

Debt Relief: Implication for the Nigerian Economy: An Empirical Analysis

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Abstracts

The focus of the research is to examine the effect of debt relief and its implication on Nigerian economy for the period of 1970 to 2015 using time series analysis. It is from this point of view that we believe that the debt relief now offers the country a lifetime opportunity to be its own economic and richer master with the liberty to formulate and implement only those economic policies that would enhance accelerated growth and sustainable development. The strived to reposition Nigeria economically and make it take its rightful place in the comity of nations is now clarified and given a positive definition. The country now stands the chance of achieving macroeconomic stability, as it would no longer be hampered by the burden of debt service. More money would now be available to the federal and state governments to pursue meaningful economic policies. On their part, Nigerians are now exceedingly justified to put their governments to task. They now have more reasons not to tolerate excuses from the various tiers of government over the poor nature of the infrastructures in their various domains. The empirical results reveal that external debt and domestic are on high side therefore has important implication in Nigerian economy. Given the negative relationship of economic growth and debt relief, the study strongly recommends that Government must ensure that debt collected are fully diverted to finance capital projects especially in the area of transportations, electricity, and education, this will enhanced and proved private sectors development thereby reducing poverty and inequality.

Key Words: Debt Relief, External Debt, Economic Growth, Nigeria, IMF, VEC.

1 Introduction

In 2005, Nigeria concluded a debt relief agreement with the Paris Club on a US\$ 30 billion debt with these creditors. The country agreed to pay US\$ 12 billion, while an amount of US\$ 18 billion was cancelled. In accordance with OECD-DAC rules, most of the US\$ 18 billion has been registered as ODA by the fourteen creditors involved.

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This large debt cancellation to Nigeria was heavily disputed at the time. An important argument against it was that Nigeria was an oil-rich country that could pay its debts. Another objection was Nigeria’s poor track record in terms of policies and governance, which made it highly unlikely that the country would use the debt relief savings well. On the other hand, it was argued that Nigeria was a low income country (in 2003, GDI per capita was US\$ 320) with 54% of its 150 million people living in poverty, and that the debt cancellation was necessary in order to help the country achieve the Millennium Development Goals (Moss et al., 2004; Okonjo-Iweala, 2008; World Bank, 2005). It was also maintained that most of the debt were arrears and that the Paris Club creditors should have cancelled the debt already a long time ago (Rieffel, 2005). It is therefore highly relevant to investigate the results of this debt agreement.

Assessing the implication of US\$ 18 billion debt relief is crucial to Nigeria economy. The paper aimed to examine the effect of debt relief on economic growth and poverty reduction in Nigeria. The paper is organised into five section, apart from introduction, section two discuss the literature and empirical works, three dwell on methodology while section, while section four explore the main findings and section five rest on policy recommendations.

2 Empirical Literature

Theoretical Framework

The theoretical framework underpinning this study is the resource mechanism theory. This emphasizes the crowding-out effect theory (Cohen, 1993). In the case of a high debt burden, debt service payments crowd out investment and thereby impede economic growth. In this setting, debt relief can affect investment and growth through an expansion in public spending by easing the government’s budget constraints. Powell, 2003, provided an accounting identity to show how debt relief can actually generate resources and ease the government budget constraint. Some premises for resource mechanism are established. Resources are only freed if the country has actually been servicing its debt (P) and if the revenue collection in the country is not reduced (T). Moreover, debt relief has to be in addition to granted aid (Powell, 2003). Bird and Milne, 2003 looked at two accounting identities: the evolution of indebtedness and the fiscal constraint on a debtor.

$$\Delta D = (S - P) + (L - W) \dots\dots\dots 2.1$$

Where ΔD is change in indebtedness (debt stock), S is contracted debt service payment, P is actual debt payments (both principal and interest), L is new total borrowing, and W is debt relief (which also reduces S). The fiscal constraint identity is:

$$G = T + L - P + A \dots\dots\dots 2.2$$

Where G is non-debt related government expenditure, A is aid granted, and T is tax receipts. If the debtor country has been defaulting servicing or has been rescheduling the debt (P = 0). No amount of debt relief will have any effect on government spending (G) or

economic growth Powell, 2003. Debt relief will only add to resource available for investment if such country has been servicing her debt and has policies that will now direct previous debt servicing funds to economic growth inducing ventures for the country.

Most studies of external debt in Africa appear to have focused on regions, especially the Sub-Sahara, which tended to give little attention to the peculiarity of individual countries. Furthermore, other studies dwell on country groupings based on certain characteristics (e.g. oil-exporting countries) or inter country comparison.

Barro (1979) provided the foundation for a neoclassical theory of debt management with testable implications for the management of public debt, under the assumption that governments behave in the manner that theory suggests would be optimal. And in fact, for industrial economies, the evidence is at least roughly consistent with the predictions of the theory.

Edo (2002) analyses the African debt problem, with particular reference to Nigeria and Morocco, and finds that fiscal expenditure, balance of payments and global interest rate are the crucial factors in explaining the accumulation of external debt in the two countries. One of his policy suggestions is a sustained export promotion programme that would generate increases in foreign earnings needed to service the debt. He also suggests that both countries should restructure and develop their capital markets to reduce exposure to the vagaries of the global interest rate.

Traditionally the practice of debt management has focused on either minimizing the interest cost of borrowing, supporting short term interest rates set by monetary policy makers or assisting capital markets through providing appropriate amounts of risk free assets and liquidity at key maturities (Missale, 1999).

Tobin (1963) looked at debt management primarily as a tool for macroeconomic stabilisation, with minimisation of interest costs coming secondary, and risk minimising not playing any role at all. Thus, in an economic upturn, issuance of new debt should be concentrated on longer maturities, driving up long-term interest rates, thus cooling off the economy. Countries experiencing fiscal deficits, especially the developing ones borrow to improve their economic growth. Government borrows in principle to finance public goods that increase welfare and promote economic growth (Ogunmuyiwa, 2011). Due to the fact that the domestic financial resources are not adequate, borrowing is acquired from foreign sources. The amount of fund provided by these foreign sources constitutes the external debt of a nation.

