International Journal of Intellectual Discourse (IJID)
ISSN: 2636-4832 Volume 3, Issue 1. June, 2020

Foreign Aid and Fiscal Stance in Nigeria: A Disaggregated Analysis

Taofik .M. Ibrahim[1], Muhammed .M. Usman[2], Angela .A. Namo[3]

[1,2,3] *Department of Economics, Ahmadu Bello University, Zaria, Kaduna State, Nigeria*

Email: imohfik@gmail.com

Abstract

This paper examines the relationship between foreign aid and fiscal stance (government expenditure) in Nigeria covering the period from 1981 to 2018. It employs the Augmented Dickey-Fuller (ADF) and Philip Perron (PP) unit root tests to determine the stationarity property of the data while the ARDL Bound testing cointegration approach was adopted to ascertain the long-run relationship between the variables. The Two-Stage Least Square estimation technique was utilized to determine the impact of total foreign aid and four different types of foreign aid on government expenditure. The results of the ADF and PP tests results revealed that the variables are a combination of I(0) and I(1). While the ARDL Bound testing co-integration test results indicate that the variables are cointegrated. The results of the Two-Stage Least Square (2SLS) showing the impact of total foreign aid and the four different categories of foreign aid on fiscal stance (total government expenditure), revealed that total foreign aid does not have an impact on government expenditure. While the results for the four different categories foreign aid shows a positive relationship between these aids and total government expenditure with bilateral aid from Nordic countries having the largest impact followed by bilateral aid from main trading partners of Nigeria, multilateral aid and the top- five growth induced aid donors based on 2013 commitment. The study recommends that the government should partner with Nordic countries for foreign assistance to finance its expenditure since foreign aid from these countries has more impact on government expenditure than other forms of foreign aid.

Keywords: Foreign aid, government expenditure, Fiscal Response Model, Nigeria

1. Introduction

The need to broaden the revenue base to meet the ever-growing expenditure profile of most Less Developed Countries (LDCs) who are mostly resource-based has remained on the centre stage for decades. One external source of revenue over the years that has to gain prominent and emerge as a possible option for the LDCs is foreign aids. Foreign aid has been the highest source of external funding in LDCs including Nigeria. One major distinguishing occurring feature of the LDCs has been the issue of budget constraint which has slowed down growth and development over time. The availability of foreign aid is believed to either relax the budget constraint of a country or influence its expenditure. It can also serve as a means of smoothening government expenditure pattern thereby stimulating economic growth and development. However, the influx of foreign aid to LDCs has not changed the economic hardship that characterized most of these countries, raising fundamental questions whether foreign aid can serve as a catalyst to smoothen government spending overtime (Sugema & Chowdhury (2005).

Understanding the fiscal effects of foreign aid has become an important issue for LDCs because most of these aid flows are

channelled directly through government spending which may have fiscal (dis)-incentives depending on how these funds are allocated and the overall impact it would have on the fiscal stance of the country. For instance, the net average volume of Official Development Aid (ODA) to Nigeria between 1970 and 1979, 2000 and 2009 ranges from US$317million and US$2620 million. Further, in 2005, the country was the second-largest recipients of ODA, and ranked among the tenth highest recipients in Africa, between the periods of 2009 to 2011. Total net bilateral foreign aid for these years (2009, 2010 and 2011) was US$1657 million, US$2062 million, and US$1813 million respectively. Furthermore, in absolute terms, foreign aid has fluctuated between $2.516 billion, $2.479 billion and $2.432 billion from 2013, 2014 and 2015 respectively.

Over the same periods, total capital expenditure as a percentage of GDP was 1.93% in 2006 it increased steadily to 2.30% in 2007 and then dropped to 1.20% in 2012, as at 2016 the value dropped significantly to 0.62%. This shows that there is a great divergence between foreign aid and government expenditure especially capital expenditure. However, according to the economic and financial crime commission (EFCC), much of the ODA received were simply looted, while recovered funds were simply re-looted. The total numbers of looted ODA funds were about $5006 billion, which is equivalent to total aid to other countries in Africa over the past decades (EFCC, 2010). Thus, factors such as corruption; improper aid coordination; inefficiencies in the management of foreign aid; high degree of indebtedness; high unemployment; lack of infrastructures; absolute poverty and unproductive public consumption have led to ineffectiveness of foreign aid.

