AIDS Effectiveness and Developmental Outcomes in Nigeria

Ibrahim Ayoade, Adekunle*, Ayomide Olayinka, Ogunade**, Ayandare Niyi, Ayantola*** and Mumeen Olatunbosun, Alabi****

Abstract
In spite of several attempts by donors, financial institutions, government and the society at large to eradicate age-old poverty, Nigeria has wallowed in generational poverty as a result of many contending factors among which mismanagement of aid and grant obtainable are leading contenders. In evaluating its objectives, this paper adopts the Augmented Dickey-Fuller test to ascertain the order of integration of the variables and Autoregressive distributed lag (ARDL) approach to account for the short run and long run dynamics of a level relationship between economic growth and foreign aid alongside relevant macroeconomic indicators. Findings reveal that there exist a long run relationship among economic growth and foreign aid to Nigeria. The paper finds out that gross capital formation significantly impacts on economic growth positively. Foreign aid exhibits a positive relationship, but it is not seen to determine economic growth in Nigeria. The study concludes that past aid to Nigeria has not been effective or it does not constitute what drives growth in the country. It also invalidates the applicability of the Two-Gap Theory squabble for Nigeria, since foreign aid is seen not to be significant.

Keywords: AIDS Effectiveness, Economic Growth, Bounds Testing, Nigeria.
JEL Codes: C32, F35, O11

* For Correspondence, Faculty of Social Sciences, Department of Economics, Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria. adekunle_ja@yahoo.com
** Faculty of Social Sciences, Department of Economics, Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria. ayomideolayinka09@gmail.com
*** Faculty of Social Sciences, Department of Economics, Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria. ayantolaayandare@gmail.com
**** Faculty of Social Sciences, Department of Economics, Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria. alabimumeen9@gmail.com

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1.0 Introduction

There has been tremendous growth in the literature of aids and its overriding consequences for growth in Nigeria, yet empirical findings remain inconclusive. The divide in extant literature is of two-fold. Some argued that foreign aids induce growth and subsequent development process in Nigeria while other concludes that it deters growth owing largely to a redundant economy that may rely on bail out in the form of official development assistance. The cohorts who believe foreign aid induce development outcomes in Nigeria argued that foreign aid can spur growth and thereby reduce poverty (see Nkoro and Furo, 2012; Fasanya and Onakoya, 2012; Thérien, 2002; Mbah and Amassoma, 2014; Fuady, 2015; Tang and Bundhoo, 2017), while the others are of the opinion that there is possibility of not spending foreign aid inflow on productive sectors, instead it can be wasted on frivolous spending (i.e. aid fungibility) as well as encourage corruption (Knack, 2004; McGillivray, 2005; Ayanwale, 2007; Easterly and Pcutze, 2008; Smith, 2012; Ajayi, 2013) and therefore, it can undermine incentives for both private and government savings, sustain bad governments in power, helping to perpetuate poor economic policies and delay proper reforms, discourage private investment, motivating currency appreciation, and in consequence could lead to non-competitiveness in the production of non-tradable goods (i.e. Dutch diseases). These contrasting results in extant literature on the growth and development effect of aids and official development assistance (ODA) in inducing developmental outcomes in Nigeria remains a gap in the literature which this study intend to fill.

In spite of the huge of amount of foreign aid disbursed to Nigeria, studies have revealed that increasing foreign aid as a tool for promoting economic growth and development is still empty of empirical generality. With increase in foreign aid to Nigeria, unfavourable environment and growing working population, threat of hunger and poverty alongside increased unemployment persist in Nigeria. Nigeria ranked among countries reported to possess the lowest human development indicator (Addison, 1993). Thus, rendering foreign aid as a panacea to growth and development outcomes in Nigeria debatable.

