



FOREIGN AID, EFFECTIVE EXCHANGE RATE AND POVERTY LEVEL IN UGANDA

Amanya Vicky, Nahabwe Patrick Kagambo John,
Kagarura Willy Rwamparagi.

ABSTRACT

The rate at which poverty is still continuously increasing in Uganda is at an alarming magnitude despite the high natural endowment and huge funds coming to the country through developmental aids. This study is therefore set out to investigate the effect of foreign aids on poverty level in Uganda using a time frame of 1980- 2022. This study used secondary data collected from Word Bank Development Indicator (2023). The methods of data analysis employed include Augmented Dickey Fuller (ADF), Johansen Co-integration test and Vector Error Correction (VECM). The ADF result showed that poverty head count, foreign aids, foreign direct investment, effective exchange rate and trade openness were stationary at first difference ($\square = 1$). The Johansen co-integration technique for both Traces and Max-Eingen Statistics established the presence of two co-integrating equation. The VECM showed that the lagged error correction ECM(-1) was negative and statistically significant with a value of 60.6%. Implying that the disequilibrium that occurred in the model was corrected at an annual rate of 60.0%. Also, foreign aids, foreign direct investment and trade openness were significant and inversely related to poverty head count. This implies that inflow of foreign aid, foreign direct investment, as well as, high export goods reduce the severity of poverty among the people. In addition, effective exchange rate was negative and non-significant at 5% significant level. Therefore, concluded that inflow of foreign aids into the country reduced the severity of poverty rate amongst the citizens. It was therefore, recommended that government should seek for more aids directed towards poverty alleviation programs. Also, government should put policies in place like tax holiday and others to further encourage investors into the real sector of the economy.

KEYWORDS: Foreign Direct Investment, Export, Trade Openness, Poverty Head Count, And Vector Error Correction Mechanism.

INTRODUCTION

Foreign aid which is usually inter-changeably used as external aid or external assistance: refers to the international movement of money, services, or goods from governments or international institutions for the benefit of the receiving country or its citizens. Foreign aid can be fiscal, military, or humanitarian and is considered one of the essential sources of foreign exchange. Foreign aid can also be seen as voluntary movement of money or other resources from one nation to another. The transactions are mostly moving from developed countries to developing countries. Foreign aid may be offered as a contribution or a loan, which can either be a hard or soft loan. If the loan is in a foreign currency, it is termed as a hard loan.

However, aid is a unique form of international financing for supporting the delivery of global goals because of its ability to be directly targeted at the world's poorest and most vulnerable people. External aid flows form an important source of financing for Uganda, where the government Official development assistance supports several projects and programmes across various sectors. Aid, especially loans from International Financial Institutions, has also helped Uganda to cover budget deficits and shortfalls in revenue collection. Budget deficits were strongly the impact of the Covid-19 pandemic, and were estimated at UGX 3,592 billion or 18% of the government's target revenue for Financial Year 2019-20, it can be attributed to external assistance that the country was able cope with the economy (Stein *et al.* 2022).

According to Moses Owori, (2020), the overall profile of official development assistance (ODA) is switching from grants to increased concessional loans, as international financial institution (IFI) lending is now essential source of foreign aid to Uganda in 2020. IFI loans consistently increased from 2018 and 2020, with a notable 124% increase between 2019 and 2020. Bilateral grants have remained the largest source of aid flows to Uganda, but they have fluctuated between 2018 and 2020, with an 8% increase between 2018 and 2019 followed by a similar (8%) decline between 2019 and 2020. The US reported the largest increase in bilateral aid flow to Uganda between 2018 and 2020, with a 4% increase from 2018 to 2020 followed by a 1% decline from 2019 to 2020. The second highest aid flow in 2020 was reported by the European Commission (EC) (US\$141 million), representing a 20% increase from 2019. Sweden reported the third highest (US\$72 million), representing a 36% increase from 2019. Aid from the UK was the



second highest bilateral aid flow to Uganda in 2019; however, the cut in the UK's disbursement in 2020 represented the largest (54%) decline in bilateral flows. The sharp decline in bilateral aid from donor countries like the UK can be at least partly attributed to Covid-19 shocks, which had serious implications for donor countries' economies. Growth in IFI aid flows to Uganda between 2018 and 2020 was mainly driven by the World Bank, which contributed 77% of the total reported IFI contributions in the three years reviewed.

Uganda has been among the world's top aid recipients for several decades. Between 2003 and 2012 the country received more than \$16 billion in official development assistance (ODA), ranking them as the 13th largest recipient worldwide (Bergo, 2015). The ratio of aid-to-GDP peaked at 19% in 1992, and has remained around 10% over the last two decades. The government has for years relied on Official Development Assistance (ODA) for large parts of its budget, with international donors accounting for an astonishing 42% of the budget in 2006 (Bergo, 2015). Although this ratio has decreased to 25% in recent years, the government still relies heavily on donations to fund their bills. In contrast to their status as a major aid recipient,

Uganda has consistently shown poverty rates among the people over the last decades. Despite impressive progress on reaching many of the Sustainable Development Goals on HIV, school enrolment, and infant mortality, Uganda still suffers from many of the common problems for developing countries. Uganda's global competitiveness is low and decreasing. Business conditions remain unfavorable to private companies, with weak infrastructure, poor financial services, and sky-high corruption rates at all levels of governance (Bergo, 2015).

On the other hand, poverty is seen as the lack or insufficiency of money to meet basic needs, including food, clothing and shelter. Poverty can be measured in monetary terms based on the monthly (or annual) expenditure of a given individual. That expenditure is then compared to a threshold called the poverty line. However, poverty is much more than the mere lack of money. It is also about deprivation in other important areas of wellbeing such as education, health, water, and housing (Kimbugwe et.al, 2015).

In Uganda, 47% of households experience multidimensional poverty, more than double the percentage living in monetary poverty. Monetary poverty is a simple construct, but the implementation is more complex. Monetary poverty measures the share of people with consumption or income level below a certain threshold, defined as the poverty line (UNICEF, 2022). Foreign aid, for over a half of a century, overseas financial aid from developed and developing nations have been the mainstream global financial and relief support towards developing nation's poverty relief in many sub-Saharan countries, Uganda inclusive. Interestingly, within the duration, worldwide organizations like the United Nations, World Bank, and International Monetary Fund, have become conspicuous in dealing with global financial and economic challenges. The principal drivers of overseas resources are targeted to the humanitarian needs, strategic significance and monetary capacity of the recipient nations as Uganda is among the top 10 Official development assistance (ODA) recipients globally (ko Wanjiku, 2019).