Investigating the fiscal consequences of foreign aid has been extensively discussed in the literature, however, two distinct issues remain unresolved. First is the non-disaggregation of foreign aid to know the exact type of foreign aid that serves as fiscal (dis)-incentives. Second, is the plausibility of simultaneity bias between aid and government expenditure as a measure of the fiscal stance in Nigeria. To address these two issues, this study differs from studies like Martins 2007; Acosta & de Renzio 2008; Aregbeyen & Fasanya 2014; Morrissey 2014; and Combes, Ouedraogo & Tapsoba 2016 by considering four different categories foreign aid to show their impacts on government total expenditure as a measure of the fiscal stance. The study also used the Two-Stage Least Squares (2SLS), to correct for the plausibility of simultaneity. The 2SLS is an equation by equation technique that produces consistent estimates if the set of instruments included in the equation is predetermined variables.

The rest of the paper is organized into four sections. Section two reviewed relevant literature on the link between aid and fiscal stance. The theoretical framework and methodology adopted for the study are discussed in section three. Section four discusses the empirical results, while section five presents the concluding remarks and policy implications.

2. Literature Review

Theoretically, there are three plausible key theories on the relationship between foreign aid and fiscal stance. First is the Dependency theory developed in the 1950s which helps in explaining the nature of the relationship between countries of the third world and the developed countries and the factors that have facilitated dependency of one country on other countries. The Dependency theory suggested that economic activity in richer countries often led to serious economic problems in poorer countries. The initial explanation for the phenomenon was very straight forward; that poor countries exported

primary commodities to the rich countries which then exported manufactured products out of those commodities and sold them back to the poor countries. The "value-added" by manufacturing a usable product always cost more than the primary products used to create these products. Therefore, poorer countries would never be earning enough from their export earnings to pay their imports.

The second theory is the Two Gap model of Chenery & Strout (1966) which has its roots in the Harrod-Dormar growth theory, the theory demonstrates the importance of savings in funding the investment required to attain a target growth rate, conditional on the productivity of capital. Where a country lacks sufficient resources to finance investment and the requirements to import capital goods and technology, aid to finance investment can directly fill the savings-investment gap, aid can also fill the foreign exchange gap (Chenery & Strout, 1966).

The third theory is the Fiscal Response theory by Heller (1975). This theory is based on a utility-maximizing government which is assumed to maximize its utility by obtaining each one of the fiscal targets such as a variety of expenditures, revenue, and borrowing during each period. An inflow of aid is then assessed on the basis of its effect on each of the fiscal targets subject to budget constraints (McGillivray & Morrissey, 2001).

Empirically, the impact of foreign aid on various macroeconomic variables such as government revenues, expenditures, savings, investment, imports, and exports has been given much attention and widely researched. Most of the early literature focused on the relationship between aid, growth, and development (see, for example, Nkoro & Uko, 2013; Kolawole, 2013; Mbah & Amassona, 2014; Olanrele & Ibrahim, 2015; Okafor, Ugwuegbe, & Ezeaku, 2016). However recent studies have considered the aid-fiscal stance nexus. For instance, Mavrotas (2002) utilized the Heller type model and the non-linear 3-Stage Least Square (3SLS) estimation technique to examine the impact of aid on government funding in India and Kenya for the period 1973-1990 and 1973-1992 respectively. Disaggregating aids flow into three main components namely; programme aid, project aid, and technical assistance, the reveal that project aid is less likely to displace other sources of government funding as compared to programme aid. Project aid may be specifically tied to project which would not otherwise have been undertaken, whereas, programme aid can perhaps be more easily treated as fungible addition to government resources. The paper concluded that individual country studies may offer a better picture concerning the macroeconomic impact of aid in recipient economies.

Adopting the Heller type model and the non-linear 3SLS estimation procedure, McGillivray & Quattara (2003) used time series data for the period 1975 to 1999 to examine the impact of foreign aid on the public sector fiscal behaviour in Cote D'Ivoire. The study lays more emphasis on the relationship between aid, debt servicing and debt, given that Cote D'Ivoire is a highly indebted country. The study found that the bulk of aid flows to the country are allocated to debt servicing and that aid is associated with increases in the level of public debt. The study recommends that given that the debt burden pulls resources (aid in particular) away from domestic expenditure (including investment) donors should help Cote D'Ivoire and other highly indebted poor countries (HIPC) in alleviating the burden in order to make aid work more effectively. Also, donor countries should allocate aid (in the form of grants) not on the grounds of a good policy environment but relative to the size of the debt burden of HIPC.