Foreign aid is believed to increase investment in capital goods, increase the capability of the developing nation to import technology, increase capital productivity and promotes technical change in developing nations. Nevertheless, growth has not been impressive in Nigeria because of the prevalence of poverty, corruption and inequality, epileptic power supply, political instability among other macroeconomic issues. There is no gainsaying that massive inflow of foreign aid to Nigeria has complemented government effort at augmenting economic growth in the country, but weak institutions, structural problems present in the economy raises questions about the role and effectiveness of foreign aid in Nigeria. For instance, Nigeria still grapples with an epileptic supply of electricity mainly because of the infrastructural deficit; Nigeria road and rail infrastructure is still inadequate; no massive investment has been undertaken in the health sector; manufacturing sector still produces below their capacity utilisation. A question that emanates from these identified problems is how effective has foreign aid impacted on economic growth and development in Nigeria? How has foreign aid affected different sectors of the economy?

Having noted this, it becomes imperative to investigate foreign aid-growth hypothesis in Nigeria to contribute to the debate if truly foreign aid has contributed significantly to the economy. This study particularly fills the gap in the extant literature on foreign aid-growth nexus in Nigeria by applying the Autoregressive Distributed Lag (ARDL) approach to testing for cointegration using theory-consistent variables such as exports, imports, savings and

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investment. Long run and short run dynamics were also measured. Findings from this study will be useful to further strengthen the argument in favour or against foreign aid in the country. Perhaps, after all, the destiny of the country lies in its hand and not on external contribution.

![Total Foreign Aid to Nigeria (1981-2015)](chart.png)

**Source:** Authors’ Presentation from Data Sourced from WDI, 2015.

**Figure 1. Foreign Aid Trend in Nigeria (1981-2015)**

The remainder of this study is organized as follows. Section 2 reviews both theoretical and empirical literature. Section 3 spells out the methodology and model specification. While section 4 presents and discusses the estimated results, the last section offers conclusion and recommendations.

2. **Literature Review**

2.1 **Theoretical Framework**

The growth effect of foreign aid has generated a very serious debate among economist, donors, financial sectors dominant players, government and the society at large. Different causes and solutions to this problem have been identified. The theory has been improved upon to explain this phenomenon.

**The Two-Gap Theory**

The Two-gap model built on the works of Dormar (1939); Harrod (1946), (1947), and Chenery and Strout (1966) was reviewed to explain the association of foreign aid and economic growth in Nigeria. The model is developed on the assumption that most developing countries either face a shortage of domestic savings to augment for investment opportunities or they (developing) countries are faced with foreign exchange constraints to finance the capital needed and intermediate goods required to propel their economy to greater height. Emmanuel and Ola-David (2010). It further introduces the assumption that importing commodity not produced locally can improve the production of investments good. Particularly, McKinnon (1964); Chenery and Strout (1966); Findlay (1973), applied the Harrod and Domar model to explain the foreign aid-growth nexus through the foreign capital,
used to augment available capital for production where the capital-output ratio is held constant.

The two-gap model is explained using the national income identity:

\[ Y = C + I + G + X - M = C + S + T \]  \hspace{1cm} (1)

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

Resource gaps can be extracted from this computation by rearranging Equation 1 as below:

\[ I - S = (X - M) + (G - T) \]  \hspace{1cm} (2)

Equation 2 shows constraints 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 its expenditure, such that it equals its tax revenue, we have:

\[ I - S = F \text{ or } I = S + F \]  \hspace{1cm} (3)

Equation 3 presents the conclusion that domestic investment can be financed by domestic savings or capital inflows as the case may be. International transfers, in the form of aid, can augment investment, which in turn stimulates economic growth by filling either the savings gap or foreign exchange gap.

2.2 Empirical review

The foreign aid-growth hypothesis has been the subject of intense debate among researchers globally. Different studies have been conducted to understand the impact of foreign aid on economic growth. For country studies, Bakare (2011) using a VAR model found a negative relationship between foreign aid and output growth in Nigeria. Similarly, Osaro and Iyoha (2012) investigated the impact of foreign aid on economic growth in Nigeria using a VAR model for the period 1970 to 2009. In order to understand the macroeconomic impact of foreign aid in the country, policy variables like the budget deficit, current account balance, real gross domestic product growth rate, and foreign aid, were included in the model. Their findings show that increases in foreign aid impede economic growth in Nigeria because of improper planning and inconsistent macroeconomic policies.