In furtherance, despite the fact that Uganda is one of the top recipients of donor aid on the continent, OECD, (2022). An amount of €578 million is foreseen for the 2014-2020 period under the National Indicative Programme of the 11th European Development Fund (EDF). Given the importance of foreign aid to the economies of developing countries, it has not sufficiently contributed to economic growth of Uganda. In 1997 the Poverty Eradication Action Plan, a framework for addressing the key poverty was developed and launched. During the process of implementation, new challenges arose which led to the first revision of the PEAP in 2015. Despite the emergency of foreign aids, the country faces widespread challenges of corruption when financial assistance is given. This may not be in accordance with the policy of the donor. Corruption cases include; "bribery, perversion or misuse of public office or position, nepotism, patronage, sale of public office, including infractions of the law, incompatibility with public opinion, and violation of public interest departure from high moral standards in exchange for personal pecuniary gain, power or prestige". Others challenges include dictatorship, leading to; financial insecurity, regional inequity and weak social and economic infrastructure. As a result of these, poverty is considered as a hindrance to the development and growth of Uganda, irrespective of foreign aid (OECD, 2022). In the literature, Studies reviewed that include Wagner (2014), Roosevelt (2018), Augbaka *et al.* (2019), Adebayo and Afolayan (2019), Iwegbu and Dauda (2022) and Ilesanmi and Agbede (2022) confirmed that foreign aid is beneficial to receiving countries; hence, reduced poverty rate. However, some studies like Amassoma (2014) and Adams and Elassal, (2020) confirmed that it was not beneficial in receiving countries; thus, does not reduce poverty. From another perspective, Pedrosa (2016), Boye (2018) and Tersoo and Abubakar (2019) discovered that a non-significant relationship existed between foreign aids and poverty. However, dichotomy in findings from different studies motivates the present study as well as the use of current data. Since some of the reviewed study used data to 2018. Therefore, such finding many not reflect the current economy situation. Therefore, this study aims to establish the effect of foreign aid on poverty in Uganda, 1980-2021.



EMPIRICAL REVIEW

Empirical evidence of country-specific foreign aid-growth nexus as conducted by Mbah and Amassoma (2014) using the ordinary least square estimation technique found that foreign aid is not beneficial in stimulating output growth. A possible reason for the result is attributed to the methodology as it does not take care of the endogeneity in the foreign aid-growth nexus. Ridwell (2014) found that aid tied to projects executed and monitored by non-governmental organizations (NGOs) or in the form of technical assistance improves the growth of the economy. Guillaumon and Wagner (2014) examined the various channels in which poverty can be reduced. The study found that foreign aid, government expenditure, and economic growth reduce poverty.

A study in Niger republic was conducted by Pedrosa (2016) to ascertain the claim whether foreign aid received so far reduce poverty. The study used Vector Correction Model from 1986-2014. The VECM result revealed that a direct and significant nexus existed between poverty rate and foreign aids. The study concluded that foreign aids alone had an infinitesimal effect on poverty alone with the recommendation that both foreign aids and home-grown interventions are jointly needed to reduce poverty in the said country. In Ghana, a similar study using the same technique was conducted within a time frame of 2008 to 2018 by Boye (2018). The result established a non-significant effect between foreign aid and poverty reduction; with the bound test confirmed a long-run relationship between them.

Roosevelt (2018) examined impact of foreign aids on extreme poverty in Liberia development complexities. This research explains the ways in which aid perpetuates poverty instead of alleviating it using interdisciplinary research approaches. The findings showed poverty persists despite billions of dollars in aid and inequalities. A similar study by Augbaka *et al.* (2019) was concerned on influence of economic development and foreign aids poverty reduction in Nigeria using ordinary least square technique. The study covered a time frame of 1986-2017 using GNP per capita as the dependent variable; while, variables such as GDP per capita growth, foreign aid, poverty headcount, inflation rate, gross capital formation, and growth of government expenditure were identified as the independent variables. From the OLS result obtained, it was established that both economic development and foreign aid had a direct and significant effect on poverty reduction. It was concluded that economic development and foreign aid eliminated the persistence of poverty in the country. Also, a study in Nigeria on how foreign aid and grants impact poverty reduction was carried out by Tersoo and Abubakar (2019) using an Autoregressive Distributed Lag (ARDL) approach. It was confirmed through the use of ARDL that the received grants in form of technically cooperation and Official Development Assistance exhibited a direct and non-significant effect on national poverty incidence in the short-run; while that of long-run displayed an inverse and non-significant also to.

On foreign aids and poverty alleviation in Nigeria, Adebayo and Afolayan (2019) conducted a study on it using Dynamic Ordinary Least Square and Granger Causality approach to achieve stated objectives from 1990 to 2017. The estimated result of the DOLS showed that foreign aid was non-significant with a sign of negative link with poverty; while that of inflation rate exhibited a positive link but non-significant. In addition, it was revealed through the granger result that unidirectional causality concurred and run from foreign aid to household consumption per capita. It was concluded that the received of foreign aids in the country as not translated to poverty alleviation.

Augbaka (2019) studied economic development, foreign aid and poverty reduction in Nigeria using. The study went on to perform correlation and regression analysis using GNP per capita as proxy for economic development as the dependent variable and poverty headcount (proxy for poverty reduction), gross capital formation, foreign aid, GDP per capita growth, inflation rate and growth of government expenditure as independent variables. It was observed that only gross capital formation has statistically significant relationship with GNP per capita while growth of government expenditure has the effect on GNP per capita. The results reveal that there is a positive relationship between economic development, foreign aid and poverty reduction. This implies foreign aid promotes economic development and poverty elimination. The poverty instead of alleviating it using interdisciplinary research approaches. The findings showed poverty persists despite billions of dollars in aid and inequalities. A similar study by Augbaka *et al.* (2019) was concerned on influence of economic development and foreign aids poverty reduction in Nigeria using ordinary least square technique. The study covered a time frame of 1986-2017 using GNP per capita as the dependent variable; while, variables such as GDP per capita growth, foreign aid, poverty headcount, inflation rate, gross capital formation, and growth of government expenditure were identified as the independent variables. From the OLS result obtained, it was established that both economic development and foreign aid had a direct and significant effect on poverty reduction. It was concluded that economic development and foreign aid eliminated the persistence of poverty in the country. Also, a study in Nigeria on how foreign aid and grants impact poverty reduction was carried out by Tersoo and Abubakar (2019) using an Autoregressive Distributed Lag (ARDL) approach. It was confirmed through the use of ARDL that the received grants in form of technically cooperation and Official Development Assistance exhibited a



direct and non-significant effect on national poverty incidence in the short-run; while that of long-run displayed an inverse and non-significant also to.

Augbaka (2019) studied economic development, foreign aid and poverty reduction in Nigeria using. The study went on to perform correlation and regression analysis using GNP per capita as proxy for economic development as the dependent variable and poverty headcount (proxy for poverty reduction), gross capital formation, foreign aid, GDP per capita growth, inflation rate and growth of government expenditure as independent variables. It was observed that only gross capital formation has statistically significant relationship with GNP per capita while growth of government expenditure has the effect on GNP per capita. The results reveal that there is a positive relationship between economic development, foreign aid and poverty reduction. This implies foreign aid promotes economic development and poverty elimination. The government has a responsibility to battle against poverty and its efforts at predictable strategic economic development are significant in poverty reduction by spending the aid money for direct production programs.

Iwegbu and Dauda (2022) examined foreign aid effectiveness in poverty reduction in Africa with focus on the role of regional fiscal policy on education and health using a panel dynamic ordinary least squares (DOLS) estimation technique from 1980-2017. The results revealed that foreign aid augmented with effective fiscal policy on education significantly improves the income level in all the regions except Central Africa, and consumption in the Western and Central regions. When augmented with effective fiscal policy on health foreign aid enhances households' income in West and Central Africa and consumption in West and Southern regions. Furthermore, foreign aid augmented with effective fiscal policy in education (health) reduces poverty headcount in the West and Central (in all regions except Central) regions of Africa.

