

## **IMPACT OF FOREIGN FINANCIAL AID ON UGANDA'S ECONOMIC GROWTH**

**Mohammed Hussein**

Masters of Economics, Turkey University, Turkey

**Prof. Dr. Aydin Çelen**

Istanbul ticaret üniversitesi, Turkey

©2022

**International Academic Journal of Economics and Finance (IAJEF) | ISSN 2518-2366**

**Received:** 10<sup>th</sup> January 2022

**Published:** 15<sup>th</sup> January 2022

Full Length Research

**Available Online at:** [https://iajournals.org/articles/iajef\\_v3\\_i7\\_429\\_446.pdf](https://iajournals.org/articles/iajef_v3_i7_429_446.pdf)

**Citation:** Mohamed, H., Çelen, A. (2022). Impact of foreign financial aid on Uganda's economic growth. *International Academic Journal of Economics and Finance*, 3(7), 429-446.

## ABSTRACT

The study examines the influence of foreign donor aid on the performance of Uganda's economy for the period 2000-2020 using time series data gathered from World Bank's development standards. The study will be focused on the production normal function where donor aid involved in the production process acts as one of the inputs. Phillip Peron's unit root test will be done. Besides the main focus, this paper also examines the link between growth and aid. Massive foreign aid inflows to sub-Saharan Africa and persistent economic output and extreme poverty in the locations are sparking intense discourse about the accomplishment of these initiatives. The study using a linear regression analysis looks at foreign financing aimed at attaining economic development in SSA with a focus on Uganda. Results show that foreign aid inflow significantly reduced economic growth in Uganda in the short run and long

run. The domestic investment was significant and had a positive sign in the short run while exports increased output in the short and long run. Dummy variable for insecurity increase output in the short run and increased it in the long run. The study identified previous periods of democracy index and effective labor to have negatively affected output in the short run. In the long run, effective labour force, exports, Dummy variable for insecurity and democratic index was found to increase output in the long run. This study contributes to the literature on foreign aid and economic growth by providing the theoretical and empirical evidence for Uganda.

**Keywords: Foreign donor aid, Production normal function, Foreign aid inflows, Economic development, Domestic investment, Insecurity, Democratic index**

## INTRODUCTION

Uganda began economic reforms in the late 1980s from the standpoint of serious financial weakness. The country had almost citizens' anxiety and ten years of war, social Services, especially education and health, were severely disrupted and almost become nonexistent in the countryside. There was an extreme shortage of resources nationwide. The donor community responded positively to NRM's desire to reform the economy and introduce a higher level of discipline to the public sector. The first flow of resources had an urgent flow to strategic areas to ensure rapid rehabilitation. A structure that enables at least a certain minimum basic service. Delivery framework was formulated. But shortly thereafter, policymakers began extensive economic redevelopment.

For over a half of a century, overseas financial aid from developed nations have been the mainstream global financial support towards developing nations poverty relief in many sub-Saharan nations, which include Uganda. Interestingly, within the duration, important worldwide organizations like the worldwide United Nations, the World Bank, and International Monetary Fund, have become conspicuous in dealing with global financial and economic challenges (Hjertholm *et al.*, 2000). The principal drivers of overseas resources are targeted to the humanitarian needs, strategic significance and monetary capacity of the recipient nations. It was additionally observed that the point of reference for finding out the nations that are given sizeable financial aid is often hugely pegged on those that rely on bilateral funds. Uganda is among the top 10 ODA recipients globally.

Although United States is Uganda's biggest ODA provider together with the EU and the World Bank, Uganda continues to struggle economically, leading to the question of whether foreign exchange aid actually was achieving its intended goals. An efficient and reliable approach to stimulate growth and development of the host country especially in sub-Saharan Africa needs to be relooked at. Past researches on this topic tried to establish an empirical link connecting aid for development and economic output although they have indicated mixed signals. In spite of the efforts, there is still no agreement among researchers on the actual influence of the aid received from foreign nations (Rajan & Subramanian, 2005).

The term "foreign aid" can refer to activities ranging from humanitarian aid after a calamity to military assistance and grants in form of weapons (Cleveland, 1957). However, taking this research into consideration, it has subservient features, making reference to the common description of "Official Development Assistance" or external assistance to foster economic development. Development finance censors cite the rationale behind it being an ineffective master plan for tackling global poverty. Foreign aid offers substantial boost in developing nations. Past researches on external aid and economic development have shown inconsistent outcomes. Karras *et al.* (2006) got evidence of positive impact of development aid.

Mosley *et al.* (1987) got proof that it does not affect development, while "Burnside and Dollar and Groom and Knack"(2000) got proof of adverse effects of external assistance and development. It is worth noting that in spite of the fact that Burnside and the dollar surmise that results of external assistance are positive, this objective applies is only relevant to financial systems that are integrated with other perspectives. A new report by Doucouliagos and Paldam uses a meta-study which includes 68 papers containing a total of 543 direct-measuring instruments, shows significant impact of aids on developmental indicators and somewhat puts certainty on the development of the impact.

A basic element of external assistance to revive economic development is to improve local sources of earnings like private equity, thereby expanding the capacity of venture capital and equity. However, countries like Uganda have been known not to have well developed financial markets. Morrissey (2001) opines that there are many different elements that aid can contribute to financial development, including giving back up in bolstering business in terms

of physical resources, objects and people; assists in building assets or the capability to import innovative materials and assistance does not have the adverse effect of bringing down the interest rate of investment. Remarkably, the enormous inflow of aid to agricultural countries has greatly gone up in recent times, but the movement of numerous types like foreign direct investment and other private flows have gone down.