Osei, Morrissey & Lloyd (2005) applied Vector Autoregression (VAR) methods to investigate the effect of aid on fiscal behaviour in Ghana for the period spanning 34 years. The result of the study shows that aid has reduced borrowing and increased tax effort in Ghana. The study concluded that aid has over the years support good fiscal policy in Ghana. Similarly, Sugema & Chowdhury (2005) assess the effects of aid on fiscal behaviour in Indonesia for the period 1970 to 2000. The study was anchored on the McGuire type model and used the OLS estimation technique. The findings of the study suggest that aid is demand-driven while project aid results in an increase in routine expenditure, therefore, project aid is fungible but programme aid mainly serves as budget support. The study further concluded that aid is a disincentive to mobilize domestic revenue through a more effective taxation system. Based on their findings, the study recommended that the government has to reduce its dependence on aid. In the longer term, the objective of the government should not be just filling the fiscal gap, but actually to create a fiscal discipline.

Martins (2010) used quarterly data for the period 1993 to 2008 and the Vector Autoregressive (VAR) model to assess the dynamic relationship between foreign aid inflows, public expenditure, revenue and domestic borrowing in Ethiopia. The results of the study indicate the presence of a long-run relationships the government budget constraint, a donor disbursement rule, and a financing trade-off. Foreign aid grants adjust to the level of development spending which can be seen as an indication of (procyclical) aid conditionality. Moreover, domestic borrowing often compensates for lower levels of revenue and grant; highlighting the cost of aid unpredictability and revenue volatility. The findings of the study imply that foreign aid flows are to be made more effective, predictable and countercyclical in order to smoothen government spending exogenously.

In Pakistan, a study by Butt & Javid (2013) examined the effect of foreign aid on government fiscal behaviour during the period 1960-2010. They applied the Autoregressive Distributed lag model to analyse the relationship that prevailed between grant aid and domestic borrowing, domestic revenue and development expenditure allocations during the study period. The results of the study revealed that foreign grants have adversely affected the government's fiscal responsibility, reduced domestic revenue while foreign debt has increased. The results also show that these effects vary considerably in relation to the approach foreign aid was delivered. The study recommends that the Pakistani government should focus on expanding its tax base and minimizing non-development expenditures. The study also emphasized that foreign resources should be used to minimize spending instead of lowering domestic resource mobilization activities.

The study by Aregbeyen & Fasanya (2014) examined the effects of aid on government fiscal behaviour in Nigeria during the period 1961 to 2009. The study employed the Vector Error Correction Model (VECM). Their findings suggest that aid flows had a significant impact on fiscal behaviour in Nigeria. The study recommended that since aid flows cannot be permanently relied upon, the government should place a premium on improving its tax efforts as well as cut down recurrent expenditure.

Similarly, Olaboyega (2015) examined the influence of deregulation on the relationship between foreign aid and fiscal behaviour in Nigeria. The study utilized the Chow test to investigate whether there are any structural changes since the adoption of deregulation that has significantly affected the relationship

between foreign aid and fiscal behaviour. The result revealed that deregulation has positively and significantly affected the impact of fiscal behaviour on foreign aid accessibility in Nigeria. The study recommended that assessment of other shocks that can affect the fiscal behaviour should be conducted with a view to getting the reason why deregulation failed to maintain the positive relationship between fiscal behaviour and foreign aid suggested by other studies.

Combes, Ouedraogo & Tapsoba (2016) revisit the fiscal effects of shifts in aid dependency in 59 developing countries from 1960 to 2010 using the Propensity Score Matching technique (PSM). The findings of the study indicate that shifts in aid dependency are frequent and have significant fiscal effects. Large aid inflows undermine tax capacity and public investment while large reductions in aid inflows tend to keep recipients tax and expenditure ratios unchanged. The study concluded that the undesirable fiscal effects of aid are more pronounced in countries with low governance scores and low absorptive capacity as well as those with IMF- supported programs.

From the literature reviewed, empirical assessments of the macroeconomic impact of foreign aid and fiscal response to aid have been dominated by cross-country studies. Although cross-country assessments are valid in identifying the determinants of aid effectiveness, however, explaining aid effectiveness by aggregating, a large number of developing countries overlooks some country-specific factors. Furthermore, considering the literature for Nigeria, few studies have actually investigated the foreign aid-government behaviour nexus (see for example Aregbeyen & Fasanya, 2014). However, to the best of our knowledge, no study has disaggregated foreign aid in order to compare the impact of disaggregated foreign aid on total government expenditure.