Bashir (2013) analyse the impact of ODA and foreign direct investment on real growth in Nigeria using error correction model for the periods 1980 to 2011. His model includes real GDP, FDI, export, import, and ODA in their logarithm scale. The study concludes that ODA exact no impact on real growth in the country. The 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. Steve et al. (2013) found a positive but insignificant
relationship between foreign aid and economic growth in Nigeria in their study using error correction model and cointegration technique.

Stella and Amassoma (2014) examine the foreign-aid growth relationship in Nigeria using ordinary least square and cointegration technique between the periods 1981 to 2012. Five policy variables that were included in the model are a Gross Domestic Product, Foreign Aid, Investment, Export, and Import. They found out that there exist a negative and non-significant nexus between foreign aid to Nigeria and gross domestic product. While they did not capture the effect of corruption or quality of governance in their model, they suggest that implementation of reforms to reduce corruption and improve governance could ensure proper use of foreign aid thereby stimulating economic growth.

In contrast, Fasanya and Onakanyam (2012) using error correction model for the period 1970 to 2010 establish a significant relationship between foreign aid and economic growth in Nigeria. Gross domestic product growth rate was dependent variable while the ratio of aid to gross domestic product was used as the proxy for foreign aid. Similarly, Zeshan (2014) examined the relative effectiveness of foreign aid on economic growth in Pakistan using ordinary regression model and cointegration technique. The result shows 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 between foreign aid and economic growth.

Angela, (2008) uses Arellano-Bond dynamic panel estimation to analyse the impact of Aid on economic growth in 34 low-income Sub-Saharan Africa countries over the period of 15 years (1990 to 2004). Empirical findings revealed that foreign aid has no impact on economic growth among the low-income countries understudied with the region. Ramesh et al. (2010) assess the effectiveness of aid at the micro- and macro-level in selected developing countries using an augmented Fischer-Easterly model. Their result supports the reoccurring view of a positive relationship between aid and growth provides the macroeconomic policy environment is stable which corroborate the findings of William (2010) who established a positive nexus between aid and economic growth in the economy with consistent macroeconomic policy and political stability. Likewise, Yakama (2013) using panel cointegration estimation technique established a long run relationship between aid and growth in West Africa.

In a panel study, Ekanayake and Dasha (2010) analysed the effects of foreign aid on economic growth of 85 developing countries covering Asia, Africa, Latin America, and the Caribbean. Results showed that foreign aid tends to hurt economic growth in Asia, Latin America, and the Caribbean while it has a positive impact on developing countries in Africa. Robert (2011) Investigated the effects of foreign aid in 31 Sub-Saharan Africa countries for the periods 1973 to 2005 using a panel VAR. The result indicates that economic growth and human development respond fairly substantial to shock in aid. Better economic policies, good institutional environment are conditions which make aid more effective thus affirming the result of (Margaret, 2008) who found out that foreign aid disbursed to the government with sound reform will likely contribute toward the fight against corruption thereby stimulating economic growth.

Lawrence (2011) Reviewed the two prominent theoretical background for studying aid in the literature which is the two-gap model popularised by Chenery and Strout (1966) and the poverty trap model used by (Nelson, 1956). Two-gap model is premised on the fact that foreign aid fills the gap that arises when investment is small to stimulate economic growth.
This situation is believed to arise because of the level of savings in the economy. Therefore, the inflow of foreign aid will substitute savings which limit investible capital in the economy. On the other hand, poverty trap model surmises that economic growth is impeded 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, the two-gap model suggests continuous inflow of foreign aid.

