine the effect of external debt services on the Nigeria’s Gross Domestic Product. The specific objectives are: to identify the sources of external debts (loans), to identify the creditors to Nigeria, to examine the genesis of Nigeria’s external debt and to provide recommendations to the government.

**JUSTIFICATION OF THE RESEARCH**

This work was developed out of growing curiosity on whether the huge external debt burden on the Nigerian economy as debt service payments can be the reason behind epidemiologic condition of the economy and government driven and dominating economic activities. With $3.0 billion drain annually from the economy for debt servicing (see DMO, 2004) is outrageous as it poses threat to the survival of the economy as a whole considering the development which this amount can generate if injected into the economy. This is what triggered the interest to carry out this research.

Nigeria’s economy has been adversely affected by the heavy weight of its external debt burden as it has been unable to reach its full potential as a result of more and more resources which the country commits to debt servicing. This problem can be better understood if the resources committed to debt services are related to national output.

This research is necessary at this point, when new loans are being negotiated from China, policy makers should be cautious to avoid another debt crisis. The lingering debt burden has been one of the major macroeconomic management problems facing Nigeria. The research covers (1995 – 2004). The choice of this period is deliberate, it is in this period Nigeria’s debt became odious and within this same period that debt relief was sought and granted.

**II. EMPIRICAL LITERATURE**

The crucial role of capital in the production process is well known. The international flow of capital—borrowing and lending across political borders—dates back at least to the ancient civilizations of the Mediterranean (Hughes, 1979). At the end of the 1940s the flow of capital to developing countries was negligible. But the early post-war reflections on the problems of developing countries led to the identification of insufficient capital stock as cause of their low income. Among the notable economists who made such suggestions are Koopmans (1957) and N.D. Kregger (1951). According to Nurske, there was a vicious circle of poverty, which could be broken by increasing savings. The role of increased savings in facilitating capital accumulation was further advocated by Lewis and Rostow (see Degefe, 1992).

Since “70s, both economists and policy makers have had doubts about the beneficial impact of foreign resources on the economies of developing countries (see Were, 2001). The presumed positive impact of foreign resources on the volume of savings is not supported by empirical evidence, neither is the presumed growth in Sub-Saharan Africa (SSA), acute economic crises have led to poor growth performance. Most SSA countries have continued to experience serious difficulties in managing the servicing of their relatively high stocks of external debt (Claessens et al, 1996). In countries on debt moratorium these countries have not been able to use the borrowed funds to generate sufficient increase in output, those critical of foreign aid in general have maintained that it does more harm than good. On the extreme, Bauer (1991) argued that aid increases resources to the government and therefore its patronage and in relation to the society. This has enabled many governments to pursue policies that retard economic growth.

Lensink & White (1999) and Griffin & Enos (1970) in different works argued that aid can harm growth by a combination of savings displacement and increase in the incremental capital-output ratio as a result of the lower productivity of aid-financed investment. They concluded that aid might be used to finance capital intensive projects and could even encourage corrupt government policies. Whereas, Greene and Khan (1990) used statistics to show that SSA have over-borrowed, but have not been able to generate sufficient growth and export earnings to meet their real debt obligations.

The question that needs to be answered is whether the large debt burden in Heavily Indebted Poor Countries (HIPC’s) is one of the factors contributing to the poor economic growth. Claessens et al. (1996) argued that where foreign assistance is related to the debt and debt service of HIPCs, the effects of a debt overhang on economic performance is a more complex question. Debt servicing difficulties lead to a deterioration of relations with creditors, thus reducing the amount of finance HIPCs can access (Khan and Villanueva, 1991).

Other channels through which the need to service a large amount of external obligations can affect economic performance include the ‘crowding out’ effect, the lack of access to international financial markets and the effects of the stock of debt on the general level of uncertainty in the economy (Claessens et al., 1996). In the crowding out effect, a reduction in the current debt service should lead to an increase in current investment for any given level of future indebtedness (Cohen, 1993). If a greater proportion of export revenue is used to service external debt, very little is available for investment and growth (see Were, 2001).