3.0. Theoretical Framework and Methodology

3.1. Theoretical Framework

This study rely on the framework of fiscal response model by Franco-Rodriquez (2000) as modified by Aregbeyen and Fasanya (2015) for the case of Nigeria. In the fiscal response model, the government can increase revenue and allocate budget to various expenditure lines based on its objective. Foreign aid is considered as a source of government revenue along with taxes. Thus, the relationship between Aid and government spending is expressed as:

$$TG = f(TFA, \varphi) \quad (1)$$

Where TG is total government expenditure, TFA is total foreign aid to Nigeria and φ represents a vector of control variables. To capture the dynamic fiscal impact of different types of foreign aid, this study differs from Aregbeyen and Fasanya (2014) by considering four different categories of foreign aids. To achieve this, the categorisation of foreign aid by Reddy and Miniou (2009) was adopted. this study considers four categories of foreign aid namely: multilateral aid, bilateral aid from Nordic countries (Denmark, Finland, Norway, Iceland, and Sweden); the top-five growth induced aid donor countries based on 2013 commitment to development index (CDI) (Denmark, Sweden, Norway, Luxembourg, and Netherland); and bilateral aid from main trading partners of Nigeria (France, Germany, Japan, Netherland, Spain, United Kingdom and the United State of America). Based on these definitions, equations (2) to (5) are specified below as:

$$TG = f(MA, \varphi) \quad (2)$$

$$TG = f(BANC, \varphi) \quad (3)$$

$$TG = f(BACDI, \varphi) \quad (4)$$

$$TG = f(BATP, \varphi) \quad (5)$$

Where; MA is Multilateral aid; BANC is Bilateral aid from Nordic countries; BACDI is Bilateral aid from top-five countries based on CDI; BATP is Bilateral aid from Nigerian's main trade partners, φ are control variables like inflation (inf), total government revenue (rev) and population (pop). These three variables are chosen because from various literatures they have been repeatedly demonstrated to exert significant effects on the patterns of government expenditure in Nigeria.

From the functional models (2) to (5), the estimable equations are expressed as:

$$TG_t = \gamma_0 + \gamma_1 TFA_t + \gamma_2 \inf_t + \gamma_3 rev_t + \gamma_4 pop_t + \eta_t \quad (6)$$

$$TG_t = \alpha_0 + \alpha_1 MA_t + \alpha_2 \inf_t + \alpha_3 rev_t + \alpha_4 pop_t + \varepsilon_t \quad (7)$$

$$TG_t = \beta_0 + \beta_1 BANC_t + \beta_2 \inf_t + \beta_3 rev_t + \beta_4 pop_t + \upsilon_t \quad (8)$$

$$TG_t = a_0 + a_1 BACDI_t + a_2 \inf_t + a_3 rev_t + a_4 pop_t + \mu_t \quad (9)$$

$$TG_t = b_0 + b_1 BATP_t + b_2 \inf_t + b_3 rev_t + b_4 pop_t + \varpi_t \quad (10)$$

Apriori, it is expected that foreign aid will influence the expenditure patterns and economic development of Nigeria. The large inflow of foreign aid should lead to an increase in government expenditure (capital expenditure) if the government allocates foreign aid efficiently and if the funds are spent on designated purposes. It is also expected that multilateral aid should have a significant impact on government expenditure than any other types of aid, for instance, In Nigeria, Olanrele and Ibrahim (2015) empirical estimates show that multilateral aid had more impact on growth compared to other types of aid. Burnside and Dolllar (2000) find that bilateral aid increases government consumption, while the coefficient of multilateral aid is statistically insignificant. Alesina and Dollar (2000) argued multilateral aid is frequently more focused on supporting development outcomes in developing countries while bilateral aid is seen as more likely to be allocated based on strategic interests, therefore suggest that bilateral aid is more fungible than multilateral aid. Similarly, Gang and Khan (1990) in analysing India's expenditures find that multilateral aid has no significant impact on government expenditures while bilateral aid induces transfer of domestic public resources from non-investment to investment for development purposes. It is also expected that total government revenue, population growth rate should have a positive impact on expenditure while the inflation rate is expected to have a negative influence.