Ilesanmi and Agbede (2022) studied the Nexus between foreign aid, poverty level and economic growth in Nigeria, from 1980 -2020 using Vector autoregressive (VAR) model. The result showed that discovered that: (i) 1% increase in ODA brought about 8% increase in GDP over time, meaning that ODA was not counterproductive in Nigeria, (ii) ODA also improved economic growth of Nigeria by 8% (iii) ODA also reduced poverty by about 0.91% for every 1% increase in ODA received during the period. Since the contribution of ODA to GDP was so marginal but positive.

Using a Liberia economy as the scope of the study, Roosevelt (2018) carried out a study on foreign aid and extreme poverty using OLS from 1990-2016. It was confirmed through the OLS estimated result that foreign aid had a direct and non-significant effect on poverty. Hence, concluded that billions of dollars received in the country in form of aids poverty still persist. Arshad *et al.* (2014) carried out a study in Pakistan on how fairs foreign debt and economic growth using Vector Autoregressive Approach (VECM) from 1970-2010. The obtained finding revealed that foreign aids in term of foreign debt was non-significant in promoting growth. Using aids and growth on development to ascertain if full circle has come to existence was conducted by Arnt *et al.* (2011). The study showed that used 25 USD aid per capita inflow to developing countries are needed to sustained and increase growth rate, gear up investments and alleviate poverty.

Edmore and Nicholas (2019) examined the effectiveness of foreign aid on poverty reduction. The study results show that foreign aid has a positive impact on poverty, as reported by the majority of studies in both the non- momentary and monetary measures of poverty groups. This means that in general, foreign aid reduces poverty, irrespective of the type of poverty measures used. Of the studies which showed that foreign aid was effective in reducing poverty, it was highlighted that: (i) democracy enhances the effectiveness of aid; (ii) aid targeted at pro-poor public expenditures such as agriculture, education, health and other social services was effective; and (iii) aid disbursed in production sectors, infrastructure and economic development was more effective in reducing poverty. These channels should, therefore, be considered when making policy decision on aid allocation.

A study in ECOWAS was carried out by Nadri, (2017) on how official development assistance (ODA) influence poverty alleviation from 1980 to 2014 using a panel data. The result discovered that ODA was positive with a significant sign on poverty reduction in the study area of ECOWAS with a non-significant sign confirmed on growth. It was concluded that in the selected ECOWAS sub region area ODA was a pro-poor and not facilitating growth in ECOWAS sub region. Also, Akpan, and Udoma (2010) study was limited to Nigeria on how official development assistance promotes growth in the country using least squares (3SLS) estimation approach from 1970 to 2010. The 3SLS technique showed that a direct and non-significant association existed between ODA and economic development; while that of capital expenditure and economic development was confirmed to be direct and significant. A similar study in Pakistan by Mahmood and Chaudhary, (2012) using an ARDL approach from 1973 to 2003 showed a direct and significant associated between FDI and poverty reduction. Hence, concluded that FDI as international inflow reduced the severity of poverty.

A study that was mainly interested in appraising international literature on both foreign aid and poverty reduction was carried out by Mahembe and Odhiambo, (2019). The study focused on reviewing already empirical studies through proxy poverty in terms of non-monetary measures and non-monetary measures. The study showed that larger percentage of the existing studies reviewed confirmed that foreign aid positively impacted poverty reduction using the two proxies of poverty. Hence, this showed that foreign aid inflow reduced the severity of poverty in the receiving countries when both non-monetary measures and non-monetary measures are used. A similar study was carried out Wrangberg (2018) that used Quasi-experimental setting and threshold to establish the nexus between the duo. The study was mainly interested in 31 countries between 1987 and 2010. The result revealed that the estimated co-efficient of foreign aids exhibited an inverse relationship with poverty rate but non-significant; while the threshold technique noted that 41% foreign aids inflow was needed to achieve poverty reduction through foreign aids among the 31 selected African countries. Yongfu *et. al.* (2017) examined whether foreign aid, together with other economic, social and environmental factors, contributes to sustainable development. It starts with an illustrative theoretical growth model where foreign aid promotes sustainable development by protecting the environment. Using factor analysis and newly developed estimation methods for a dynamic panel data model with endogenous regressors, the empirical section of the chapter finds evidence that foreign aid has had a significantly positive influence on sustainable development in aid recipient countries. This effect is very likely to go through channels related to growth and resources as well as a technology channel with respect to energy intensity.

Kirikaleli et al. (2021) explored the nexus between foreign aid and Chad's economic growth. The study adopted annual data from 1982 to 2018. The study used ARDL technique to establish interconnection among the economic indicators. Subsequently, the study utilized the wavelet coherence technique to capture causality and correlation between economic growth and the independent variables. One of the wavelet approach's uniqueness is that it shows the pattern and behavior of the variables used, including the different time horizons. Thus, the study explored the dynamic influence of gross capital formation, foreign aid, import, and export on Chad's economic growth. The result of the ARDL long-run estimates revealed that gross capital formation and foreign aid exerted insignificant impact on GDP growth. However, exports and imports exerted a positive and significant impact on GDP growth. Furthermore, the global financial crisis had a negative and significant impact on the economy of Chad. The outcomes of the wavelet coherence test provide supportive evidence for the ARDL long-run outcomes.

Perveen and Ali (2021) conducted a study on the impact of official development assistance on sustainable development of Pakistan from 1976 -2017. Sustainable Development is a dependent variable for which proxy variable of Adjusted Net Savings has been deployed. ODA (% of GNI), Inflation, Per Capita GDP and Trade (GDP %) have been used as explanatory variables. Augmented Dickey-Fuller Test has been applied to examine the nature of the data as time series data may contain unit root problems. ADF test confirms mixed order of integration for the selected variables, hence Autoregressive Distributed Lag (ARDL) Approach was applied to find out the long-run relationship among the considered variables. Estimation of Error Correction Regression resulted in a significant long-run relationship between ODA and Sustainable Development. ECM regression also signifies the negative and significant value of the speed of adjustment term confirming that the model is stable and convergent towards the equilibrium. Overall results of the study confirmed a positive and highly significant relationship between ODA and the measure of sustainable development in Pakistan.

Mustafa, Elshakh, and Ebaidalla (2018) studied the relationship between foreign aid and economic growth in Sudan using time series data ranging from 1980 to 2015 while employing autoregressive distributed lag (ARDL) bounds tests for co-integration. The result revealed that foreign aid impact positively on the economic growth in the short run in Sudan, but negative with corruption in public institutions in the long run. On a general note, the study concluded that foreign aid can enhance sustainable growth if channeled toward enhancing human capital development in Sudan.

Yiew and Lau (2018) empirically investigated the role and the impact of foreign aid (ODA) on economic growth (GDP) using 95 developing countries as the sample. The study also included foreign direct investment (FDI) and population (POP) as the control variables. The panel data results indicated that a U-shape relationship exists between foreign aid and economic growth. The result showed that foreign aid negatively impacted the countries' growth. Further, the results strongly support the view that both FDI and POP are more important determinants of GDP, implying that GDP is less likely to depend on ODA. The study recommended that strengthening the legal framework would be essential for these countries while their over dependency on the influx of ODA might lead to negative impacts on the growth as a whole.

