



Stanley Egenti ¹⁾
Chinedu Nevo ²⁾
Israel Onwe ³⁾
Tobechi Faith ⁴⁾
Oludare Durodola ⁵⁾



¹⁾ MA., *Institute of Development Research and Development Policy, Ruhr University Bochum (Bochum, Germany)*
* Corresponding author: e-mail: stanley.egenti@ruhr-uni-bochum.de
ORCID: <https://orcid.org/0000-0003-3601-4095>



²⁾ MSc., *Department of Economics, University of Nigeria Nsukka, (Nsukka, Nigeria)*
* Corresponding author: e-mail: chinedunevo@gmail.com
ORCID: <https://orcid.org/0000-0003-2304-7090>



³⁾ MSc., *Department of Economics, University of Nigeria Nsukka, (Nsukka, Nigeria)*
* Corresponding author: e-mail: onweisrael2@gmail.com
ORCID: <https://orcid.org/0000-0003-2429-5678>



⁴⁾ PhD, *Department of Economics and Development Studies, Alex Ekwueme Federal University Ndufu-Alike Ikwo, (Ndufu-Alike, Nigeria)*
* Corresponding author: e-mail: tobечи_agbanike@yahoo.co.uk
ORCID: <https://orcid.org/0000-0001-9063-7176>



⁵⁾ MSc, *Institute of Water and Energy Sciences, Pan-African University, (Tlemcen, Algeria)*
* Corresponding author: e-mail: durodolaoludare@gmail.com
ORCID: <https://orcid.org/0000-0001-6183-2474>

HAS FOREIGN AID IMPROVED GOVERNANCE AND HUMAN DEVELOPMENT IN WEST AFRICA?

CZY POMOC ZAGRANICZNA POPRAWIŁA ZARZĄDZANIE I ROZWÓJ SPOŁECZNY W AFRYCE ZACHODNIEJ?

Abstract

This study investigates foreign aid, quality of governance and human development in West Africa, adopting the Random-Effects Model (REM) of the Panel Data Analysis and Estimated Generalized Least Square (EGLS) estimation technique for 15 West African countries from 1990-2015. Governance Composite Index with Goal Post and Geometric Mean

ISSN 2450-2146 / E-ISSN 2451-1064

© 2019 /Published by: Międzynarodowy Instytut Innowacji Nauka-Edukacja-Rozwój w Warszawie, Polska

 This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>)

Egenti S., Nevo Ch., Onwe I., Faith T., Durodola O., (2019) Has Foreign Aid Improved Governance and Human Development in West Africa? *International Journal of New Economics and Social Sciences*, 1 (9) 2019: 215-227

[DOI 10.5604/01.3001.0013.3045](https://doi.org/10.5604/01.3001.0013.3045)

approach on six indicators of governance were constructed to treat foreign aid effects on governance collectively. Results showed that most foreign aids improve human development (income, life expectancy, and education). However, some foreign aids weaken the quality of governance. The researchers recommended that government should have little or no role in foreign aid influx into the economy; rather, foreign aid should be channeled through tax effort and private investment. More so, donors should concentrate on poor countries with good institutions if foreign aid must be channeled through government expenditure. Finally, an independent body should ensure mutual accountability between recipients and donors routinely to ensure foreign aid improves human development without weakening governance quality.

Keywords: Foreign Aid, Governance, Quality, Human Development, West Africa

Streszczenie

W niniejszym badaniu zbadano pomoc zagraniczną, jakość zarządzania i rozwój społeczny w Afryce Zachodniej, przyjmując technikę szacowania efektów losowych (REM) danych panelowych oraz technikę szacunkowej uogólnionej najmniejszej powierzchni (EGLS) w 15 krajach Afryki Zachodniej w latach 1990-2015. Skonstruowano wskaźnik potrzebny do oceniania wpływu pomocy zagranicznej na jakość zarządzania. Wyniki pokazały, że większość pomocy zagranicznych poprawia możliwości rozwoju społecznego (dochód, oczekiwana długość życia i edukacja). Jednak niektóre pomoce zagraniczne osłabiły jakość zarządzania. Autorzy zalecają, żeby rząd nie brał udziału, lub brał niewielki udział w naphywie pomocy zagranicznej do gospodarki; pomoc zagraniczna powinna być raczej kierowana poprzez wysiłek podatkowy i inwestycje prywatne. Co więcej, darczyńcy powinni skoncentrować się na krajach mniej zamożnych, jeśli pomoc zagraniczna musi być kierowana przez wydatki rządowe. Niezależny organ powinien zapewnić wzajemną odpowiedzialność między odbiorcami i dawcami rutynowo, tak żeby pewnym było, że pomoc zagraniczna poprawia rozwój bez osłabiania jakości zarządzania.