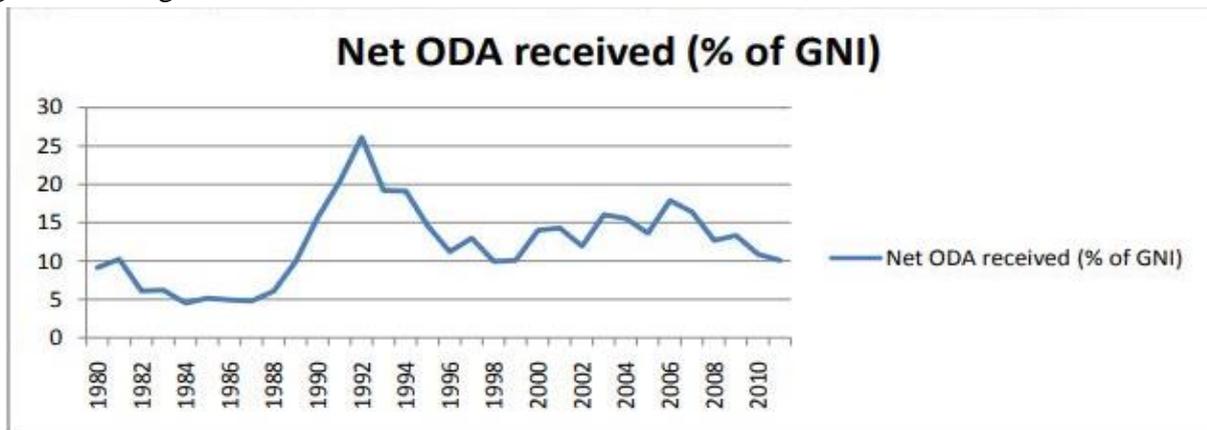
According to the Organization for Economic Co-operation and Development (OECD) documents, the Development Assistance Committee (DAC)'s Official Development Assistance (ODA) to advance individual admittance increased by 10.2% in 2008. As a matter of fact, it ought to reach \$ 119.8 billion and \$ 130 billion dollars in 2010. Africa is the biggest beneficiary of external financial aid, for example, DAC benefactors' net bilateral ODA to African nations in 2008 was \$ 26 billion, out of which \$ 22.5 billion was sent to sub-Saharan Africa. In the absence of unstable bond aid allotment, bilateral assistance to Africa could improve 10.6% and 10% in actual cost correspondingly. With the significance of external assistance to financial states of agricultural nations, it is important to get to know the dedication of non-industrial nations to financial development.

This research analyzes the influence of development aid on Uganda's financial development. In spite of the fact that Uganda is among the world economies with a good climate it has not effectively shrugged off the tag of countries with a borrowing bowel and having a slow rate of capital formation. Many of the countries in this category are continuously battling extreme poverty and depend heavily on economic inflow of assistance. Unfortunately, the weight that mandatory regulations place upon these countries is overwhelming each time. However, Official Development Assistance flows have declined in the past ten years so agricultural nations have to find different approaches to demonstrate more plausible use of aid flows. They have to get an innovative master plan to put together the right proposals and get more help financially. Because of the importance of this topic, the effectiveness of development aid has been examined particularly more keenly to ensure the right models for development are designed for developing nations.

The key question that recipients and researchers ask themselves is whether aid affects the development of agricultural countries and the extent of its effectiveness to trickle down to reach the vulnerable populations in developing nations (Babyenda, 2017). This question was put out in different contexts. The obvious answer may not really exist. In addition, it should be noted that elements like the sum and kind of fiscal aid not only influences the profitability of assets at hand but also the rational use of the assets by the nation. Getting donations also contributes greatly.

The key drivers of benefactor aid are the charitable needs, tactical significance and economic prospects of beneficiary nation. Recently, it has been ascertained that the criteria for settling on the nation to be given the highest aid majorly rely on bilateral associations and the geographical importance of specific benefactor nation. Nevertheless, most benefactor nations seem to direct their assistance on virtuous governance, effectiveness of assistance and

liability. Below is a series of charts showing the trends of the foreign aid and economic growth for Uganda.



Source: World Bank (2014) World Bank Development Indicators

Figure 1: Foreign aid (Net ODA as a % of GNI) received by Uganda from 1980 to 2011