Foreign aid and growth nexus is predominantly positive in panel studies while some singular studies reviewed established a negative relationship. This negative relationship may arise because such studies failed 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 the static model to estimate the relationship may distort the findings of the study especially when the economy is vulnerable to external shock.

Katarina et al. (2012) Critically analyse the long-run effect of foreign aid (ODA) on key macroeconomic variables like real investment, real private consumption, real government consumption, and real gross domestic product in 36 sub-Saharan African countries using a cointegrated VAR model. Findings support the view of a positive long-run relationship between ODA flows and these macroeconomic variables in the countries. Specifically, there is a significant and positive effect on investment or real gross domestic product in 27 countries out of the 36 SSA countries sampled in the study. In seven of the remaining countries, the effect of aid is positive but insignificant while there is the significantly negative effect on only two countries; Comoros and Ghana.

Douzouenet and Yogo (2013) Studied the effectiveness of aid in 34 sub-Saharan African countries for the period 1990 to 2010. Their result suggested that aid has a positive effect on growth when governance is incorporated in the model, but if governance is not incorporated, aid has a negative impact on growth. Aid impacts growth negatively through the appreciation of real exchange rate which results in loss of competitiveness of the economy. Education and governance are found to be the main channels through which aid causes economic growth in a stable environment, but in a post-conflict environment, aid affects growth through investment in infrastructure.

Elizabeth (2014) Examined the impact of foreign aid in education on economic growth in 38 Sub-Saharan countries over the periods 1990 to 2004. Findings revealed that aid in primary education has a positive and significant effect on growth while aid in secondary education has a negative effect on economic growth in these countries. In contrast, Arvind (2015) use an instrumental variable approach to establishing a strong positive relationship between aid per capita and economic growth in developing countries both in the short run and long run. Specifically, an additional per capita aid causes growth rate in the recipient country to increase by 8% over four years and 5% over a decade.

3.0 Methodology

In analysing the macroeconomic determinants of Aid Effectiveness in Nigeria, the study would make use of a two-stage econometric procedure. First, the Augmented Dickey-Fuller (ADF) and Elliot-Rothenberg-Stock Dickey-Fuller GLS test would be undertaken to ascertain
the order of Integration of the variables, and then the Auto Regressive and Distributed Lag (ARDL) model would be employed to account for a long-run and short-run dynamics of the model. This study would make use of annual data covering the period 1981-2017 (36 years). Data used in the study are sourced from Central Bank Statistical Bulletin (2015) and World Data from World Development Indicator (WDI).

3.1 Model Specification

The empirical model for the study is based on the Neoclassical growth model, which expresses a relationship between growth (Y) as depending on capital (K) and Labour (L). For the purpose of this study, an adapted version is specified below:

\[ RGDPK = f(For_{Aid}, Inv, Exp, Imp, sav) \] (4)

Where \( RGDPK \) represents Real Gross Domestic Product Per Capita, \( Inv \) represents investment; \( Exp \) denotes the volume of exports of goods and services; \( Imp \) proxies’ volume of import of goods; \( sav \) represents Gross National Savings. \( For_{Aid} \) captures total foreign aid received by Nigeria. Restating the model in an econometric form:

\[ RGDPK_t = \beta_0 + \beta_1 For_{Aid}_t + \beta_2 Exp_t + \beta_3 Imp_t + \beta_4 sav_t + \beta_5 Inv_t + \varepsilon_t \] (5)

Where \( \varepsilon_t \) represents error term and \( \beta_0, \beta_1, \beta_2, \beta_3, \beta_4 \) and \( \beta_5 \) are parameter estimates

Estimation Technique

The ARDL (Autoregressive Distributed Lag) approach (Pesaran et al., 2001) is employed in estimating the specified model. This approach is favoured due to its many advantages. First, as proved by Pesaran et al. (2001), the approach yields consistent estimates of long-run coefficients that are asymptotically normal irrespective of whether the variable used are I(0) and I(1), The Engle-Granger two-step (Engle and Granger, 1987), Johansen Maximum Likelihood Johansen and Juselius (1990) Philips and Hansen Philips and Hansen (1990) amongst other prominent cointegration tests are solely suitable for strictly I(1) stationary variables. Secondly, the approach has good small sample properties as compared to alternative techniques of multivariate cointegration Narayan (2005). Lastly, the approach is suitable for addressing potential endogeneity case in the model, as it provides unbiased estimates of the long-run model and valid t-statistics in the presence of endogeneity problem.