In Nigeria, external debt is sourced from multilateral agencies, Paris club creditors, London club creditors, Promissory Note holders and other creditors. External debt is one of the sources of financing capital formation in any country and is acquired to contribute meaningfully to the economy but the future debt service payment poses a threat to economic growth. A number of researchers have examined the effect of external debt on economic growth since the beginning of the new millennium (Ayadi and Ayadi, 2008).

Ayadi and Ayadi (2008) also, examined the impact of the huge external debt, with its servicing requirements on economic growth of the Nigerian and South African economies. The Neoclassical growth model which incorporates external debt, debt indicators, and some macroeconomic variables was employed and analyzed using both Ordinary Least Square (OLS) and Generalized Least Square (GLS) methods. Their finding revealed negative impact of debt and its servicing requirement on the economic growth of Nigeria and South Africa. Ogunmuyiwa (2011) examined whether external debt promotes economic growth in Nigeria using time-series data from 1970-2007. The regression equation was estimated using econometric techniques such as Augmented Dickey-Fuller test, Granger causality test, Johansen co-integration test and Vector Error Correction Method (VECM). The results revealed that causality does not exist between external debt and economic growth in Nigeria.

Adesola (2009) empirically investigated the effect of external debt service payment practices on the economic growth of Nigeria. Ordinary Least Square method of multiple regressions was used to examine how debt payment to multilateral financial creditors, Paris club creditors, London club creditors, Promissory Notes holders and other creditors relates to gross domestic product (GDP) and gross fixed capital formation (GFCF) using data from 1981 to 2004. The study provides evidence that debt payment to Paris club creditors and Promissory Notes holders are positively related to GDP and GFCF while debt payment to London club creditors and other creditors show a negative significant relation to GDP and GFCF. Audu (2004) examined the impact of external debt on economic growth and public investment in Nigeria from 1970-2002.

Adepoju, Salau and Obayelu (2007) analysed the effects of external debt management on the economic growth of Nigeria for the period of 1962 to 2006 using time-series data of the various bilateral and multilateral arrangements. Their study concluded that accumulation of external debt adversely affected Nigeria's economic growth.

Choong, Lau, Liew, and Pua (2010) examined the effect of different types of debts on the economic growth in Malaysia during the period 1970 – 2006. Using Co-integration test, the findings suggest that all components of debts have a negative effect on long run economic growth. The Granger causality test reveals the existence of a short-run causality linkage between all debt measures and economic growth in the short-run. Abdelmawla and Mohammed (2005) investigated the impact of external debt on economic growth of Sudan from a period spanning 1978 – 2001. The study showed that export earnings have a significant positive impact while external debt and inflation had negative impact on Sudan's economic growth.

Karogol (2002) investigated both the short-run and long-run relationships between economic growth and external debt service for Turkey during 1956 – 1996. The study employed a standard production function model analyzed using multivariate co-integration techniques. The Vector Autoregression estimates showed that there exists one Co-integration equation. It also revealed that debt service is negatively related to economic growth in the long-run. The causality test showed uni-directional causality between debt service and economic growth. Clements, Bhattacharya, and Nguyen (2003) examined the channels through which external debt affects growth in low income countries. Their results suggest that the substantial reduction in the stock of external debt projected for highly

indebted poor countries (HIPC) would directly increase per- capita income growth by about 1 percentage point per annum. Reductions in external debt service could also provide an indirect boost to growth through their effects on public investment.

Malik, Hayat, and Hayat (2010) explored the relationship between external debt and economic growth in Pakistan for the period 1972 – 2005, using time series econometric technique. Their result shows that external debt is negatively and significantly related to economic growth. The evidence suggests that increase in external debt will lead to decline in economic growth. Previous study by Hameed et al. (2008) on Pakistan analysed the long run and short run relationships between external debt and economic growth. Annual time series data from 1970 to 2003 was obtained to examine the dynamic effect of GDP, debt service, capital stock and labour force on her economic growth. The study concludes that debt servicing burden has a negative effect on the productivity of labour and capital, thereby adversely affecting economic growth.

An Overview of Nigeria's External Debt

Nigeria's total external debt stock, as at December 31, 2005 stood at US\$20,477.97 million as against US\$35,944.66 million in December 2004, indicating a decrease of US\$15,466.69 million or 43.03 per cent. The significant reduction was as a result of the implementation of the first and second phases of the Paris Club debt deal, which reduced the pre-cut off Paris Club debt by 33 per cent after regularization of arrears. As all arrears to the Paris Club have been paid, and no arrears are outstanding to any other external creditors, the entire external debt stock of US\$20,477.97 million comprises of principal balances (disbursed outstanding debt). This is the first time in twenty years that Nigeria has no arrears outstanding in its external debt stock (DMO: 2005).

The trend in Nigeria's external debt stock and debt service over the last five years (2000-2005) has been well computed and documented by the country's Debt Management Office (DMO). Nigeria's total external debt stock, as at December 31, 2001 was US\$28.347 billion. A significant portion of the stock consisted of arrears of principal, interest, as well as the late interest, which had been consolidated to form the current principal balance. Nigeria's external debt increased significantly between 2001 and 2004 despite the fourth rescheduling agreement with the Paris Club Creditors in 2000. The external debt stock as at December 2000 amounted to about US\$28.274 billion, interest arrears of US\$4.4 billion and late interest of over US\$5.1 billion. So one could observe the exacerbating effect not only of principal and interest arrears, but also of late interest which is interest charged on defaulted debt payments (Arikawe: 2003).

In terms of creditor categorization, the external debt stock in 2005 comprised US\$15,412.40 million or 75.26 per cent owed to the Paris Club, US\$2,512.19 million or 12.27 per cent owed to multilateral institutions, US\$1,441.79 million or 7.04 per cent owed to the London Club, US\$649.80 million or 3.17 per cent owed to the Promissory Note holders and US\$461.79 million or 2.26 per cent owed to non-Paris Club Creditors (DMO 2003). The figure below show the trend of total debt services as percentages to economic growth, the trend shows systematic changes since 1970, while GDP growth rates is showing negative trend especially in the 1990s, this was supported by fall in export.

