THE EFFECT OF CAPITAL INFLOW ON POVERTY REDUCTION IN NIGERIA

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Abstract

This study used annual data that spanned 35 years, starting from 1986 to 2020 to analyze the effect of inflows of capital on poverty reduction in Nigeria. Autoregressive Distributed Lag (ARDL) method was used to investigate both the short and long-run relationship. The ARDL Bound co-integration test showed evidence of a long-run relationship between capital inflows and poverty reduction. The result showed that both in the short and long-run, capital inflows positively impacted poverty reduction. Also, in the short run, there was a negative relationship between human capital and poverty reduction but in the long-run the relationship between human capital and poverty reduction is positive. However, government spending did not contribute to the reduction of poverty either in the short-run or long-run, likewise gross capital formation. Based on the findings from this study, the onus is on the government to put more effort on how to increase capital inflows and also ensure that the capital is distributed to the appropriate quarters where it will be used for productive activities that will bring drastic reduction to the poverty rate in the country.

Keywords: ARDL, poverty reduction, Nigeria, capital inflows

1 Introduction

Capital flow across countries cannot be underestimated in the era of globalization. According to Lucas (1988), The inflow of capital from developed economies to developing economies is made possible through some strategic factors which include investment opportunities and better returns on the investment. The fact that developing

countries are deficient in capital to provide critical infrastructures and make necessary investments across the sectors is also a major factor that contributes to the flow of capital to developing economies. According to Sy and Rakotondrazaka (2015) and UNCTAD (2015), for developing countries to decrease the deficiency of capital and poverty in their economies, the inflow of capital is essential.

Presently, one of the major issues confronting Nigeria is poverty. World Poverty Clock (2018) and Aderemi et al., (2020) stated that poverty has become prevalent in Nigeria in such a way that the majority of its populace could not afford basic necessities of life such as food, quality education and the host of others. According to CIA World Factbook (2018), over 62 per cent of Nigeria's 206 million people are wallowing in abject poverty. Based on this, reducing poverty is one of the major targets of the government as reducing poverty is in tandem with the advocacy of the sustainable development goal of the United Nations. However, mobilizing resources to effectively reduce poverty in Nigeria is a big issue due to low productivity, income, tax, savings and investment. Therefore, one of the effective ways to mobilize resources to tackle poverty is through capital inflow.

However, in developing countries, there is debate on whether capital inflow can effectively be used to reduce poverty. For instance, some studies have queried and disputed the growth and development benefits associated with capital inflows anchored on the proposition that capital inflow is not well associated with the creation of jobs and reduction of poverty (UNCTAD, 2005; Bhinda & Martins, 2009). In line with this, some factors that can prevent inflows of capital from contributing to the reduction of poverty have been highlighted. For example, Fagbemi and Olufolahan (2019) stated that private inflow might not be sufficient to reduce poverty as it is highly unstable. Calvo et al., (1994) and Son and Kakwani (2006) also argued that the dependency of developing economies on private inflows of capital could make poor households suffer more than rich households. Also, Hulme and Mosley (1996), opined that financial credit expansion does not give any benefit or advantage to poor households, unlike the rich households that earn above the poverty line who can benefit from financial credit (especially micro-loans).

This research is motivated by some reasons. First, there are insufficient studies that examined the association between capital inflow and poverty reduction in Nigeria. Most of the previous studies focused on the connection between capital flow and economic growth. Second, there is no consensus among the existing studies on whether capital inflow can effectively reduce poverty. Knowing the exact relationship between capital inflow and poverty reduction is very important in Nigeria for effective poverty reduction policies. Without an empirical finding from a study like this, it might be very difficult for policymakers to effectively formulate policies that can mitigate poverty. Third, the past studies that examined the relationship between capital inflows and poverty reduction used various measures of poverty which played a major role in the outcome of their findings. For instance, Fagbemi and Olufolahan (2019) used poverty headcount, while Olowookere et.al. (2020), used GDP per capita, Anigbogun, et.al (2016) used the absolute number of poor people living under the poverty line but data on poverty headcount from world development indicator is scanty for the period of this study. This study used Household's final consumption expenditure (% of GDP) which is one of the most comprehensive measures of poverty reduction.

The remaining parts of this study are organized as follows; Session 2 consists of

the literature review; the methodology is presented in Session 3; Session 4 presents the measurement of the variables. Session 5 contains the empirical analysis while session 6 presents the conclusion and recommendation.

2 Literature Review

Some empirical studies have been conducted to examine the nature of the relationship between capital inflows and poverty reduction and also the relationship between capital inflows and economic growth both in developed economies and developing economies. In this section, this study reviews the existing studies on the relationship between capital inflows and poverty reduction.

Magombeyi and Odhiambo (2017) looked at the direct impact of FDI on reducing poverty. It was discovered that FDI and poverty reduction are positively correlated. The relationship between the inflow of capital inflow and the growth of the Nigerian economy was examined by Adekunle (2018). The study included the years 1986 through 2015. The Auto-Regressive Distribution Lag (ARDL) approach was used in this investigation. According to the study, inflows of net foreign direct investment (FDI) boosted economic growth in the short run whereas flows of net portfolio and net foreign remittances had the opposite effect.