Słowa kluczowe: pomoc zagraniczna, jakość zarządzania, rozwój społeczny, Afryka Zachodnia

Article history: Received: 25.03.2019 / Accepted: 17.04.2019 / Published: 27.05.2019

JEL Classification: C 30, F 35, F 39, J 24, I 31

Statement of the problem in general outlook and its connection with important scientific and practical tasks.

The concept of foreign aid became popular after World War II (WWII) when Chenery and Strout (1966) developed the Two-Gap-model which holds that the reason why countries are not developing economically is because of the lack of sufficient aggregate savings (savings gap) needed to fi-

nance investment that would realize a sufficient growth of GDP or because of insufficient foreign currency (foreign currency gap) necessary to import the machinery needed to realize a sufficient growth of GDP, hence the need for foreign aid to bridge both gaps. The connections and

ISSN 2450-2146 / E-ISSN 2451-1064

© 2019 / Published by: Międzynarodowy Instytut Innowacji Nauka-Edukacja-Rozwój w Warszawie, Polska

 This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>)

Egenti S., Nevo Ch., Onwe I., Faith T., Durodola O., (2019) Has Foreign Aid Improved Governance and Human Development in West Africa? *International Journal of New Economics and Social Sciences*, 1 (9) 2019: 215-227

[DOI 10.5604/01.3001.0013.3045](https://doi.org/10.5604/01.3001.0013.3045)

structure of bilateral and multilateral aid after World War II became extremely strong to the extent that the word “development” was now seen to be the same in meaning as the word aid, and the concept of “gap-filling with aid flow” was now officially enshrined in every development theory. According to Browne (1997), the basic aim of foreign aid was to assist fewer development countries to achieve sustainable development by tackling their problem of gap filling with foreign aid flow and their capital formation challenges. Gelandar & Walle (2006) argued that the high flow of foreign aid into a country has both positive and negative impact on governance; on one hand, the high inflows of aid improves governance while on the other hand, it hinders it. Moss (as cited in Akinkugbe & Yinusa, 2009) observed that improvement of governance in a country can impede high inflows of aid in two major ways. The first way is by encouraging overdependence on collective action hereby by making the foreign aid system ineffective and making it difficult to build a capable and responsive state. Secondly, institutions are weakened by the high inflows of foreign aid. This happens when: the high inflow of aid is used dishonestly, the transaction cost attached to the aid is unduly high, the effect of foreign aid on the budgeting process or if aid hinders the likelihood of obtaining skills and knowledge.

From a positive viewpoint, Akinkugbe & Yinusa (2009) argued that this high inflow of foreign aid can be directed towards establishing strong institutions and improving the quality of their civil service and policy-making by a government with well-structured development plans. Carlsson, Van de

Walle, & Somoleke (1997) affirms that in the Eastern region of Asia, Southern Korea and Taiwan are suitable examples of countries that can benefit positively from high inflow of aid because their various governments have a well-structured development plans and agenda in the region and similar result is obtainable in Botswana in sub-Saharan Africa. Foreign aid can help resolve the problem of revenue constraint for a country whose government is developmentally driven by making available excess revenue to such government (Miller & Swanson, 2001). Durbarry, Gemmill and Greenaway (as cited in Akinkugbe & Yinusa, 2009) argued that results from various studies carried out on aid showed that the economy of a country with well-structured development plans and policies grows speedily with high inflow of foreign aid into such country hereby improving the quality of governance by generating new revenue from the fast-growing economy to fund such improvements. Base on this, the researcher seeks to provide answers to the following questions.

- I. What is the effect of foreign aid on the quality of governance in West Africa?
- II. What is the effect of foreign aid on human development in West Africa?

There is a wide range of empirical literature on the impact of foreign aid on the quality of governance and human development in Africa. Some of the research works found that foreign aid affects the quality of governance and human development positively; several others reached a negative consensus, while others found no statistically significant effect. It is pertinent to review the interesting debates raised by these contradicting findings in brief.

Analysis of latest research where the solution of the problem was initiated.