Abeselom (2018) investigated the impact of foreign aids and sustainable growth in Ethiopia. The study employed annual data spanning from 1980 to 2015 in determining the effects of foreign aid on sustainable growth in Ethiopia. while adopting panel pool data. The estimation result from the result shows that external debt and official development



assistance had a negative and statistically significant effect of sustainable growth in Africa. Foreign direct investment also had a positive influence on sustainable growth but with a significant insufficient result. Equally, the estimation result only shows that technical cooperation grants are the only variable with a positive influence and statistically significant result on sustainable growth in Ethiopia. Based on these findings, the study recommended that government should put more efforts in proper utilization of foreign aids grant to further sustainable growth.

Asongu and Nnanna (2018) study was motivated by evidence that extreme poverty has been decreasing in all regions of the world with the exception of Africa, the study contributes to the literature on reinventing foreign aid by assessing if development assistance can sustain inclusive human development. The empirical evidence is based on 53 African countries with data for the period 2005-2012 and Generalized Method of Moments. The adopted foreign aid variables include: aid for social infrastructure, aid for economic infrastructure, aid to the productive sector, aid to the multi sector, programme assistance, action on debt and humanitarian assistance. The results revealed that whereas foreign aid improves inclusive human development in the short-run, it decreases it in the long term. Policy implications are discussed with particular emphasis on reinventing foreign aid for sustainable development in the post-2015 development agenda.

Adams and Ellassal, (2020) was interested in if aid flows have contributed to economic growth or growth divergence between a sample of Asian and African countries using data over the period of 1980–2015. The paper attempts to establish whether aid, in any of its forms, has played a role in economic growth in these countries. The study adopted a panel data fixed-effects model for each sample (Africa and Asia) between 1980 and 2015. Both theoretical predictions and empirical studies are used to derive the independent variables selected for modelling. The findings strongly suggested that aid flows in both the Asian and African samples have no relation at all to either long-run growth paths or growth divergence.

Tsaurai, (2021) was interested in a study in the Middle East and North African (MENA) Regions using a panel data and dynamic generalized techniques to achieve different set of the formulated objectives. The study took a cursory examination of foreign aid and poverty in MENA countries using a frame period of 2007 to 2018. First, the panel data confirmed that foreign aid was significant with a direct effect on poverty reduction in the selected areas. The dynamic generalized established that human capital development was significant with an evidence direct effect on foreign aid's which reduced poverty reduction in the MENA region.

METHODOLOGY

Theoretical framework

This study used Vicious cycle of poverty theory as propounded by Nurkse (1953), the theory assumes that poverty is a circular constellation that have both demand and supply side and that it requires a high degree of capital formation to penetrate and break it. The theory avows that low income within an economy encourages low saving that turn in low investment which directly leads to low industrial productivity that completes a circle. Nurkse (1953) argued that capital formation is required to break the circular constellation forces of vicious cycle of poverty; therefore, resulting in this study adopting Vicious cycle of poverty as the theoretical framework

Model Specification

The model for this study for objective two was built on Adebayo and Afolayan (2019) model with a comprehensive modification. Therefore, the basic model for Adebayo and Afolayan (2019) is given below;

$$HCP = F(FA, FDI, INF) \dots \dots \dots (3.1)$$

Where;

HCP = Household Consumption per Capita

FA = Foreign Aids into Nigeria

FDI = Foreign Direct Investment Inflow.

INF = Inflation rate

In the equation 3.1 above, the model was modified for three reasons. First, Adebayo and Afolayan (2019) ignored the inclusion of trade openness in their model; therefore, ignore the first assumption in international finance that assumes that foreign aids is given to an open economy. Receiving foreign aids form international donors or foreign countries is a give and take approach; where you open your boarder for international transaction to receive aids (Falade et al., 2021). Second, the study ignored the conversion of foreign aids to local currency. Thirdly, foreign direct investment inflow, household consumption per capita and inflation rate were removed from the basic model because they have no interest to the objective of the current study. Therefore, the model is re-specified as follow

$$POV = f(AIDS, FDI, EXCH, TRADEOP) \dots \dots \dots (3.2)$$

Where;



POV = Poverty head count

AIDS = Foreign aids

FDI = Foreign Direct Investment

EXCH Effective exchange rate

TRADEOP = Trade openness

Where the econometric form of equation (3.2) becomes

$$POV = \beta_0 + \beta_1 AIDS + \beta_2 FDI + \beta_3 EXCH + \beta_4 TRADEOP + \mu_t \dots \dots \dots (3.3)$$

DATA ANALYSIS AND INTERPRETATION OF RESULT

This chapter presents data analysis, interpretations and discussions of the research findings. The chapter comprises of five sections that altogether cover the objectives of the study. These sections include the descriptive statistics of the variables, trend analysis, unit root testing and co-integration, Vector Error Correction (VECM) and discussion of result

Descriptive Statistics

Table: 4.1 Descriptive Statistics	POV	AIDS	FDI	EXCH	TRADEOP
Mean	40.10571	10.34548	2.208571	261.8179	611.6858
Median	45.78500	9.535000	2.330000	115.5650	143.1653
Maximum	68.70000	26.17000	6.660000	2218.020	13335.47
Minimum	0.000000	4.230000	-0.140000	90.05000	35.99287
Std. Dev.	25.37981	5.275793	1.789644	398.7796	2032.761
Skewness	-0.701539	0.897178	0.371991	3.777507	6.043968
Jarque-Bera	5.508124	5.724257	1.050737	464.6237	2443.285
Probability	0.063669	0.057147	0.591337	0.121111	0.541211
Observations	42	42	42	42	42

Source: Researcher's Compilation from E-views

This Table 4.1 displays series of statistics of the variables that include poverty head count (POV), foreign aids (AIDS), foreign direct investment (FDI), effective exchange rate (EXCH) and trade openness (TRADEOP). The mean for instance, showed the average rate of growth of the variables. The mean row implied that poverty growth at an accumulated average rate of 40% within the year of study; while foreign aids (AIDS) grows at 10.3% as well as others variables that followed the same trend.

The median value confirmed a stable growth rate of poverty head count (POV) with a value of 45.7%; while that of foreign aids (AIDS) is 9.5% as well as others variables. The economic implication of this is that the rate of growth in poverty within the study years was greater than foreign aids received in the country.

