FOREIGN RESOURCES AND ECONOMIC GROWTH IN NIGERIA

BY

DAASI L.K GIBSON
&
UDO N. EKPO

Abstract
The study examines the impact of foreign recourse inform of foreign aids, foreign direct investment and exports on economic growth in Nigeria. Data were collected from the CBN statistical bulletin of 2015 and the OLS econometric technique of multiple regression was employed. Results shown that there is a significant relationship between foreign resources and economic growth in Nigeria. It is recommended that Nigeria should seek more favourable terms of trade with developed countries rather than just foreign aid.

Key words: Foreign Resources, Growth, Nigeria.

1.0 INTRODUCTION

1.1 CONCEPTUAL FRAMEWORK

Foreign resources is the various aid through which wants are satisfied or needs are met in the international market. In an attempt to mobilise resources for its development, a country must rely on transfers of foreign resources until its achieves the capability for self sustaining growth.
According to Okowa (1991) "The transmission of technology, ideas and knowledge are other aspects of resource transfer.

1.1.1 TYPES OF FOREIGN RESOURCES

The following are foreign resources throng which countries of people's wants can be met.

i. Foreign aid
ii. Private foreign investment
iii. Private bank lending
iv. Foreign capital.

i. FOREIGN AID: Pure aid is a gift or grant of convertible currency. Foreign aid is t therefore a gift or grant from another country to the recipient country. Foreign aid does not require the recipient country to pay back. It is not a loan but a grant. Sometime, foreign aid is undertaken by the World bank.

There are reasons for aid giving:

- For the promotion of economic development of the recipient country.
- For political reason: Some more developed countries (MDCs) may grant aid to the less developed countries (LDCs) with the aim of taking charges of a particular sector of the economy of the r ecipient country.

ii. PRIVATE FOREIGN INVESTMENT: Nationals of other countries (MDCs) can invest in the recipient country portfolio investment or Foreign Direct Investment (FDI). Countries might purchase securities like shares, bond, equities, this is portfolio investment. But what is most significant for a LDC is FDI, which involves direct participation of the foreigners by opening companies, factories or industries with their technology, also employing staffs which reduces rate of unemployment and also paying tax to the government of the recipient country.

iii. PRIVATE BANK LENDING (FOREIGN): This is the ability of foreign private banks to give loan, advances and over draft to the government of the less developed countries (LDCs)

iv. FOREIGN CAPITAL: there are foreign equipment use for further production of goods in the recipient country. It includes liquid capital (money) received by a national in the recipient country.

Official development assistance (ODA) also known as foreign aid has been employed by developed nations and multinational organisations in enhancing economic growth and development in developing countries indeed, the total foreign assistance to Africa from all donors increased from $51 billion 2012 to $56 billion in 2013. However, in a report by the World Bank (2015) poverty in Sub-Saharan Africa was 42.6 percent in 2012.

The global divergence on the impact of foreign aids birth t two schools of thought in the literature on aid-growth nexus. Once school of thoughts, the public interest theories urges that foreign aid promote economic growth provided that sound macro-economic policy exists in the recipient country (Sachs, 2005) The other school of thought in line with the public choice theory opined that foreign aid has a negative impact on economic growth in light of the pervading structural problems in African economics (Djankov, Montalvo and Rev-nal-Querol. 2008 and Williamson, 2008).

In the specific case of Nigeria, the largest African economy, foreign aid has increased significantly in tandem with the growth of economies. Nigeria gross domestic product increase from $411.7 billion in the year 2011 to $463 billion in 2012 and to $521 billion in the year 2013. Following the same trend, total foreign aid in Nigeria increased from $1.7 billion in the year 2011 to $1.9 billion in 2012 and to $2.5 billion in the year 2013. However, Nigeria still grapples with deficit social and economic infrastructure; epileptic supply of electricity, road and rail network, health sector, manufacturing sector still produce below their capacity utilisation.

A question that emanates from these identified problems is how foreign aid and FDI impacted on economic growth in Nigeria? How has foreign aid and FDI affected different sector of the economy? In attempting to answer the question, some researchers have investigated the impact of foreign aid and FDI on economic growth in Nigeria but the result are mix. Nkoro & Furo (2012) and Fasanya and Onakoya (2012) in their studies established a positive relationship between aid and growth in Nigeria While Stella and Amassoma (2014) Emmanuel (2012), Bakare (2011) established a negative relationship in a different stance, Bashir (2013) found out that official development assistance to Nigeria has no effect on real growth.