3.2. Estimation Technique

Most foreign aid studies are associated with the problem of endogeneity, the problem caused by endogeneity is that the correlation between the independent variable and error

term is no longer zero. The problem can be resolved if we can find a variable highly correlated to the independent variable but not related to the error term, such a variable is called an instrumental variable. To correct for the possibility of simultaneity biases associated with this study, the study will employ the instrumental variable estimator. The instrumental estimators are capable of eliminating the correlation between explanatory variables and error term (Olanrele & Ibrahim, 2015).

The Two-Stage Least Square (2SLS) is one of the leading instrumental variable estimators. The Two-Stage Least Squares (2SLS) or instrumental variable regression may give valid outcomes in the presence of endogeneity (Martin, 2010). The name of the 2SLS refers to the fact that the analysis incorporates two-step: a first step in which the instrument or instruments are used to estimate the independent variables; and a second step that uses the estimate of the independent variable to estimate the dependent variable. By using instruments to estimate the independent variable, the correlation of the independent variable with the error term is reduced. That is because proper instruments are exogenous and thus not logically correlated with the dependent variable. Therefore, the effect a confounding variable may have on the independent variable is avoided. The estimation of the independent variable is done based on the exogenous instruments exclusively. An instrumental variable may thus both help in the presence of endogeneity and possibly also be used to find the direction of causality. The 2SLS estimator may be a reliable estimator in the presence of endogeneity due to simultaneity, omitted variables or measurement error. According to Mamman (2017), even though adding instruments should always improve the estimate, this may not be practicable in small sample distributions, this forms the basis of the weakness of 2SLS.

3.3. Diagnostic Test

When there is more than one instrument for an endogenous variable, it is possible to test for the validity of the instruments. To validate the instruments that will be used for the study, the J-statistics will be conducted. On the other hand, the Cragg Donnald (1993) F statistics will be used to evaluate the overall strength of the instruments. Equally the F-statistics can be used to test for the weakness of the instruments.

3.4. Sources of Data

Time series secondary data for the period 1981-2018 will be used for this analysis. The data will be obtained from the Organization of Economic Corporation and Development (OECD), the Central Bank of Nigeria (CBN) statistical bulletin and international financial statistics.

4.0. Empirical Results

The empirical analysis presents the Augmented Dickey-Fuller (ADF) and Phillips Perron (PP) unit root tests to determine the order of integration of the series while the ARDL bound testing approach to cointegration is adopted to define the long-run relationship between the variables. Furthermore, the study utilized the Two Stage Least Square (2SLS) to show the long-run impact of foreign aid on total government expenditure.

4.1. Unit Root Tests

The results of the ADF and PP unit root tests are presented in Table 1. From table 1, the stationarity of the variables is a combination of I(0) and I(1). This implies that some of the variables were stationary without been differenced while others became stationary after first differencing. Hence, the study adopted an ARDL Bound testing co-integration test to determine whether the variables have a long-run relationship or not.

Table 1: Summary of Unit Root Results

	Unit Root/Stationarity Test					
	ADF			PP		
	Level	***First Diff.***	***I(d)***	***Level***	***First Diff.***	***I(d)***
Tfa	4.7241**			-5.8181**		***I(0)***
Bacdi	-2.9005**		***I(0)***	-2.6111**		***I(0)***
Banc	-3.5085**		***I(0)***	-2.0603**		***I(0)***
Batp	-4.3307**		*I(0)*	-3.9478**		***I(0)***
Ma	0.9985	-6.5925**	***I(1)***	0.9722	-6.0694**	***I(1)***
Tg	0.7121	-4.7528**	***I(1)***	0.9945	-5.1152**	***I(1)***
Pop	0.9981	-5.0205**	***I(1)***	1.0000	-4.3178**	***I(1)***
Inf	-6.8729**		***I(0)***	-3.2438**		***I(0)***
Rev	1.0061	4.7821**	***I(1)***	1.1003	4.4891***	***I(1)***

*Note: The optimal lag order is selected based on SIC in the ADF test equation. ** indicates 5% significant level.*

Source: *Authors' Computation*

4.2. ARDL Bounds co-integration test

The bound testing cointegration results are presented in Table 3. The results show that there exists a long-run relationship between the variables in equations 8-12. Specifically, there is a long-run relationship between Total government expenditure, Multilateral aid, Bilateral aid from Nordic countries, Bilateral aid from top-five countries based on CDI, Bilateral aid from Nigerian's main trade partners and other control variables.