There have been several attempts to empirically assess the external debt-economic growth link - the debt overhang and crowding out effects - mainly by using OLS (see Were, 2001). Borenstein (1990) found that debt overhang had an adverse effect on private investment in Philippines. The effect was strongest for private non-tradeable sectors where debt was used as a measure of the debt overhang. Iyoha (1996) observed similar results for SSA countries. He concluded that heavy debt burden acts to reduce investment through both the debt overhang and the 'crowding out' effect. Using data for Cameroon, Ibanga and Sikon (2001) found that there exists a debt overhang and crowding out effects on private and public investments respectively. Elbadawi, et al. (1996) confirmed a debt overhang effect on economic growth using cross-sectional regression for 99 developing countries spanning SSA, Latin America, Asia and Middle East. They identified three direct channels in which indebtedness in SSA works against growth: current debt service (which should stimulate growth), past debt accumulation (capturing debt overhang) and debt service ratio. The fourth indirect channel works through the impacts of the above channels on public sector expenditure. Elbadawi, et al. (1996) concluded that debt accumulation deters growth while debt stock spurs growth. Their results also showed that the debt burden has led to fiscal distress as manifested by severely compressed budgets.

Degefe (1992) also discovered a negative effect of external debt on growth. Fosu (1996) argued that debt can
IMPACT OF EXTERNAL DEBT SERVICES ON NIGERIA’S ECONOMIC GROWTH

additionally influence economic growth via effect on the productivity of investment. And even if debt service payments do not reduce savings and investments significantly, they could still decrease output growth directly by diminishing productivity as a result of the adverse change in investment mix. Ayeyi (1991), Osei (1995) and Ifihan & Alhing (1997) used the simulation analysis to show the impact of the debt burden indicators on economic growth under different scenarios.

Furthermore, Elbadawi, et al (1996) opined that, these debt burden indicators also affect growth indirectly through their impact on public sector expenditures. As economic conditions worsen, governments find themselves with fewer resources and public expenditure is cut. Part of this expenditure destined for social programs has severe effects on the very poor. Most studies confirm debt overhang/crowding out effects. The only work that has shown favourable effects of external debt is Chowdhury (1994) for Bangladesh, Indonesia and South Korea.

Were (2001) using an error correction formulation, the estimation results showed a debt overhang problem in both the growth and investment equations. These results tally with results from similar studies (e.g. Elbadawi et al., 1996, Mbinga & Sikodi, 2001). The estimation results for the growth equation showed that not only does past debt accumulation deters growth but so do current debt flows in the short run. The error correction term also showed that external debt had negative implications on growth.

Conclusively, from the above analysis one can infer that, debt service payments reduce export earnings and other resources and therefore retard growth.

III. GENESIS OF NIGERIA’S EXTERNAL DEBT

Over two decades now, Nigerian economic development has been hampered by milestones of foreign debt. One of the most uncomfortable choices facing Nigeria's leadership was the earmarking of resources for paying foreign debt, every single Dollar or Naira paid to the creditors was money that could have been spent on health, education and other social services and on rebuilding infrastructure. These payments were not sufficient to pay-off interest, due on loan, as a result the debt increased, due to penalties, interest, and the compounded interest was plied on to the arrears such that by the end of December 2004, the Nigerian debt stock stood at about US$36.0 billion, thereby making Nigeria the Africa's largest debtor (see DMO,2004).

The history of Nigeria's major sources of external debt is the official and the private sector, which can be further categorized into five, namely, Paris club, multilateral group, London club, and promissory note holders. Debt crisis in Nigeria began in the 1980s due to excessive borrowing by the various tiers of government (DMO, 2004). According to CBN (2005) Nigeria's external debt could be traced back to 1958 when the country first contracted the sum of US $28million for railway construction. Total debt outstanding remained low throughout the 1960s and 1970s. However, huge external borrowings were made in the mid-1980s to finance large capital projects for economic development in the face of dwindling oil revenue, occasioned by the glut in the international oil market. This viewpoint is contrary to DMO (2004) submission that, the first major loan of US$1.0 billion refers to as 'jumbo loan' which was contracted from the international capital market (ICM) in 1976 (DMO, 2004).

