

Does U-Shaped Relationship Hold Between Foreign Aid and Human Development Index Across African Countries? An Empirically Analysis

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Abstract

This study examined the link between foreign aid and human development index (HDI) in African countries using data for 54 African countries from 2013 to 2022. The 2-step system GMM is applied for foreign aid and human development index nexus while the robustness check is done by Difference GMM. The study found a negative relationship between foreign aid and human development index as well as a positive relationship between the squared foreign aid and human development index, suggesting a U-shaped relationship between foreign aid and HDI. This indicates that aid effectiveness is contingent on its quantity. On the other hand, government budget, and government effectiveness exhibit negative relationship with human development index. The study underscores the importance of targeted foreign aid, efficient budget allocation, effective governance and prioritize attracting high-quality Foreign Direct Investment (FDI) for sustained human development. Policymakers should prioritize governance reforms to enhance the effectiveness of aid. Strategic planning that considers the quantity and quality of aid is essential for positive human development outcomes in Africa.

Keywords: Foreign Aid, Human Development Index, U-Shaped Relationship, GMM, African Countries.

Introduction

Human development is a major challenge in many African countries, requiring solutions to problems such as poverty, income inequality, access to education, and healthcare in order to improve people's lives as a whole. The connection of these challenges represents quite an important aspect of African development. African nations have utilized a variety of funding

sources in the past few decades to combat these challenges, with foreign aid and budgetary allocations from government coffers being particularly significant.

For African countries, the most basic source of human development finance coming from abroad includes both grants and loans from foreign governments, international organizations, and non-governmental organizations (NGOs) (African Development Bank Group, 2019). At the same time, such grants and loans (aid) harmonize traditional trade relations and decrease deficit in financing poverty alleviation programs, bridging inequality initiatives and enhance access to education and healthcare. Over the past 50 years, the sum of over one trillion US dollars has flowed into the region, supporting the construction of such diverse projects as infrastructure, healthcare, and education, as well as programs aimed at alleviating poverty (Moyo, 2010). In 2022, for example, the United States Agency for International Development (USAID) provided Africa with \$6.5 billion in humanitarian aid (USAID, 2022). This underscores the important impact foreign aid has in alleviating challenges in achieving sustainable human development.

Despite the above efforts, however, sustainable financing for human development still has practical challenges and differences. The region suffers from great poverty rates, unequal conditions, problems with infrastructure, high mortality rates for children and much more, all of which have been further aggravated by the COVID-19 pandemic and therefore, essential to remove the structural barriers that have hindered human development financing over the years. There are different views on how foreign aid affected human development as well as its effectiveness in advancing human development. Hence, despite contributing to progress, foreign aid can tend to foster dependency and reduce the incentive for the recipient countries to develop especially in an environment where governance programs are ineffective or corrupt (Dahmardeh & Tabar, 2013; Moyo, 2010). In addition, foreign aid may have conditions attached that go against the priorities of recipient countries, leading to inefficiency (Mahembe & Odhiambo, 2021; Akobeng, 2020; Farah et al., 2018; Lohani, 2004).

With respect to these challenges, it is critical to have more studies in order to fully understand the impact of foreign aid on human development in Africa and explore whether non-linear relationships in the nexus exist. Thus, constitute a literature gap that provide a medium to contribute to existing knowledge. What follows in this study are as: section 2 reviews past literature, section 3 provide the methodologies that were employed. The findings and analysis of the result is presented in section 4 while section 5 concludes and offers policy recommendations.

Literature Review

Theoretical Framework

Two Gap Model

The Two-Gap Model, conceived by Chenery and Strout (1966), is the foundational framework for understanding the economic challenges of low-income countries, particularly those in the African context examined in this study. This model indicates the existence of two critical gaps in low-income countries, the savings gap and the foreign exchange gap. These gaps both inhibit economic development. A savings gap occurs when domestic savings fall short of the necessary investment for economic progress and foreign exchange gap develops as a result of a shortage of foreign exchange to cover the cost of import. Based on this classic work, the model has important implications for understanding Africa's economic behavior. One of these is that it helps in understanding how to obtain resources within and outside the country to finance certain project and programs of government.