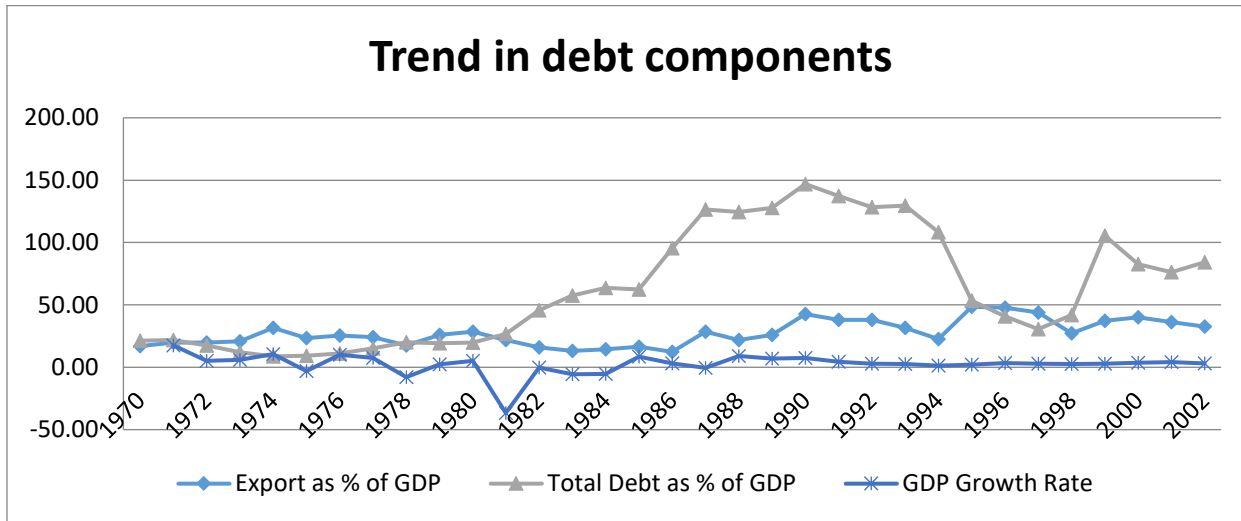


Figure 1:

External borrowing by Nigeria started towards the end of British colonial rule in the country. The last of such borrowing was the 1958 World Bank loan which was used to finance the Nigerian Railways Extension to Borum. This loan was US\$250 million and because not much borrowing took place in that decade, public charges were relatively small, averaging N3.2 million per annum and representing 0.2 percent of GDP (Obadan:2002).

In the 1960s when shortage of foreign exchange became one of the bottlenecks to national economic development, external borrowing became imperative for the country. During this era, Nigeria borrowed sparingly and cautiously too. The reasons are varied. Immediately Nigeria attained independence in 1960, some laws guarding external borrowings were enacted. The Promissory Notes Ordinance and the External Loans Act were enacted respectively in 1960 and 1962. A backing fund for loan redemption was established under the Promissory Notes Ordinance while the External Loans Act required that external loans be used for development Programmes and for lending to regional governments. The 1962 Act was amended in 1965 to broaden the end use of external loans. During this period, debt servicing was never a problem, hovering around 2% of exports. This cautious attitude prevailed throughout the 1960s and most of the 1970s (Umoren: 2001) However, these legal frameworks failed to deter successive governments, whether military or civilian from abusing the external borrowing process. The country's external debt was N82.4 million, N435.2 million and N488.8 million as at 1960, 1965 and 1970 respectively. During these years, the values of exports were N337.4 million, N536.5 million and N885.4 million respectively. The external debt figures increased slightly to N349.9 million in 1975 when late General Murtala Mohammed took over the mantle of leadership (Fasipe: 1989) up to this period, 1975-1976, loans were taken in relatively small amounts and were largely to supplement domestic resources for the provision of 1988 and 1970 and 2001). Thus, as stated earlier, in 1970, Nigeria's external debt stock was less than one billion dollars as shown in tables 2 and 3. By the second half of the 1980s, the debt profile had deteriorated seriously due to indiscriminate acquisition of short-term loans and trade arrears with little regard to the efficient management of the ensuing debt and its servicing. That resulted in

mounting arrears and unmanageable growth of the debt stock relative to avoidable resources stock, which was about US\$9 billion in 1980, grew to nearly US\$19 billion by 1985. Correspondingly, the debt stock as a percentage of total export earnings and GNP rose to uncomfortable levels of 151% and 24% respectively. In that year, the debt service payment due was a little above US\$4 billion, which was about 33% of the total export earnings (Okonjo-Iweala: 2001). However, the actual debt service payment for the year was about US\$1.5 billion, in the early 1990s, total debt stock to export ratio hovered around 250 – 300%. As figures (from the World Bank's Global Development Finance, 2002) shows between 1998-2000 the country's key indebtedness ratios averaged as follows:

- (i) Total debt stock to export of goods and services - 203%
- (ii) Present value of debt service to export of goods and services -112%
- (iii) Total debt stock to gross national income - 105%
- (iv) Present value of debt service to gross national income - 84%
- (v) Total debt service paid to exports of goods and services - 6%

The key ratios of Nigeria's unbearable debt burden until the Paris Club exit deal of 2005 place the country among the severely indebted low-income countries as categorized by the World Bank, although Nigeria is not so classified. These are the countries for which the present value of debt service to GNI exceeds 220%, the debt stock as percentage of total export and the GNP was 149% and 83% respectively (Arikawe:2003). The story of how Nigeria got into the debt trap, part of which has been told earlier, if well appreciated by the policy elites can guide the country's excessive dependence on external financing for development in the future. The bulk of

Nigeria's debt was incurred at non-concessional terms during the late 1970s and the early 1980s, during a period of significantly low interest rate regime when the London Inter-Bank Offered Rate (LIBOR) hovered between 3 and 4 percent. The debt grew rapidly through the eighties for two main reasons. The first was that LIBOR rose steeply during the period peaking at 13 percent in 1989. As a result, the pre-1984 debt of most developing countries, Nigeria inclusive, quadrupled by 1990. The second was the accumulation of debt service arrears due to worsening inability to meet maturing obligations as oil prices collapsed. The situation was compounded by poor economic policies, bad management and unfavourable loan terms, making it extremely difficult to service the mounting external debt obligations, particularly those due to the Paris Club. As a result, despite three rescheduling arrangements in 1986, 1989 and 1991, arrears continued to mount, and further aggravated the debt problem.