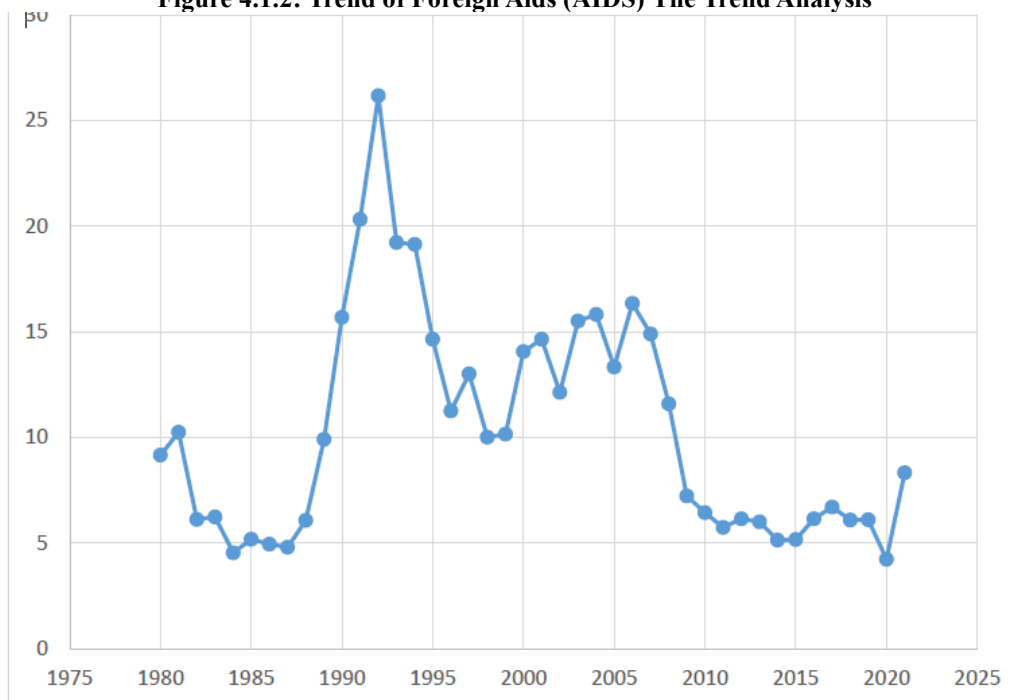
Also, trade openness (TRADEOP) shows highest value of maximum value, as well as followed by others; while, foreign aids (AIDS) showed negative minimum value within the study years. For maximum value, this suggests that within the study years there was highest trading of export and import within the country; while for minimum value, there was time the country did not receive any form of aids from foreign donors.

The finding forms the standard deviation implies that trade openness (TRADEOP) ratio has the highest values around the mean; followed by others variables in the model. Also, it was revealed that the selected variables were skewed to the right and left; where foreign aids (AIDS), effective exchange rate (EXCH) and trade openness (TRADEOP) were skewed to the right, with poverty head count (POV) skewed to the left.

Finally, the *Jarque-Bera* test statistics for testing whether the series is normally distributed showed that poverty head count (POV), foreign aids (AIDS), foreign direct investment (FDI), effective exchange rate (EXCH) and trade openness (TRADEOP) were normally distributed, since their corresponding p-value was greater than 5%. The implication of this is that present change poverty head count (POV), foreign aids (AIDS), effective exchange rate (EXCH) and trade openness (TRADEOP) is not determined by their previous year performance.

The Trend Analysis

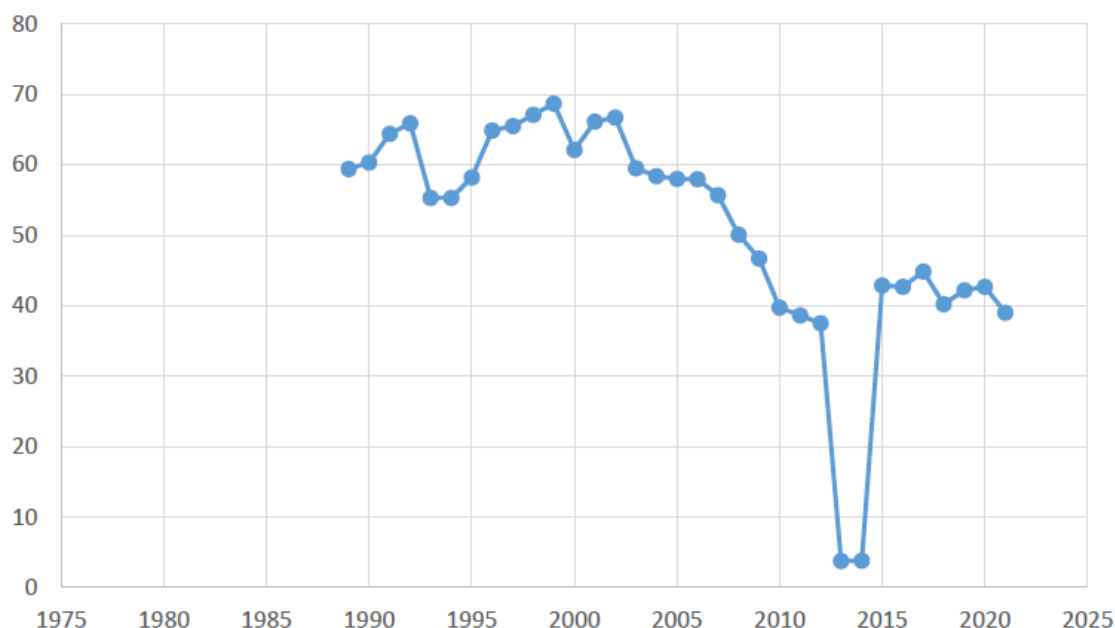
Figure 4.1.2: Trend of Foreign Aids (AIDS) The Trend Analysis



The figure 4.1.2 above shows the trend analysis of Ugandan foreign aids (AIDS) from 1980- 2021. From the graph, foreign aids was considered high in 1980, with a value of 9.16% as the percentage of GDP. This suggest that 9.16% of aggregate output produced in the country in 1980 was received in form of foreign aids. However, a drastically fall was witnessed in foreign aids from 1982-1987. The decline in foreign aids during these periods may be attributed to political instability in the country. Moreover, started from 1988, the country's foreign aids took a new dimension with a sharp increase in its value till 1993. Ever since 1993, the foreign aids have remained unstable in the country.

Figure 4.1.3: Trend of Poverty Head Count (POV)

POV



The figure 4.1.3 above shows the trend analysis of Ugandan poverty head count (POV) from 1989- 2021. From the graph above, in 1989, poverty head count was 59.4% and showed a gradual increase in its value. The implication of the 59.4% is that more than half of the citizens were below the poverty line. Hence shows that 59.4% of the entire nation live above \$ 1 dollar per day then. From that 1989 -1992, the poverty head count exhibit high value. however, there was a sharp decline in its value in 1993 and maintained it till 1994.

However, starting from that 1995-1999, poverty head count was not encouraging as the country value exhibited an increase in value. It implication is that there was increase in number of citizens living below the minimum standard of living annually from 1995-1999. Also, there was a bit increase in its value in 2000-2001, before the country starting experiencing decline in its value. However, a decline in its value started from 2004-2014. Meanwhile, such decrease is considered encouraging. As this indicates better standard of living. However, form 2005 till 2021, its value has started increasing with each year exhibiting high value; hence implies a high increase in number of poor people.

Unit Root Test

This study adopted both Augmented Dickey Fuller (ADF) and Phillip Peron (PP) unit root test to examine the stationarity of the series.

Augmented Dickey Fuller (ADF) Unit Root Test

The ADF test decision rule is that the ADF test statistic must be largely negative, that is, it must be greater than or equal to its critical values in absolute term before one can accept stationarity. In this study, both the ADF test decision at level and test at first differences were examined using 5% critical value.

