"THE IMPACT OF FOREIGN AID ON POVERTY REDUCTION IN SUB-SAHARAN AFRICA: THE ROLE OF CORRUPTION AND ECONOMIC GROWTH"

Nigina Shamsiddinova – WIUT
niginashamsiddinova19@gmail.com
Sherzod Abidov – WIUT
sherzodabidov@gmail.com

Abstract

This study examines the relationship between economic growth, corruption, and foreign aid in Sub-Saharan Africa to answer the following research question: What is the impact of foreign aid on poverty reduction in Sub-Saharan Africa? Panel data from 2010 to 2023 was chosen for the analysis and Ordinary Least Squares regression model is employed. The independent variable is foreign aid, the dependent variable is poverty headcount ratio, and the control variables are GDP per capita and the Corruption Perceptions Index. The outcomes show that foreign aid falls short of its objective of reducing poverty in Sub-Saharan Africa. Furthermore, reduced corruption decreases the poverty rate, demonstrating its significance in the successful application of foreign aid. Finally, it was demonstrated that GDP per capita alone had almost no impact. Three policy recommendations were made: eliminate corruption, improve control over finances, and put strategies for sustainable growth into practice.

Introduction

In Sub-Saharan Africa, foreign aid has long been regarded as a vital instrument for reducing poverty and promoting economic growth. Billions of dollars have been given to Sub-Saharan Africa to improve their living standards. However, there is ongoing discussion regarding the impact of foreign aid, with some studies demonstrating that it lowers poverty while others explain that its objectives are not met due to corruption and mismanagement (Krasniqi and Demukaj, 2021). Aid money may

be mismanaged or stolen off by corrupt authorities in many Sub-Saharan nations due to weak institutions and bad governance (Bethencourt, 2024). Although some scholars believe that economic growth is the main driver of poverty reduction, other studies have demonstrated that growth is insufficient on its own (Mogess et al., 2023).

This study aims to investigate how economic growth, corruption, and foreign aid contribute to the poverty reduction in Sub-Saharan Africa. Current research will use Ordinary Least Squares (OLS) regression to examine the effects of foreign aid on poverty reduction, using corruption and economic growth as control variables and will answer the following research question: What is the impact of foreign aid on poverty reduction in Sub-Saharan Africa?

Liteature Review

Foreign Aid and Poverty Reduction

This still remains a controversy whether foreign aid has a beneficial impact in stimulating development. According to some research, aid boosts welfare and economic growth, whereas other studies point out corruption-related inefficiencies. A meta-analysis of aid-growth research was done by Mekasha and Tarp (2019), who came to the conclusion that aid makes a modest yet beneficial impact on GDP growth, which in turn lowers poverty. Sumner and Kirk (2014) discovered that when foreign aid is directed towards economically viable sectors like infrastructure and agriculture, it helps create additional job places in Sub-Saharan Africa. However, according to Benziane (2023), aid only stimulates economic development when institutions are robust, highlighting the significance of governance. Furthermore, Young and Sheehan (2014) showed that, when institutional quality is taken into account, aid inflows do not significantly correlate with growth. Ijaiya (2015) concludes that because of a high level of corruption and inadequate resource management, foreign aid has little to no impact on reducing poverty in Sub-Saharan Africa.

Corruption and Poverty Reduction

According to Bethencourt (2024), aid improves governance in economies with effective management but encourages corruption in environments with insufficient institutional frameworks. Krasniqi and Demukaj (2021) highlight that foreign aid has harmed developing nations more than it has helped them by decreasing the quality of their institutions and their capacity to mobilize their own resources, as well as by fostering corruption and rent-seeking behavior. Andersen et al. (2020) discover that high levels of foreign assistance are associated with higher deposits stored in offshore bank accounts, suggesting that aid may also result in elite capture. Moreover, De la Croix and Delavallade (2014) state that it appears that more aid flows to more corrupt countries rather than less corrupt ones. Finally, after analyzing aid inflows and corruption levels in Sub-Saharan Africa, Handley et al. (2009) discovered that increased corruption makes aid less effective and produces worse economic results.