Since the 1977/1978 financial year when Nigeria, for the first time borrowed in larger chunks and shorter maturities from the International Capital Market (ICM) at higher and variable interest rates, many more such loans from the ICM were raised, especially as funds from bilateral and multilateral institutions became increasingly inadequate for the needs of the ruling elites. Consequently, ICM loan rose rapidly from N1.0 billion in 1970 to N5.5 billion in 1982 and to N40.5 billion in 1987, when it constituted 40.2 percent of total external debt (Osemwota:1994). As Obadan (2002) noted, the singular act of borrowing from the ICM changed the character and structure of Nigeria's external debt. The debt profile showed a significant shift from the mainly traditional concessional bilateral and multilateral sources to market sources characterized by short and medium-term loans, shorter repayment and grace periods, and high and variable interests. In the same period, state governments joined the bandwagon of external borrowings, without recourse to the laws guarding external

borrowings. As table 2 shows, the loans kept growing at a rate higher than the value of Nigeria's exports. There were no new loans between 1984 and 1985. Ibrahim Babangida resumed borrowing. But this time only from the World Bank as the Banks had since 1982 stopped lending to Nigeria. In 1986, the World Bank made a \$452 million trade policy and export development loan commitments. The Babangida government did not stop at this World Bank loan; nor could it, for as far back as 1983, Nigeria was estimated to need \$11 billion external funding and that need deepened with dwindling export earnings. In 1988, the World Bank announced it was making available to Nigeria \$2.95 billion over 1988-90; this would include two structural adjustment loans to support trade and industry commercial banks were also to provide \$320 million and Japan \$200 million (Umoren;2001). When General Ibrahim Babangida took over power from General Mohamadu Buhari in a palace coup in August 1985, the Group of Seven (G-7) countries refused to grant Nigeria trade credit facilities for export. Also, Nigeria's short and medium-term loans became matured during the period. By 1986 and 1987, Nigeria's external debt had risen to N42,2229.5 million (\$18,631.3 million) and N86,550.8 (\$26,200.00) respectively.

In 1998, the external debt stood at N146, 410.00 million (\$29,282.00 million). In 1988, the external debt stood at N149, 410.00 million (\$29,282.00 million). In 1989, it was N240,329.6 million (\$31,424.00 million). The figure stood at N298, 614.3 million (\$33,179.0 million) in 1990. At the end of December 1991, external debt stood at N325, 496.4 million (\$33,364.5 million) and in 1992, it stood at \$27,564.8 million) and in 1992). In 1998, the debt stock stood at N633, 144.4 million (CBN: 1993). In 1994 and 1995, the debt stock stood at N648, 813.0 million (\$29,429 million) and \$32,585 respectively (CBN; 1995). By December 31, 1996, Nigeria's external debt stock amounted to \$26,060 billion. That year, General Sani Abacha regime claimed to have serviced the nation's external debt at \$2 billion. (Offiong and Oriakhi, 2002). In 1997, 1998, 2000 and 2001, the stock of Nigeria's external debt stood at US\$27,087.8 million, US\$28,773.3 million, US\$28,273.7 million and \$28,347.0 million dollars respectively (Obadan; 2004). In 2003 and 2004, the debt stock stood at US\$32.9 billion and \$35.9 billion respectively (CBN; 2004). See table 4, which shows Nigeria's outstanding debt by creditor, 2001-2005. By December 31, 2005, Nigeria's external debt as stated earlier stood at US\$20,477.97 million as against US\$35,944.66 million in December 2004, indicating a decrease of US\$15,466.69 as a result of the implementation of the first and second phases of the Paris Club debt by 33 percent after regularization of arrears.

Nigeria's Debt Relief and its Implications

Obviously, the burden of amortization and interest payments drains the nation's resources and reduces the possible expenditure of resources on productive ventures. The setting aside of a disproportionately high percentage of export earnings to meet debt service obligations means increasing inability of the country to pay for imports of goods and services that are vital for economic growth. Debt Service payment, which is the increasing net transfer of resources from Nigeria increases the government budget deficit financed mainly by the Central Bank, it frustrates the achievement of other macroeconomic objectives including price, exchange rate, and interest rate stability as well as balance of payments viability. The

implication of this, according to Obadan (2004), the need to reduce the debt service burden substantially in order to release foreign exchange to fund economic recovery programmes as well as make the continued contracting of burdensome new loans unnecessary.

In its efforts to free the economy from this huge debt service burden and free up resources for development in the country, the President Olusegun Obasanjo government (1999-till date) attached priority to obtaining rapid and substantial external debt reduction from the nation's main creditors. The major planks of the strategy include regularization of relations with the international financial community to pave the way for constructive engagement with members of the Paris Club; negotiation of favourable terms for debt rescheduling and restructuring under "traditional" debt relief mechanisms in the short run; and building on that in the medium term, to secure deeper and more substantive debt reduction. (Arikawe, 2004).