**Analysis of past and latest research
Aid and Governance quality**

The work of Mosley, Hudson, and Horrel (1992) was among the earliest studies on foreign aid and they discovered from their findings that economic growth was not promoted by the inflow of foreign aid rather it was unproductive public consumption that was increasing in the economy. After a while, the findings of Mosley, Hunson, and Horeel (1992) was supported by Pedrsen (1996) who in his work discovered that a country's development is distorted by the inflow of foreign aid and it leads to overdependence of the country on foreign aid as well.

Using a different approach Collier (2007) analyzed the same issue and he found that foreign aid is a task that cannot be handled by Official Development Assistance (ODA) alone because countries at the receiving end of this aid are characterized by weak governance and histories of conflict and they lack good governing mechanism to effectively allocate this aid. Similarly, Collier and Hoeffler (2007) in similar research found out that foreign aid was facilitating more 'regional public bad' with no regional public good to offset this 'public bad'.

Similarly, Moyo (2009), in her research discovered that in Africa, the inflow of Foreign aid has led to an increase in poverty, corruption, and dependency over time. On the contrary, the findings of Moyo (2009) were contradicted by Okada and Samreth (2012) who in their study found that corruption was on a decline as a result of the inflow of foreign aid.

In response to the findings of Okada and Samareth (2012), Asongu (2012) investigated the impact of foreign aid on governance in Africa from 1996- 2013. Choosing

a sample size of 53 Africa countries and data collected from these countries were analyzed using a dynamic panel generalized method of moments (GMM) estimator and the result showed that foreign aid had a positive impact on corruption and this positive impact was more significant among countries that are landlocked, do not export oil, dominated by Christians, speaks French as their official language and dominated by middle-income earners. He concluded that the control of corruption is rendered ineffective by the inflow of aid as corruption itself is fueled by aid.

Also, using an instrumental variable (IV) Estimation & Two-Stage Least Square (2SLS) regression to analyze data from 53 African countries for the period 1996-2010, Asongu and Jellal (2013) found that foreign aid injected into the economy through tax effort and private investment reduces corruption while development assistance channel through governments expenditure into the economy fuels corruption.

Likewise, using a quantile regression estimation technique, Asongu (2014) also investigated the various factors affecting corruption-control in about 46 African Countries and the finding from the analysis showed that foreign aids fuels corruption in African countries governed by English Law and dominated by Christians.

In another study, Asongu and Nwachukwu (2015) assessed the impact of development assistance on governance in Africa from the period 1996-2010. Data collected from 52 African countries was estimated using a Two-Stage Least Square (2SLS) estimator and the results showed that the impact of development assistance on political governance was statistically insignificant but deteriorates economic and institutional governance.

ISSN 2450-2146 / E-ISSN 2451-1064

© 2019 /Published by: Międzynarodowy Instytut Innowacji Nauka-Edukacja-Rozwój w Warszawie, Polska

 This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>)

Engenti S., Nevo Ch., Onwe I., Faith T., Durodola O., (2019) Has Foreign Aid Improved Governance and Human Development in West Africa? *International Journal of New Economics and Social Sciences*, 1 (9) 2019: 215-227

[DOI 10.5604/01.3001.0013.3045](https://doi.org/10.5604/01.3001.0013.3045)

Aid and Human Development

Boone (1996) analyzed the effect of foreign aid on human development and his results showed that the impact foreign aid had on infant mortality rate and a number of primary school enrolment which were used to proxy human capital development was statistically insignificant. Boone's findings were later supported by Dollar and Burnside (1998) who in similar research discovered that the impact of foreign aid on human development (proxy by infant mortality rate) was statistically insignificant.

A contradicting finding was presented by Kosack (2003) who examined the impact of development assistance in an autocratic and democratic country. Results showed that development assistance had a negative impact on human development in autocratic countries and a positive impact in democratic countries. In conclusion, Kosack was of the opinion that the development of human capital of poor democratic countries is promoted or improved with the help of development assistance. The findings of Kosack (2003) were contradicted by McGillivray and Noorbakhsh (2007) who examined the impact of foreign development assistance on human development in non-democratic and democratic countries. Results showed that foreign development assistance had a negative and statistically significant impact on human development index in non-democratic and democratic countries. These discoveries led to the division of analysis into democratic countries and non-democratic countries. Furthermore, quantile regression analysis was used by Gomanee et al (2005) to investigate the impact of foreign aid on human development. The result from the findings showed that foreign aid does not have a direct effect on human development rather through its effect on pro-poor expenditure it indirectly affects human development positively


which in turn improves welfare, but this effect is stronger in countries with lower welfare. They concluded by arguing that improving human development through ODA does not entirely depend on sound economic policies. Contrary to this findings, Gomanee, Girma and Morrissey (2005) in their research found that development aid has a positive and direct effect on human development with no evidence of any sort of indirect effect through the Pro-Poor index as suggested by Gomanee et al (2005) in their findings.

