Foreign Aid, Domestic Savings and Investment: Implications for Nigeria

Okore Amah Okore, PhD
Banking & Finance Department
Renaissance University, Ugbawka – Enugu State

Anthony Odinakachukwu Nwadiubu, PhD
Department of Accounting
Kingsley Ozumba Mbadiwe University, Ogboko – Imo State

DOI: 10.56201/jafm.v8.no5.2022.pg45.53

Abstract
The study examined the implications of foreign aid on domestic savings and investments in Nigeria. The scope of the study covered a period from 1987 to 2019. The hypotheses were tested using the E-view statistical software adopting the Ordinary Least Square (OLS) method on the regression models adopted. The signs and significance of the regression coefficients and the probability were relied upon in explaining the nature and influence of the independent variable on the dependent variable as to determine both magnitude and direction of impact. In the analysis we relied on the following statistical tools; Correlation Coefficient (R), Coefficient of Determination (R^2), probability and the student (t) test. The hypotheses were tested at 0.05 (5%) level of significance. Results of the findings revealed that: Foreign aid had positive and significant impact on Gross Domestic Product (GDP), Foreign aid had positive and significant impact on domestic savings and Foreign aid had positive and significant impact on domestic investment in Nigeria within the period under review. The study concluded that, the contribution of foreign aid to growth can be magnified if Nigeria focuses on implementing effective macroeconomic policies. It is therefore recommended that, policies that strengthen the state and its institutions such as institutional development, human capital development, investment targeting, diversification of the Nigerian economy, a stable and trust worthy political environment, monitoring and evaluation on the use of aid funds and other aid-friendly domestic policies should be promoted.

Keywords: *Implications, Foreign Aid, Domestic Savings, Investment, Nigeria*

1. INTRODUCTION

Foreign aid represents an important source of finance in most countries in Sub-Sahara Africa (SSA), including Nigeria, where it can supplement low savings, enhance investment and increase Gross Domestic Product (GDP). In fact, foreign aid is considered to be a major supplement to government expenditure in Nigeria. Foreign aid stimulates economic growth by supplementing domestic sources of finance such as savings, thus increasing the amount of investment and capital stock in the country. Aid also increases; investment in physical and human capital, capacity to import capital goods or technology and it is also associated with technology transfer that increases productivity of capital and promotes endogenous technical change (Njeru, 2003). All these are influenced by external, climatic, political and institutional conditions. Foreign aid can have positive effect on economic growth, through public expenditure if properly channeled to the productive sectors of the economy (Odusanya, Logile & Akanni, 2011).

Scholars like Pedersen (1996) had argued that it is not possible to conclude that the foreign aid has a positive impact on growth. Morrisey (2001) claimed that aid works well conditional on other variables in the growth regression. Mosley (1980), Boone (1996), and Jensen and Paldam (2003) found evidence to suggest that aid has no impact on growth. Many other authors find no evidence that aid affects growth in developing countries. By and large, the relation between aid and economic growth remains inconclusive and is worth being studied further.

Developing countries like Nigeria are indeed characterized by low level of income, high level of unemployment, very low industrial capacity utilization, and high poverty level just to mention a few. In addressing these problems, foreign aid has been suggested as a veritable option for augmenting the meagre domestic resources. While some countries that have benefited from foreign assistance at one time or the other have grown such that they have become aid donors - South Korea, North Korea, China etc., majority of countries in Africa like Nigeria have remained backward. Nigeria has continued to benefit from all sorts of foreign assistance and in fact still collect more than the amount it collected in the early 1980s, 1990s, and even in 2017 till date, yet socio-economic development has remained dismal.

Against this background, a research work of this nature to evaluate the implications of foreign aid on the Nigerian economy is considered inevitable at this time. Therefore, this study investigates the impact of foreign aid on the domestic savings, investment and the economy in general.