Given the Two Gap Model structure, foreign aid becomes a practical way to solve foreign exchange shortages. In addressing the savings gap, foreign aid can augment domestic savings and provide the necessary investment in infrastructure, education and health care. The model also offers a theoretical justification on which to base understanding of the strategic function of aid in bridging the savings gap (Chenery & Strout, 1966). Foreign aid also plays an important role in bridging the foreign exchange gap. Codification of a country's balance of payments ensures that it can keep on imported items without excessive depletion of foreign exchange reserves. Foreign aid and The foreign exchange gap, as spelled out in the Two Gap Model, are two sides of the dollar balance challenged by need and particularly by foreign aid systems and needs.

In the African context, the two-gap model has become an instrument for interpreting long-lasting economic constraints. Researchers like Easterly (2005) have emphasized that the material and economic environment of African societies requires different kinds of development literature to serve them. The Two Gap Model under study thus furnishes a theoretical basis for gauging not only how foreign aid has impacted economic development but, still-more importantly, vital social indicators throughout Africa. Yontcheva and Masud (2005) and Asongu (2012) are contemporary scholars who offer many valuable insights into the interaction between foreign aid and development indicators. Situated within the Two Gap Model framework, their work provides a variety of viewpoints on the advantages and problems of aid in confronting the economic challenges in African societies.

The Two Gap Model, with its attention to savings and foreign exchange gaps, is a strong theoretical basis for understanding the economic complexities of African nations. This theory forms the foundation for the subsequent investigation on how foreign aid and government expenditure promote social development across African countries.

Threshold Theory

Threshold Theory, provides a conceptual framework that can help explain the behavior of non-linear dynamics in some variables, such as the relationship between foreign aid and human development. A threshold of aid is suggested by this theory, beyond which the effect on human development may fade or even become negative (Asongu, 2012). Asongu (2012), provides an empirical evidence of a critical threshold of aid that has a significant impact on human development in Africa. Furthermore, Scholars like Burnside and Dollar (2000) have addressed the question of aid's effectiveness under various conditions of policy boundaries. Their work is indispensable as far as the evaluation of aid's effectiveness is concerned. Their paper examined the relationships among foreign aid, economic policies, and growth per capita GDP. They found that aid has a positive impact on growth in developing countries with good fiscal, monetary, and trade policies but has little effect in the presence of poor policies. Good policies are ones that are themselves important for growth. The quality of policy has only a small impact on the allocation of aid. Their results also suggest that aid would be more effective if it were more systematically conditioned on good policy.

In addition, Threshold Theory argues that the impact of certain variables may change direction at specific threshold levels. In the case of foreign aid and human development, the theory suggests a non-linear pattern may exist in the relationship between foreign aid and human development. That is to say, a country has to reach certain development level beyond which foreign aid can positively impact on development outcomes and beyond a certain threshold of aid, the positive effects may dominate, but below that threshold, the impact might diminish or even become negative. This form the basis of empirically testing the

presence of a non-linear relationship between foreign aid and human development index across African countries in this study.

Empirical Review

The relationship between foreign aid and development outcomes is intricate and depends on contextual factors. From the literature, it is evident that foreign aid in the form of multilaterally-issued aid and grants has had a substantial and positive impact on poverty reduction in sub-Saharan Africa (Mahembe & Odhiambo, 2021). Akobeng (2020) addressed the interactions between foreign aid, institutional democracy, and poverty in sub-Saharan Africa, revealing that democracy is conducive to the use of foreign aid for alleviating poverty. In particular, multilateral sources and grants had a more pronounced effect on poverty reduction than did bilateral sources and loans. Hana (2015) presents a new viewpoint by looking at aid and its role in reducing poverty in Ethiopia. The study is slanted towards poverty reduction rather than economic growth, and as a result, foreign aid has a clear (and in some cases statistically significant) effect on such indicators as the infant mortality rate and household consumption expenditure. Alvi and Senbeta (2012) explore how foreign aid impacts various socio-economic indicators, and they argue that, foreign aid has a significant impact on poverty even after income levels are accounted for. Kim and Lin (2015) underscore the positive effects of foreign aid targeted at health in African countries, especially when the intervention goes into towards health infrastructure and service delivery. In the same manner, Murshed and Khanaum (2014) reveals that foreign aid has a positive impact on social development.