These contracting results may have arisen because of difference in variable choices and methodological differences as explained by Rajan and Subramanian (2008) that there is no systematic impact of foreign aid on economic growth even with difference types of aid, the methodologies and time frame in focus. Indeed, more investigation of the nexus, between foreign aid and growth is needed. This paper will deploy multiple regression method. This method stand a better chance of truly explaining the relationship between the variables and provides a good template for predicting a change in a policy variable.

The rest of this study process as follows. Sector two reviews existing empirical literature and captures the theoretical framework. In section three the research methodology is discussed with emphasis on the econometric model and sources of data used. The results and discussions are presented in section four while in section five. the conclusions, policy implications and recommendation are discussed.

1.2 OPERATIONAL OBJECTIVE/HYPOTHESIS

The objective of the study centres on the investigation of foreign recourse and it impact on economic growth in Nigeria. Specifically, the study seeks to examine the role of foreign direct investment and volume of exports of goods and services in the growth of the Nigeria economy.

Ho; Foreign resources such as Foreign Direct Investment and ‘ exports do not impact on economic growth in Nigeria.

Despite the incessant effect by the Nigeria government to participate in the International Market for advantages trade, the Nigeria economic growth had over the years suffered some setbacks. In view of the above the study is necessitated.

2.0 THEORETICAL ISSUES

This section is in two parts; review of existing empirical literature on the impact of foreign aid on economic growth and the theoretical framework.

2.1 THEORETICAL FRAMEWORK

The two gap model built on the work of Dormar (1939). Harrod (1946,1947), Chenery and Strout (1966) is a relevant theory of for that study. Two-gap model is premised on the fact that foreign aid fills the gap that arises when investment is small to stipulate economic growth. This situation is believe to arise because of the level of savings in the economy. Therefore, the inflow of foreign aid will substitute saving which limit investible capital in the economy. In the other hand poverty trap model surmise that economic growth is impacted by poverty traps in the economy which arises from various factors like high population, weak savings, low production capacity, to mention but a few. Therefore one time infusion of foreign aid into the economy can spur the economic and rescue it from poverty traps. While, poverty trap model suggested one time infusion, two-trap model suggest continues inflow of foreign aid (Emmanuel and Ola-David. 2010)

The theory also posits that importing commodity not produced locally can improve the production of investments good. McKinnon (1964), Chenery and Strout (1966). Findlzy (1973) applied the Harold Dormar model to explain the foreign mid-growth nexus through foreign capital used to augment available capital for production where capital output ratio is held constant. The two gap model is explained using national income identity.

$$Y= C+ I+G+X-M$$

Where Y is total output produced in a given year (GDP). C is private consumption; I represent investment, and G is government consumption; X explains export while M denotes imports. S and T are savings and total government tax revenue.

The premises on the analysis is that domestic investment can be financed by domestic saving as well as through inflows of capital. The recourse gaps can therefore be extracted from this computation by rearranging equation (1) as below.

$$I = S = (X-M) + (G-T)$$

Equation (2) shows constrains to financing growth Y: Savings gap (constraint) on the left hand side of the equation and foreign exchange (external finance gap) constraint on the right hand side of the equation.

Representing X-M=F assuming government plans it expenditure, such that it equals its tax revenue, we have:

$$I-S = F \text{ or } I= S + M$$

Equation 3 presents the conclusion that domestic can be financed by domestic savings and/or capital inflows as the case may be international transfers, in the form of aid can augment investment, which ion turn stipulates economic growth by fillings either the saving gap of foreign exchange gap. This study is predicated on the two gap model the methodology of which is presented next.

2.2 EMPIRICAL REVIEW

The foreign aid-growth hypothesis has been subject of intense debate among research globally. Different studies have been conducted in order to understand the impact of foreign aid on economic growth. Some other researchers provide evidences of negative relationships Angus Deaton, the 2015 winner of the Nobel prize in economic sciences as cited by Carter (2015) contents that long-term aid can hinder a country economic growth. The rationale for this assertion is contained in the fact that in other to have the funding to run a country, a government needs to collect taxes from its people. Since the people ultimately hold the purse string they have a certain amount of control over their government with the power to cut them off if leaders do not deliver. Deaton argued that foreign aid can weaken this relationship, leaving a government less accountable to its people, the parliament, and the court.

There are country studies, cross sectional studies, and panel studies on the same subject but different findings. For country studies, Stella and Amassoma (2014) examine the forewing aid growth relationship in Nigeria using Ordinary Least Square and co-integration technique between the periods 1981 to 2012. They report negative and non-significant nexus between foreign aid to Nigeria and gross domestic product. The use of the VAR method by Bakare (2011) also reports the same result.