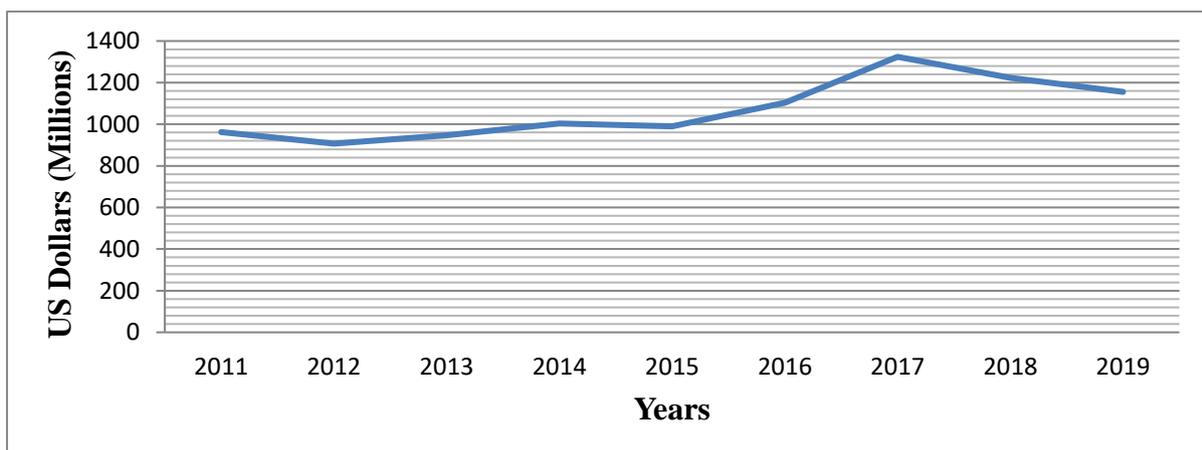


Figure 2: Foreign aid total disbursements to Uganda

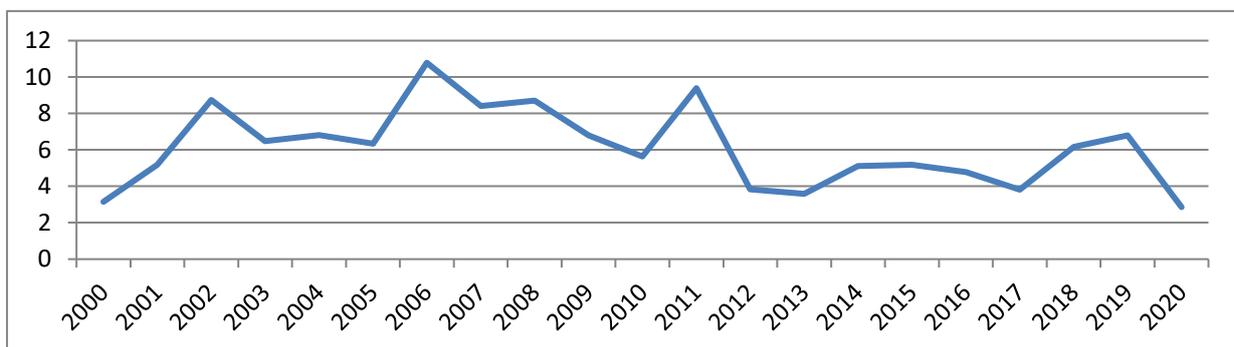


Figure 3: GDP growth rate for Uganda

### Problem Statement

Going by the new statistics by the Organization for Economic Cooperation and Development (OECD) provided in 2007, Uganda is one of the continent's largest aid recipients. Nevertheless, development specialists opine that Uganda's incessant dependence on external

financial assistance flows must be reduced if the nation's national prospects of poverty eradication is to be improved. Uganda got \$1,786 million in 2009, up \$145 million from 2008, becoming the 4,444th official development aid (ODA) recipient in the African continent. However, economic growth continues to fluctuate and is difficult to keep above 10%. ODA does not include support from NGOs and organizations other than the World Bank (OECD, 2014). With the significance of external assistance to the economies of developing nations, understanding its input to Uganda's economic output is essential. Consequently, this research will empirically examine influence of foreign assistance on economic output in Uganda.

### **Objectives of the Study**

The major objective of this research was to examine the impact of foreign aid on economic growth in Uganda from the year 2000 to 2020. The specific objectives of the study were:

- a) To establish the impact of foreign aid on economic growth in Uganda.
- b) To find out the relationship between foreign aid and economic growth.

### **Theoretical Review**

The theories to be explored include the new growth theory, two gap model, public interest and public choice theory. These theories are discussed below.

#### **New Growth Theory**

The theory arose in the 1990s to elucidate the poor performance of most developing nations in implementing the fundamental principles dictated by neoclassical theories. In contrast to the Solow model, which takes into account exogenous technological change, the new growth model shows that technological change in most developing countries is not uniform or is transferred exogenously (World Bank, 2000). Proponents of the theory Howitt (1992), Lucas (1988), Aghion and Romer (1986) have associated the change in technology with knowledge production. It asserts that output in a countries economy is the result of increased profits from the use of knowledge instead of labor and capital.

#### **Public Choice Theory**

It is an opposing theory of development assistance. It asserts that external assistance is inefficient and potentially harmful to beneficiary nations. Anwar (2000) points out that according to the theory, the procedures for making political decisions involve interactions of various players to maximize the benefits: voters, politicians, officials and interest categories. When considering donor decisions on development aid, their use and the maximization of behavior within individual donor countries (bilateral aid) and within countries must be taken into account (Dreher, 2004).

To stay in power through re-election, they had to appease voters (Landau, 1990). This help can be obtained in many ways and means. One way to get help is to provide financial support

to poor countries and developing nations. Assistance to poor and developing nations is often given a justification by politicians with the need to alleviate poverty in less developed nations. This is often described as the “moral appeal” of development assistance (Michaekawa, 2003).

The term foreign financial assistance can also be described as Official Development Assistance (ODA) and alludes to transfer of assets from one nation to another (OECD, 2010). The OECD maintains a list of the least developed countries and areas; only financial aid to the nations counts as ODA (OECD 2014). ODA can take place via multilateral or bilateral avenues (OECD, 2012). The bilateral financial assistance reflects this direct movement of funding from one nation to another while multilateral assistance alludes to flows of aid from many nations plus other institutions. For example, the European Union, the International Development Association and the Global Fund are the main donors of multilateral assistance. They give billions in credit and donations to developing nations, with a focus on poverty alleviation and economic development in those countries.