However, the effectiveness of aid varies with factors such as institutional quality, democracy, and the particular sectors involved. According to Maruta et al. (2020), the effectiveness of different types of foreign aid given to different parts of the world for growth varies by region. They find that education aid is especially beneficial in South America, health aid in Asia, and agricultural aid in Africa. However, Farah et al. (2018) suggest that foreign aid has a rich and divisive effect on Ethiopia's socioeconomic development. Although foreign aid has little influence on GDP growth, aggregate investment in foreign direct investment (FDI) and the unemployment rate increase significantly. But because of problems like corruption and authoritarianism, even though Ethiopia gets an unprecedented amount of foreign aid, it remains mired in its problems. Is aid ultimately effective? Some studies raise this question. According to Signor and Vandernoot (2021), internal factors mainly drive the Human Development Index (HDI), while foreign aid and private funding are not significantly related to improving HDI. Akinbode and Bolarinwa (2020) apply System GMM in their study and show that foreign aid has no significant effect on human development in Sub-Saharan Africa. Furthermore, HDI falls as corruption rises, and is positively related to trade openness. Ekanayake et al. (2010) display mixed results on the effects of foreign aid on economic growth in developing economies. In another study, Kumler (2007) challenge the believes that more foreign aid leads to higher HDI levels, indicating a potential disconnect between aid and human developmen. Masud and Yontcheva (2005) assert that NGO aid can significantly reduce infant mortality but somewhat less capable of reducing illiteracy. Finally, Lohani (2004) questions whether there is a positive relationship between foreign aid and the Human Development Index and found a negative relationship.

The existing literature on the relationship between foreign aid and development has explored various aspects, including the impact of aid on human development index, poverty reduction, economic growth, and social infrastructure. However, there appears to be a gap in specifically

addressing the U-shaped relationship between foreign aid and the Human Development Index (HDI) across African countries.

While some studies have examined the overall impact of foreign aid on development indicators, there are relatively few that have inquired further into the dynamics that might produce a U-shaped pattern. A U shaped relationship suggests that aid might have an optimal level, after which its effectiveness diminishes or even becomes counterproductive. The quantification of an optimal level of foreign aid that maximizes the beneficial effects on human development and the potential diminishing returns or negative side effects of aid when it reaches extreme levels are issues that the current literature may not have treated comprehensively and hence the contribution of this study. Examining if aid has a threshold to which it becomes less effective could yield important information for aid agencies and policy makers.

Methodology

Given that endogeneity (i.e., omitted variable bias, bidirectional causality) might emerge among variables, which cannot be handle by pooled ols, fixed and random effect models. This study utilized Generalized Method of Moments (GMM) estimation techniques which addresses endogeneity problems (Astuti et al., 2020). Most notably, when lagged dependent variables appear in models as explanatory variables, ordinary least squares (OLS), fixed effects, random effects, and generalized least squares techniques produce biased and inconsistent results (Baltagi, 2001 and Roodman, 2009). Nevertheless, the GMM is comprised of two different kinds of estimators: the difference GMM suggested by Arellano and Bond (1991), and the system GMM advocated by Blundell and Bond (1998). In addition, Bond (2001) had pointed out that the differenced GMM may become true downward biased mainly due to finite sample bias. In line with these remarks, we use 2-Step System Generalized Method of Moments (SGMM), rather than the first Differenced Generalized Method of Moments (DGMM). The strategy of using SGMM is to give consistent parameters whenever DGMM is downward bias-reduction.

Model Specification

The study is built on two gap model, threshold theory and the empirical model for estimating the relationship is based on the past studies including (Khan et al., 2022; Chakraborty & Mallick, 2017; Alemu & Lee, 2015; Asongu, 2012). As a result, the empirical model is as follows:

$$HDI_{it} = f(Aid_{it}, GB_{it}, GE_{it}, FDI_{it}) \quad 1$$

Where HDI_{it} Human development index of country i at time t , Aid_{it} is the Foreign Aid of country i at time t , GB_{it} is the Government Budget of country i at time t , GE_{it} is the Government Effectiveness of country i at time t , and FDI_{it} is the Foreign Direct Investment of country i at time t , as explained in the literature.