In other to understand the macroeconomic impact of foreign aid in Nigeria, Osaro and Iyoha (2012) also use the VAR method for the period 1970 to 2009 by including policy variables like budget deficit, current account balance, Real Gross Domestic Product, growth rate and foreign aid in the

model. Their findings was also negative. These results tally with Emmanuel (2012) who employed two stage least square to analyse the relationship between development aid and human development. He concludes that there exist a negative relationship between development aid and human development in Nigeria thus supporting the view of aid ineffectiveness in developing countries.

In a panel study, Ekanayake and Chatrna (2010) analysed the effect for foreign aid on economic growth of 85 developing countries. Asia, Africa Latin and the Caribbean. Results shows that foreign aid tends to have adverse effect on economic growth in Asia, Latin, America and Caribbean while it has a position impact on developing countries in Africa. Margaret (2008) found out that foreign aid disbursed to government with sound reform will likely contribute toward the fight against corruption thereby stipulating economic growth.

Elizabeth (2014) examined the impact of foreign aid in education on economic growth in 38 sub-Saharan countries over the periods 1990 to 2004. Finding revealed that aid in primary education has a positive and significant effect on growth while aid in secondary education has negative effect on economic growth in these countries.

On the other hand Fasanya and Onakoya (2012) using error correction model for the period 1970 to 2010 established a positive and significant relationship between foreign aid and fording aid on economic growth in Nigeria. Similarly, Zeshan (2014) examined the relative effectiveness of foreign aid on economic growth in Pakistan using ordinary regression model and co-integration technique. The result shown that there is a positive long run relationship between foreign aid and economic growth in Pakistan but there exist no relationship in the short-run.

The effectiveness of aids in 34 Sub-Saharan African countries for the period 1990 to 2010 was studies by Douzounet and Yogo (2013) Their results suggested that aid have positive effect on growth when governance is incorporate. aid has a negative impact on growth. In similar vein, Arvind (2015) use an instrument variable approach established a strong positve relationship between aid per capita and economic growth in developing countries but in the short run and long run specifically, an additional per capita aid cause growth rate in recipient country to increase by 8% over four year and 5% over a decade.

The long run influence of foreign aid (ODA) on key macroeconomic in 36 sub-Saharan African countries was of interest to Katarina Niels and Finn (2012) who applied the consecrated VAR model their finding was generally positive same as Yakama (2013) use of panel co-integration estimation technique established a long run relationship between aid and economic growth in West Africa. Specifically, there is a significant and positive effect on investment or real gross domestic product in 27 countries out of the 36 Sub-Saharan Africa countries sampled in the study. In seven of the remaining countries, the effect of aid is positive but insignificant while there is significantly negative effect on only two countries Comoros and Ghana.

Ramesh, Norman and David (2010) assess the effectiveness of aid at the micro and macro level in selected developing countries using an augmented Fisher Easterly, model. The result supports the reoccurring view of a positive relationship between aid and growth provides tje macroeconomic policy environment is stable which corroborate the findings of Easterly (2003) who established a positive nexus between aid and economic growth in economy with consistent macroeconomic policy and political stability.

Neutral impact was reported by Bashir (2013) who analysed the influence of ODA and foreign direct investment on real growth in Nigeria using error correction model for the periods 1980 to 2011. Similar result was reported among the low-income countries by Ayadi, and Avadi (2008) who use the Arellano-Bond dynamic panel estimation to analysed the impact of Aid on economic growth in 34 low-income Sub-Saharan Africa countries over the period of 15 years (1990 to 2004).

Distorted results may arise because such studies fail to account for policy space and political stability in the country of study. Also, aid may not be geared towards growth at least, in the short run thus necessitating a robust study of the effect of aid. Also, using static model to estimate the relationship may distort the findings of the study especially when the economy is vulnerable to external shock. These possible failings, a robust estimation technique may be needed. Before

discussing the estimation methodology, it is appropriate to present the theoretical underpinning of the research. This is presented in the next section.

3.0 METHODOLOGY OF STUDY

3.1 DATA SOURCES AND DESCRIPTION

Secondary data for a period of 16 years, covering 2000-2015 were obtained from the Central Bank of Nigeria statistical bulletin, 2015.

3.2 MODEL SPECIFICATION AND DESCRIPTION

A quantitative model for the study was built to show the relationship between the dependent variables, GDP and the independent variables, Exports and Foreign Direct Investment:

The model is specified in the functional form as, GDP = f(EXP,FDI). By assuming a linear relationship,

$GDP + a_o + a_1EXP + a_2FDI + U$

Where GDP = Gross Domestic Product

EXP = Volume of Exports of goods and services

FDI = Foreign Direct Investment

a_o, a_1, a_2 = Parameter

U = Error term.