2. REVIEW OF RELATED LITERATURE

Conceptual Framework

Concept of Aid

Aid is used to represent financial transactions made or guaranteed by one government to another. Indeed, foreign aid has become a major issue and instrument of foreign policy by advanced economies to strengthen their economic ties with the developing countries. Aid according to Ajayi & Oke (2012) is a form of assistance by a government or financial institution to other needy countries, which could be in cash or kind. The establishment of aid was one of the principles of Breton Wood system in 1914. The system believes that there should be a free capital market which allows for an unrestricted inflow of foreign aid. Based on this thinking, a Marshal Aid Assistance of about $17.5 billion was granted to European countries to resuscitate their ruined economies due to Second World War. Since then, foreign aid has remained a veritable economic phenomenon of the international economic system (Todaro, 1977).

Concept of Foreign Aid

Foreign Aid according to Todaro and Smith (2011) is the international transfer of public funds in the form of loans or grants either directly from one government to another (bilateral assistance) or indirectly through the vehicle of a multilateral assistant agency such as World Bank. Economist have defined Foreign aid, therefore, as any capital flow to a developing country that meets two criteria:

- Its objectives should be noncommercial from the point of view of the donor, and
- It should be characterized by non-concessional terms; that is, the interest rate and repayment period for borrowed capital should be softer (less stringent) than commercial terms.

Foreign aid is very important for the acceleration of economic development. Foreign aid can be used by the recipient country in accordance with its development programmes. Foreign aid can also be in the form of economic assistance like:

i. Investment in the economy of the needy country,
ii. Loan, and
iii. Infrastructural development

Foreign Aid can also come in form of military assistance such as:

i. Supply of military hardware at subsidized rates,
ii. Military agreements, bilateral or multi-lateral, loose or solid or in defense pact,
iii. Supply of military technical assistance such as military presence to a country in conflict or war with another,
iv. Military subversions, coup, assassinations, etc.

The conceptualizations of aid above clearly depict that aid is not the same thing as loan. While aid is more comprehensive and encompassing, loan is embedded in aid. Loan is money or other valuable item that an organization, individual or a country lends out usually with interest. Foreign aid is succinctly divided into three broad categories namely: Bilateral, multilateral and private (Todaro, 2010). Bilateral foreign aid is a financial outflow from one country to another, that is, it involves capital outflow between two countries. It accounts for more than 60% of aid to developing countries. Bilateral aid according to Nwoke can be in four forms: Development loan which is usually repayable within long term duration; Technological assistance involving the technological and managerial know how and transfer technology for substitution. For instance the Nigerian Technical Aid Scheme (Technical Aid Corps) which Nigerians Professionals are sent to needy country. The fourth one is military cooperation between a powerful nation and a relatively weak one. Armament and training of military personnel as well as supply of military hardware at subsidized rates are usually major components of such aid pact.

Empirical Literature Review

Nwosu (2018) examined the effect of foreign aid on economic growth in Nigeria from 1981-2016. Data employed were from the world bank and method of analysis was the two stage least squared (2sls). The results showed a positive and significant, albeit marginal aid-growth relationship. This suggests that although foreign aid is relevant for economic growth in Nigeria, it is not among the economy's major growth drivers. Better macroeconomic policies and strengthening of relevant institutions may help to improve the effect of foreign aid received by the country.

Ukpong (2017), studied foreign aid and African development: Lessons from Nigeria. He was of the view that the interdependence of developing countries necessitates the granting of aid to needy countries. However, analysts have diverse opinions about factors responsible for the underdevelopment of Africa. Many assumed that the underdevelopment and dependency situation of most African countries on foreign aid are due to poor leadership, mismanagement of national resources and elevation of personal aggrandizement and primordial interest over and above national interest. The Neo-Marxist scholars, on the other hand, submitted and insisted that what propelled the development of developed countries are also the same factors that facilitated the underdevelopment of developing countries. These factors were stated to be colonialism, slave trade, and unequal exchange rate. This study adopted dependency theory in analyzing the implication of foreign aid on the economies of the world.