It will be fascinating looking at another dimension of literature relating to the topic impact of foreign aid on human development for certain countries characterized by their economic policies, institutional quality and their level of democracy. As regards to this, a Panel Vector Auto-regressive model was employed by Headey and Hansen (2010) to examine the short-run impact of development aid on human development in extremely aid-dependent countries and less aid-dependent countries. The result of the findings showed that there is a threshold of aid dependency if exceeded renders aid ineffective. In conclusion, they argued that over-dependence on development aid results in bad governance and macro distortions.

Taking another direction, the link between conflict, aid, and Human Development Index (HDI) was analyzed by Noorbakhsh and McGillivray (2014) and the result of the findings showed that both development aid and conflict impact negatively on HDI and this effect was statistically significant. In another literature, Yontcheva and Masud (2005) examined the impact of governmental and non-governmental aid on human development and their effectiveness. The outcome of their findings showed that non-governmental aid was statistically significant

ISSN 2450-2146 / E-ISSN 2451-1064

© 2019 /Published by: Międzynarodowy Instytut Innowacji Nauka-Edukacja-Rozwój w Warszawie, Polska

 This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>)

Egenti S., Nevo Ch., Onwe I., Faith T., Durodola O., (2019) Has Foreign Aid Improved Governance and Human Development in West Africa? *International Journal of New Economics and Social Sciences*, 1 (9) 2019: 215-227

[DOI 10.5604/01.3001.0013.3045](https://doi.org/10.5604/01.3001.0013.3045)

cant in reducing the mortality rate of infants. Furthermore, non-governmental aid was found to be more effective compared to governmental aids.

Lastly, Quartey and Asiamah (2009) investigated the impact of foreign aid on human capital development in sub-Saharan Africa. Data was collected and analyzed from over 39 sub-Saharan African countries and the results showed that the impact of foreign aid on human capital development (proxy by infant mortality rate and HDI) was positive and statistically significant.

Aims of paper. Methods

This study covered panel data for 15 West African countries from 1990-2015. The Hausman specification test indicated that the Random Effects Model (REM) was most appropriate for this study, thus the Estimated Generalized Least Square (EGLS) estimation technique was adopted. The advantage of the EGLS method is that it produces better results and high significance

$$GOVERN_{it} = \beta_{0i} + \beta_{11i}NBAF_i + \beta_{21i}NODARPGNI_i + \beta_{31i}NODARPC_i + \beta_{41i}NOFFUNDP_i + \mu_{1it} \dots \text{equation 1}$$

While the model for the second objective can be specified as:

$$HDI_{it} = \beta_{0i} + \beta_{1i}NBAF_i + \beta_{2i}NODARPGNI_i + \beta_{3i}NODARPC_i + \beta_{4i}NOFFUNDP_i + \mu_{it} \dots \text{equation 2}$$

Where: $GOVERN_i$ is an index that stands for governance quality. It ranges from 0 to 1. 1 means very strong quality while 0 means very weak quality.

HDI_{it} stands for human development index. Its value ranges from 0-1. 1 means perfect human development and 0 means no human development

$NBAF_i$ stands for net bilateral aid flows from development assistance committee (DAC). This variable is measured in current US\$

$NODARPGNI_i$ stands for net official development assistance received as a percentage of gross national income. This variable is measured in percentage

$NODARPC_i$ stands for net official development assistance received per capita. This variable is measured in current US\$

$NOFFUNDP_i$ stands for net official flows from United Nations Development Program. This variable is measured in current US\$.

$\beta_{0i} \beta_{1i} \dots \beta_{4i}$ represents the parameters to be estimated μ_{it} and μ_{1it} are the error terms. It stands for other variables that affect GOVERN or HDI that is not present in the model.

From the literature reviewed, it is evident that there are contradictory findings on the tripartite nexus amongst foreign aid, quality of governance, and human development. It is this contradiction that emanated this study which intends to extend the debate and verify common positions. But unlike previous studies, this study is interested in the West African nexus and the researchers constructed quality of governance composite index in order to reveal how foreign aid affects all aspects of governance as an aggregate.

most times even when there is an auto-correlation or heteroskedasticity problem (Gujarati, 2008).

Model Specification

According to Gujarati (2008), the econometric form of the model for the first objective can be specified as:

Exposition of main material of research with complete substantiation of obtained scientific results. Discussion.