### **Theories on Economic Development and Aid**

Different sorts of capital produce improvement for nation; subsequently defenseless nations are in dire need of funds. There are numerous forms of aid, from humanitarian emergency assistance, to food aid, military assistance, among others. Development aid has long been recognized as crucial to help poor developing nations grow out of poverty. In most cases external foreign financial assistance to agrarian nations can help deliver human resource training, positive financial turn of events and advancement in family pay.

Help to families normally happens in especially during times when we have drought and famine and is availed in kind of meals, while help to the private sector maintains an autonomous endeavor, though most conventionally help goes to government monetary arrangements. As indicated by Jeffrey Sachs, nonindustrial nations (specifically helpless nations) require a "major push", for instance help from rich nations. Sachs deduces that the full flow of financial support in the useful and social fields will lead to the development of all areas of the public, an idea created from the hypothesis of the "poverty trap", a low stage efficiency deters defenseless states. Sachs argues that the "giant hit" hypothesis comes from countries that are too poor to set anything aside for the time to come and are consequently stuck in a low or even insignificant output. Arguably, Boone and Easterly (2006) tried this hypothesis, which seems to have some defects.

As at Easternly (2006) between the 1970s and 1994, by which time several billion dollars had been spent on open businesses, the pace of growth did not expand as indicated by the "big push" hypothesis. Boone also adds to the discussion by suggesting that the “huge thrust” hypothesis is false when it is based on the fact that helping homeless families’ increases utilization efficiency and therefore has no appreciable effect on development and funding of the enterprise. The standard is that aid to agricultural countries should be able to extend the financial development of aid recipient countries, so most of them do not. The main problem

with foreign aid inefficiencies is that it is useful to speculate whether recipient countries have incorporated aid into beneficial economic development strategies.

### Two-gap Model

The “two-gap” model has long been the standard hypothesis for clarifying assistance. The largest gap is the link between the amount of investment needed to achieve a given growth rate and the local mutual funds available, with the link is between the exchange rate and local mutual funds being established. The two-gap model demonstrates that advances and rewards improve local wealth through a blockade of foreign trade or by reducing investment funds. The reduction of the national reserve fund opens the doors of businesses to the countries while the lack of foreign trade creates the country's imports of basic products from the middle of the road and from the population. The foreign aid fills two holes in the same time, making the two holes equivalent. Therefore, losses in reserves and losses in foreign trade are free; this means that at least only one of the two can be applied in the beneficiary country for a resources. Different researchers draw attention to the negative impact of uncleanness on financial development.

## METHODOLOGY

### Research Design

This study used a correlational design research that seeks to discover if two variables are associated or related in some way, using a regression analysis. This design was also non-empirical as the researcher cannot control, manipulate, or modify the prognosis or the subjects, but rather depends on clarifications or viewing the outcome of a regression analysis to draw conclusions.

### Theoretical Framework

This part analyzes the way the model is used in this study. The model originates from a production function that includes not only national labor and capital but also foreign aid as input. The production function can be presented as follows:

$$Y = f (L, K, A) \dots\dots\dots 1$$

Under which Y is the real gross domestic product (GDP), L is the labor input, K is the national capital reserve and A is the development aid reserves. Assuming that (3.1) is linear in all registers (in terms of elasticity), the following expression outlines the predictor of the real GDP output rate acquired:

$$y = b_0 + b_{ll} + b_{2k} + b_{3a} + e \dots\dots\dots 2,$$

where the lower case letters stand for the output rates of the odd sole variables. Going by the past researches, the output rate of equity roughly corresponds to the share of investment in GDP. Additionally, the rate of change in the workforce is also replaced by the rate of population growth (Karras, 2006).

### Specification of model

According to the previous theoretical framework, the experimental model can be defined as follows;

$$GDP_t = \alpha_0 + \alpha_1 FAID_t + \alpha_2 INF_t + \alpha_3 DI + \alpha_4 TO + \varepsilon_t \dots\dots\dots(3)$$

Where is the GDP output rate, AID is external assistance estimated by Official Development Assistance as a ratio of GDP and INF plus AID as an inflation rate and foreign aid respectively; DI is the direct investment while TO is the trade openness, are the estimated parameters of the model. And  $\varepsilon$  the error term, also known as the disturbance term, which is taken as independent and normally distributed; it covers other variables that are presumed to influence economic output and these variables are not part of the model. To investigate the impact of external aid on Uganda's economic development, this study applies an autoregressive distributed lag model (ARDL). For the purpose of investigating the relationship between foreign aid and economic development, this review derives the following ARDL model in equation (3.3). The main concern is the level and indication of the coefficient of aid, but who is expected to provide a more valuable perspective on the results of other control variables?

$$\begin{aligned} \Delta GDP_t = & \beta_0 + \sum_{r=1}^{m_1} \beta_{1r} \Delta GDP_{t-r} + \sum_{r=0}^{m_2} \beta_{2r} \Delta FAID_{t-r} \\ & + \sum_{r=0}^{m_3} \beta_{3r} \Delta DI_{t-r} + \sum_{r=0}^{m_4} \beta_{4r} \Delta TO_{t-r} + \delta_0 GDP_{t-r} \\ & + \delta_1 FAID_{t-r} + \delta_2 DI_{t-r} + \delta_3 TO_{t-r} + \mu_t \end{aligned}$$