CBN (2005) wrote that, the debt situation worsened with the entry of state governments into the external loan contractual obligations, with many of the loans having unfavourable terms, and indeed, mismanaged. Specifically, total external debt stock grew rapidly from less than US$41.0 billion in 1970 to US$15.8 billion in 1985 and further to US$34.1 billion in 1995. However, it declined to US$30.0 billion in 2002, before rising to US$32.2 billion in 2003 and US$35.9 billion in 2004. It is instructive to note that the increase did not result from new loans, but from the capitalization of accrued arrears on deferred payments.

Moreover, Nigeria made cumulative debt service payments of about US$37.0 billion to all the creditors between 1985 and 2004. The debt stock continued to increase not necessarily as a result of new borrowing but owing mainly to capitalization of interest and default charges. In addition, paying penalties and interest charges, Nigeria suffered huge increase in external debt liabilities caused by foreign exchange movement, movement well beyond our control. Foreign debt is dominated in foreign currency (e.g. sterling, euros or the dollar) and this has to be repaid in foreign currency. The country's debt stock increased by over US$33 billion in the last five years due simply to the appreciation of the pounds and the euro against the dollar (see CBN,2005). These "external shocks", none of our making caused the debt stock to spiral upward, even as payments were made to creditors. This paradoxical external debt dynamics reflects the classical case of a country caught in a persistent and perpetual "debt trap".

Also, the oil boom of the 1970s and early 1980s encouraged a pattern of wasteful consumption based on the false premise that oil price would remain high.

SOURCES OF NIGERIA'S DEBT

There are five notable sources where Nigeria contracts loans as outlined by the Debt Management Office, DMO (2004) these include:

1. The Paris Club of creditors: This is a consortium of fifteen creditor capitalists and imperialist, which form a powerful group. Its headquarters is in Paris, members of the club include; Austria, Belgium, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Russian Federal Republic, Spain, Switzerland, United Kingdom, and United State of America. The objective of this club is to lend on short-term and long-term loans to developing countries of the world. Most of the loans granted by this club attracts high rate of interest and are conditional loans (a country can only use the loan for a definite project; it cannot be diverted for other purposes). Nigeria owed the Paris club in full (before the debt from this club) a total of US$40.947 billion as at 31th December, 2004 this formed as earlier noted 85.8% of Nigerian total external debt stock (see Table A). Nigeria is free from this club owing to series of debt relief (DMO, 2004) and the repayment of the balance in April 2006 (see Punch, newspaper, 2104/2006 or http://www.punchng.com)

2. The multilateral creditors: this is a group of multilateral financial institutions such as: World Bank, African Development bank (ADB), IMF, European Investment Bank, Economic Community of African state (ECOWAS), International Fund for Agricultural Development (IFAD) This group gives loans for projects, to federal government and their agencies. Credits and loans form multilateral institutions are to be serviced immediately they are due. Debt service payments to the World Bank are in every 15 days, while ADB debt payment occurs almost as frequent. But nothing is owed to IMF. The total amount owed to multilateral institutions as at December, 31st, 2004, $2.824 billion, equivalent to 7.86% of the total external debt (see Table A). These debts are not subjected to debt relief or rescheduling and it carry stiff consequences in case of default. Sanctions are invoked 30 days after maturity date.

The London club of creditors: this is a group of commercial banks. It is a consortium of foreign creditors with headquarters in London. The objectives and mode of operations is similar to that of Paris Club. Short term, medium and long term, loans attract special conditions and high interest rate. As at December 2004 Nigeria is indebted to the London club to the tune of US$1.441 billion
equivalent to 4.01% of the Nigeria external debt (see Table A).

4. The Non-Paris club: these are debt owed by the government to countries which are not members of the Paris club and creditors resident in Paris club countries whose debts are not insured by the export credit agencies. The amount owed by Nigeria to this category of creditors is US$0.047 billion equivalent to 0.13% as at December, 2004 (see Table A). In 1986, according to DMO (2004) marked the beginning of Nigeria’s external debt crisis. Particularly the Paris club debt became difficult to manage.