Table 4.2.1: Results of Unit Root Test *Test at Level* *Test at first level difference*

<i>Variable</i>	<i>Test Statistic</i>	<i>5% critical value</i>	<i>Level</i>	<i>S/NS</i>	<i>Test Statistic</i>	<i>5% critical value</i>	<i>Level</i>	<i>S/NS</i>
POV	/2.0534 68/	/2.9350 01	I(0)	NS	/6.0814 11/	/2.9369 42/	I(1)	S
AIDS	/1.7130 00/	/2.9350 01/	I (0)	NS	/5.3577 73/	/2.9369 42/	I(1)	S
FDI	/2.1326 65	/2.9369 42	I (0)	NS	/5.2584 38/	/2.9389 87/	I(1)	S
EXCH	/2.0492 87/	/2.9458 42/	1(0)	NS	/5.1613 53/	/2.9604 11	I(1)	S
TRADE	/2.6926	/2.9540	I (0)	NS	/0.7962	/2.9604	I(1)	S
OP	15/	21/			5/	11/		

Where; S indicates Stationary; NS non Stationary

Table 4.2.1 shows the Augmented Dickey Fuller (ADF) result of test at level and test at first differences. The findings inferred that all the five variables identified in the model that include poverty head count (POV), foreign aids (AIDS), foreign direct investment (FDI), effective exchange rate (EXCH) and trade openness (TRADEOP) were stationary at first level difference, I (1). The economic implication of this finding is that at integrated of order ($\square = 1$), other economics variables do not cause change among the variables identified in the model; therefore, become independent of themselves.

Lag Order Selection

Table 4.2.2: Lag Order Selection (Max 2) Lag	LogL	LR	FPE	AIC	SC	HQ
0	-932.9735	NA	5.34e+14	48.10121	48.31448	48.17773
1	-813.2333	202.6373	4.20e+12	43.24273	44.52240	43.70187
2	-797.2107	23.00684	7.11e+12*	43.70311	46.04916*	44.54486*
3	-761.0240	42.68177*	4.79e+12	43.12944*	46.54187	44.35379

Co-integration Result

This study employed Johansen co-integration technique to test whether there is a long-run relationship between the dependent and independent variables in the model, by employing the Trace and Max-Eingen Statistics respectively at 5% significance level.

Table 4.2.3: Johansen Co- Integratio n Test No. of CE(s)	Trace Statistic	Critical Value	Prob.**	Max- Eigen	Critical Value	Prob.**
None *	77.12782	69.81889	0.0116**	34.81814	33.87687	0.0385**
At most 1*	52.30967	47.85613	0.0002**	28.67634	27.58434	0.0399**
At most 2	23.63333	29.79707	0.2164	14.22720	21.13162	0.3467
At most 3	9.406136	15.49471	0.3291	8.790974	14.26460	0.3040
At most 4	0.615162	3.841466	0.4328	0.615162	3.841466	0.4328

The results from both Traces and Max-Eingen Statistics established the presence of two co-integrating equation. Therefore, confirmed a long-run relationship between The findings from Table 4.3.1 shows that the lagged error correction ECM (-1) included in the model to capture the long run dynamics between the co-integrating series are correctly signed (negative) and statistically significant judging from the t-value. The absolute estimated coefficient value of the lagged error correction ECM (-1) was approximately 0.60 with the absolute t-statistic (3.94418) greater than the t-value ($t_{0.05} = 2.042$) at 5 % level. This finding implies that a long run causality ruined from foreign aids (AIDS), foreign direct investment (FDI), effective exchange rate (EXCH) and trade openness (TRADEOP) to poverty head count (POV). In economics terms, the finding implies that the disequilibrium that occurred in the model from 1980-2012 was corrected at an annual rate of 60.6%. The results for immediate past year of poverty head count (POV) was significant with an indirect effect; while that of second year was non-significant with an indirect effect also. For the immediate past year, its absolute t-statistics (2.14411) was greater than the t-value ($t_{0.5} = 2.042$) at 5% significance level with a co-efficient value of 22.4%. While, that of second year was non-significant. In economic term, this implies that decrease in poverty rate is due to availability of foreign aids, as well as, social amenities indicators such as housing, medical care, education, social and environmental services, consumer goods, recreational opportunities, neighborhood amenities and transport facilities which contribute to poverty reduction.

The absolute coefficient of foreign aids (AIDS) was 44.1% and was inversely related to poverty head count (POV) for immediate past year as well as second year. This means that during the period under review 1% increase in the volume of foreign aid received brought about 44.1% and 28.6% in the two consecutive period in the country. So foreign aid had the effect to reduce poverty as against the criticism in certain quarters that foreign aid was counterproductive. The implications of this finding on poverty level is that more inflow of foreign aid into the country drastically reduce the severity of poverty among the citizens. The finding showed that official development assistance could serves as capital formation that could break the circular constellation of poverty when efficiently used within the country

The coefficient of foreign direct investment (FDI) was 1.6-units which was negative for immediate past year as well as year second year judging from the t-values greater than the student t-test ($t_{0.05} = 2.042$) at 5 % level. The negativity sign of the foreign direct investment was in consonance with *a priori* expectation. The economic

implication of this finding is that as Ugandan government formulates good policies that encourage inflow of FDI in to the real sector of the economy, many citizens would be engaged through job opportunities that would reduce poverty level.

The coefficient of one lagged period of effective exchange rate (EXCH) was 10.2% which was negative and non-significant at 5% level; while that of lagged two periods was non-significant also. The implication of negative sign for lagged one was in consonance with *a priori* expectation; while that of lagged two was contrary with *a priori* expectation. Statistically, this implies that exchange rate has zero effective on poverty. This implies that non-formulation of good policy by monetary authority in the country makes exchange rate less impactful on the aggregate poverty level in the country.

The result in Table 4.3.1. shows that the co-efficient of trade openness (TRADEOP) was statistically significant at 5% significance level for lagged two periods; while that of lagged one was none. This implies that trade openness (TRADEOP) had an indirect effect on poverty head count (POV). The mechanical meaning of this is that trade openness (TRADEOP) had a reduction impact on poverty rate on the assumption that all other factors were constant. This is a favorable indicator since it suggests that there is a greater rate of investment in the local market, which is supported by aids from foreign sources that increase the exports of goods, and total outputs.

DIAGNOSTIC TEST

R square

The R-square for the model was pegged at 77.4%, which implies that foreign aids (AIDS), foreign direct investment (FDI), effective exchange rate (EXCH) and trade openness (TRADEOP) explained about 77% systematic variation on poverty head count (POV) over the observed years in the Uganda economy while the remaining 24% variation is explained by other variables outside the model.

Adjusted R square

The adjusted R square are 61.9%, implying that about 61.9% is accounted for when the degrees of freedom is put into consideration.