.....4

If  $\Delta$  represents the first difference operator,  $\beta_0$  is a constant and  $\beta_{1r}$ ,  $\beta_{2r}$ ,  $\beta_{3r}$ , and  $\beta_{4r}$  are the short-term coefficients of BIP, FAID, DI, and TO in equation (3.4), respectively.  $m_1$ – $m_4$  represents the optimal delay length and  $\mu_t$  represents the remainder term. If long-term relevance between variables is guaranteed, the short-term relationship with the error correction term should be determined below. Equation (3.5) is an expression of ECT with short-term relationships between variables.

$$\begin{aligned} \Delta GDP_t = & \beta_0 + \sum_{r=1}^{m_1} \beta_{1r} \Delta GDP_{t-r} + \sum_{r=0}^{m_2} \beta_{2r} \Delta FAID_{t-r} \\ & + \sum_{r=0}^{m_3} \beta_{3r} \Delta DI_{t-r} + \sum_{r=0}^{m_4} \beta_{4r} \Delta TO_{t-r} \\ & + \eta_1 ECT_{t-r} + \mu_t \end{aligned}$$

.....5

### Description of variables and data sources

Economic output rate is the study's dependent variable and is computed in terms of GDP output rate. Data is extracted from the bank's online database of the World Development Index (WDI) computed in terms of ODA as a ratio of GNI. According to the study, external assistance is envisioned to have a positive influence on Uganda's economic output. Inflation

rate introduced as a control variable in the model is described as the yearly percentage change in the consumer price index (CPI) and the data is derived from the MDI. Inflation is expected to have a negative influence on Uganda's economic output.

### **Data Analyses**

This focus sought to quantify the influence of external assistance on Uganda's economic output by use of linear regression model. Some variables that are frequently regarded to contain an appropriate influence on output are also made part of the regression model for estimation in the following (Karras, 2006) and others. Because the data for this analysis will be a combination of exchange rates and nominal values, the model will be further modified to  $GDP_t = \theta + SE_{1t} + EXP_{2t} + IMP_{3t} + AID_{4t} + GCF_{5t} + E_t \dots \dots \dots 6$

Where GDP is the annual output rate of GDP, SE<sub>t</sub> is education as a ratio of sum population, EXP<sub>t</sub> is exports as a ratio of GDP, IMP<sub>t</sub> is import rate, and AID<sub>t</sub> (percentage of GDP) is the average annual inflow of foreign aid. Total capital formation, as defined by the total value of total fixed capital formation, changes in inventory, and purchase minus liquidation valuables, is known as GCF<sub>t</sub>. The ARDL model created by Pesaran and Shin (1999) is proposed as a data analysis technique in this research. Pesaran, Shin, and Smith were the first to assess the experimental validity of ARDL.

ARDL incorporates the autoregressive and distributed delay processes into a single equation configuration as a dynamic regression model. In terms of its overall structure, ARDL allows you to use the lag of the regression as well as additional predictors (and even the present value) as explanatory variables. Furthermore, ARDL is dependent on the belief that the series is integrated of order I (0), I(1), or a combination of I(0) and I(1). One of the precursors to the ARDL model was the determination of the integration order of all sequences by the root unit test. The reason is to make sure that none of the series is I (2) in order to fix the problem of regression results being bogus.

### **Data Sources and Types**

Secondary time series data from the World Bank Development Indicators and the Uganda Statistical Bureau were used in this research.

### **Data Validation**

In case the variables under research are related, different variables influencing economic output will be employed in the regression model. Secondary time series data was employed in this investigation. As a result, the study began the analytical process by looking at the time series features of the variables and a test will be done to see if the variables analyzed have unit roots.

## **Empirical Results and Discussion**

This section focuses on the effects of foreign aid on the economic growth and the aid transmission mechanisms for growth of Uganda. Time series secondary data were used for the analysis. The secondary data were obtained from World Bank Development Indicators and the Uganda Statistical Bureau. Since the study makes use of time series secondary data, temporal properties of the variables in the model were checked by use of the unit root tests in order to determine the stationarity of the variables. The process of unit root test is therefore important to determine whether or not the variables contain a trend and whether that trend is deterministic or stochastic. It is also a preliminary step in testing for cointegration and causality. It was conducted to verify the stationarity properties (absence of trend and long-run mean reversion) of the time series data so as to avoid spurious regressions.

Non-stationary time series are those that wander from their mean over time. As a result, traditional estimate of variables with this connection frequently leads to erroneous inferences or spurious regression. To tackle this non-stationarity challenge, time series data analysis has increasingly focused on the topic of cointegration. Because cointegration is a powerful tool for determining the presence of steady state equilibrium between variables, it was chosen. For any economic model that uses non-stationary time series data, cointegration has become a must-have. If the variables do not cointegrate, we will have spurious regression difficulties, and the findings will be almost worthless. Cointegration, on the other hand, occurs when the variables cointegrate.

According to Pesaran and Shin (1996), Pesaran et al. (2001), and Johansen and Juselius (1990), the Autoregressive Distributed Lag (ARDL) cointegration technique or bound test of cointegration is the solution to determining the long run relationship between non-stationary series, as well as re-parameterizing them to the Error Correction Model (ECM). This reveals the underlying variables' short-run dynamics and long-run connection. Although the ARDL cointegration technique does not require pre-testing for unit roots, the unit root test was performed to determine the number of unit roots in the series under consideration in order to avoid ARDL model crash in the presence of an integrated stochastic trend of  $I(2)$ . The sturdiness and significance of the empirical model were determined using diagnostic tests such as the F-test, Akaike, Schwarz criteria test, Jarque Bera test, Breusch-Godfrey Serial Correlation LM Test, White Heteroscedasticity Test, and Ramsey RESET Test.