3.3 ESTIMATION TECHNIQUES

This study employs the Ordinary Least Square techniques (OLS) of multiple regression. This review the various tests of significance as could be seen in the estimated results, such as the R^{2-} test, the T-test, the F-test and the DW-test.

R^2-test: This test the goodness of fit to see whether the regression line is well fitted and to test the explanatory power of the regression line.

T-test: This test the individual parameters relationship with the dependent variable and to see the reliability and validity of he such relationship.

F-test: This test the overall significant of the regression model as it looks at the individual effects as well as the combined effects of the explanatory variables on the regression.

DW-test: This is a test to see the regression is associated with any special problem like autocorrelation, serial correlation, multicolinearity and heterosectasticity.

4.0 EMPIRICAL RESULT

4.1 DATA AND DESCRIPTIVE STATISTICS

The data for analysis is shown in appendix A. The summary of the statistical used in the study is presented in table 4.1.

4.1: OLS RESULTS FOR GDP MODEL MODEL

Variable	Coefficient	Standard error	T-test	Prob
C	-3576.850	9089.800	-0.393501	0.7003
EXP	8.855143	1.808140	4.897378	0.0003
FDI	-49.38485	21.93263	-2.251661	0.0423
	$R^{2\,=}$ 0.748079 Dw = 0.85996		F* = 19.301 N = 16 Prob (f) = 0.000124	

4.2 HYPOTHESIS TESTING/INTERPRETATION

Regression Equation

GDP = -3576.850 + 8.855143 EXP -49.38485 FDI the estimated model shows that export is positively related and significant with GDP. A unit increase in export will increase GDP by 8.855143 unit. Foreign direct investment is negatively related but us significant with GDP as can be seen in the t-values and probability value.

Without any change in the value of goods and service exported and in Foreign Direct Investment, the GDP in Nigeria is 3576.850 units.

The R^2 -value is 0.748079 which is 75%. It shows that volume of expiorts and foreign direct investment can explain changes in GDP by 75%. The remaining 25% can be explained by stochastic variables, not included in the model.
The overall regression model is significant as shown in the F-ratio since t he Fcal > Ftab. This results show that foreign resources such as exports of goods and services, foreign direct investments impact positively to a large extent on the growth of the Nigerian economy.

4.3 DISCUSSION OF FINDINGS

The estimated model, equation (7) shows that foreign exports aid is positively related to RGDP per capita with a percentage increase in foreign aid leading to increase in GDP. The relationship is also statistically significant in shaping the real domestic product per capita by foreign direct investment.

This result aligns with the conclusion of the two gap model built on the works of Dormar (1939). Harrod (1946,1947), and Chanery and Strout (1966) upon which this study is predicted, Chanery and Strout (1966) in the two-gap ,model posit that growth in the developing countries have been limited by levels of foreign exchange earnings and domestic savings. Their contention is that both foreign aid and foreign direct investment are veritable avenues for breaking the poverty circle and solving the two gap simultaneously.

Furthermore, this research is in congruence with the finding of Ekanayake and Chatrna (2010) which found positive association between foreign aid and economic growth for Africa region. This was not considered surprising given that African is the largest recipient of foreign aid than any other region.

The finding is also not in agreement with the public choice theory of Bauer (2000). Learning from the exposition of the theory recipient countries can improve on the effectiveness of aids by strengthening the governance institutions against corruption and graft. The gains from foreign assistance can be further improved where the terms of donation agreements are structured to serve the combined economic interest of both the donor counties and recipient countries.

5.0 POLICY IMPLICATION AND RECOMMENDATIONS

The study contributes to the discussion on aid-growth in Nigeria. This research substantiate the conclusion of Easterly (2001) on the inapplicability of the two-gap theory to Nigeria. In effect foreign aid filled some of the savings and/or external finance gap in propelling the Nigeria economy towards the achievement of targeted growth tates. This findings is quite instructive in that it sheds light on what policy makers should focus on drivers such as export promotion, import prohibition and capital formation in the country.

The suggested emphasis should be in the areas of technology-enhancing assistance if greater real growth is to be pursued. Growth promoting foreign aid, particularly those that seek to enhance gross capital formation and up-seeking human resources should be emphasized. In order to further improve utilisation effectiveness of foreign aids, the study recommended that aid donor should attach conditionality's to further compel recipient monetary and fiscal authorities policies fight corruption. Domestic savings will be further improved and consequently the resource gap narrowed where donors provide aids with conditionality's that compel recipient governments to cut down on unproductive private consumptions and white elephant in investments.