Economic Growth (as GDP per Capita) and Poverty Reduction

According to Kouadio and Gakpa (2022), economic growth is regarded as one of the primary forces behind the decrease of poverty and the enhancement of living standards in emerging nations. Wu et al. (2024) found that restoring sustainable economic growth is a top goal for Sub-Saharan Africa in order to reduce poverty and enhance living conditions for its citizens. However, Abate (2022) argues that economic growth is constrained by income inequality and ineffective redistribution measures and has little immediate effect on reducing poverty. Furthermore, growth alone, according to Mogess et al. (2023), is insufficient to reduce poverty and inequality in Africa quickly enough because African economies' industrial bases must be strengthened and efficient higher education institutions must be established that can meet the demands of a developing continent. Saidi et al. (2023) conclude that if Sub-Saharan African nations have stable governments and successful governance reforms, GDP growth may be beneficial.

Data and Variables

This study investigates how Foreign Aid and Corruption affect poverty reduction in Sub-Saharan Africa. The research is based on panel data from nine Sub-Saharan countries from 2010 to 2023. The data was acquired from the World Bank, OECD and Transparency International to ensure accuracy and reliability. The data is formatted as panel data, with observations made for each country over a fourteen-year period, for a total of 126. This enables the analysis to account for both cross-country and time-series variations in assessing the aid's impact.

Table 1. Definition of variables

Variable Name	Definition
Poverty Headcount Ratio	% of population living below $2.15/day (2017 PPP), dependent variable
Foreign Aid	Net Official Development Assistance (ODA) as % of national income, independent variable
Corruption Perceptions Index (CPI)	Perceived corruption level (0 = high corruption, 100 = no corruption), control variable 1
GDP per Capita	Economic output per person (in USD), control variable 2

Table 2. Descriptive statistics

Variable Name	Obs	Mean	Std. dev	Min	Max
Poverty Headcount Ratio	126	40.14374	19.87597	15.4	80.22778

Foreign Aid	126	5.763881	5.352902	0.234	22.517
Corruption Perceptions Index (CPI)	126	38.28571	12.84981	18	65
GDP per Capita	126	5817.881	5524.863	1031	18846

In the case of Poverty Headcount Ratio, we can observe a high standard deviation of 19.9, indicating that some countries are significantly poorer than others. It can also be proven by wide range of 15.4 to 80.2. In addition, the mean value of this ratio is 40.1, which shows that 40% of population in Sub-Saharan Africa live below $2.15/day. A large range and a high standard deviation of 5.4 are also present in the case of foreign aid, indicating that some nations got significantly more aid than others. Additionally, the Corruption Perceptions Index, which ranges from 18 to 65, shows various levels of corruption. The average value across countries was 38.3, indicating a significant degree of corruption. Values of GDP per capita range from 1031 USD to 18846 USD, with a standard deviation of 5524.9 USD, demonstrating a significant disparity in the countries' levels of economic development.

Econometric model

The study uses the OLS method to determine the impact of foreign aid and corruption on poverty:

$$Poverty_{i,t} = \beta_0 + \beta_1 Foreign\ Aid_{i,t} + \beta_2 Corruption\ Perceptions\ Index_{i,t} + \beta_3 \text{GDP per Capita}_{i,t}$$

i: Country

t: Year (2010-2023)

Poverty headcount ratio is a dependent variable that shows which percent of population is living below $2.15/day at country i at time t. Foreign Aid is an

independent variable thar demonstrates Net Official Development Assistance as % of national income in country *i* at time *t*. Corruption Perceptions index is a control variable that indicates the corruption level in country *i* at time t. GDP per Capita is control variable that shows economic output per person in USD in country *i* at time *t*.