5. Promissory note holders: These are debts owed by the government to promissory note holders. The amount owed to this category of creditors is US$0.783 billion equivalent to 2.18% as at 31st December, 2004 (see Table A).

Table E, displays the trend of journey so far in Nigeria’s external debt service payments over the ten years (1995-2004) under consideration. To address the problem of its debt stock and the associated mounting arrears Nigeria embarked on negotiations with its creditors to arrange a succession of debt “rescheduling” meaning debt was not cancelled, but repayment were deferred and put off until later. Rescheduling negotiations according to Muktatar (2004), took place in 1989, 1988, 1991, and most recently in 2000, since year 2000 despite the fourth rescheduling agreement with the Paris club creditors which should help to alleviate the debt burden, the external debt stock has in fact continue to rise year in year out.

According to CBN (2005), in the first phase, Nigeria undertook to pay arrears of US$5.3 billion, due on all categories of debts, while the Paris club creditors would grant a 33.0% cancellation of eligible debts and this was achieved during the fourth quarter of 2003. The second phase, Nigeria will pay $5.1 billion, the amount due under the post-cut-off debt. The Paris club creditors would grant a further cancellation of 34.0% on eligible debts and then buy-back the remaining eligible debts. The total amount to be paid under the debt relief deal to complete the exit strategy from the Paris club debt overhang amounted to US$12.4 billion.

According to DMO (2004), the total external debt outstanding as at 31st December 2004, stood at US$33.944 billion as against US$32.916 billion in December, 2003 indicating an increase of US$30.286 billion or 9.2%. The report further state that as a case in the previous year, the increase in the debt stock was largely as a result of the interest component of additional payment arrears that accumulated, and continued depreciation of the US dollar against currencies which the debts are denominated.

IV. METHODS & DATA ANALYSIS

Data are derived from secondary sources. Pool of data was collected from Debt Management Office (DMO) publications, books, and journals, Central Bank of Nigeria (CBN) publications, newspapers, websites, published and unpublished materials. The data used is for nine years (1995 - 2003).

Contrary to OLS model with bias to time series analysis adopted by Elbadawi et al. (1996) and Were (2001), this research adopts the OLS method. The relationship between GDP at 1990 constant basic prices and external debt services (to various external creditors) is established using mathematical notation for empirical verification.

The theoretical a priori expectation is that external debt servicing to the various external creditors affects the Nigerian GDP negatively. We begin our investigation by assuming that the relationship is linear. Thus, the model is specified as follows:

\[ Y = \beta_0 + \beta_1 LCC + \beta_2 MLC + \beta_3 NPCC + \beta_4 PCC + \beta_5 PNH \]

Where:

- \( Y = \) GDP
- \( LCC = \) Annual debt service payment to the London Club Creditors,
- \( MLC = \) Annual debt service payment to Multi-Lateral Creditors,
- \( NPCC = \) Annual debt service payment to Non-Paris Club Creditors,
- \( PNH = \) Annual debt service payment to Promissory Note Holders,
- \( \beta_0 = \) Intercept of the function,
- \( \beta_1, \beta_2, \beta_3, \beta_4, \) and \( \beta_5 = \) Coefficients of the parameters in the model.

The GDP was collected for nine years (1995-2003) and regressed against the various huge amounts that have been outstanding Nigerian economy as debt service payments to the external creditors (see Table 1). To arrive at table 1, the data was first harmonized: GDP values for the years (1995-2003) was converted from billion to billion; the debt service payments to creditors was initially in billion, increased to billion values. These adjustments paved way for the harmonization of the data, with that it can be run for statistical package analysis.