Table 2: **Bounds test co-integration Results**

Model Specification	F-Statistics	Lower Bound	Upper Bound	Conclusion
Equation (8)	5.1424	2.27	3.28	Co-integration
Equation (9)	4.3491	2.27	3.28	Co-integration
Equation (10)	6.8438	2.27	3.28	Co-integration
Equation (11)	6.1707	2.27	3.28	Co-integration
Equation (12)	5.5821	2.27	3.28	Co-integration

Note: the critical value is selected from 5% significance level. The optimal lag order is based on SIC.

Source: *Authors' computation*

4.3.Two-Stage Least Results on the impact of Foreign Aid and Fiscal Stance

The results on the effect of the total foreign aid and other categories of foreign aid on fiscal stance (government expenditure) are presented in Tables 3-7. For instance, Table 3 revealed that the coefficient of total foreign aid (TFA) is positive but not statistically significant. This implies the TFA does not impact on aggregating fiscal stance (government expenditure) in Nigeria. This result is in contrast to the findings of Hussen (2014); Aregbeyen & Fasanya (2014); and Dinku (2008). Similarly, total government revenue has a positive and significant impact on government expenditure. Also, both the J-statistics and Cragg-Donald F-statistics diagnostic tests revealed that the instruments are valid and not weak.

The results for four different categories of foreign aid considered in this study are presented in Tables 4-7. From the Tables, it is evident that the four categories of foreign aid considered have a positive impact on total government expenditure with bilateral aid from Nordic countries having the largest significant coefficient of 0.4303, followed by bilateral aid from Nigeria's trading partners (0.3129), Multilateral aid (0.2903) and bilateral aid from the top-five CDI ranked countries (0.2597). The results also show that the coefficient of Inflation rate for multilateral aid, bilateral aid from the top-five CDI ranked countries, and bilateral aid from Nigeria's trading partners are all negative and significant at different significance level. This implies that increase in inflation rate impact negatively on government total expenditure over the period of this study. However, the coefficient of inflation in the equation for bilateral aid from Nordic countries is negative in line with the apriori expectation but it is statistically insignificant. The coefficient for total government revenue is positive as expected and statistically significant for the equations for total foreign aid and the four different types of aid considered for this study. This suggests that total government revenue is a key determinant of total government expenditure in Nigeria. The coefficients of total population in all the equations are positive as expected but it only significant for the total foreign equation indicating that total population growth impacted total government expenditure for the period covered in this study.

Likewise, the J-statistics and Cragg-Donald F-statistics diagnostic tests result revealed in Tables 4-7 indicate that the instruments are valid and not weak. The implication of this is that the country will experience more economic growth and development through trading with multiple countries of the world since no country can be an autarky and hence the increase in total government expenditure to meet up with the development. Therefore, bilateral aid from Nordic countries is more significant in determining the total government expenditure than the other forms of aids.

Table 3. The effect of Total foreign aid (TFA) on total government expenditure

Variable	**Dependent variable: Tg**	
	Coefficient	t-statistic
Constant	3.7286***	6.2758
Tfa	0.1240	0.8642
Inf	0.0062	0.8184
Rev	0.0081**	2.0452
Pop	0.0159*	1.8002
R^2	0.7838	
Adj R^2	0.7618	
DW	1.8366	
J-statistic	9.7237	
Prob(J-statistic)	0.0000	
Instruments: Tg(-1) tfa(-1) inf(-1) rev(-1) pop(1)		
Cragg-Donald F-statistic: 6.768		

Note: ** and *** depicts significance level at 5% and 1% respectively
Source: *Authors' computation*

Table 4: The effect of multilateral aid (MA) on Total government expenditure

Variable	**Dependent variable: Tg**	
	Coefficient	t-statistic
Constant	3.1156***	9.8823
Ma	0.2903**	2.2891
Inf	-0.0013***	4.7179
Rev	0.0004**	2.7721
Pop	0.0641	1.0783
R^2	0.8569	
Adj R^2	0.8395	
DW	1.7063	
J-statistic	3.9341	
Prob(J-statistic)	0.0000	
Instruments: Tg(-1) ma(-1) inf(-1) rev(-1) pop(1)		
Cragg-Donald F-statistic: 7.9965		

Note: ** and *** depicts significance level at 5% and 1% respectively
Source: *Authors' computation*

Table 5: The effect of Nordic countries' bilateral aid (BANC) on Total government expenditure