Results

Foreign aid has a significant coefficient of 2.91 in Model 1, meaning that for every percentage increase in foreign aid, the poverty rate rises by 2.91, while other variables remain constant. Following the addition of the control variables GDP per capita and the Corruption Perceptions Index, the coefficient in Model 2 remained significant but slightly declined to 2.83. These findings imply that foreign assistance is not decreasing poverty but rather may be making it worse, which is entirely consistent with the research conducted by Ijaiya (2015), who found that foreign aid has little to no effect on improving poverty in Sub-Saharan Africa due to a high degree of corruption and poor resource management. After adding control variables, the standard error increased from 0.17 to 0.35, suggesting a little bit more variability in the estimate. This is anticipated when additional variables are put into the model. A negative coefficient of -0.64 for the Corruption Perceptions Index indicates that for every unit increase in the CPI (which means less corruption), there is a 0.64 percent reduction in poverty, which shows that lower corruption significantly reduces poverty. This is supported by the study that was made by Handley et al. (2009), which found that greater corruption reduces the effectiveness of aid and results in worse economic outcomes. Since the standard error of 0.127 is low, the Corruption Perceptions Index estimate is accurate and consistent across countries. In this model, GDP per capita has no noticeable effect on poverty because its coefficient of 0.000155 is near to zero. This implies that poverty reduction in Sub-Saharan Africa countries is not always a direct result of solely economic growth. This is backed by earlier studies by Mogess et al. (2023), which found that economic growth is not enough to decrease poverty and inequality in Africa. Additionally, another study by Abate (2022) demonstrated that economic

expansion has no immediate impact on poverty reduction and is limited by income disparity and ineffective redistribution policies. Foreign aid alone accounts for 61.4% of the variation in poverty, according to Model 1's R squared value of 0.6139. In Model 2 the R squared value is 0.7645, which shows that the addition of control variables in Model 2 improves the model's ability to explain the variance in poverty ratio. Although F-statistic in Model 2 is lower than in Model 1, indicating that the additional variables make the model more complex, the model is still very significant. The decrease in F-statistic reflects how complex poverty dynamics are.

Table 3. The estimated models

Variables	Model 1	Model 2
Foreign Aid	2.909241	2.834785
	(0.17105)	(0.3543881)
Corruption Perceptions Index (CPI)		-0.6404991
		(0.1272752)
GDP per Capita		0.000155
		(0.0003606)
constant	23.37522	47.42455
	(1.249081)	(3.442229)
R squared	0.6139	0.7645
F-statistic	289.28	186.56
N	126	126

Conclusion

This study investigated the relationship between foreign aid, corruption, and economic growth in Sub-Saharan Africa in order to address the following research question using an Ordinary Least Squares regression model: What is the impact of foreign aid on poverty reduction in Sub-Saharan Africa? The results demonstrated a positive relationship between poverty and foreign aid, providing evidence that if foreign aid is not well managed, it may not achieve its claimed goal of alleviating poverty. In addition, the study found that poverty outcomes are significantly influenced by corruption, which is a key factor that weakens aid effectiveness. This model also found that GDP per capita had no statistically significant impact on poverty, which suggests that economic growth alone is insufficient to reduce poverty in Sub-Saharan Africa.

Policy Recommendations:

1)Aid-giving countries need to strengthen their control of the funds.

2)To make effective use of the aid, countries must lower their levels of corruption.

3)Strategies for sustainable growth that enhance social welfare and income distribution should be the main emphasis of policymakers.

Reference list

Abate, C.A. (2022). The Relationship between Aid and Economic Growth of Developing countries: Does Institutional Quality and Economic Freedom matter? *Cogent Economics & Finance*, 10 (1). Available from https://doi.org/10.1080/23322039.2022.2062092. [Accessed 5 March 2025].

Andersen, J.J., Johannesen, N. and Rijkers, B. (2021). Elite Capture of Foreign Aid: Evidence from Offshore Bank Accounts. *Journal of Political Economy*. Available from https://doi.org/10.1086/717455. [Accessed 6 March 2025].

Benziane, Y. et al. (2023). Aid for Trade and Economic Growth: Does the Quality of Institutions Matter? *International Journal of Academic Research in Economics and*

Management Sciences, 12 (1). Available from https://doi.org/10.6007/ijarems/v12-i1/15771 [Accessed 7 March 2025].