Ishmail and Adegbemi (2012), analyzed the impact of foreign aid on economic growth in Nigeria during the period 1970 to 2010 making use of annual time series data. They found that aid flows had significant impact on economic growth in Nigeria: domestic investment increased in response to aid flows and population growth had no significant effect on aid flows. Aid flows also provided free resources to increase domestic investment, thus confirming the aid-policy-growth hypothesis. Therefore, donor governments should be aware of the political situations in recipient countries, and work with international bodies to ensure as much stability as possible.
Chukwuemeka, Okechukwu and Uchechi (2012), investigated the effect of foreign aid on the development of different sectors of the Nigerian economy. Particular emphasis was laid on the educational sector of Anambra State. Survey research method was adopted. Many factors were found to militate against the effectiveness of foreign aid in achieving development among the factors were corruption, poor policies and institutional framework as well as poor utilization of development fund. Based on the findings, recommendations were made. These include the need for the establishment of a sound institutional framework and infrastructural facilities; also there is the need for a reform of the educational sector of Anambra state as well as all sectors of the Nigerian economy.

Tamer (2012), reviewed the findings of other researchers on the relationship between foreign aid And development. It was found that despite conflicting empirical results on the nature of relationship that exists between aid and growth, foreign aid can achieve some development goals in absence of corruption, with good governance present in the recipient country, with the presence of sound economic policy and institutions. Findings also indicated that aid's impact may be large depending on how donors coordinate themselves. In addition, aid in the form of technical assistance can at times be of larger impact.

Akonor (2008) examined foreign aid impact on Africa using theoretical and descriptive quantitative analyses and revealed that aid is not a panacea for Africa's development woes. He said, foreign aid has so far created a welfare continent mentality and has become the hub around which the spokes of most African economies turn. The study further stated that dependence on foreign aid has compromised the sovereignty of African countries and that it is very unfortunate that aid has taken more than 50% of Sub-Saharan African countries' budgets and 70% of their public investment.

Ahmed and Ahmed (2002) studied the impact of foreign capital inflow on domestic saving in Pakistan by applying three variants of cointegration techniques to time series data for the 1972-2000 periods. The study revealed in every case a valid long run relationship among the variables. The three variants of co integration technique also revealed an inverse relationship between saving rate and foreign capital inflows and short run relationship between these two variables was also found to be negative.

Burnside and Dollar (2000) studied the link between aid, policy and growth for 56 developing countries. The study applied panel data analysis for the period 1970-1973 and 1990-1993 and the study revealed that on the average aid has had little impact on growth, although, a robust finding was that aid has had a more positive impact on growth in good policy environments. Therefore, the debate over the impact of foreign aid is on-going and left open to further study.

3. METHODOLOGY

The *ex-post facto* research design was adopted to determine the cause-effect relationship of foreign aid and the Nigerian economy. The dependent and independent variables were observed over the period, 1987 to 2019. The same data were analyzed and tested using econometric analytical technique to determine the impact of the independent variable - foreign aid proxied by Oversea Development Assistance (ODA), on the dependent variables GDP, Savings and Investment.

The study adopted the model used by Ugwuegbe, Okafor & Akarogbe (2016) and Nwosu (2018) in similar studies with little modification. The original form of the model as used by Ugwuegbe, etal. (2016) and Nwosu (2018) were as follows:

GDP = f (ODA, INF, EXP, IMP, ER, FDI) .... (1)

However, the above model is modified to suit our purpose as follows:

GDP = f (ODA, SAV, INV) .... (2)

All the variables are in natural logs. The advantage of estimating a log model is that asides improving the linearity of the parameters, it helps avoid heteroscedasticity (Ugwuegbe, 2016). The model can thus be expressed linearly as:

$$Log(GDP_t) = \beta_0 + \beta_1 Log(ODA_t) + \beta_2 Log(SAV_t) + \beta_3 Log(INV_t) + \mu t \quad \text{.....................} \quad (3)$$

Where GDP is Gross Domestic Product, ODA is Overseas Development Assistance, SAV is Savings and INV is investment. $\beta_0 \ldots \beta_3$ are coefficients, μ is the error term and t represents time.