DISCUSSION OF FINDINGS

Foreign Aids and Poverty Head Count

It was discovered from the VEC result that coefficient of foreign aids (AIDS) was 44.1% and was inversely related to poverty head count (POV). Statistically, this implies that during the period under review 1% increase in the volume of foreign aid received brought about 44.1% reduction in poverty rate. This finding has two economic implications on poverty. First, foreign aids directed towards poverty alleviation program reduce the rate of poverty amongst the beneficiaries; therefore, place the beneficiaries in better economic position. Second, foreign aids directed towards the real sector of the economy promotes the aggregate economy, as well as, place the household in better working condition that reduce poverty. As such, studies like Hirano and Otsubo (2014), Arndt et al. (2015) and Mahembe and Odhiambo (2017) discovered in their separate studies that foreign aid is significant and indirectly related to poverty rate.

Foreign Direct Investment and Poverty Head Count

It was established that foreign direct investment (FDI) was significant and inversely related to poverty head count. The negativity sign of the foreign direct investment was in consonance with *a priori* expectation. The policy implication of this finding is that more inflow of FDI in to the real sector of the economy increase the opportunities for job creation due to increase in aggregate output; therefore, reduce the severity of poverty amongst the citizens. Given this, studies like Berthélemy (2006), Nunnenkamp and Thiele (2006) and Quinn and Simon (2006) confirmed a negative and significant relationship between them; while, Gates and Hoeffler (2004) and Tuman and Ayoub (2004) discovered a negative and non-significant relationship between them

Effective Exchange Rate and Poverty Head Count

Also, the coefficient of one lagged period of effective exchange rate (EXCH) was 10.2% and non-significant at 5% level. The implication of negative sign for lagged one was in consonance with *a priori* expectation; while that of lagged two was contrary with *a priori* expectation. Statistically, this implies that exchange rate has zero effective on poverty. This implies that non-formulation of good policy by monetary authority in the country makes exchange rate less impactful on the aggregate poverty level in the country. Also, studies like Gates and Hoeffler (2004), Tuman and Ayoub (2004) and Arndt et al. (2015) arrived at a similar conclusion that non-significant relationship existed between exchange rate and poverty growth rate.



Trade Openness and Poverty Head Count

It was discovered that trade openness (TRADEOP) was statistically significant at 5% significance level. The mechanical meaning of this is that trade openness (TRADEOP) had a reduction impact on poverty rate on the assumption that all other factors were constant. The economic implication is that when export is greater import, it increases local production; therefore, creates many job opportunities that reduced poverty rate amongst people. Arndt *et al.* (2015) also arrived at similar findings.

CONCLUSION AND POLICY RECOMMENDATIONS

The study examined the effect of foreign aid on poverty in Uganda from 1980 – 2021. The result showed that foreign aids, foreign direct investment and trade openness were significant and inversely related to poverty head count. This implies that inflow of foreign aid, foreign direct investment, as well as, high export goods reduce the severity of poverty among people. In addition, effective exchange rate was negative and non-significant at 5% significance level. Based on the findings, the study concluded that inflow of foreign aids into the country reduced the severity of poverty rate amongst the citizens and therefore recommended that government should seek for more aids directed towards poverty alleviation programs. Also, government should put policies in place like tax holiday and others to further encourage investors (both foreign and local) into the real sector of the economy.

REFERENCES

1. Abeselom, K. (2018). *The impact of foreign aid in sustainable development in Africa: A case study of Ethiopia*. *Open Journal of Political Science*, 8(04), 365.
2. Adams, J., & Elassal, O. (2020). *Can foreign aid contribute to sustained growth? A comparison of selected African and Asian countries*. *World Journal of Entrepreneurship, Management and Sustainable Development*, 16(4), 249-270.
3. Addison, T., Morrissey, O., & Tarp, F. (2017). *The macroeconomics of aid: overview*. *The Journal of Development Studies*, 53(7), 987-997.
4. Afolayan, M. A. (2019). *A High Gain Patch Antenna Array for 5G Communication*. In 2019 2nd International Conference of the IEEE Nigeria Computer Chapter (NigeriaComputConf) (pp. 1-6). IEEE.
5. Akramov, Kamiljon T. 2006. *Governance and Foreign Aid Allocation*. Dissertation. Santa Monica, CA: RAND Corporation. http://www.rand.org/pubs/rgs_dissertations/RGSD202.
6. Alesina, A. and D. Dollar (2000). "Who Gives Foreign Aid to Whom and Why?" *Journal of Economic Growth* 5(1): 33-63. Alesina, A. and B. Weder (2002). "Do Corrupt Governments Receive Less Foreign Aid?" *The American Economic Review* 92(4): 1126-1136.
7. Ali, M. E. M., Elshakh, M. M., & Ebaidalla, E. M. (2018, November). *Does Foreign Aid Promote Economic Growth in Sudan? Evidence from ARDL Bounds Testing Analysis*. In *Economic Research Forum Working Papers* (No. 1251).
8. Alok, K. K. (2019). *Assessment of Factors that have led to Intimate Partner Violence in Uganda: A Case Study of UDHS UBOS 2016 Data Set* (Doctoral dissertation, Makerere University).
9. Arndt, C., Jones, S., & Tarp, F. (2010). *Aid, growth, and development: Have we come full circle?* *Journal of Globalization and Development*, 1(2), 1-27.
10. Arndt, C., Jones, S., & Tarp, F. (2015). *Assessing foreign aid's long-run contribution to growth and development*. *World Development*, 69, 6-18.
11. Arshad, Z., Hanif, M. A., Qadri, R. W. K., Khan, M. M., Babarinde, A., Omisore, G. O., ... & Latif, S. (2014). *Role of essential oils in plant diseases protection: a review*. *International Journal of Chemical and Biochemical Sciences*, 6, 11-17.
12. Asongu, S. A., Nnanna, J., Biekpe, N., & Acha-Anyi, P. N. (2019). *Contemporary drivers of global tourism: evidence from terrorism and peace factors*. *Journal of Travel & Tourism Marketing*, 36(3), 345-357.
13. AUgbaka, M., Awujola, A., Shcherbyna, T. (2019). *Economic Development, Foreign Aid and Poverty Reduction: Paradigm in Nigeria*. *Socioeconomic Challenges*, 3(4), 5-12.
14. Babyenda, P., Kabubo-Mariara, J., & Odhiambo, S. *Climate Variability and Agricultural Productivity in Uganda*. Available at SSRN 4364153.
15. Burnside, C., & Dollar, D. (2000). *Aid, policies and growth*. *American Economic Review*, 90(4), 847-868.
16. Burnside, C., & Dollar, D. (2004). *Aid, policies, and growth: Revisiting the evidence*. Washington DC: World Bank. Working Paper 3251.
17. Bush, G., Nampindo, S., Aguti, C., & Plumptre, A. (2004). *The Value of Uganda's Forests: A livelihoods and ecosystems approach*.
18. Chaudhuri, S., & Ravallion, M. (2006). *Partially awakened giants: uneven growth in China and India* (Vol. 4069). World Bank Publications.
19. Chenery, H. B. (1966). *The foreign aid and economic development: the case of Greece*. *The Review of Economics and Statistics*, 1-19.
20. Cheney, B. A., Davidson, A. G. F., & Henze, K. G. (1962). *Evidence for calcitonin – a new hormone from the parathyroid that lowers blood calcium*. *Endocrinology*, 70(5), 638-649.