### **Unit Root Test**

In the mean, many economic and financial time series show trending or non-stationary behavior. Exchange rates, levels of macroeconomic aggregates such as real GDP, investment, and other economic variables have been proven to exhibit trends. Determining the best appropriate form of the trend in the data is an important econometric task. Prior to analysis in ARMA modeling, the data must be transformed to a stationary form. If the data is trending, some sort of trend elimination is necessary. To assess whether trending data should be initially differenced or regressed on predictable functions of time to render the data

stationary, unit root tests were utilized. Long-run equilibrium linkages among non-stationary time series variables are frequently suggested in economic and finance theory. Cointegration techniques can be utilized to simulate these long-run relationships if these variables are I (1). As a result, pre-testing for unit roots is frequently used as the initial step in cointegration modeling. In this study, the variables were subjected to a unit root test using the Augmented Dickey-Fuller (ADF) test, which looked for the presence of a unit root in each of them.

The unit root test was conducted on variables that included, LGDPY, LEY, ODAY, DEM, LINVY, DUM, and L and verified that all the series are integrated of order one as shown in table 1, where LGDPY=Real per capita income, LINVY=Total investment residual, ODAY=Official Development Assistance per GDP, LEY=Exports per GDP, LA=Labour growth, DUM=Dummy variable for political instability. The first difference in lags was included in such a way that the error term is distributed as white noise, because the ADF test can handle both first order and higher order auto-regressive processes. By minimizing the Schwartz Bayesian information criterion/minimizing the Akaike information criterion/lags were eliminated until the final lag was statistically significant, the number of augmenting lags (p) was calculated. As previously indicated, using data with unit roots can lead to substantial statistical inference errors.

If time series variables are non-stationary and co-integrated, the variables may drift away at any point in time, but there will always be a propensity for them to stay close together. Because non-stationary variables achieve equilibrium in the long run, the relationship in our model tends to bind them together in the long run. The findings of the ADF test were determined for both in level and at the first difference with intercept and no trend. Table 1 shows that all of the variables under investigation are integrated to order one, meaning that all of the series are non-stationary and that traditional regression analysis may yield erroneous conclusions. Because variables were found to be non-stationary in levels but stationary after first difference, the hypothesis of a unit root could not be ruled out in all levels. At the 0.05 threshold of significance, the hypothesis of a unit root is rejected, indicating that all variables are integrated to degree one.

**Table 1. Unit Root Test.**

	ADF Tests				Variable
	Stat	Critical Values			Order of Integration
LGDPY	-2.076	-3.606	-2.937	-2.607	Non stationary at I (0)
	-4.702	-3.61	-2.939	-2.608	Stationary I (1)
LODAY	-1.675	-3.606	-2.937	-2.607	Non stationary at I (0)
	-5.532	-3.61	-2.939	-2.608	Stationary at I (1)
LNVY	-1.627	-3.606	-2.937	-2.607	Non stationary at I (0)
	-8.18	-3.61	-2.939	-2.608	Stationary at I (1)
LEY	-1.893	-3.607	-2.938	-2.607	Non stationary at I (0)
	-6.591	-3.611	-2.94	-2.608	Stationary at I (1)
LA	-1.553	-3.606	-2.975	-2.627	Non stationary at I (0)
	-3.997	-3.708	-2.98	-2.629	Stationary at I (1)
DUM	-1.513	-3.606	-2.937	-2.607	Non stationary at I (0)
	-4.748	-3.61	-2.939	-2.608	Stationary at I (1)
DEM	-1.777	-3.711	-2.981	-2.63	Non stationary I (0)
	-4.307	-3.738	-2.992	-2.636	Stationary at I (1)

The unit root tests of Augmented Dickey-Fuller (ADF) can rule out the possibility of a unit root with break. If there is a break under the unit root null, two undesired outcomes can occur. For starters, these endogenous break unit root tests will have size distortions, causing the null hypothesis to be rejected far too frequently. It's possible to conclude that a time series is stationary with a break when, in fact, it's non-stationary with a break. As a result, "spurious rejections" may occur, increasing the magnitude of the breach. Because the initial step of the empirical analysis is to determine the sequence of integration, it is required to confirm by doing a unit root test with structural breakdowns.

### **Structural Breaks**

The existence of a cointegration relationship depends on the testing of a series' unit roots, thus it's crucial to get to the best conclusions about whether a series is stable or not. The Augmented Dickey-Fuller test was originally commonly used to check for stationary. Perron, on the other hand, demonstrated that failing to account for an existing break, which could be a shift in the series as a result of one-of-a-kind economic events, results in a bias that makes it harder to reject a false unit root null hypothesis. A known or exogenous structural break is considered in the test to overcome this. All the variables were plotted on a graph and it showed a displacement.

A CUSUM test was conducted. The fluctuations started in 1985 and the parameters start being unstable. The Chow break point stability test on the parameters is shown in table 1. All estimations were carried out using eviews 9. Because the computed F-statistic is substantially bigger than the upper bound of the tabular F-statistic, the bound cointegration test rejects the null of no cointegration. The long run and short-run correlations were calculated using the Autoregressive Distributed Lag (ARDL) technique after discovering evidence of cointegration between the variables listed above.