Variable	**Dependent variable: Tg**	
	Coefficient	t-statistic
Constant	3.7740***	8.3536
Banc	0.4303***	3.4708
Inf	-0.0219	1.4471
Rev	0.0067**	3.2956
Pop	0.5672	1.1674
R^2	0.8862	
Adj R^2	0.6632	
DW	1.9166	
J-statistic	6.7672	
Prob(J-statistic)	0.0000	
Instruments: Tg(-1) banc(-1) inf(-1) rev(-1) pop(-1)		
Cragg-Donald F-statistic: 5.5971		

Note: ** and *** depicts significance level at 5% and 1% respectively
Source: *Authors' computation*

Table 4: the effect of top five CDI countries bilateral aid on Total government expenditure

Variable	**Dependent variable: Tg**	
	Coefficient	t-statistic
Constant	3.4945***	8.1098
Bacdi	0.2597**	2.1725
Inf	-0.0246*	-1.8529
Rev	0.0095***	5.2229
Pop	0.2418	0.9952
R^2	0.7219	
Adj R^2	0.6956	

DW	1.7366
J-statistic	4.4313
Prob(J-statistic)	0.0016
Instruments:lnTgexp(-1) lnbacdi(-1) inf(-1) rev(-1) pop(1)	
Cragg-Donald F-statistic:4.0004	

Note: *, ** and *** depicts significance level at 10%, 5% and 1% respectively
Source: *Authors' computation*

Table 5: The effect of Nigerians' trading partners' bilateral aid on Total government expenditure

Variable	**Dependent variable: Tg**	
	Coefficient	t-statistic
Constant	2.7079***	5.0413
Batp	0.3129**	2.7779
Inf	-0.0225*	1.7001
Rev	0.0077***	3.6462
Pop	0.1451	1.0456
R^2	0.7978	
Adj R^2	0.7767	
DW	1.8153	
J-statistic	9.0333	
Prob(J-statistic)	0.0000	
Instruments: Tg(-1) batp(-1) inf(-1) rev(-1) pop(1)		
Cragg-Donald F-statistic: 4.3172		

Note: *, ** and *** depicts significance level at 10%, 5% and 1% respectively
Source: *Authors' computation*

5. Concluding Remark and Policy implication

This paper examined the impact of foreign aid on government fiscal stance (Measured by government expenditure) in Nigeria. The study utilized the Augmented Dickey-Fuller (ADF) and Phillips Perron (PP) unit root tests to determine the order of integration of the series while the ARDL bound testing approach to cointegration was adopted to ascertain the long-run relationship between foreign aid on government fiscal stance (Measured by government expenditure). Furthermore, the Two-Stage Least Square (2SLS) was employed to show the long-run impact of foreign aid on total government expenditure. The results of the ADF and PP unit root tests reveal that the stationarity of the variables is a combination of I(0) and I(1). While the ARDL Bound testing co-integration test results indicate that the variables in equation 8-12 are cointegrated implying a long-run relationship among the variables.

The results of the Two-Stage Least Square (2SLS) showing the impact of total foreign aid and the four different categories of foreign aid on fiscal stance (total government expenditure), revealed that total foreign aid does not impact on government expenditure. While the results for the four different categories foreign aid shows a positive relationship between these aids and total government expenditure with bilateral aid from Nordic countries having the largest impact followed by bilateral aid from main trading partners of Nigeria, multilateral aid and the top- five growth induced aid donors

based on 2013 commitment. The plausible reason for this is that Nordic aid allocations are remarkably free from self-interest and more oriented towards their stated objectives of poverty alleviation, they concentrate more on social infrastructure, this explains why bilateral aid from Nordic countries have more effect on total government expenditure than other types of aid. Based on the above findings, the study, therefore, recommends the following: Government should partner with Nordic countries for foreign assistance to finance its expenditure since foreign aid from these countries has more impact on government expenditure than other forms of foreign aid, and appropriate fiscal policy should be formulated to help direct foreign aid and government expenditure to productive sectors of the economy.

References

Acosta, A. M., & de Renzio, P. (2008). Aid, rents and the politics of the budget process. IDS *Working Paper No. 311*. Institute of Development Studies at the University of Sussex Brighton, UK.

Alesina, A. & Dollar, D. (2000). Who gives foreign money to whom and why? *Journal of Economic Growth, 5*(1), 33-63.