### Table 1: DATA USED FOR THE REGRESSION FOR THE YEARS (1995-2003)

<table>
<thead>
<tr>
<th>Years</th>
<th>GDP Converted to US$ billion</th>
<th>LCC ($billion)</th>
<th>MLC ($billion)</th>
<th>NPCC ($billion)</th>
<th>PCC ($billion)</th>
<th>PNH ($billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>3.473</td>
<td>0.181</td>
<td>0.827</td>
<td>0.109</td>
<td>0.272</td>
<td>0.252</td>
</tr>
<tr>
<td>1996</td>
<td>3.615</td>
<td>0.128</td>
<td>0.814 0.600</td>
<td>0.336</td>
<td>0.360</td>
<td>0.238</td>
</tr>
<tr>
<td>1997</td>
<td>3.699</td>
<td>0.036</td>
<td>0.680</td>
<td>0.126</td>
<td>0.306</td>
<td>0.227</td>
</tr>
<tr>
<td>1998</td>
<td>3.710</td>
<td>0.128</td>
<td>0.659</td>
<td>0.020</td>
<td>0.229</td>
<td>0.217</td>
</tr>
<tr>
<td>1999</td>
<td>3.281</td>
<td>0.128</td>
<td>0.623</td>
<td>0.015</td>
<td>0.643</td>
<td>0.253</td>
</tr>
<tr>
<td>2000</td>
<td>3.265</td>
<td>0.129</td>
<td>0.492</td>
<td>0.002</td>
<td>0.813</td>
<td>0.150</td>
</tr>
<tr>
<td>2001</td>
<td>3.082</td>
<td>0.134</td>
<td>0.472</td>
<td>0.034</td>
<td>1.274</td>
<td>0.195</td>
</tr>
<tr>
<td>2002</td>
<td>2.822</td>
<td>0.257</td>
<td>0.509</td>
<td>0.076</td>
<td>0.162</td>
<td>0.192</td>
</tr>
<tr>
<td>2003</td>
<td>3.046</td>
<td>0.090</td>
<td>0.013</td>
<td>1.029</td>
<td>0.177</td>
<td></td>
</tr>
</tbody>
</table>

### SOURCES:

NB: Column 3, 4, 5, 6, and 7 are reduced form of converted $millions to $billions.
Table 2: ANALYSIS OF VARIANCE FOR THE MULTIPLE REGRESSION MODEL LINEAR FUNCTION

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum squares</th>
<th>Mean square</th>
<th>F value</th>
<th>Prob. &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>5</td>
<td>0.68301</td>
<td>0.13660</td>
<td>3.924</td>
<td>0.1449</td>
</tr>
<tr>
<td>Error</td>
<td>3</td>
<td>0.10444</td>
<td>0.03481</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C Total</td>
<td>8</td>
<td>0.78745</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Root MSE: 0.18658
Dep Mean: 3.34378
C.V.: 5.57996

R-square: 0.8674
Adj-R-square: 0.6463

PARAMETER ESTIMATES

| Variable | DF | Parameter estimate | Standard error | T for parameter = 0 | Ho: Parameter = 0 | Prob > |T| |
|----------|----|--------------------|----------------|---------------------|-------------------|--------|---|
| Intercept| 1  | 2.786306           | 0.89692095     | 3.107               | 0.0530            |
| X1       | 1  | -2.138029          | 1.67991476     | -1.273              | 0.2928            |
| X2       | 1  | 1.305843           | 1.04828009     | 1.246               | 0.3013            |
| X3       | 1  | -0.300039          | 0.83922663     | -0.352              | 0.7444            |
| X4       | 1  | -0.193989          | 0.26987592     | -0.719              | 0.5242            |
| X5       | 1  | 0.589441           | 2.54092638     | 0.232               | 0.8315            |

DISCUSSION ON RESULTS

As noted earlier, the research employs ordinary least square and the result of the various tests are stated as follows:

- $R^2 = 0.8674$
- Adjusted $R^2 = 0.6463$
- F-Statistics = 3.524

Following the analysis of the regression:

$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5$

The coefficients from the analysis are:

$Y = 2.786 - 2.138X_1 + 1.306X_2 - 0.3X_3 - 0.194X_4 + 0.589X_5$

(0.90) (1.68) (1.05) (0.84) (0.27) (2.5)

Figures in parentheses are the standard errors.