In time series analysis, the Chow test is most typically employed to check for the presence of a structural break. The chow test is frequently used to see if independent variables affect different subsets of the population differently. However, the Chow test has a significant drawback in that the break date must be known ahead of time. In this study, the data was graphed and a spike in the data was seen in 1985. The null hypothesis that there is no break at the specified breakpoints is rejected. This implies that the model can be improved by adding a dummy variable at the break point. As a result, DUM85 is included in the model. DUM85 has a value of 0 for 1970-1985 and value of 1 for 1986-2017.

**Table 2. Chow Breakpoint Test**

<b>Chow Breakpoint Test: 1985</b>			
<b>Null Hypothesis: No breaks at specified breakpoints</b>			
F-statistic	2.658	Prob. F (8,12)	0.0618
Log likeli ratio	28.55	Prob. Chi- (8)	0.0004
Wald Statistic	21.26	Prob. Chi- (8)	0.0065

## **Cointegration Test**

After establishing the ARDL approach's assumptions, which include that data must be free of autocorrelation, heteroscedisty, and normal distribution, and that all variables must be I (0) or I (1) or a blend of level and first difference. For Uganda, a cointegration test based on the ARDL technique is used with annual data from 1970 to 2017. The Akaike Information Criterion was used to choose the number of delays on the first-differenced variables (AIC). These were initially chosen by narrowing down the results using a general-to-specific process. When the estimated equation passed all of the diagnostic checks and the CUSUMSQ stability test, the final lag was chosen. Cointegration testing is a critical step in determining whether a model experimentally demonstrates important long run relationships.

**Table 3. Results of ARDL Cointegration Test-bound test.**

<b>ARDL Bound Test</b>		
Null Hypothesis: No long-run relationships exist		
Test Statistic	Value	k
F-statistic	32.65	6
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.53	3.59
5%	2.87	4
2.5%	3.19	4.38
1%	3.6	4.9

If the cointegration between underlying variables cannot be established, it is necessary to work with variables in differences instead. Long-term data, on the other hand, will be missing. Other than the Engle and Granger procedures, there are numerous cointegration tests available, including the Autoregressive Distributed Lag cointegration technique and the bound cointegration testing approach. This becomes the study's focal point. Table 3 shows the four delays chosen for the cointegration test based on this criterion.

The model was examined for the presence of long-term partnerships. The estimated F statistics 32.65 exceeded the upper bound critical value for any significance level, according to the bound test results. It denotes that the variables under consideration are in a long-term equilibrium within the time period under consideration. The null hypothesis that there is no cointegration is disproved. The ARDL technique begins with establishing the proper lag order (p) in equation 1. (8). The Akaike Information Criterion (AIC) indicates that p=4 is the most optimal lag time for foreign aid inflow for this purpose. According to the Akaike Information Criterion, the short and long-run equations were approximated using the optimal ARDL (5, 1, 2, 0, 1, 1, 0) order.

## **Discussion of Results**

According to the estimated results, foreign aid has no major impact on Uganda's economic growth, and it even shows an unexpected evidence of a negative relationship. Foreign aid transfers from wealthy to developing countries have, nonetheless, been lauded as the solution to world poverty in poorest countries. However, the assumption that all aid is good to any country regardless of circumstances needs to be examined further. Massive influxes of

foreign help can have negative consequences for the governments of receiving nations, and in certain cases, they can cause more harm than good. Discrimination by donor countries based on governance norms, on the other hand, adds significant challenges. The existing foreign aid paradigm needs to be revamped, and the new system needs to take a more nuanced approach to international development (Abuzeid, 2009). As a result, this could be the source of the strained connection.

In addition, foreign aid in Uganda has either ended in people's pockets or miss allocated for example the recent scandals in the prime minister's office where large amounts of aid were lost. As earlier expected by the study, the coefficient of inflation with respect to GDP growth rate (economic growth) is negative and significant at 5 % level of significance. Specifically, a unit increase in inflation rate in an economy reduces Uganda's economic growth by 0.029746 percentage points. This outcome is consistent with economic growth theories and earlier research findings. This is true because high inflation rates impede economic growth in the country by scaring away both domestic and foreign investors, as well as reducing commerce since importers fear imported inflation.

## **Conclusion**

The main goal of this research was to determine the influence of foreign aid on Uganda's economic growth objectively. Based on the findings, international help to Uganda can be both a part of the problem and a part of the solution to the problems of poverty reduction and economic growth. International aid has so far proven to be part of the problem in Uganda when it comes to poverty reduction and economic progress, due to a number of specific variables.

We used the Dynamic Panel Estimation technique to re-estimate the relationship between foreign aid and economic growth in a large cross-section of foreign aid recipients, and we discovered a significant and positive relationship between foreign aid and Gross Domestic Product in South and East Asian countries. It is an important avenue for money transfer from wealthy countries to impoverished countries. Our findings back with a number of empirical findings on the positive and considerable influence of external finance on domestic savings, investment, and growth, such as Burnside and Dollar's study (1997).

It also offers some crucial support for foreign aid's usefulness in boosting growth and development in developing countries. Foreign aid has a beneficial impact on economic growth in developing nations if they have solid monetary, fiscal, and trade policies, but it has a negligible impact if they do not have good policies. Aid should be used to help underdeveloped countries develop. Because foreign aid is linked to these policies, this research can be expanded by looking at how foreign aid affects domestic fiscal, trade, and monetary policy.