Calculation of the Quality of Governance Index

The quality of governance index is composed of six different indicators of governance. They are namely: Control of Corruption, Political Stability, and Absences of violence, Rule of Law, Government Effectiveness, voice and Accountability, and Regulatory Quality. The Quality of Governance index was calculated using a combination of the Geometric and Goal Post approach. The Human Development Index

was calculated by the United Nations using this same method.

The researcher proceeded as follows to compose this index:

Step1: Here, the researchers created an index for each of the six indicators. For each indicator, a maximum and minimum possible value (goal post) was fixed. The indicators were transformed into an index that ranges from 0 to 1 depending on its position on the goal post using equation 3 below.

$$\text{Index } xi = \frac{\text{Actual value} - \text{minimum value}}{\text{Maximum value} - \text{minimum value}} \dots \dots \text{equation 3}$$

The maximum value is the value of the highest observed value of all countries in the world from 1980-2015 while the minimum value is the lowest observed value of all countries in the world during

the same period.

Step 2: Using equation 4, the quality of governance index was then created by calculating the geometric mean of the six indices that was created in step 1

$$\text{Quality of governace composite index} = \sqrt[6]{x1 * x2 \dots x6} \dots \dots \text{equation 4}$$

Where $x_1, x_2 \dots x_6$ are the six governance indices calculated using the goal post method

Unit root test:

The first step prior to analyzing a panel or time-series data is to ascertain its stationarity (stability) properties to ensure that the dataset is stable since the stability of dataset is necessary for valid regression. This is because when we plot the value of the dataset, it is possible that it may not be smooth, this implies that there is a time when there was a shock. The rationale of testing for unit root/stationarity is to ascertain whether the shock had a temporal or permanent effect. If the shock had a

permanent effect then our endogenous variables (GOVERN and HDI) may not return to its long-run equilibrium but when the shock is temporal, our endogenous variable returns to its long-run equilibrium meaning that our dataset is stable and stationary (Dickey & Fuller, 1979). This study used the Levin, Lin, & Chu t^* and the Im, Pesaran and Shin W-stat unit root test to ascertain this property.

To ascertain the stationarity/unit root properties, the following regression equations were used (Gujarati, 2008).

$$Y_t - Y_{t-1} = \rho Y_{t-1} - Y_{t-1} + \mu_t \dots \dots \dots \text{equation 5a}$$

$$= (\rho - 1)Y_{t-1} + \mu_t \dots \dots \dots \text{equation 5b}$$

Equation 5b can also be expressed as:

$$\Delta Y_t = \delta Y_{t-1} + \mu_t \dots \dots \dots 5c$$

where $\delta = (\rho - 1)$ and Δ are the operators used to indicate that the variable has been differenced. The researchers estimated equation 5c and test the null hypothesis that

$\delta = 0$ (the data set has a unit root) against the alternative hypothesis that $\delta < 0$ (data is stationary at level)

Co-integration test:

Co-integration test is used to identify the long-run relationship between variables, if the unit root test shows that all the data series are not integrated of order zero but are integrated of order one then it is required to run a cointegration test to determine if a linear combination of all the data series are integrated of order zero (i.e. stationary at level). According to (Gujarati) The data series (variables) is said to have a long-run relationship if they were found to be integrated of order zero. Thus, we will obtain a non-spurious result when we regress the dependent variable on the independent variables. To ascertain the long relationship, this study made use of the Johansen Fisher Panel Cointegration test.

Diagnostic Test:

According to Gujarati (2008), one of the assumptions of the OLS models is that there is no serial correlation among the residuals. The Breusch-Pagan LM test was adopted to test for autocorrelation to avoid the violation of this statistical assumption. For our panel data regression to yield efficient results with an unbiased standard error the correlation among the residuals should be

zero because in the presence of positive or negative correlation our results become inefficient even if the estimators are linearly unbiased and normally distributed. According to Gujarati (2008), the effect of having a biased standard error is that it makes some statistically significant regression coefficients to become statistically insignificant.

Data source:

Data on the six indicators of quality governance used in computing the Quality of Governance index (GOVERN) was gotten from World Governance Indicators. The Human Development Index (HDI) was gotten from the Human Development Report of the United Nations. Net bilateral aid flows from the Development Assistance Committee (NBAF) and net Official Flows from the United Nations Development Program (NOFFUNDP) were both gotten from World Development Indicators. The net Official Development Assistance received as a percentage of gross national income (NODARPGNI) and net Official Development Assistance received per capita (NODARPC) were both gotten from Organization for Economic Co-operation and Development (OECD).