To actualize its debts strategy, the Obasanjo administration embarked upon bold macroeconomic stabilization and structural reform policies, supported by a stand-by arrangement that was approved by the IMF on August 4, 2000. The good track circumstances, paved the way for negotiations with the Paris Club creditors on the restructuring of the Country's debts. (DMO: 2006) The Nigerian negotiating team was able to make a convincing case for debt relief to the major creditor governments, culminating in a formal announcement by the Paris Club on 29 June 2005. The total relief package amounted to an US\$18 billion debt write-off, with Nigeria expected to pay off the balance of approximately US\$12 billion to the creditors over a period of six months in order to completely exit from all Paris Club obligations (Muhtar, 2005) on Nigeria's gains from the debt relief, Mansur Muhtar, the Director General of the Debt Management Office said that the Nigerian Government will no longer need to spend US\$1 billion a year on average in servicing its Paris Club debts. Muhtar declared further: "To ensure that debt relief savings are judiciously utilized, a virtual poverty fund – oversight of Public Expenditure in NEEDS (OPEN) –has been set up to monitor and track spending of the debt relief savings. The 2006 budget has earmarked these savings for spending in priority areas, such as health, education, water, agriculture, power and works. In addition to the direct benefits above, the removal of the debt overhang will also help to restore investors' confidence in Nigeria, attract increased foreign direct investment and facilitate the smooth conduct of trade with other countries by improving access to the facilities of export credit guarantee agencies" (Muhtar, 2005). Nigeria, in 2006 eventually sealed the Paris Club deal by paying a total of US\$12.124 billion to get a write-off of US\$18 billion loans from the Paris Club. Though, the civil society and some critical Nigerians seriously opposed the decision of the Obasanjo to pay the amount of US\$12.124 billion at a go to the Paris Club, at a time when serving external debt is having a heavy toll on the national economy. Indeed, civil society groups like the African Network for Environment and Economic Justice (ANEJ) and other human rights organizations criticized the Paris Club debt deal and rather asked for unconditional cancellation of Nigeria's external debt on grounds that the debt is odious and that the pains of debt servicing fall on the poor people, who are over 70 per cent of the population. Yet, the Obasanjo government ahead a release a total of US\$126 billion to the Paris Club and it is presently negotiating with the London Club for a similar debt deal. Nigeria's debt to the London Club stood at a little over US\$2 billion as at December 2005. According to The Guardian newspaper reports, President Olusegun Obasanjo had on May 24, 2006 informed

the senate of his government's readiness to pay-off Nigeria's last batch of outstanding debts owed the London Club amounting to US\$2.15 billion (N279.5 billion).

The President said he is following up its recent action in paying-off the country's debt to the Paris Club of creditors, and that the government will adopt a different approach in tackling the London Club creditors that would benefit the country (The Guardian, August 28, 2006). Yet, Nigerian civil society organizations are completely opposed to the government's decision to strike a debt relief deal with the London Club. Critics are worried that the country, still bleeding from the Paris Club debt repayments needs to benefit from its improved foreign exchange earned from the surge in oil price in the last four years or so.

The socio-economic implications of the US\$12.124 billion Paris Club debt relief leaving the economy are self-evident. The social cost as usual is being transferred to the poor citizens. It is important to point out that since Nigeria started swimming in the debt crisis, the national economy has been in complete ruins. The pains and burden over the years, are transferred to members of the underclass, especially, "the poor of the poor", women and other vulnerable members of the Nigerian society. Today, over 70 percent of Nigerians live below the poverty line. The country in 2004 UNDP HDI report was ranked 151 out of 177 countries in terms of socio-economic development while between 105 and 159 children die out of every 1000 born (Human Development Report, 2004). Nigerians labour daily under crushing neo-liberal policies of IMF and World Bank which preach liberalization, deregulation, cuts in social welfare, and withdrawal of government subsidies to education, health, agriculture and privatization of national institutions. The IMF and World Bank imposed neo-liberal agenda, rather than alleviate poverty as the government claims to be doing, impose poverty on the majority of the Nigerian people. Thousands of the citizens are daily losing their jobs to government's "down-sizing" or "right-sizing" policies of job cuts. The majority poor Nigerians are bearing the brunt of Nigeria are unguarded, if not irresponsible borrowings of the past years and the greed of the country's creditors.

3 Research Methodologies

The focus of the research is to investigate effect of debt relief on economic growth with the particular reference to Nigeria using vector error correction (VEC) methodology. The research is different from previous study considering time periods and methodological framework.

Vector autoregressive model (VEC) originates from reduced form VAR model. The unrestricted VAR stated each variable is a linear function of its own past values and past values of all other variables. A reduced form VAR of order p in levels of the variables can be expressed as follows:

$$y_t = \Omega + \Phi_1 y_{t-1} + \Phi_2 y_{t-2} \dots \dots \Phi_p y_{t-p} + B\mu_t \tag{3.1}$$

Where y_t is an $(n \times 1)$ vector of endogenous variables such that $y_t = (y_{1t}, y_{2t}, \dots, y_{nt})$; Ω is the vector constant; Φ_i is an $(n \times n)$ matrix of coefficients of lagged endogenous variables ($\forall i = 1, 2, 3, \dots, p$); B is an $(n \times n)$ matrix whose non-zero off-diagonal elements allow for direct effects of some shocks on more than one endogenous variable in the system; and μ_t are uncorrelated or orthogonal white-noise structural disturbances i.e. the covariance matrix of μ_t is an identity matrix ($\mu_t, \mu_t' = 1$). Equation (3.1) can be rewritten in compact form as:

$$y_t = \Omega + \Phi(L) y_{t-i} + B\mu_t \tag{3.2}$$

Where $\Phi(L)$ is an $(n \times n)$ finite order matrix polynomial in the lag operator L . It should be noted that there exist a two method of identification in VAR framework, one among the method is to use variance-covariance matrix of the VAR framework by applying triangular process this can be done by applying a Cholesky decomposition to the variance covariance matrix of the reduced form residuals μ_t Aliyu (2009).

3.1 Data sources and description

The research utilizes annual data for the periods of 1970 to 2015. The data was extracted from the Central Bank of Nigeria (CBN) Statistical Bulletin and National Berue Statistics (NBS) various issues. The variable includes real economic growth, total debt services, external debt, domestic debt, and dummy variable to capture post debt relief and after debt relief in Nigeria.

3.2 The Econometric Model Building

The research will firstly start by diagnostic checking the time series properties of the data generating processes using the Augmented Dickey Fuller (ADF) and Phillips and Perron (PP) tests to identify whether the mean and variance of data are constant (stationary) or fluctuates over periods of time, this will provide the basis of establishing long run properties of the variables used in the model (cointegration) in order to avoid the problem of spurious regression. A principal feature of cointegration variables is that their time path are influenced by the extent of any deviation from long run equilibrium, after all if the system is to return to the long run equilibrium the movement of at least some of the variables must respond to the magnitude of the disequilibrium (Enders, 2012). In short two or more variables are said to be cointegrated if they exhibit co-movement in the long run. The test will start by assuming that Y_t follows a p th order autoregressive process.