On this basis, the econometric model can be specified as follows:

$$HDI_{it} = \beta_0 + \beta_1 Aid_{it} + \beta_2 GB_{it} + \beta_3 GE_{it} + \beta_4 FDI_{it} + \mu_{it} \quad 2$$

β_0 , β_1 , β_2 , β_3 , and β_4 respectively, are the coefficients of foreign aid, Government budget, government effectiveness, and Foreign direct investment. while μ_{it} is the error term which is assumed to be normally distributed with zero mean and constant variance.

Therefore, equation 2 can be re-specify using GMM developed by Blundell and Bond, (1998) as follows

$$\begin{aligned} InHDI_{it} &= \beta_0 + \beta_1 InHDI_{it-1} + \beta_2 InAid_{it} + \beta_3 InAid_{it}^2 + \beta_4 InGB_{it} + \beta_5 InGE_{it} + \beta_6 InFDI_{it} \\ &+ In\mu_{it} \\ \Delta InHDI_{it} &= \beta_0 + \beta_1 (\Delta InHDI_{it-1}) + \beta_2 (\Delta InAid_{it}) + \beta_3 (\Delta InAid_{it}^2) + \beta_4 (\Delta InGB_{it}) \\ &+ \beta_5 (\Delta InGE_{it}) + \beta_6 (\Delta InFDI_{it}) \\ &+ \Delta In\mu_{it} \end{aligned}$$

The quadratic term for aid (i.e., Aid^2) is included in the model to examine whether the relationship between aid and human development index is U-shaped.

Data Sources

This study is based on secondary source of data. The data is from Human Development Reports and World Bank for the period of the study. The data collected are the Human Development Index (HDI), Foreign Aid, Gross National Expenditure as a proxy for Government Budgets, Government Effectiveness, and Foreign Direct Investment.

Empirical Results and Discussion

Table 1 shows the estimation results by Pooled OLS, fixed and difference GMM, offering information on choice between difference GMM and System GMM. Specifically, the table presents the coefficient of the lagged dependent variable, Human Development Index (HDI_{it-1}). What is significant is that the coefficient from the difference GMM is close to the lower limit set by the fixed effect model indicating a slight downward bias in the difference GMM. Therefore, System GMM is preferred.

Table 1

System GMM Vs Difference GMM Estimation

	Pooled OLS	FEM	DGMM
HDI_{it-1}	1.005842	0.800082	0.809862

Source: Author's Computation (2023).

In Table 2 below, System GMM results are given. The coefficient for the lagged Human Development Index (HDI_{it-1}) is 0.8120, and this is significant at the 1% level (t-statistic= -22.93184, P-value=0.0000). This indicates that holding other factors constant, a 1% increase in the past human development raises current level by 81.20%. this indicates that previous spending on education, health, and general welfare contribute very significantly to present human development. The coefficient of foreign aid is negative at -0.0216, and it is significant at the 1% significance level (t-statistic = -6.5207, p-value = 0.0000). This shows that, other things being equal, a 1% increase in foreign aid is associated with a 2.16% drop in the Human Development Index. Therefore, an increase in foreign aid on average leads with a lower average Human Development in Africa. This underscores the need for a more strategic and targeted utilization of aid which may not be currently focused on these goals due to various

inefficiencies inherent misallocations within present forms. This finding is in line with (Lohani, 2004) for a sample of 44 developing countries that have lower HDI (HDI below 0.595). And it is contrary to the findings of Mahembe & Odhiambo (2021); Hana (2015); Murshed and Khanaum (2014) that found a positive relationship.

The Squared Foreign Aid terms (AID^2) has a positive coefficient of 0.0023, and it is statistically significant at the 1 percent level with t-statistic and p-value of ($t = 5.6005$, $p = 0.0000$). This implies that aid affects the HDI in a nonlinear fashion ceteris paribus. On moderate levels aid has a negative relationship HDI but once raised or reduced to a great extent a small change in HDI would occur, this is because there is no single relationship between different levels of international assistance and the HDI. In other word the quantity of foreign aid matters in its effectiveness. Furthermore, the result shows that there could be diminishing returns. Studies suggest a non-linear link between foreign aid and HDI. According to Asiama and Quartey (2009) falling broadly into two different categories, while aggregate bilateral aid did not significantly impact HDI, sector-specific and program aid did. This was further corroborated by Mohamed and Mzee (2017) showed the existence of a positive association between aid and HDI in low-HDI countries. The effectiveness of aid in economic prosperity and per capita economic growth is untidy, Asongu (2012) noted, the aid-HDI nexus was negative, indicating that not all aid enhances human development.