Bethencourt, C. and Perera-Tallo, F. (2024). Foreign aid and corruption: Unveiling the obstacles to effective development. *Southern Economic Journal*. Available from https://doi.org/10.1002/soej.12725. [Accessed 9 March 2025].

de la Croix, D. and Delavallade, C. (2013). Why corrupt governments may receive more foreign aid. *Oxford Economic Papers*, 66 (1), 51–66. Available from https://doi.org/10.1093/oep/gpt004 [Accessed 8 March 2025].

Handley, G. et al. (2009). *Poverty and poverty reduction in sub-Saharan Africa: An overview of the issues Results of ODI research presented in preliminary form for discussion and critical comment Overseas Development Institute*. Available from https://www.files.ethz.ch/isn/95497/wp299.pdf. [Accessed 6 March 2025].

Ijaiya, G. and Ijaiya, M. (2004). Foreign aid and poverty reduction in sub-Saharan Africa: A cross-country investigation. *South African Journal of Economic and Management Sciences*, 7 (3), 542–552. Available from https://doi.org/10.4102/sajems.v7i3.1364 [Accessed 6 March 2025].

Kouadio, H.K. and Gakpa, L.-L. (2021). Do economic growth and institutional quality reduce poverty and inequality in West Africa? *Journal of Policy Modeling*, 44 (1). Available from https://doi.org/10.1016/j.jpolmod.2021.09.010. [Accessed 10 March 2025].

Krasniqi, A. and Demukaj, V. (2021). Does Aid Fuel corruption? New Evidence from a cross-country Analysis. *Development Studies Research*, 8 (1), 122–134. Available from https://doi.org/10.1080/21665095.2021.1919538. [Accessed 9 March 2025].

Mekasha, T.J. and Tarp, F. (2019). A Meta-Analysis of Aid Effectiveness: Revisiting the Evidence. *Politics and Governance*, 7 (2), 5. Available from https://doi.org/10.17645/pag.v7i2.1771 [Accessed 7 March 2025].

ODA trends and statistics. (2024). *OECD*. Available from https://www.oecd.org/en/topics/oda-trends-and-statistics.html. [Accessed 9 March 2025].

Saidi, Y., Mohamed Ali Labidi and Ochi, A. (2023). Economic Growth and Extreme Poverty in Sub-Saharan African Countries: Non-Linearity and Governance Threshold Effect. *Journal of the Knowledge Economy*. Available from https://doi.org/10.1007/s13132-023-01421-7. [Accessed 5 March 2025].

Summer, A. and Kirk, T. (2014). The Donors' Dilemma: Emergence, Convergence and the Future of Foreign Aid | Global Policy Journal. *Globalpolicyjournal.com*. Available from https://www.globalpolicyjournal.com/projects/gp-e-books/donors-dilemma-emergence-convergence-and-future-foreign-aid. [Accessed 7 March 2025].

Transparency International. (2023). Corruption Perceptions Index. *Transparency International*. Available from https://www.transparency.org/en/cpi/2023. [Accessed 9 March 2025].

World Bank. (2023). GDP per capita (current US$). *World Bank*. Available from https://data.worldbank.org/indicator/NY.GDP.PCAP.CD. [Accessed 10 March 2025].

World Bank. (2024). Poverty headcount ratio at $2.15 a day (2017 PPP) (% of population) | Data. *Worldbank.org*. Available from https://data.worldbank.org/indicator/SI.POV.DDAY. [Accessed 9 March 2025].

Wu, H., Paci, P. and Atamanov, A. (2024). Economic growth and poverty reduction: Is Africa any different? *World Bank Blogs*. Available from https://blogs.worldbank.org/en/africacan/economic-growth-and-poverty-reduction-africa-any-different-afe-0324. [Accessed 6 March 2025].

Yohannes Kefale Mogess, Zerayehu Sime Eshete and Abadi Teferi Alemaw. (2023). Economic growth and poverty reduction: Evidence from Sub-Saharan Africa (SSA)

countries. Available from https://doi.org/10.1002/pop4.364. [Accessed 10 March 2025].

Young, A.T. and Sheehan, K.M. (2014). Foreign aid, institutional quality, and growth. *European Journal of Political Economy*, 36, 195–208. Available from https://doi.org/10.1016/j.ejpoleco.2014.08.003 [Accessed 5 March 2025].