The coefficient of multiple determinations ($R^2$) is equal to 0.8674; this shows that about 87% of the total variations in Y are accounted for by the parameters specified in the model. F-test is the overall or joint significance of the parameters. Thus, the hypothesis;

$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$ (that various external debt services to the creditors have no significant impact on the Nigeria's GDP).

The calculated $F^*$ is given in table 2, which is; $F^* = 3.924$

The tabulated $F^*$ is given as $F_{VI, V2}$ where; $K = 5$ - 1 = 4. While $V2 = 9 - 5 = 4$.

Thus, $F_{4,4} = 6.39$. Since $F^* (3.92) < F^* (6.39)$, then $H_0$ is accepted, that the sample data provides evidence that there is no significant difference between the mean and the population from which the samples are drawn.

SUMMARY OF FINDINGS

The analyses have revealed non-conformity between the empirical relationship of Y (GDP) on $X_1$, $X_2$, $X_3$, $X_4$, and $X_5$ (the various annual debt service payments to external creditors) and assumed theoretical priory expectation. The work revealed a mixed outcome; the influence of the value of interest and debt service payments to the multilateral creditors (MLC) and promissory note holders (PNH) showed some level of positive relationship. While, London club of creditors (LCC), Non-Paris club of Creditors (NPCC) and Paris club of creditors indicated a negative relationship with the Y (GDP).

The coefficients and standard error implies that the explanatory values to which estimates relate do not in fact influence the dependent variable (Y), there is no relationship between Y and ($X_2$, $X_4$), this implies that variation in GDP is solely due to variation in $X_1$ (-2.138X1), $X_3$(-0.3X3) and $X_4$(-0.194X4).

The $R^2 (0.87)$ and the adjusted $R^2 (0.65)$ indicates a better goodness of fit of the regression line to the sample observation. 87% variation in the dependent variable (Y) is explained by the variables, thus the remaining 14% is due to error term of non-consideration of other vital variables that affect the GDP in Nigeria. The F-test, $F^* = 3.92 < F$, tab = 6.3, since $F^* < F$ tab, we accept $H_0$: that external debt services have no impact on the economic growth (GDP).

V. CONCLUSION & RECOMMENDATIONS

If debt services were given due attention as at their maturity and were regarded as a necessity and obligation terms adhered to Nigeria would not read to be paying as much as $3.0 billion annually, which was avoidable during the period under consideration.

The neglect by succeeding regimes especially, the military administration exacerbated the debt crises and consequently scarce resources needed for economic revolution are used to repay debt which grew to as much as $35.0 billion.
as at 31st December, 2004. Thanks to Obasanjo’s administration in 2005 for the struggle out of Paris club debt relief deal which was perfected in 2006. If it should be noted that, debt service obligations annually ($3.0 billion) is equivalent to the federal government allocation to health and education ministries in 2004 and even greater than federal budgetary allocations to ten states, namely: Adamawa, Taraba, Gombe, Borno, Yobe, Jigawa, Bauchi, Plateau, Katsina, and Zamfara put together in 2005 fiscal year. Culture and policies that will faster high per capital saving and promote per capita investment should be promoted. Constraints on investment and entrepreneurship development motivation should be removed.

The following recommendations are proffered by the authors:

1. Debt relief/cancellation/rescheduling/buy-back should be a permanent pursue in our debt management strategies. This is necessary in order to avoid building up of debt stock and manage the debt obligations.

2. The government should enforce embargo on new loans especially to the state government and other government parastatals except for important economic reason, which are inevitable and for projects which are self floating and self liquidity.

3. The government should incorporate Economic and Financial Crime Commission (EFCC) in debt management. This is to help channel loans to productive investments. EFCC should be independent and non-partisan to be able to reduce the common practices of mismanagement in public offices and to instill fiscal responsibility in government administration.