Results and Discussion
Unit Root Test

Table 1. Unit Root Results

Variable	Levin, Lin, & Chu t*.	Order of integration	Im, Pesaran and Shin W-stat	Order of integration
HDI	-3.18	<i>I(1)</i>	-2.55	<i>I(1)</i>
NBAF	-3.56	<i>I(1)</i>	-3.13	<i>I(1)</i>
NODARPGNI	-3.98	<i>I(1)</i>	-2.82	<i>I(1)</i>
NODARPC	-3.94	<i>I(1)</i>	-3.17	<i>I(1)</i>
NOFFUNDP	-5.16	<i>I(1)</i>	-2.47	<i>I(1)</i>
GOVERN	-2.39	<i>I(1)</i>	-2.89	<i>I(1)</i>

Source: Authors' Computation using Eviews 10.

Note: **Probabilities are computed assuming asymptotic normality

The Levin, Lin, & Chu t* unit root test was carried out to determine the stationarity level of the data series. The result showed that the data series were all stationary at first difference (integrated of order one *I(1)*). Since

none of the data series were stationary at level, the Johansen Fisher Panel cointegration test was conducted to check for the existence of a long-run relationship.

Cointegration Test Result

Table 2. Johansen Fisher Panel Cointegration Results for Model 1

Hypothesized No. of CE(s)	Fisher Stat* (from trace test)	Prob. **	Fisher Stat* (from max-eigen test)	Prob. **
None	89.26*	0.001	75.19*	0.002
At most 1	61.98*	0.025	53.18*	0.031
At most 2	25.38	0.059	21.64	0.062
At most 3	19.14	0.087	15.38	0.091
At most 4	11.76	0.103	9.16	0.218

Source: Authors' Computation using Eviews 10.

Note: * denotes rejection of the hypothesis at the 0.05 level

** MacKinnon-Haug-Michelis (1999) p-values

Table 3. Johansen Fisher Panel Cointegration Results for Model 2

Hypothesized No. of CE(s)	Fisher Stat* (from trace test)	Prob. **	Fisher Stat* (from max-eigen test)	Prob. **
None	73.11*	0.000	62.46*	0.000
At most 1	69.54*	0.013	51.22*	0.029
At most 2	58.29*	0.036	42.32*	0.047
At most 3	34.16*	0.042	27.84*	0.062
At most 4	21.12	0.071	18.84	0.079

Source: Authors' Computation using Eviews 10.

Note: * denotes rejection of the hypothesis at the 0.05 level

** MacKinnon-Haug-Michelis (1999) p-values

The optimal lag length for the cointegration analysis was first obtained using the Akaike information criterion (AIC), Schwarz information criterion (SIC) and the Final Prediction Error (FPE). The result showed that 2lags was suitable for model 1 and 1lag for model 2. Both the max-eigen test and trace test from the Johansen Fisher Panel cointegration test above showed that model 1 has at least 2 cointegrating equation and at least

4 cointegrating equation for model 2. Hence, we conclude that there exists a long-run relationship between foreign aid and human development as well as quality governance in West Africa

Given the existence of a long-run relationship, this study adopted the Estimated Generalized Least Square (EGLS) technique in the estimation of our Random-Effect Model. The results are shown below.

Table 4. Panel EGLS result for model 1

Dependent variable: Quality of governance index

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NBAF	-0.056	0.018	3.152	0.035
NODARPGNI	-0.092	0.033	2.713	0.026
NODARPC	-0.048	0.039	1.214	0.581
NOFFUNDP	0.038	0.020	1.834	0.538

Source: Authors' Computation using Eviews 10.

Table 5. Panel EGLS result for model 2.

Dependent variable: Human development index

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NBAF	0.031	0.011	2.876	0.041
NODARPGNI	0.082	0.026	3.142	0.021
NODARPC	0.019	0.011	1.737	0.059
NOFFUNDP	0.076	0.029	2.625	0.044

Source: Authors' Computation using Eviews 10.

Table 4 and 5 are results of the Random-Effects Model (REM) estimated using the Estimated Generalized Least Square (EGLS)

ISSN 2450-2146 / E-ISSN 2451-1064

© 2019 /Published by: Międzynarodowy Instytut Innowacji Nauka-Edukacja-Rozwój w Warszawie, Polska

 This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>)

Egenti S., Nevo Ch., Onwe I., Faith T., Durodola O., (2019) Has Foreign Aid Improved Governance and Human Development in West Africa? *International Journal of New Economics and Social Sciences*, 1 (9) 2019: 215-227

[DOI 10.5604/01.3001.0013.3045](https://doi.org/10.5604/01.3001.0013.3045)

technique as a recommendation by the Hausman Specification test.