4. ANALYSIS OF DATA AND DISCUSSION OF FINDINGS

The hypotheses of the study is stated in null and alternate form and tested in this section as follows:

1. H_o: Foreign aid has no positive and significant impact on Gross Domestic Product (GDP) in Nigeria.
   H_1: Foreign aid has positive and significant impact on Gross Domestic Product (GDP) in Nigeria.
2. H_o: Foreign aid has no positive and significant impact on domestic savings in Nigeria.
   H_1: Foreign aid has positive and significant impact on domestic savings in Nigeria.

3. H_o: Foreign aid has no positive and significant impact on domestic investment in Nigeria.
   H_1: Foreign aid has positive and significant impact on domestic investment in Nigeria.

The regression results as analyzed are shown below:

Dependent Variable: LOG(ODA)
Method: Least Squares
Date: 25/06/22 Time: 11:30
Sample (adjusted): 1987 – 2019
Included observations: 32 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.189529	0.273381	11.66699	0.0000
LOG(GDP)	0.185437	0.071486	0.076053	0.0400
LOG(SAV)	0.695455	0.073636	9.444493	0.0000
LOG(INV)	0.101081	0.025880	3.905737	0.0006

R-squared	0.980614	Mean dependent var	8.617446
Adjusted R-squared	0.978377	S.D. dependent var	1.963636
S.E. of regression	0.288749	Akaike info criterion	0.477045
Sum squared resid	2.167769	Schwarz criterion	0.663871
Log likelihood	-3.155674	Hannan-Quinn criter.	0.536812
F-statistic	438.3865	Durbin-Watson stat	2.891923
Prob(F-statistic)	0.000000		

Source: Researchers E-View Results.

Model Equation: $\text{Log}(ODA_t) = 3.1895 + 0.1854GDP + 0.6955SAV + 0.1011INV + \mu$
(t-value = 0.076053, 9.444493, 3.905737)

Discussion of Findings

The result shows that the log of Gross Development Product (GDP) was not stationary at level but stationary at first difference. More so, the result shows that log of Overseas Development Assistance (ODA) was not stationary at level but stationary at first difference. However, the result revealed that the log of Savings (SAV) was stationary at level. Also, the log of investment (INV) was stationary at level.

The E-View result shows that Overseas Development Assistance represented with Log ODA positively and significantly had an impact on Gross Domestic Product represented by log GDP with a probability value of 0.0400 < 0.05, 0.185437 coefficient and 0.076053 t-Statistics. ODA represented by Log ODA positively and significantly had an impact on Savings represented by Log SAV with a probability value of 0.0000 < 0.05, 0. 695455 coefficient and 9.444493 t-Statistics. ODA represented by Log ODA positively and insignificantly had an impact on Investment represented by Log INV with a probability value of 0.0006 > 0.05, 0.101081 coefficient and 3.905737 t-Statistics.

On the whole, Log GDP, Log SAV and Log INV had statistically positive and significant impact on ODA. The R-squared value of 0.980614, 98.0614% and Adjusted R-square of 0.978377, that is 97.8377% shows that the model was a good fit.

Consequently, since Overseas Development Assistance had positive and significant impact on Gross Domestic product, we therefore reject the null hypothesis (Ho) and accept the alternative hypothesis that Foreign Aid had positive and significant impact on Gross Domestic Product in Nigeria. Similarly, Overseas Development Assistance had positive and significant impact on savings; therefore we reject the null hypothesis (Ho) and accept the alternative hypothesis that Foreign Aid has positive and significant impact on domestic savings. Also, Overseas Development Assistance had positive and significant impact on investment, therefore we reject the null hypothesis (Ho) accept the alternative hypothesis that Foreign Aid has positive and significant impact on domestic investment. Hence, Foreign aid had positive and significant impact on Gross Domestic Product (GDP), domestic savings and domestic investment in Nigeria within the period under review.