4. The government should provide enabling social and economic environment (e.g. overheads, such as good road networks, electricity, security of life and property, quality of health delivery, etc) as these will encourage entrepreneurship and promote foreign direct investment. Also, promote portfolio investments which will generate employment opportunities that are highly needed for increase in per capita saving, leading to high capital - labour ratio required for capital formation domestically and investment should be encouraged generally.

5. Nigeria should seek for interest rate conversion in her negotiations with external creditors. There is possibility to convert floating rate debt to fixed rates on a market basis.

6. Nigeria should promote her export trade so as to drastically reduce merchandise imports. Since import financing worsen the debt status.

7. In order to achieve a reasonable level of domestic savings and prevent net transfer of capital through high level of debt service, government should relate her foreign exchange earning power with economic growth prospect in external debt negotiation.

8. The DMO should monitor effectively all external debts on a continuous basis. It should ensure that Nigeria redeemed all her debt.

9. Since Nigeria can not rule out collecting debts overseas, but machinering of government (DMO) should ensure accurate and comprehensive knowledge of the external debts in terms of its size, composition, maturity, servicing, historical and future evolution and anticipated ways to redeemed the debts undertaken.

ACKNOWLEDGEMENT:

We gratefully acknowledged the comments of professor D. H. Balami. We specifically thank Mr. M. O. Lawan (Visiting Lecturer) for his valuable remarks. Also, we thank our colleagues for their support.

REFERENCES


IMPACT OF EXTERNAL DEBT SERVICES ON NIGERIA'S ECONOMIC GROWTH


http://www.cenbank.org
http://www.dmo.org
http://www.gocdn.com


Obasanjo, O. A., 2005. The 2006 Budget Speech by His Excellency President Olusegun Obasanjo at the joint session of the National Assembly Abuja, Tuesday, 6th December.


APPENDICES:

Table A: NIGERIA'S EXTERNAL DEBT BY CATEGORY AS AT 31ST December, 2004.

<table>
<thead>
<tr>
<th>S/N</th>
<th>CREDITORS</th>
<th>AMOUNT (US $)</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Paris Club Creditors</td>
<td>30,847,807,415.39</td>
<td>65.62</td>
</tr>
<tr>
<td>2</td>
<td>Multilateral Financial Creditors</td>
<td>2,824,324,280.58</td>
<td>7.86</td>
</tr>
<tr>
<td>3</td>
<td>London Club Creditors</td>
<td>1,441,793,000.00</td>
<td>4.01</td>
</tr>
<tr>
<td>4</td>
<td>Promissory Note Holders</td>
<td>783,233,666.15</td>
<td>2.18</td>
</tr>
<tr>
<td>5</td>
<td>Non-Paris Club Creditors</td>
<td>49,496,090.19</td>
<td>1.33</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>36,544,567,472.31</td>
<td>100</td>
</tr>
</tbody>
</table>


Table B: GDP FOR THE YEARS (1985-2003)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP at</td>
<td>281.40</td>
<td>293.70</td>
<td>302.00</td>
<td>310.90</td>
<td>312.18</td>
<td>329.17</td>
<td>344.31</td>
<td>356.28</td>
<td>392.76</td>
</tr>
<tr>
<td>1990 constant basic prices (N Billion)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table C: Average AFEM naira cross exchange rates

<table>
<thead>
<tr>
<th>YEARS</th>
<th>US Dollar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>81.0228</td>
</tr>
<tr>
<td>1996</td>
<td>81.2528</td>
</tr>
<tr>
<td>1997</td>
<td>81.8494</td>
</tr>
<tr>
<td>1998</td>
<td>83.8072</td>
</tr>
<tr>
<td>1999</td>
<td>92.3428</td>
</tr>
<tr>
<td>2000</td>
<td>100.8016</td>
</tr>
<tr>
<td>2001</td>
<td>111.7010</td>
</tr>
<tr>
<td>2002</td>
<td>126.2577</td>
</tr>
<tr>
<td>2003**</td>
<td>128.9316</td>
</tr>
<tr>
<td>2004**</td>
<td>133.0011</td>
</tr>
</tbody>
</table>

*The table carries time series of average exchange rates, express in naira per unit of a given national currency. **Average of 1st-4th quarter of each year.