3.2.1 Vector Autoregressive Model

The equation 3.1 in VAR model can be re-written in VEC approach as;

$$\Delta y_t = \lambda_1 + \sum P^{-1} \Gamma_i y_{t-1} + \prod y_{t-p} + \varepsilon_t \dots \dots \dots 3.2$$

Δ is first difference lag operator, y_t denotes $(n \times 1)$ matrix of the random variables included in the model having stationarity properties of $I(1)$. While λ_1 is the vector constant coefficient and ε_t is the vector of white noise process and contains information regarding the short-run relationships among the variables. The matrix \prod denotes the long-run information contained in the data. It is the rank of $\prod = \psi\beta$, β the matrix of cointegrating vectors; the elements of ψ are known as the adjustment parameters in the vector error correction model. The rank implies that variables are cointegrated using the maximum eigenvalues and trace statistics test which will be adopted in the presence research.

3.3 Model Specification

$$RGDP = \beta_0 + \beta_1 TD + \beta_2 TDS + \beta_3 ED + \beta_4 DD + Dummy + \mu_t \dots \dots \dots 3.7$$

The expected sign of the coefficients are: β 's and dummy $\neq 0$

4 Findings

4.1 Unit Root Test

The result for unit test was firstly tested using ADF and PP test both in level and first differences with the constant and trend. The variables become stationary after taking first differences, except for the domestic debt which is taken in a log form. Thus we proceed to test cointegration since variables are integrated of the same order I (1). Similarly, the AIC is utilized in the selection of the lag length and ordering of the variables, respectively.

4.2 Johansen Test of Co Integration

The next step is to examine the possibility of long-run relationship among these variables. We are to excess how external debt components reacts in the long run in the model within the Nigerian context. The results from the maximum eigenvalue test indicate two cointegrated equations whereas trace test suggest the existence of two cointegrating equations at the 5 per cent significance level among the variables. The results of Johansen test are depicted in figure 1below:

TABLE 1: JOHANSEN TEST OF CO INTEGRATION

Hypothesised No. of CE(s)	Trace Statistic	0.05 critical value	Max-Eigen Statistics	0.05 Critical value
None*	141.398	95.756	56.956	40.077
At most 1*	84.441	69.818	44.369	35.876
At most 2	40.072	47.856	24.343	27.584

Source: Eviews version 8, user work

4.3 Long Run Result

As the speed of adjustment coefficients provide additional base for inferring short run dynamic among these variables. If we select $r = 1$ and normalize the cointegrating vector with respect to economic growth, then the long run equilibrium relationship can be shown as:

From the vector equation, we drive the long run equations of economic growth and other independent variables. The normalized two equations and value is vector cointegration is presented as:

$$RGDP = -0.287TD - 0.001TDS^* + 34.85 LDD^* + 0.383ED - 16.99 Dummy^* \dots\dots\dots 4.1$$

$$RGDP = - 3.181TDS + 44.42 LDD^* - 0.062ED + 68.04 Dummy^* \dots\dots\dots 4.2$$

Although equation (4.2) has important implications that cannot be discarded, we restricted the analysis on equation (4.1) because it reflects most of the theoretical expectation. The co integrating parameters in the above equation show that the explanatory

variables are significant impact economic growth except for external debt, and total debt. Equally, analysis of the above empirical model indicates linear relation consisting of both positive and negative relationship between economic growth and its exogenous variables. Economically, total debt and debt serving constitutes leakage to the proper functioning of an economy and also constitute impediments to growth when allowed to exist in a given economy. Total debt constitutes a drastic fall of economic growth by 28% while total debt services by 1 per cents indicating a crowding out effect of privates investment associated with the rises of interest rates. Specifically from the study, a percentage growth in domestic debt increases growth of Nigerian economy by 34 per cent is statistically significant. In general external debt reveals a positive relation with economic growth, it was further identified using dummy variable as a proxied by debt relief a negative relationship was identified as there is evidence of 17% decrease of economic growth, this implies that debt relief in Nigeria was no transport into developmental project that boost growth reduces poverty, and enhance societal welfares.

4.5 Short-Run Analysis: A Vector Error-Correction Model (VECM)

In time series analysis a variables exhibit long run relationship is expected to have an error-correction component, showing how aquarium will converge towards short run adjustments. Therefore, we aimed to identify the effects of the estimated long-run equilibrium on the short-run dynamics. This implies whether the parameter of the error correction term is correctly sing and is significantly different from zero, (vector of exchange rates). One lags length is used as appropriately suggest by lag selection criteria, and short run dynamic of exchange rates and its determinants is examine using vector error correction model. The VEC is presented as follow:

$$RGDP = 191.21 + 0.15RGDP (-1) - 0.015TD (-1) + 6.941TDS (-1) - 1.35TDS (-2) ** - 84.12LDD (-1)* - 0.075ED (-1)* - 99.58Dummy** - 0.157ECM*4.1$$
$$R^2 = 0.33 \text{ Adj} = 0.010 \text{ AIC} = 122.00$$

The results from table 1.5 show error correction model is correctly sign (negative) and significance. The ECM is significance and highly significance chosen level of significance. This implies the coefficient is -0.16 suggesting about 16% disequilibrium relatively is corrected in the current year under the period of investigation. Therefore, when economic growth when above or below equilibrium, it adjusts approximately by 16% within first year to ensure equilibrium is restored. All variable are negatively related to the economic growth except for total debt service in the first lag. The goodness of fit is 33% while, the adjusted R² is 10%.

5 Conclusions and Recommendation

The paper examined the effect of debt relief and its implication on Nigerian economy using time series analysis. The results from both long and short run model reveal that debt component which serves as leakages to the economy has serious implication to the Nigerian economy. However, it is from this point of view that we believe that the debt relief now offers the country a lifetime opportunity to be its own economic and richer master with the liberty to formulate and implement only those economic policies that would enhance accelerated growth and sustainable development. The strived to reposition Nigeria economically and make it take its rightful place in the comity of nations is now clarified and given a positive

definition. The country now stands the chance of achieving macroeconomic stability, as it would no longer be hampered by the burden of debt service. More money would now be available to the federal and state governments to pursue meaningful economic policies. On their part, Nigerians are now exceedingly justified to put their governments to task. They now have more reasons not to tolerate excuses from the various tiers of government over the poor nature of the infrastructures in their various domains.