Government Budget (GB) has a negative coefficient of -0.0055, with t-statistic and p-value ($t = -4.7234$, $p = 0.0000$). This shows that a 1% increase in the Government Budget is associated with a 0.55% drop in the Human Development Index. This would seem to indicate that as government budgets increase the Human Development Index lowers ceteris paribus. This represents a certain inefficiency or misallocation of budgetary resources in the pursuit of human development. Also, the results tell us that we should go carefully over budgetary allocations to make sure that resources are effectively applied to human development projects. Wang and Wang (2014) found that this is the case in China, and Lei-chi (2006) also found the same result but in Indonesia spending more on education rise the HDI, although health expenditure has no significant impact (Maharda & Aulia 2020). In the case of Iran, too, government health expenditure has a positive and significant relationship with the HDI (Razmi et al., 2012).

With a negative coefficient of -0.0006, the Government Effectiveness (GE) is statistically significant at the 1% significance level (t-statistic of -4.0120, p-value = 0.0000). This shows that holding all other variables constant, every 1% increase in Government Effectiveness is connected with a 0.06% decrease in the Human Development Index. It means lower government effectiveness is linked with lower human development. This shows that quality of governance matter in order to achieve a good human development results.

The coefficient of Foreign Direct Investment (FDI) is -0.0002. It is statistically significant at the 1% level, with t-statistic and p-value ($t = -2.9238$, $p = 0.0052$). The result suggests that a 1% increase in FDI is associated with a 0.02% decrease in the Human Development Index, all things being equal, indicating a negative impact of FDI on the HDI. Not all the literature shows FDI's contribution to economic growth to be positive nor do they point to a rise in the HDI. By way of evidence, Ford et al (2007); Baghirzade (2012) reveal that FDI has a positive impact on economic growth but not on the HDI. In addition, Gokmenoglu et al (2018) found a significant impact of FDI on the HDI in Nigeria, while Aderemi et al (2021) established mixed results in their study of the relationship between FDI and poverty reduction in Nigeria.

Diagnostic tests of Hansen for instrument validity and the Arellano-Bond Serial Correlation Test (AR(2)) suggest that the model's instruments are valid and the model's residuals show no second-order serial correlation.

Table 2
System GMM Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
HDI(-1)	0.812021***	0.0354	22.9318	0.0000
AID	-0.021639***	0.0033	-6.5207	0.0000
AID*AID	0.002344***	0.0004	5.6005	0.0000
GB	-0.005456***	0.0012	-4.7234	0.0000
GE	-0.000565***	0.0001	-4.0120	0.0002
FDI	-0.000193***	6.6005	-2.9238	0.0053
Root MSE	0.007540	Mean dependent var		-0.003754
S.D. dependent var	0.009066	S.E. of regression		0.007601
Sum squared resid	0.021320	Hansen		38.70975
Instrument rank	36	Prob(J-statistic)		0.132365
AR(2)	0.0617			

Source: Author's Computations (2023). Note: *** p<0.01, ** p<0.05, * p<0.1

Robustness Check

The robustness check results are shown in Table 3, providing important information on the estimation. The study applies System GMM (SGMM) and conduct the robustness check with difference GMM (DGMM) method. By resorting to this method, this technique provides a comprehensive model stability and trustworthiness assessment in which various estimation methods come into play. The results indicate that, for each variable, estimates are similar in proper and robust estimations done by both SGMM and DGMM. In absolute terms, their magnitude varies but as regards significance and the direction of the relationship, it shows consistent in both SGMM and DGMM.

Table 3
Robustness Check

Variables	SGMM	DGMM
HDI(-1)	0.8120*** (0.0354)	0.8099*** (0.0351)
AID	-0.0216*** (0.0034)	-0.0215*** (0.0033)
AID*AID	0.0023*** (0.0004)	0.0023*** (0.0004)
GB	-0.0055*** (0.0012)	-0.0053*** (0.0011)
GE	-0.0006*** (0.0001)	-0.0006*** (0.0001)
FDI	-0.0002*** (6.6005)	-0.0002*** (6.6105)

Source: Author's Computations (2023). Note: *** p<0.01, ** p<0.05, * p<0.1; and Standard Errors are in Parenthesis.

