The Impact of External Debt on Economic Growth and Public Investment: The Case of Nigeria (Abstract)

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Publication: 2004
111 pages

There is widespread recognition in the international community that excessive foreign indebtedness of many developing countries remains a major impediment to their growth and stability. Developing countries have contracted large amount of debts, often at highly concessional interest rates particularly in the 1970s. The hope was that these loans would put them at faster development path through higher investment and faster growth. But as debt service ratios reached very high levels in the 1980s, it became clear that for many of these countries, debt repayment would not only just constrain economic performance in their countries. More importantly, it would be virtually impossible to repay back these loans and leave a favorable balance to support their domestic economy.

Attempts to cope with the debt crisis through the adoption of IMP-supported programmes further compounded the excruciating debt problem. The structural adjustment programmes have invariably resulted in worsening economic conditions. The Highly Indebted Poor Countries (HIPC) Initiative formulated by the IMP/World Bank has also fell far short ofwhat is required to re-establish the condition of sustained economic growth. The fiscal burden of debt servicing is extremely inimical to economic growth in HIPCs, and is in fact an important reason for the failure of structural adjustment programmes to restore economic growth in so many of them.

Various theoretical and empirical literatures support negative relationship between external debt and public investment. Krugman and Proot (1989) showed that there is limit at which debt accumulation stimulate investment and growth. They argued that at high levels of indebtedness, growth and investment would only improve if part of the current debt service obligations of a debtor country were forgiven. Borensztein, 1990; Greene and Villanueva, 1991 and Deshpande, 1997) provides empirical support for debt overhang hypothesis.

In Nigeria, using the social and economic indicators, debt overhang is the major factor that has contributed largely to the poor performance of the Nigeria economy. The debt service burden has militated against the country rapid economic development and worsens the social problems. Service delivery by key institutions designed to mitigate the living condition of vulnerable groups were hampered by decaying infrastructure due to poor funding. By cutting down expenditure on social and economic infrastructure, the government appears to have also constrained private sector investment and growth through lost externalities. This has reduced total investment, since public investment is significant proportion of the total investment in the country.

The objective of the study is to examine the impact of external debt on economic growth and public investment in Nigeria from 1970-2002. For these reasons two hypotheses were tested.

First, the external debt service has a negative impact on economic growth. Secondly, there is a negative correlation between external debt overhang and public investment.

The study is carried out using Ordinary Least Square (OLS), on time series data covering the period 1970-2002, bearing in mind recent developments on cointegration and error correction models (ECMD). Tests of the order of integration of the variables and the ECMD were conducted using Phillips-Perron (PP) tests and the result shows that several of the variable are stationary after differencing once (integrated of order one) except GDP growth rate (GDPGR), interest rate (INT), fiscal balance (FISBAL), foreign direct investment (LFDIGDP) and dummy variable for political stability (GCRI) which are stationary (integrated of order zero) at 5% level of significance. A dummy variable was introduced to accommodate political stability (GCRI) in the model and takes the value of 0 for stability and 1 for instability in the growth model. The higher the political instability in a country, the lower the economic growth will be.

The specification of the models are based on the empirical work of Elbadawi *et at* (1996), and Were (2001) which are largely derived from neoclassical framework. However, our models are augmented with some debt overhang variables to the equations to determine the significance of the direct impact of debt overhang on economic growth and investment. Besides these variables, the models also incorporates policy, fundamental and shock variables since there are so many channels through which indebtedness works against growth. The regression results of the error correction model (ECMD), in the growth equation support our hypotheses by confirming the operation of crowding out and import compression hypotheses in Nigeria. This means that debt servicing pressure in the country has had a significant adverse effect on the growth process. Nigeria frequently diverts resources to take care of pressing debt service obligations instead of being allocated to the development of infrastructures that would improve the well being of the citizenry. However, the coefficient of past debt accumulation (LEDTGDPt-2) relates positively to economic growth, thus contradicting the prescription of the debt overhang hypothesis in Nigeria. This outcome is not expected. These results is consistent with findings from similar studies (e.g Cohen, 1993; Warner, 1992; Degefe, 1992 etc).

In the public investment equation, the estimated coefficient of past debt accumulation ($LEDTGDP_{t-1}$) negatively affect public investment. This outcome is expected and revealed some evidence in support of the debt overhang hypothesis. However, that support is not robust in the model. On the other hand, debt service ratio (LDSGDP) is positively related to investment and statistically significant at 5% level, thus contradicting the prescription of crowding out hypothesis in Nigeria. This result is unexpected. The sign of this variable to investment is an aberration. However, the structure of the economy might be used to explain the aberration. Crude oil dominated the country export; and if a significant proportion of the debt service is linearly related to oil exploration through the joint venture operation, and given the oil export and investment/economic growth is highly correlated, then the outcome is not surprising. The more debt obligations, the oil companies and the Nigerian National Petroleum Corporation (NNPC) settled the more credit worthy the sector becomes, hence the more vibrant the sector and the economy. The results further suggest that GDP growth rate is positively related to public investment through accelerator mechanism and this supports the a priori expectation of economic theory that the rate of growth of GDP should be positively related to investment.

In sum, the paper concludes that encouraging alternative financing through foreign direct investment, portfolio investment, and non-guarantee private debt is the feasible long-run solution to the Nigeria, external debt problems. Nigeria still has a chance of overcoming her external debt problems by cultivating the right policies.

Descriptors: External Debt, Economic growth, Public investment, Nigeria

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