To implement this approach, equation 5 is modelled as a Conditional Autoregressive Distributed Lag (ARDL) model:

\[ \Delta GDP_t = \beta_0 + \sum_{j=1}^{n} \gamma_5 GDP_{t-j} + \delta_j \Delta Inv_t + \delta_j \Delta Exp_t + \delta_j \Delta Imp_t + \delta_j \Delta Sav_t + \sum_{j=1}^{n} \gamma_3 \Delta GDP_{t-j} + \gamma_4 For_{Aid}_{t-j} + \sum_{j=1}^{n} \gamma_5 Inv_{t-j} + V_t \] [6]

The first step in the ARDL approach is to estimate equation 6 using Ordinary Least Square (OLS). Secondly, we test for evidence of cointegration by restricting all the coefficients of the lagged level variables equal to zero; the null hypothesis of no cointegration (Ho: \( \gamma_1 = 212 \)
\( \gamma_2 = \gamma_3 = \gamma_4 = 0 \) is tested against the alternative \((H1: \gamma_1 \neq 0, \gamma_2 \neq 0, \gamma_3 \neq 0, \gamma_4 \neq 0)\) using an F-statistic with a non-standard distribution.

The ARDL cointegration test involves two asymptotic critical value upper and lowers value bounds for I(1) and I(0) series respectively. Evidence of cointegration is established if the test statistic value exceeds their upper critical value. However, the inference is inconclusive if the computed test statistic lies between bounds. Upon establishing a possible long run relationship, Equation 6 is estimated using a fitting lag-selection criterion. The optimal lag lengths are selected using the adjusted R-Squared criterion.

Unlike other techniques, the ARDL approach does not require the pretesting of the series used in the model for the presence or otherwise of a unit root Pesaran et al., (2001). However, we conduct unit root test to exclude the possibility of variables integrated of the second order, a scenario, which may not suit the applicability of the bounds testing approach.

4.0 Results

The Augmented Dickey-Fuller and Elliot-Rothenberg-Stock Dickey-Fuller GLS tests are employed in this study. As shown in Table 1, the unit root test result reveals that the series are a mix of I(0) and I(1), with none of them being I(2), thereby confirming the suitability of the proposed approach.

<table>
<thead>
<tr>
<th>Variables (all in log)</th>
<th>ADF Levels</th>
<th>ADF 1st Difference</th>
<th>DF-GLS Levels</th>
<th>DF-GLS 1st Difference</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>-2.1970</td>
<td>-5.1980***</td>
<td>-2.1357</td>
<td>-5.3024***</td>
<td>I(0)</td>
</tr>
<tr>
<td>Import</td>
<td>-1.4821</td>
<td>-6.4865***</td>
<td>-1.960</td>
<td>-6.4490***</td>
<td>I(1)</td>
</tr>
<tr>
<td>Foreign Aid</td>
<td>-3.2746*</td>
<td>-5.0960***</td>
<td>-3.3940**</td>
<td>-</td>
<td>I(1)</td>
</tr>
<tr>
<td>Export</td>
<td>-1.9933</td>
<td>-5.0704***</td>
<td>-2.1096</td>
<td>-6.0971***</td>
<td>I(1)</td>
</tr>
<tr>
<td>Investment</td>
<td>-1.6692</td>
<td>-2.9021*</td>
<td>-0.4314</td>
<td>-2.7402***</td>
<td>I(1)</td>
</tr>
<tr>
<td>Savings</td>
<td>-4.0064***</td>
<td>-4.1428***</td>
<td>-4.1428***</td>
<td>-</td>
<td>I(0)</td>
</tr>
</tbody>
</table>

* denotes statistical significance at 10%, ** denotes 5% and *** denotes 1%.