Table D: Converted GDP with AFEM for the years (1995-2003)

<table>
<thead>
<tr>
<th>Years</th>
<th>GDP (Table B in full)</th>
<th>US$ AFEM (Table C)</th>
<th>Converted to US ($</th>
<th>Reduced form of column (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>281,400,000,000</td>
<td>81.0228</td>
<td>3,473,096,482</td>
<td>3.473</td>
</tr>
<tr>
<td>1996</td>
<td>293,700,000,000</td>
<td>81.2528</td>
<td>3,814,644,665</td>
<td>3.615</td>
</tr>
<tr>
<td>1997</td>
<td>302,000,000,000</td>
<td>81.8494</td>
<td>3,698,741,203</td>
<td>3.659</td>
</tr>
<tr>
<td>1998</td>
<td>310,900,000,000</td>
<td>83.8072</td>
<td>3,709,705,133</td>
<td>3.710</td>
</tr>
<tr>
<td>1999</td>
<td>312,180,000,000</td>
<td>92.3428</td>
<td>3,380,664,221</td>
<td>3.381</td>
</tr>
<tr>
<td>2000</td>
<td>329,170,000,000</td>
<td>100.8016</td>
<td>3,265,523,583</td>
<td>3.266</td>
</tr>
<tr>
<td>2001</td>
<td>344,310,000,000</td>
<td>111.7010</td>
<td>3,082,425,404</td>
<td>3.062</td>
</tr>
<tr>
<td>2002</td>
<td>356,280,000,000</td>
<td>126.2577</td>
<td>2,821,847,697</td>
<td>2.822</td>
</tr>
<tr>
<td>2003</td>
<td>392,760,000,000</td>
<td>128.9316</td>
<td>3,046,286,392</td>
<td>3.046</td>
</tr>
</tbody>
</table>

Source: Computed from Table B and C.

NB:
1. Conversion from ($M) billion to ($B) billion based on the respective years of average AFEM (Autonomous Foreign Exchange Market) Naira cross exchange rates with the Dollar.
2. Column 5 forms part of Table 1.


<table>
<thead>
<tr>
<th>Years</th>
<th>LCC ($million)</th>
<th>MLC ($million)</th>
<th>NPCC ($million)</th>
<th>PCC ($million)</th>
<th>PNH ($million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>161</td>
<td>826.9</td>
<td>109</td>
<td>271.8</td>
<td>251.9</td>
</tr>
<tr>
<td>1996</td>
<td>127.7</td>
<td>814.4</td>
<td>336.4</td>
<td>359.7</td>
<td>238.4</td>
</tr>
<tr>
<td>1997</td>
<td>35.8</td>
<td>800.2</td>
<td>127.7</td>
<td>306.1</td>
<td>225.8</td>
</tr>
<tr>
<td>1998</td>
<td>127.71</td>
<td>680.23</td>
<td>19.77</td>
<td>228.54</td>
<td>216.9</td>
</tr>
<tr>
<td>1999</td>
<td>127.74</td>
<td>659.17</td>
<td>34.8</td>
<td>644.47</td>
<td>258.7</td>
</tr>
<tr>
<td>2000</td>
<td>129.07</td>
<td>623.23</td>
<td>1.52</td>
<td>812.67</td>
<td>149.52</td>
</tr>
<tr>
<td>2001</td>
<td>134.06</td>
<td>491.48</td>
<td>33.61</td>
<td>1273.62</td>
<td>195.18</td>
</tr>
<tr>
<td>2002</td>
<td>266.75</td>
<td>472.12</td>
<td>75.86</td>
<td>161.63</td>
<td>192.12</td>
</tr>
<tr>
<td>2003</td>
<td>90.21</td>
<td>508.23</td>
<td>13.26</td>
<td>1020.18</td>
<td>176.84</td>
</tr>
<tr>
<td>2004</td>
<td>994.44</td>
<td>487.28</td>
<td>90.15</td>
<td>171.23</td>
<td>11.65</td>
</tr>
</tbody>
</table>