Aregbeyen. O., & Fasanya, O. I. (2014). Fiscal response to foreign aid inflows in Nigeria. *The IUP Journal of Applied Finance*, *20*(2), 37-56.

Butt, R., & Javid, A.Y. (2013). Foreign aid and fiscal behaviour of government of Pakistan. *PIDE working paper No. 2013/96.* Retrieved from Pakistan institute of development Economics

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

Chenery, H. B., & Strout, A. (1966). Foreign assistance and economic development. *Economic review, 66*, 679-733

Combes, J. L., Ouedraogo, R., & Tapsoba, S. J. (2016). What does aid do to fiscal policy? New Evidence. *IMF Working Paper No. WP/116/112.* Retrieved from International Monetary Fund website.

Dinku, M.Y. (2008). *Impact of foreign aid on government fiscal behaviour: Evidence from Ethiopia* (Master's Thesis). University of the western cape, South Africa.

Franco-Rodriquez, S. (2000). Recent development in fiscal response with an application to Costa Rica. *Journal of International Development, 12*(3), 429-441.

Gang, I. N., & Khan, H. A. (1991). Foreign aid, taxes and public investment. *Journal of Development Economics, 34*(1), 355-369.

Heller, P. S. (1975). A model of public fiscal behaviour in developing countries*:* Aid investment and taxation. *American Economic Review, 65*(3), 429-445.

Hussen, S. A. (2014). *The Fiscal Effects of Foreign Aid in Ethiopia* (Master's thesis). Addis Ababa University, Addis Ababa, Ethiopia.

Kolawole, O. B. (2013). Foreign assistance and economic growth in Nigeria: The two gap model. *International Journal of contemporary Research*, 3(10), 153-160.

Mamman, O. S. (2017). *An Analysis of the Determinants of Foreign Exchange Market Pressure in Nigeria*. (Master's thesis) Ahmadu Bello University, Zaria, Kaduna State, Nigeria.

Martins, P. M. G. (2010). Fiscal dynamics in Ethiopia: A cointegrated VAR model with quarterly data. *Working Paper*

No. 10/05. Retrieved from center for research in economics development and international trade website, University of Nottingham, school of Economics, Nottingham, United Kingdom

Mavrotas, G. (2002). Foreign aid and fiscal response: Does aid disaggregation matter? *Journal of Economic Development, 138*(3), 534-559.

Mbah, S., & Amassoma, D. (2014). The linkage between foreign aid and economic growth in Nigeria. *International journal of Economic Practices and Theories, 4*(6), 1007-1017.

McGillivray, M., & Morrissey, O. (2001). Aid illusion and public sector fiscal behaviour. *Journal of development studies, 37*, 118-136

Morrissey, O. (2014) .Aid and fiscal behaviour. Assessing recent evidence. *World Development journal, 69*, 98-105.

Nkoro, E., & Uko, A. K. (2013). Foreign capital inflows and economic growth in Nigeria: An empirical approach. *Asian Journal of Empirical Research, 2*(5), 149-161.

Okafor, I. G., Ugwuegbe, S. U., & Ezeaku, H. C. (2016). Foreign capital inflows and Nigerian economic growth nexus: A Toda Yamamoto approach. *European Journal of Accounting, Auditing and Finance Research, 4*(3), 16-26.

Olaboyega, M. B. (2015). Foreign aid and fiscal behaviour in Nigeria: An impact assessment of Deregulations. *Journal of Economics and Finance*. *6*(1), 1-10.

Olanrele, I., & Ibrahim, T. M. (2015). Does developmental aid impact or impede on growth: Evidence from Nigeria. *International Journal of Economics and Financial Issues*, 5(1) 288-296.

Osei, R., Morrissey, O., & Lloyd, T. (2005). The fiscal effects of aid in Ghana. *Journal of International Development, 17*(8), 1037-1053.

Ouattara, B. (2003). Aggregation bias in aid effectiveness studies: A case study of Côte d'Ivoire using the fiscal response framework. Ph.D. dissertation. University of Manchester.

Reddy, S., & Miniou, C. (2009). Foreign aid and economic growth, a positive – long-run Relation. *IMF Working papers No. 09/118.* Retrieved from International Monetary Fund website.

Sugema, I. & Chowdhury, A. (2005). Aid and fiscal behaviour in Indonesia: The case of a lazy government. *CIES Discussion Paper No. 0506,* University of Adelaide, Australia.