5. CONCLUSION AND RECOMMENDATION

The study was set out to examine the implication of domestic savings, investment and GDP of Nigeria. Foreign aid had positive and significant impact on Gross Domestic Product (GDP), domestic savings and domestic investment in Nigeria within the period under review. This is consistent with the findings of Fasanya and Onakoya (2012), Olanrele and Ibrahim (2015), and Reddy and Minoiu (2006), which suggest that foreign aid has a positive and significant impact on the economy. It is therefore recommended that sound policy and stable economic management are very important to gain the best result from foreign aid in Nigeria. of foreign aid inimical to the governance quality of a foreign aid recipient developing economy. It is, therefore, important and indeed imperative for the Nigerian government to deploy economic policies consistent with productive budgetary balance, low rate of inflation, unimpaired and competitive rate of exchange, in addition to managing civil unrests and political unpredictability.

REFERENCES

Ajayi, L.B. & Oke, M.O. (2012). Effect of external debt on economic growth and development of Nigeria. *International Journal of Business and Social Science, 3(12), 297-304*.

Akonor K (2008). Foreign Aid to Africa: A Hollow Hope? International Law and Politics 40: 1071.

Boone, P. (1996). Politics and the Effectiveness of Foreign Aid. *European Economic Review*. *40*(2), 289-329.

Burnside, C. & Dollar, D. (2000). Aid, Policies, and Growth. *American Economic Review*. *90*(4), 847-868.

Chukwuemeka, E. E. O; Okechukwu, E. and Uchechi, B. O. (2012): Foreign Aid to Nigeria and Domestic Obstacles: A Review of Anambra State Education Sector, *Africa's Public Service Delivery & Performance Review, 52-81*

Fasanya, I. O. & Onakoya, A. B. O. (2012), Does Foreign Aid Accelerate Economic Growth? An Empirical Analysis for Nigeria, *International Journal of Economics and Financial Issues. 2(4): 423-431*

Ishmail, F. & Adegbemi, O. (2012). Does Foreign Aid Accelerate Economic Growth? An Empirical Analysis for Nigeria, *International Journal of Economics and Financial Issues, 2(4*): 423-431

Jensen, P.S., Paldam, M. (2003), "Can the New Aid-Growth Models Be Replicated?," Working Paper No. 2003–17, Institute for Economics: Aarhus.

Morrisey, O. (2001). Does Aid Increase Growth in Cameroon. Progress in Development Studies, 1, 37–50.

Mosley, P 1980, "Aid, Savings, and Growth Revisited'' Bulletin of the Oxford university *Institute of Economics and Statistics, (42) 6 79-96.*

Njeru, J. 2003, The Impact of Foreign Aid on Public Expenditure: The Case of Kenya, AFRC Research paper No. 135. *African Economic Research Consortium*, Nairobi, Kenya.

Nwosu, U.C. (2018). Nigeria's economic growth: does foreign aid really matter? (Master's Thesis, University of Sheffield). https:// www.researchgate. net/publication/327765899_Nigeria_ Foreign-Aid. Retrieved on 12th September, 2021

Odusanya, I. A., Logile, A. I., & Akanni, L. O. (2011). Foreign Aid, Public Expenditure And Economic Growth: The Nigerian Case. *Journal of Applied Business Research (JABR), 27*(3), 33-42.

Olanrele, I.A. & Ibrahim, T.M., (2015). Does Developmetal Aid Impact or Impede on Growth: Evidence from Nigeria. *International Journal of Economics and Financial Issues. 5(1), 288-296.*

Reddy, S.G. and Minoiu, C., (2006). Development Aid and Economic Growth: A Positive Long Run Relation. DESA Working Paper. ST/ESA/2006/DWP/29

Tamer, R. (2012). Foreign aid and development: What can Developing Nations Learn. *Journal of Economics and Economic Education Research 13-22*

Todaro MP (1977). *Economics for a Developing World*. Harlow: Essex, Longman.

Todaro M.P. & Smith, C.S. (2011). *Economic Development*, Eleventh Edition, Boston, Pearson Addison Wesley

Ugwuegbe, S. U.; Okafor, I. G. & Akarogbe, C. (2016). Effect of External Borrowing and Foreign Aid on Economic Growth in Nigeria, *International Journal of Academic Research in Business and Social Sciences, 6(4): 155-175*

Ukpong, U. A. (2017). Foreign Aid and African Development: Lessons from Nigeria, *Journal of Political Sciences & Public Affairs, 5(3): 274-276*