Source: Author’s Computation

Autoregressive Distributed Lag (ARDL) Estimates and Cointegration Test Result

Using Schwarz Bayesian Criterion as the optimal lag selection criterion, ARDL \((1, 0, 0, 2, 0, 0)\) in the order of GDP, For_Aid, Import, Export, Savings and Investment is estimated. The estimates are based on White’s heteroskedasticity adjusted standard errors to check for the problem of heteroskedasticity. To ensure that the model is correct, a test of serial correlation of residuals in the OLS case is conducted (see Table 2). Table 2 below shows that the null hypothesis of no serial correlation is accepted.

<table>
<thead>
<tr>
<th>Serial Correlation Lagrange Multiplier Test:</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic; F(2,18)</td>
<td>0.55347</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>1.7380</td>
</tr>
<tr>
<td>Prob. F(2,20)</td>
<td>0.584</td>
</tr>
<tr>
<td>Prob. Chi-Square(2)</td>
<td>0.419</td>
</tr>
</tbody>
</table>

Source: Author’s Computation

The bounds testing approach for cointegration is then carried out, having affirmed the well-behaved characteristic of the ARDL model.
Cointegration Result
We then test for the existence of a level relationship amongst the variables in the specified ARDL model. The F-statistic in Table 3 appears to be greater than the upper bound in the asymptotic critical value for testing levels relationship computed by Pesaran et al., therefore suggesting the presence of long run relationship amongst the variables in the model. The Wald statistic reported in Microfit 4.0 is the chi-square (1). Its F-statistic variant is gotten by dividing the chi-square computed by its k-variable; by one(1), which gives 12.7835.

<table>
<thead>
<tr>
<th>Table 3: ARDL Cointegration Test (Wald Test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Statistic</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>F-statistic</td>
</tr>
<tr>
<td>Chi-square</td>
</tr>
</tbody>
</table>

Lags: 1

<table>
<thead>
<tr>
<th>Critical Bounds – Case I</th>
<th>99%</th>
<th>95%</th>
<th>90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Bound</td>
<td>-5.94</td>
<td>-5.29</td>
<td>-4.96</td>
</tr>
<tr>
<td>Lower Bound</td>
<td>-3.96</td>
<td>-3.41</td>
<td>-3.13</td>
</tr>
</tbody>
</table>

*no intercept, no trend.

Source: Author’s Computation

Having confirmed the presence of long-run levels relationship, I proceed to estimate the long run coefficients using the ARDL approach and the error correction representation for the selected ARDL model as shown in Table 4 and 5 respectively.

<table>
<thead>
<tr>
<th>Table 4: Estimated Long Run Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable: Gross Domestic Product</td>
</tr>
<tr>
<td>Regressor</td>
</tr>
<tr>
<td>For_Aid</td>
</tr>
<tr>
<td>Import</td>
</tr>
<tr>
<td>Export</td>
</tr>
<tr>
<td>Savings</td>
</tr>
<tr>
<td>Investment</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Trend</td>
</tr>
</tbody>
</table>

*** denotes statistical significance @ 1%, ** 5% and * 10%

Source: Author’s Computation

As revealed in the table above, foreign aid, though, has a positive relation with economic growth is not seen to be a statistically significant determinant of economic growth in Nigeria both in the long run and in the short run (see Table 5). Also, import, export, savings and investment do not impact on economic growth in the long run; Table 5 exposes the rather significant importance of import on the Nigerian economy as well as the lagged term of export in the short run.

In agreement with a priori expectations, savings and investment are revealed to have a positive relationship with growth in the country. Contradictorily, however, import is seen to
have a positive impact on the economy, while export is seen to exhibit a negative relationship with growth, both in the short and long run.