REFERENCES

Amassoma, D & Stella, M (2014) The linkage between foreign and economic growth in Nigeria. *international journal of economic practices and theories,* 4(6), 2014. 1007-1017.

Bashir, O.K (2013) Foreign assistance and economic growth in Nigeria: The two-gap model framework, *American international journal of contemporary Research, 3(10), 153-160.*

Carter J. (October 19, 2015). How foreign aid can keep poor countries in poverty. Retrieved from http;//blog.acton.org/archieves/82758-how-foreign-aid-keep-poor-countries-in-poverty.html.

Dickey D.A and Fuller, W.A. (1979) Distribution of the estimators for autoregressive time series with a unit, *Journal of the American Statistical Association 74.427-431.*

Easterly W. (2003). Can foreign aid buy growth? *The Journal of Economic Perspective. 17(3). 23-48.*

Ekanayaka E.M & Chatrna D. (2010) T he effect of foreign aid on economic growth in developing countries. *Journals of International Business and Cultural Studies.* 3(*2) 140-155.*

Elizabeth A. (2014). Does foreign aid in education promote economic growth? Evidence from Sub-Saharan Africa. *Journal of African development 16(1). 37-59*

Engle R.F., Granger, C.W.J. (1987). Co-integration and error correction representation estimation and testing. *Econometrical 55,215-251.*

Gujarati D.N & Porter, D.C (2009) *Basic econometric.* New York, NY. Tata McGraw-Hill education.

Nkoro, E & Furo, A.O (2012) Foreign capital inflow and economic growth in Nigeria. An empirical approach: *Academic Journal of interdisciplinary Studies. 1(2)-55-71*

Ramesh, D. Norman. G and David, G (2010) New evidence on the impact of foreign aid on economic growth. Centre for Research in Economic Development and International Trade, University of Nottingham.

Williamson, C.R. (2008). Foreign aid and human development. The impact of foreign aid to the health sector. Southern Economic journa;. 75(1). 188-207.

Yakana M.J. (2013) Testing the foreign aid-led growth hypothesis in West Africa. *Department of Management Birkbeck University of London Working Paper BWPMA 1303.1-34 Retrieved.http;//www.bbk.ac.uk/management/docs/workingpapers/wp3.pdf.*

APPENDIX A

YEARS	GDP	EXPORT	FDI
2000	6,713.57	1,945.7	116.0
2001	6,895.20	1,868.0	132.4
2002	7,795.76	1,744.2	225.2
2003	9,913.52	3,087.9	258.4
2004	11,411.07	4,602.8	248.2
2005	14,610.88	7,246.5	654.2
2006	18,564.59	7,324.7	624.5
2007	20,657.32	8,309.8	759.4
2008	24,296.33	10,387.7	971.5
2009	24,794.24	8,606.3	1273.8
2010	54,612.26	12,011.5	905.7

2011	62,980.40	15,236.7	1360.3
2012	71,713.94	15,139.3	1113.5
2013	80,092.56	15,262.0	875.1
2014	89,043.62	12,960.5	738.2
2015	94,144.96	8,845.2	602.1

Source: CBN Bulletin various issues

APPENDIX B

Dependent Variable: GDP
Method: Least Squares
Date: 03/23/17 Time: 01:35
Sample: 2000 2015
Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3576.850	9089.800	-0.393501	0.7003
EXPORT	8.855148	1.808140	4.897378	0.0003
FDI	-49.38485	21.93263	-2.251661	0.0423

R-squared	0.748079	Mean dependent var	37390.01
Adjusted R-squared	0.709322	S.D. dependent var	32147.95
S.E. of regression	17332.43	Akaike info criterion	22.52591
Sum squared resid	3.91E+09	Schwarz criterion	22.67077
Log likelihood	-177.2073	F-statistic	19.30174
Durbin-Watson stat	0.859963	Prob(F-statistic)	0.000128

Dependent Variable: LOG(GDP)
Method: Least Squares
Date: 03/23/17 Time: 01:40
Sample: 2000 2015
Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.856677	1.571487	-0.545138	0.5949
LOG(EXPORT)	1.601968	0.413013	3.878731	0.0019
LOG(FDI)	-0.499048	0.399813	-1.248204	0.2340

R-squared	0.822267	Mean dependent var	10.12538
Adjusted R-squared	0.794924	S.D. dependent var	0.963765
S.E. of regression	0.436444	Akaike info criterion	1.347049
Sum squared resid	2.476289	Schwarz criterion	1.491910
Log likelihood	-7.776394	F-statistic	30.07172
Durbin-Watson stat	0.635597	Prob(F-statistic)	0.000013