Based on the findings, it was recommended that:

- Gouvernement should provide atmosphere and diversify itself of all projects which the private sector can handle, this will provide enabling environment for private sector participation investors such as tax holidays, subsidies, guarantees and most importantly improved infrastructure
- Given the negative relationship of economic growth and debt relief, the study strongly recommends that Government must ensure that debt collected are fully diverted to finance capital projects especially in the area of transportations, electricity, and education, this will enhanced and proved private sectors development thereby reducing poverty and inequality. Similarly, it will minimize the negative effect of crowding out of private sector. In this regard, effective debt management policies, strategies and disipline aimed at reducing the corruption, cost and risks associated to public debt has to be developed both at federal and state level to ensure sustainable economic growth.

Bibliography

- THE WORLD BANK REPORT (1998) ACADEMIC STAFF UNION OF UNIVERSITIES (ASUU) (2002), "THE IMPACT OF DEBT ON NIGERIA'S DEVELOPMENT AND POVERTY REDUCTION" IN THE STATE OF THE NATION, ASUU PUBLICATION.
- ARIKAWÉ, AKIN (2003) "NIGERIA'S EXTERNAL DEBT MANAGEMENT: CONTEXT, CHALLENGES AND INITIATIVES", PAPER PREPARED FOR THE EXECUTIVE MANAGEMENT SEMINAR ORGANIZED BY THE FINANCIAL INSTITUTIONS TRAINING CENTRE, KADUNA, FEBRUARY 24 – 28.
- DEBT MANAGEMENT OFFICE (DMO) (2005) ANNUAL REPORT AND STATEMENT OF ACCOUNTS, ABUJA.
- OBADAN, I. MIKE (2004), FOREIGN CAPITAL FLOWS AND EXTERNAL DEBT; PERSPECTIVES ON NIGERIA AND THE LDCs GROUP, LAGOS, BROADWAY PRESS LIMITED.
- UMOREN, ROSE (2001), ECONOMIC REFORMS AND NIGERIA'S POLITICAL CRISIS, IBADAN, SPECTRUM BOOKS LIMITED.
- ENDERS WALTER (2012), APPLIED ECONOMETRICS TIME SERIES, SECOND EDITION.
- FASIPE, AKINTAYO (1989) (ED), NIGERIA'S EXTERNAL DEBT, ILE-IFE, OBAFEMI AWOLowo UNIVERSITY PRESS.
- OKONJO-IWEALA, NGOZI (2001), "MANAGING NIGERIA'S DEBT: INTERNATIONAL AND GOVERNANCE ASPECTS", PAPER PREPARED FOR THE INTERNATIONAL CONFERENCE ON NIGERIA'S DEBT, ABUJA, MAY 17.
- WORLD BANK (2002) GLOBAL DEVELOPMENT FINANCE.
- CBN (1992) ANNUAL REPORT AND STATEMENT OF ACCOUNT, CENTRAL BANK OF NIGERIA.
- CBN (1993) ANNUAL REPORT AND STATEMENT OF ACCOUNT, CENTRAL BANK OF NIGERIA.
- CBN (1995) ANNUAL REPORT AND STATEMENT OF ACCOUNT, CENTRAL BANK OF NIGERIA.
- CBN (2004) ANNUAL REPORT AND STATEMENT OF ACCOUNT, CENTRAL BANK OF NIGERIA.

- O.J. OFFIONG AND FELIX O.U. ORIAKHI (2002), "DEBT BONDAGE AND ITS IMPACT ON THE NIGERIAN ECONOMY (1985-1997)" NNAMDI AKIKWE JOURNAL OF POLITICAL SCIENCE, VOL.2, No.2.
- OSAMWOTA, OSA (1994), SELECTED TOPICS IN PUBLIC FINANCE AND BUDGETING, UNPUBLISHED MIMEOGRAPH, INSTITUTE OF PUBLIC ADMINISTRATION AND EXTENSION SERVICES, UNIVERSITY OF BENIN, BENIN CITY, EDO STATE, NIGERIA.
- ONYEIWU, STEVEN (1991), "DEPENDENT INDUSTRIALIZATION AND THE NIGERIAN DEBT CRISIS", A PAPER PRESENTED AT THE NATIONAL CONFERENCE ON DEBT, FINANCIAL/ECONOMIC STABILITY AND PUBLIC POLICY, ORGANIZED BY THE BENDEL (AMBROSE ALLI UNIVERSITY) EKPOMA.
- ABACHA, SANI (1997) NATIONAL BUDGET BROADCAST OF JANUARY 7, ABUJA, REPRODUCED BY NATIONAL ORIENTATION AGENCY (NOA) PUBLICATIONS.
- OKONJO-IWEALA, NGOZI (2005) "DEBT CANCELLATION IS NECESSARY FOR THE REFORM", DMO PUBLICATION [HTTP://MAJORCA.GLOBAT.COM/DMO.GOV.NG/DEBTRELIEF/NEWSPAPER/INDEX.PHP](http://majorca.globat.com/dmo.gov.ng/debtrelief/newspaper/index.php)
- DEBT MANAGEMENT OFFICE (DMO) (2006) "NIGERIA'S ETERNAL DEBT AND THE ECONOMY", DMO PUBLICATION, [HTTP://MAJORCA.GLOBAT.COM/DMO.GOV.NG/DEBT STRATEGY/EXTDEBTSTRAT.HTM](http://majorca.globat.com/dmo.gov.ng/debtstrategy/extdebtstrat.htm)
- MUHTAR, MANSUR (2005), DMO PUBLICATIONS, THE GUARDIAN NEWSPAPER, LAGOS AUGUST 28, 2006
- OMORUYI, S.E. (1995) "NIGERIA'S DEBT MANAGEMENT CONTROL – PROBLEMS AND PROSPECTS", PAPER PRESENTED AT THE SEMINAR ON MACROECONOMIC POLICY FOR CBN EXECUTIVE STAFF, HELD IN LAGOS, 15-19 NOVEMBER
- DEBT MANAGEMENT OFFICE (DMO) (2002), DMO PUBLICATION, ABUJA.
- ABDELMAWLA & MOHAMMED (2005). THE IMPACT OF EXTERNAL DEBT ON ECONOMIC GROWTH: AN EMPIRICAL ASSESSMENT OF THE SUDAN: 1978 – 2001, EASTERN SOCIAL SCIENCE RESEARCH REVIEW, VOL. 21(2), 53-66.
- ADEPOJU, A.A., SALAU, A.S., & OBAYELU, A.E., (2007). THE EFFECTS OF EXTERNAL DEBT MANAGEMENT ON SUSTAINABLE ECONOMIC GROWTH AND DEVELOPMENT: LESSONS FROM NIGERIA, MPRA. PAPER No. 2147.
- ADESOLA, W.A. (2009). DEBT SERVICING AND ECONOMIC GROWTH IN NIGERIA: AN EMPIRICAL INVESTIGATION, GLOBAL JOURNAL OF SOCIAL SCIENCES, VOL. 8, No. 2, 1-11.
- AUDU, I. (2004). THE IMPACT OF EXTERNAL DEBT ON ECONOMIC GROWTH AND PUBLIC INVESTMENT: THE CASE OF NIGERIA, AFRICAN INSTITUTE FOR ECONOMIC DEVELOPMENT AND PLANNING (IDEP), DAKAR.
- AYADI, F.S AND AYADI, F.O (2008). THE IMPACT OF EXTERNAL DEBT ON ECONOMIC GROWTH: A COMPARATIVE STUDY OF NIGERIA AND SOUTH AFRICA, JOURNAL OF SUSTAINABLE DEVELOPMENT IN AFRICA, VOL. 10, No.3, 234-264.
- CHOONG, C., LAU, E., LIEW, V.K., & PUAH, C. (2010). DOES DEBTS FOSTER ECONOMIC GROWTH?: THE EXPERIENCE OF MALAYSIA, AFRICAN JOURNAL OF BUSINESS MANAGEMENT, VOL. 4(8), 1564-1575.
- CLEMENTS, B., BHATTACHARYA, R., & NGUYEN, T.Q. (2003). EXTERNAL DEBT, PUBLIC INVESTMENT, AND GROWTH IN LOW-INCOME COUNTRIES, IMF WORKING PAPER WP/03/249, INTERNATIONAL MONETARY FUND, WASHINGTON D.C.
- HAMEED, A., ASHRAF, H., & CHAUDHARY, M.A. (2008). EXTERNAL DEBT AND ITS IMPACT ON ECONOMIC AND BUSINESS GROWTH IN PAKISTAN", INTERNATIONAL RESEARCH JOURNAL OF FINANCE AND ECONOMICS, ISSN 1450-2887, ISSUE 20, 132-140.