These causes include, but are not limited to, a lack of incentives for government officials to encourage economic growth and exceptionally high levels of corruption throughout the

administration. Despite the fact that a large portion of international aid is taken by local authorities, it is clear that foreign aid can help Ugandans to some level. This is due to the fact that a small portion of foreign aid that eventually reaches the people it was meant for can be used to give food and build schools for the underprivileged. However, providing foreign aid in the form of food, cash, or debt relief is a short-sighted response to the problem, and long-term solutions necessitate significant institutional changes.

Foreign aid is now financing a high degree of corruption and ineptitude among government officials in Uganda, and hence the provision of foreign aid in its current form requires immediate and thorough scrutiny. This research has identified a number of options that the Ugandan government can consider in order to reduce its reliance on foreign aid. Revamping governmental expenditures, reforming the country's taxation structure, expanding domestic investment, and securing better agreements for the country's agricultural products on the international market are among the opportunities discovered.

Furthermore, the Ugandan government must conduct investigations and searches for natural resources within its boundaries, as the discovery of a big oil reservoir in Lake Alberta could signal the possibility of other such reserves. Problems in Uganda, as well as many other African countries, must be addressed domestically rather than internationally. Modernization of policies and a wide range of essential domestic institutions are directly tied to internal solutions. The Ugandan government's funding sources must shift away from foreign aid and toward earnings generated by the private sector. However, in order to do this, relevant regulatory reforms must be implemented, as well as adequate infrastructure for the private sector to be established.

### **Policy Recommendations**

Basing on the findings of the study, we recommend that the government of Uganda should find alternative sources of funding since foreign aid has no significant impact on Uganda's growth process. This can be achieved through improving on local revenue generation from the taxes either through tax reforms, discovering new tax bases, increasing tax rates, suspending tax rebates, holidays and exemptions thus increasing on the locally generated revenues. The government of Uganda should also strive hard to maintain economic stability in the country by controlling the rate of inflation in the country. Controlling inflation rates will in turn attract increased investments from both within and outside thus leading to increased employment opportunities thus accelerating the rate of economic growth.

## REFERENCES

- Abuzeid, T. (2009). Aid to Africa: an unfinished agenda. *Journal of International Development*, 17(4), 989 - 1001.
- Aghion, W. & Romer, G. (2011). Aid and the African dilemma: The effect of foreign aid on human development in Africa (Doctoral dissertation, Georgetown University). *American Economic Review*, 56(1), 679-733.
- Anwar, C. (2000). Assessing foreign aid's long-run contribution to growth and development. *World Development*, 69(1), 6-18.
- Babyenda, B. P. (2017). *The effectiveness of foreign aid: a case study of Nepal* (Unpublished doctoral dissertation, University of Western Sydney) Retrieved from <http://handle.uws.edu.au:8081/1959.7/23734>
- Cleveland, H. V. (2019). Purposes of International Aid Programs. *Scientific Monthly* 85, 77 - 81.
- Dreher, A. (2004). Foreign Aid and the "Big Push" Theory: Lessons from Sub-Saharan Africa. *Stanford Journal of International Relations*, 16 - 23.
- Easternly, E. M. (2006). The effect of foreign aid on economic growth in developing countries. *Journal of International Business and Cultural Studies*, 1 - 16.
- Hjertholm, P., & White, H. (2014). Survey of Foreign Aid: History, Trends, and Allocation, Discussion Papers. Copenhagen: University of Copenhagen Institute of Economics.
- Hudson, J. (2004). Introduction: aid and development. *Economic Journal*, 114, 185 – 190.
- Howitt, L. (1992). Foreign Aid and Economic Growth in Sub-Saharan Africa. University of Western Australia, Business School, Economics.
- Johansen, K. B., & Juselius, D. (1990). Foreign aid and economic growth in developing countries: Evidence from Sub-Saharan Africa. *Theoretical Economics*, 7(05), 14-73
- Karras, M., Feeny, S., Hermes, N., & Lensink, R. (2006). Controversies over the impact of development aid: it works; it doesn't; it can, but that depends. *Journal of International Development*, 18(7), 1031 – 1050.
- Karras, P., (2006). Aid, the public sector and the market in less developed countries. *Economic Journal*, vol.97, no.387, 616 – 641.
- Michaekawa, D. (2003). Dead aid: Why aid is not working and how there is a better way for Africa. Macmillan.
- Morrissey, O. (2001). "Does aid increase growth? *Progress in Development Studies*, Vol.1, No.1, 37 - 50. Mosley, P. (1980). Aid, savings and growth revisited. *Oxford Bulletin of Economics and Statistics*, 42(2), 79 – 95.

- Mosley, P. (2010). Aid, savings and growth revisited. *Oxford Bulletin of Economics and Statistics*, 42 (2), 9-15.
- Nyoni, T. S. (2018). Foreign aid and economic performance in Tanzania. *World Development*, 26 (7), 1235-1240.
- Ouattara, B. (2016). Foreign aid and government fiscal behavior in developing countries: Panel data evidence. *Economic Modeling*, 23, 506 - 514.
- Papanek, G. F. (2012). The effect of aid and other resource transfers on savings and growth in less developed countries. *The Economic Journal*, 82 (327), 934-950.
- Pesaran, P. & Shin, G. (2015). Innovative ways of making aid effective in Ghana: tied aid versus direct budgetary support. *Journal of International Development*, vol.17, 1077 - 1092.
- Rajan, R. G., & Subramanian, A. (2005). Aid and Growth: What Does the Cross Country Evidence Really Show? International Monetary Fund Working Papers 05. Washington DC: IMF.
- World Bank (2000). A Guide to Modern Econometrics, 3rd Edition. Rotterdam: Erasmus University.