21. Clemens, M. A., Radelet, S., Bhavnani, R. R., & Bazzi, S. (2011). Counting chickens when they hatch: Timing and the effects of aid on growth. *The Economic Journal*, 122(561), 590–617.
22. Cleveland, H. V. (1957). Purposes of international aid programs. *The Scientific Monthly*, 85(2), 77–81.
23. Clunies-Ross, A., Forsyth, D., & Huq, M. (2009). *Development economics* (1st ed.). Berkshire: McGraw-Hill Higher Education.
24. Collier, P., & Dollar, D. (2001). Can the world cut poverty in half? How policy reform and effective aid can meet international development goals. *World Development*, 29(11), 1787–1802.
25. Collier, P., & Dollar, D. (2002). Aid allocation and poverty reduction. *European Economic Review*, 46(8), 1475–1500.
26. Domar, E. D. (1946). Capital expansion, rate of growth and employment. *Econometrica*, 14(2), 137–147.
27. Easterly, William. 2002. "The Cartel of Good Intentions: The Problem of Bureaucracy in Foreign Aid." *Journal of Policy Reform* 5 (4): 223–250.
28. Nurske, R. (1953). *Problems of capital formation in underdeveloped countries*. New York: Oxford University Press.
29. OECD. (2006). *Development assistance: Efforts and policies*. Paris: Author.
30. OECD. (2009). *Managing aid: Practices of DAC member countries*. Paris: Author.
31. OECD. (2017, November 21). Development aid rises again in 2016 but flows to poorest countries dip [Online]. Retrieved from <http://www.oecd.org/dac/financing-sustainable-development/development-aid-rises-again-in-2016-but-flows-to-poorest-countries-dip.htm>
32. OECD. (2018). Frequently asked questions: What are the differences between bilateral, multilateral and Bi/Multi aid? [Online]. Retrieved from <http://www.oecd.org/dac/stats/faq.htm>
33. Okidi, J., & McKay, A. (2003). Poverty dynamics in Uganda: 1992 to 2000.
34. Owori, M. (2020). Poverty in Uganda: National and regional data and trends. *Development Initiatives*. <https://devinit.org/resources/poverty-uganda-national-and-regional-data-and-trends>.
35. Pedrosa, M., Bayoumi, M., Gairi, M., Maglia, G., & Carulla, N. (2016). A β 42 assembles into specific β -barrel pore-forming oligomers in membrane-mimicking environments. *Proceedings of the National Academy of Sciences*, 113(39), 10866–10871.
36. Perveen, R., Wang, X., Jamil, Y., Ali, Q., Ali, S., Zakaria, M. Q., ... & Fiaz, S. (2021). Quantitative determination of the effects of he–ne laser irradiation on seed thermodynamics, germination attributes and metabolites of safflower (*Carthamus tinctorius* L.) in relation with the activities of germination enzymes. *Agronomy*, 11(7), 1411.
37. Pickbourn, L., & Ndikumana, L. (2013). Impact of sectoral allocation of foreign aid on gender equity and human development. *UNU/WIDER Working Paper*, (2013/066).
38. Pronk, Jan P., et al. 2004. "Aid as a Catalyst." In *Catalysing Development? A Debate on aid*, edited J. Pronk, 3–10. Malden, MA: Blackwell.
39. Rajan, R. G., & Subramanian, A. (2008). Aid and growth: What does the cross-country evidence really show? *The Review of Economics and Statistics*, 90(4), 643–665.
40. Ravallion, M. (2004). Pro-poor growth: a primer. Available at SSRN 610283.
41. Ravallion, M. (2015). The idea of antipoverty policy. In A. Atkinson & F. Bourguignon (Eds.), *Handbook of income distribution* (pp. 1966–2061). Amsterdam: Elsevier B.V.
42. Riddell, R. C. (2008). *Does foreign aid really work?* New York: Oxford University Press.
43. Roosevelt, C. H., Luke, C., Ünlüsoy, S., Çakırlar, C., Marston, J. M., Grady, C. R. O., ... & Slim, F. G. (2018). Exploring space, economy, and interregional interaction at a second-millennium BCE citadel in Central Western Anatolia: 2014–2017 research at Kaymakçı. *American Journal of Archaeology*, 122(4), 645–688.
44. Rosenstein-Rodan, P. N. (1943). Problems of industrialisation of Eastern and Southern Europe. *The Economic Journal*, 53(210/211), 202–211.
45. Sachs, J. 2005. *The End of Poverty: Economic Possibilities for Our Time*. New York: Penguin.
46. Scott-Smith, T. 2013. *The Least Provocative Path: An ANT Lens on Development Project Formation and Dissolution*. Working Paper 3. Center for Development Informatics. Institute for Development Policy and Management. SED University of Manchester.
47. Sen, A. (2002). Health: perception versus observation: self reported morbidity has severe limitations and can be extremely misleading. *Bmj*, 324(7342), 860–861.
48. Shackleton, N. J., Backman, J., Zimmerman, H. T., Kent, D. V., Hall, M. A., Roberts, D. G., ... & Westberg-Smith, J. (1984). Oxygen isotope calibration of the onset of ice-rafting and history of glaciation in the North Atlantic region. *Nature*, 307(5952), 620–623.
49. Shcherbyna, T. V., AUGbaka, M., & Awujola, A. (2019). Development, Foreign Aid and Poverty Reduction: Paradigm in Nigeria.
50. Shitile, T. S. ., & SULE, A. . (2019). Reassessing the Efficacy of Foreign Aid and Grants in Poverty Reduction in Nigeria. *Asian Economic and Financial Review*, 9(4), 450–460.
51. Shleifer, A. (2009). Peter Bauer and the failure of foreign aid. *Cato Journal*, 29(3), 379–390.
52. Slavik, R., Parmigiani, F., Kakande, J., Lundström, C., Sjödin, M., Andrekson, P. A., ... & Richardson, D. J. (2010). All-optical phase and amplitude regenerator for next-generation telecommunications systems. *Nature Photonics*, 4(10), 690–695.



53. Sorens, J. 2007. "Globalization and Ethnic Discrimination." Paper presented at the annual meeting of the Midwest Political Science Association. Palmer House Hotel, Chicago, IL. 12 April.
54. Ssewanyana, J. K. (2009). ICT usage in microfinance institutions in Uganda. *The African Journal of Information Systems*, 1(3), 3.
55. Standley, C., Boyce, M. R., Klineberg, A., Essix, G., & Katz, R. (2018). Organization of oversight for integrated control of neglected tropical diseases within Ministries of Health. *PLoS Neglected Tropical Diseases*, 12(11), e0006929.
56. Stanley, I. J., Kajumbula, H., Bazira, J., Kansiime, C., Rwego, I. B., & Asiimwe, B. B. (2018). Multidrug resistance among *Escherichia coli* and *Klebsiella pneumoniae* carried in the gut of out-patients from pastoralist communities of Kasese district, Uganda. *PloS one*, 13(7), e0200093.
57. Stein, D., Bergemann, R., Lanthorn, H., Kimani, E., Nshakira-Rukundo, E., & Li, Y. (2022). Cash, COVID-19 and aid cuts: a mixed-method impact evaluation among South Sudanese refugees registered in Kiryandongo settlement, Uganda. *BMJ global health*, 7(5), e007747.