Conclusion

This study aimed to examine the relationship between foreign aid and the human development index (HDI) in a panel of African countries, with a specific focus on investigating whether a U-shaped pattern exists. Despite the abundance of literature on this subject, this empirical examination has often been overlooked, despite its significant policy implications. The use of both System and Difference Generalized Method of Moments adds robustness to our analysis by addressing issues such as endogeneity, serial correlation, and downward bias. Furthermore, the validity of instruments used in the model is established, and there is no second-order serial correlation in the model's residuals. The findings from the SGMM estimation reveal key insights, a negative and statistically significant coefficient of foreign aid as well as positive and statistically significant coefficient of the squared foreign aid, suggesting a U-shaped relationship exist. On the other hand, government budget, government effectiveness and foreign direct investment exhibit negative and statistically significant coefficients. The results highlight the importance of nuanced policy considerations, especially regarding foreign aid, government budget allocation, the quality of governance, and foreign direct investments in achieving sustained human development in Africa. Policymakers should prioritize governance reforms to enhance the effectiveness of aid. Strategic planning that considers the quantity and quality of aid is essential for positive human development outcomes in Africa.

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Appendix

Table A1

Data Details and Source

Variables	Defination	Notation	Source
Human Development Index (HDI)	Human Development Index (HDI) is a composite metric that assesses human development across three key dimensions: health, education, and standard of living. It provides a comprehensive overview of a population's well-being and development by considering factors like life expectancy, education levels, and economic prosperity. HDI is widely used to measure and compare human development outcomes across different regions and countries.	HDI	UNDP
Foreign Aid	net official development assistance (ODA), consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients. It includes loans with a grant element of at least 25 percent (calculated at a rate of discount of 10 percent). Net official aid refers to aid flows (net of repayments) from official donors to countries and territories in part II of the DAC list of recipients: more advanced countries of Central and Eastern Europe, the countries of the former Soviet Union, and certain advanced developing countries and territories. Official aid is	AID	WDI

	provided under terms and conditions like those for ODA. Part II of the DAC List was abolished in 2005. The collection of data on official aid and other resource flows to Part II countries ended with 2004 data. Data are in constant 2020 U.S. dollars.		
Government Budget	Gross national expenditure (formerly domestic absorption) is the sum of household final consumption expenditure (formerly private consumption), general government final consumption expenditure (formerly general government consumption), and gross capital formation (formerly gross domestic investment).	GB	WDI
Government Effectiveness	Government Effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Percentile rank indicates the country's rank among all countries covered by the aggregate indicator, with 0 corresponding to lowest rank, and 100 to highest rank. Percentile ranks have been adjusted to correct for changes over time in the composition of the countries covered by the WGI.	GE	WGI
Foreign Direct Investment	International Monetary Fund, International Financial Statistics and Balance of Payments databases, World Bank, International Debt Statistics, and World Bank and OECD GDP estimates.	FDI	WDI

Robustness Check

The robustness check results are shown in Table 3, providing important information on the estimation. The study applies System GMM (SGMM) and conduct the robustness check with difference GMM (DGMM) method. By resorting to this method, this technique provides a comprehensive model stability and trustworthiness assessment in which various estimation methods come into play. The results indicate that, for each variable, estimates are similar in proper and robust estimations done by both SGMM and DGMM. In absolute terms, their magnitude varies but as regards significance and the direction of the relationship, it shows consistent in both SGMM and DGMM.

Table 3
Robustness Check

Variables	SGMM	DGMM
HDI(-1)	0.8120*** (0.0354)	0.8099*** (0.0351)
AID	-0.0216*** (0.0034)	-0.0215*** (0.0033)
AID*AID	0.0023*** (0.0004)	0.0023*** (0.0004)
GB	-0.0055*** (0.0012)	-0.0053*** (0.0011)
GE	-0.0006*** (0.0001)	-0.0006*** (0.0001)
FDI	-0.0002*** (6.6005)	-0.0002*** (6.6105)

Source: Author's Computations (2023). Note: *** p<0.01, ** p<0.05, * p<0.1; and Standard Errors are in Parenthesis.