KARAGOL, E. (2002). THE CAUSALITY ANALYSIS OF EXTERNAL DEBT SERVICE AND GNP: THE CASE OF TURKEY, *CENTRAL BANK REVIEW*, 2(1), 39-64.

MALIK, S., HAYAT, M.K. & HAYAT, M.U (2010). EXTERNAL DEBT AND ECONOMIC GROWTH: EMPIRICAL EVIDENCE FROM PAKISTAN”, *INTERNATIONAL RESEARCH JOURNAL OF FINANCE AND ECONOMICS*, ISSN 1450-2887, ISSUE 44, 88-97.

OGUNMUYIWA, M.S. (2011). DOES EXTERNAL DEBT PROMOTE ECONOMIC GROWTH?, *CURRENT RESEARCH JOURNAL OF ECONOMIC THEORY* 3(1), 29 – 35.

OLOYEDE, B. (2002). *PRINCIPLES OF INTERNATIONAL FINANCE*, FORTHRIGHT EDUCATIONAL PUBLISHERS, LAGOS.

OMOTOYE, O.R., SHARMA, H.P., NGASSAM, C. & ESEONU, M.C. (2006). SUB-SAHARAN AFRICA’S DEBT CRISIS: ANALYSIS AND FORECAST BASED ON NIGERIA, *MANAGERIAL FINANCE*, VOL. 32, NO.7, 606-602.

APPENDIX: STABILITY TABLE A111

VEC Granger Causality/Block Exogeneity Wald Tests
 Date: 02/27/15 Time: 19:06
 Sample: 1970 2015
 Included observations: 41

Dependent variable: D(RGDP)

Excluded	Chi-sq	df	Prob.
D(TD)	8.847907	2	0.0120
D(TDS)	2.934035	2	0.2306
D(ED)	5.576323	2	0.0615
D(LDD)	5.105349	2	0.0779
D(DUMMY)	3.085768	2	0.2138
All	11.43022	10	0.3250

Dependent variable: D(TD)

Excluded	Chi-sq	df	Prob.
D(RGDP)	0.617414	2	0.7344
D(TDS)	0.917939	2	0.6319
D(ED)	0.521293	2	0.7706
D(LDD)	0.137168	2	0.9337
D(DUMMY)	4.789062	2	0.0912
All	11.02890	10	0.3553

Dependent variable: D(TDS)

Excluded	Chi-sq	df	Prob.
D(RGDP)	0.447280	2	0.7996

D(TD)	0.295558	2	0.8626
D(ED)	0.850655	2	0.6536
D(LDD)	0.038071	2	0.9811
D(DUMMY)	1.717761	2	0.4236
All	11.84557	10	0.2955

Dependent variable: D(ED)

Excluded	Chi-sq	df	Prob.
D(RGDP)	0.054039	2	0.9733
D(TD)	0.379450	2	0.8272
D(TDS)	0.517979	2	0.7718
D(LDD)	0.041658	2	0.9794
D(DUMMY)	2.726957	2	0.2558
All	7.477122	10	0.6798

Dependent variable: D(LDD)

Excluded	Chi-sq	df	Prob.
D(RGDP)	1.932811	2	0.3804
D(TD)	16.89316	2	0.0002
D(TDS)	6.808884	2	0.0332
D(ED)	13.11300	2	0.0014
D(DUMMY)	3.453540	2	0.1779
All	31.89394	10	0.0004

Dependent variable: D(DUMMY)

Excluded	Chi-sq	df	Prob.
D(RGDP)	0.909290	2	0.6347
D(TD)	0.093301	2	0.9544
D(TDS)	0.191924	2	0.9085
D(ED)	0.400201	2	0.8186
D(LDD)	0.530521	2	0.7670
All	3.092761	10	0.9792