Table 3 analyzed the impact of foreign aid on the quality of governance in West Africa. The regression result shows that net bilateral aid flow from development assistance committee (NBAF) and net official development assistance received as a percentage of gross national income (NODARPGNI) both had a statistically significant negative effect on the quality of governance in west Africa. Official development assistance received per capita (NODARPC) had a statistically insignificant negative effect on governance quality, while net official flows from United Nations Development Program (NOFFUNDP) was found to have a positive but statistically insignificant effect on governance quality. Thus, there is evidence that some types of foreign aid (NBAF and NODARPGNI) affect the quality of governance negatively.

On the other hand, table 4 analyzed the effect of foreign aid on human development

in West Africa. The result shows that all the variables used to proxy foreign aid in the model (net bilateral aid flow from development assistance committee (NBAF); net official development assistance received as a percentage of gross national income (NODARPGNI); official development assistance received per capita (NODARPC); net official flows from United Nations Development Program (NOFFUNDP)) all had a statistically significant positive effect on human development except NODARPC which was found to have an insignificant effect.

The Breusch-Pagan LM test was used to ensure that the assumption of no autocorrelation was not violated. Since the P-value of the Breusch and Pagan statistic (0.0724) was greater than the critical value (0.05) we did not reject the null hypothesis that there is no autocorrelation. Thus, we concluded that the model is statistically valid.

Conclusions.

The paper investigated the effect of foreign aid on human development and quality of governance in West Africa in order to extend the debate on this subject and to verify common positions, from Moyo's 'Dead Aid', and Collier's 'Bottom Billion'. The empirical evidence is based on data from 15 West African countries for the period 1990–2015. A random-effects model was most appropriate for this study, thus the estimated generalized least square (EGLS) technique was used to estimate the model. The findings revealed that most foreign aid positively affect human development (income, and/or life expectancy, and/or education) but some foreign aid negatively affects the quality of governance (Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government

Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption) in West Africa.


The findings on the foreign aid and governance nexus are broadly in accordance with Moyo (2009), Collier (2007), and Asongu (2014), but contradict the Asongu (2012) stance on the aid-corruption nexus, as well as Okada and Samreth (2012) findings on aid-corruption nexus.

As regards to the foreign aid and human development nexus, this finding disagrees with Moyo (2009) findings on aid and poverty nexus but agrees with Masud and Yontcheva (2005) findings on aid and infant mortality nexus.

For foreign aid to simultaneously improve human development and the quality of gov-

ISSN 2450-2146 / E-ISSN 2451-1064

© 2019 /Published by: Międzynarodowy Instytut Innowacji Nauka-Edukacja-Rozwój w Warszawie, Polska

 This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>)

Egenti S., Nevo Ch., Onwe I., Faith T., Durodola O., (2019) Has Foreign Aid Improved Governance and Human Development in West Africa? *International Journal of New Economics and Social Sciences*, 1 (9) 2019: 215-227

[DOI 10.5604/01.3001.0013.3045](https://doi.org/10.5604/01.3001.0013.3045)

ernance, or at least improve human development without deteriorating the quality of governance, the following policy reforms should be considered: The government should have little or no role in the injection of foreign aid into the economy, rather, foreign aid should be channeled through tax effort and private investment. More so, donors should give more foreign aid to poor

countries that have good institutions if foreign aid must be channeled through government expenditure. Finally, further studies should be conducted on the essential indicators of human capital, socio-political institutions, development assistance and how they specifically affect the standard of living in fragile states.

References:

1. Akinkugbe O., Yinusa O., (2009). *ODA and human development in Sub-Saharan Africa: Evidence from panel data*. In presentation at the 14th Annual Conference on Econometric Modelling for Africa (pp. 8-10). Abuja, Nigeria.
2. Asiamia J.P., Quartey P., (2009). *Foreign aid and the human development indicators in Sub-Saharan Africa*. *Journal of Developing Societies*, 25(1), 57-83.
3. Asongu S.A., (2012a). "On the effect of foreign aid on corruption", *Economics Bulletin* 32(3), 2174-2180.
4. Asongu S.A., Jellal, M., (2013) "On the channels of foreign aid to corruption", *Economics Bulletin*, 33(3), 2191-2201.
5. Asongu S.A., (2014). *Fighting African capital flight: Trajectories, dynamics and tendencies*. African Governance and Development Institute Working Paper.
6. Asongu S.A., Nwachukwu J.C., (2016). *Foreign aid and governance in Africa*. *International Review of Applied Economics*, 30(1), 69-88.
7. Boone P., (1996). *Politics and the effectiveness of foreign aid*. *European economic review*, 40(2), 289-329.
8. Browne S., (1997). *The rise and fall of development aid*. UNU World Institute for Development Economics Research.
9. Burnside C., Dollar D., (1998). *Aid, the incentive regime, and poverty reduction* (No. 1937). World Bank Publications.
10. Carlsson J., Van de Walle N., Somolekae G., Van de Walle N., (1997). *Foreign Aid in Africa: Learning from country experiences*. Nordic Africa Institute.
11. Chenery H.B., Strout A.M., (1966). *Foreign assistance and economic development*. *The American Economic Review*, 56(4), 679-733.
12. Collier P., (2007). *The bottom billion: Why the poorest countries are failing and what can be done about it*. Oxford University Press, USA.
13. Collier P., Hoeffler A., (2007). *Unintended consequences: does aid promote arms races?*. *Oxford Bulletin of Economics and Statistics*, 69(1), 1-27.
14. Devarajan S., Miller M.J., Swanson E.V., (2001). *Goals for development: History, prospects, and costs*. The World Bank.
15. Dickey D.A., Fuller W.A., (1979). *Distribution of the estimators for autoregressive time series with a unit root*. *Journal of the American statistical association*, 74(366a), 427-431.
16. Durbary R., Gemmill N., Greenaway D., (1998). *New evidence on the impact of foreign aid on economic growth*. (No. 98/8). CREDIT Research paper.
17. Gomanee K., Girma S., Morrissey O., (2005). *Aid, public spending and human welfare: evidence from quantile regressions*. *Journal of International Development: The Journal of the Development Studies Association*, 17(3), 299-309.

ISSN 2450-2146 / E-ISSN 2451-1064

© 2019 / Published by: Międzynarodowy Instytut Innowacji Nauka-Edukacja-Rozwój w Warszawie, Polska

 This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>)

Engenti S., Nevo Ch., Onwe I., Faith T., Durodola O., (2019) Has Foreign Aid Improved Governance and Human Development in West Africa? *International Journal of New Economics and Social Sciences*, 1 (9) 2019: 215-227

[DOI 10.5604/01.3001.0013.3045](https://doi.org/10.5604/01.3001.0013.3045)

18. Gomanee K., Morrissey O., Mosley P., Verschoor A., (2005). *Aid, government expenditure, and aggregate welfare*. World Development, 33(3), 355-370.
19. Gujarati D.N., (2008). *Basic econometrics*. Tata McGraw-Hill Education.
20. Hansen H., Headey D.D., (2010) 'The short-run macroeconomic impact of foreign aid to small states: An agnostic time series analysis.' The Journal of Development Studies 46(5), 877–896
21. Kosack S., (2003). *Effective aid: How democracy allows development aid to improve the quality of life*. World Development, 31(1), 1-22.
22. Masud N., Yontcheva B., (2005). *Does foreign aid reduce poverty? Empirical evidence from non-governmental and bilateral aid* (No. 5-100). International Monetary Fund (IMF).
23. McGillivray M., Noorbakhsh F., (2004). *Composite indices of human well-being: past, present, and future* (No. 2004/63). Research Paper, UNU-WIDER, United Nations University (UNU).
24. McGillivray M., Noorbakhsh F., (2007) 'Aid, conflict and human development.' Working Papers 2007-03, Department of Economics, University of Glasgow
25. Mosley P., Hudson J., Horrell S., (1992). *Aid, the public sector and the market in less developed countries: A return to the scene of the crime*. Journal of International Development, 4(2), 139-150.
26. Moss T.J., Pettersson Glander G., Van de Walle N., (2006). *An aid-institutions paradox? A review essay on aid dependency and state building in sub-Saharan Africa*.
27. Moyo D., (2009). *Dead aid: Why aid is not working and how there is a better way for Africa*. New York: Macmillan.
28. Okada K., Samreth S., (2012). *The effect of foreign aid on corruption: A quantile regression approach*. Economics Letters, 115(2), 240-243.
29. Pedersen K.P., (1996). 'Aid, Investment and incentives' Scandinavian Journal of Economics 98(3),423-438.