Table 5: Error Correction Representation for the ARDL Model (Short Run Coefficients)

<table>
<thead>
<tr>
<th>Dependent Variable: Gross Domestic Product</th>
<th>Coefficient</th>
<th>t-Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(For_Aid)</td>
<td>0.0400</td>
<td>0.9598</td>
</tr>
<tr>
<td>D(Import)</td>
<td>0.3278</td>
<td>2.1180**</td>
</tr>
<tr>
<td>D(Export)</td>
<td>-0.0088</td>
<td>-0.0559</td>
</tr>
<tr>
<td>D(Export(-1))</td>
<td>0.1633</td>
<td>1.9103*</td>
</tr>
<tr>
<td>D(Savings)</td>
<td>0.0263</td>
<td>0.2530</td>
</tr>
<tr>
<td>D(Investment)</td>
<td>0.2718</td>
<td>1.5729</td>
</tr>
<tr>
<td>D(Constant)</td>
<td>0.9300</td>
<td>1.7806*</td>
</tr>
<tr>
<td>D(Trend)</td>
<td>0.0297</td>
<td>2.3392**</td>
</tr>
<tr>
<td>ECM(-1)</td>
<td>-0.5059</td>
<td>-2.7559***</td>
</tr>
</tbody>
</table>

R-squared: 0.7119  
F-Statistic: 6.1786***  
Durbin-Watson: 2.29

*** denotes statistical significance @ 1%, ** 5% and * 10%

Source: Author’s computation

This result aligns with Bashir (2013); Emmanuel (2012) conclusion on the no-impact argument of foreign trade on real gross domestic product per capita income.

5.0 Conclusion and Recommendation

Foreign aid on its own does not impact economic growth in Nigeria both in the long run and short run, substantiating (Easterly, 2001) conclusion on the inapplicability of the two-gap theory, which establishes that foreign aid can fill savings and external finance gap to propel an economy towards achieving a target growth rate. These findings are 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 current belief of reliance on assistance from countries and partners abroad should be de-emphasized if real growth is to be pursued. However, foreign aid, particularly those that seek to enhance gross capital formation as well as enhance capital formation in the country should be encouraged.

The significance of import as a determinant of growth in the country is quite baffling, but also clearly resonates with the reality of the country. Importation has proven to be a major component of what makes the countries industrial and manufacturing activities. Local content in manufacturing is abysmally low, exposing us to the looming danger the country is predisposed to. The non-significance of import in the long run obviously explains its impulse-based characteristics and its lacking in capacity to drive long run growth in the country. We would recommend an immediate review and evaluation of extant trade policies in the country, especially the recently announced Common ECOWAS Tariff. This study captures and explains the dangerous exposure of the country to trade risks associated with recent trade policies, especially the common tariff arrangement.
The study contributes to the discussion on aid-growth nexus in Nigeria. Using ARDL approach to proposed by Pesaran et al. (2001). The study echoes the popular stance that foreign aid is not growth-aiding in Nigeria, as it does not significantly impact on economic growth. Though its foreign aid is observed not to impact economic growth, the evidence in this study is not sufficient to affirm that foreign aid cannot be a potential driver of growth in the country. It might be worth considering a study that seeks to examine factors inducing possible effectiveness of foreign aid. Perhaps, aids targeted to specific growth-inducing activities such as capital formation might shed more light on if foreign aid is counter-productive or otherwise.

Reference


Arvind, M (2015) Foreign Aid and Economic Growth in Developing Countries: An Instrumental Variables Approach, Department of Economics University of Calgary 2500 University Drive Calgary, Alberta T2N-1N7 Canada.


Michal, C. and Sweder, V (2010) *Economic Growth and the Volatility of Foreign Aid* Tinbergen Institute Discussion Paper, [http://hdl.handle.net/11245/1.315227](http://hdl.handle.net/11245/1.315227)