Based on cross-country data from 30 African nations for the years 1981-2011, Fowowe and Shuaibu (2014) examined how FDI affects the poor. They argued that FDI has a positive impact on the poor and that FDI's direct impact on reducing poverty would also be very high. They did this by using Generalized Methods of Moments (GMM) techniques. In a related study carried out by Aderemi et al., (2020) 16 nations in the ECOWAS sub-region were examined using various panel methodologies to determine the effect of FDI on alleviating poverty from 1990 to 2017. Their findings showed that FDI has a significant effect on poverty reduction within the sub-region. Israel (2014) discovered that there is a direct correlation between FDI and poverty reduction in his study on the impact of FDI on poverty alleviation in Nigeria using the poverty headcount as a proxy for the reduction of poverty from 1980 to 2009. In a related study, Omorogbe et al. (2007) used the Ordinary Least Square (OLS) technique to evaluate the relationship between FDI and poverty reduction in Nigeria and used per capita GDP as a proxy for poverty and found that FDI has a positive influence on per capita GDP in Nigeria. Between 1992 and 2016, Adigun and Oke (2021) looked at how FDI affected Nigeria's efforts to reduce poverty. They used the Augmented Dickey-Fuller (ADF Test, ARDL and OLS regression analyses, and they reported that the results indicated that FDI had only a little impact on reducing poverty and that in the short-run, FDI has an inverse relationship with poverty reduction at the 5% level of significance '

Adigun and Oke (2021) examined the impact of FDI on reducing poverty in Nigeria between 1992 and 2016. Because of the stationarity level, the study used the ARDL method. Their findings revealed that FDI has a negative impact on reducing poverty in the short run at a 5% significant level, and they found that FDI has always concentrated on industries with little potential to reduce poverty. From 1981 to 2017, Ogunleye et al. (2020) looked at the long-term equilibrium relationship between poverty reduction and government development assistance. They discovered that there is a considerable inverse relationship between FDI and poverty reduction.

Using the ECM technique, Adesiyan (2014) examined the relationship between FDI and poverty reduction in Nigeria

between 1980 and 2009. The results indicated a positive relationship between the two. Simon (2014) investigated the relationship among capital formation, foreign private investment and poverty reduction in Nigeria from 1978 to 2008, co-integration, ECM and Granger causality techniques were used. The results revealed that FDI does not significantly affect poverty reduction in Nigeria. Using annual time series data from 1990 to 2018, Musakwa, Nicholas, and Odhiambo (2021) examined the effect of foreign capital inflows on poverty in Vietnam. ARDL approach is used for the estimation, when household consumption spending was utilized as a measure of poverty, the study indicated that FDI reduced poverty in both the short and long run. When infant mortality rate and HDI were employed as poverty proxies, the study found that FDI actually made poverty worse in the short term. The study found that, in the short-run, regardless of the poverty measure employed, the external debt had a poverty-mitigating effect, but in the long run, only when household consumption spending was used. Topalli et al. (2021) examined the impact of FDI inflows on poverty in six Western Balkan countries and also considers other country characteristics, such as the human development index (HDI), corruption, investment freedom, economic freedom, trade openness, and fertility. The study used a generalized method of moments (GMM) estimator for panel data models with fixed effects during the period from 2002 to 2021. The results show that FDI has significantly contributed to poverty reduction in the Western Balkan countries.

3 Methodology

Abdelkader (2017) posited that econometric models that evaluate the effect of capital inflow on the reduction of poverty are mainly multivariate regression models. For this study, the functional form of the empirical model/equation is specified as follows:

$$POV = f(CFLOW, GCF, HUM, GOVE) \quad (1)$$

where POV denotes poverty reduction, CFLOW represents capital inflow, GCF is gross capital accumulation, HUM is represented by human capital and GOVE is the government expenditure, The general form for the econometrics form of the model can is as follow:

$$\Delta(POV_t) = \gamma_0 + \gamma_1(CFLOW_t) + (GCF_t) + \gamma_3(HUM_t) + \gamma_4 GOVE_t + +\varepsilon_t \quad (2)$$

The ARDL bound test method1 of the relationship between capital inflows and poverty reduction in Nigeria is stated in the form of an unrestricted error correction model to check for co-integration as follows:

$$\Delta POV_t = \beta_0 + \beta_1 POV_{t-1} + \beta_2 CFLOW_{t-1} + \beta_3 GCF_{t-1} + \beta_4 HUM_{t-1} + \beta_5 GOVE_{t-1} + \beta_6 \sum_{i=1}^{n} \Delta POV_{t-1} + \beta_7 \sum_{i=0}^{n} \Delta CFLOW_{t-1} + \beta_8 \sum_{i=0}^{n} \Delta GCF_{t-1} + \beta_9 \sum_{i=0}^{n} \Delta HUM_{t-1} + \beta_{10} \sum_{i=0}^{n} \Delta GOVE_{t-1} + \varepsilon_{1t} \quad (3)$$

In equation 3 above, n is the lag order while the first difference operator is denoted by Δ. The lagged dependent variable is represented by POV_{t-1}. β_0 connotes the drift term and the residuals are denoted by ε_{1-t} . ARDL bounds technique is applied in Eq. (3), because it allows a joint significance test of the null hypothesis of no co-integration (H_0: $\beta_0 = \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7 = \beta_8 = 0$) against its alternative (H_1: $\beta_0 = \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 \neq 0$) that co-integration exists. To determine the presence of the co-integrating long-run relationship in the model, the F-statistics is employed. The critical values tabulated by

Pesaran et al. (2001) will be contrasted with estimated F-statistics. For a specific significance level, Pesaran et al. (2001) produced two sets of critical values (lower and upper critical bounds). One group demonstrates that all variables are I(0), while the other group demonstrates that they are I(1). Therefore, if the estimated F-statistics is higher than its upper critical value, the H0 hypothesis will be rejected. This indicates the presence of a co-integration long-run connection. The long-run connection is confirmed by this. However, if the estimated F-statistics is below its lower critical value, the H0 hypothesis will not be rejected. This implication is that there is no long-run co-integration relationship. Finally. The test will be inconclusive if the estimated F-statistics is between a lower bond and an upper bond. We used the Schwarz Bayesian Criterion (SBC).

The ARDL model can be used to examine relationships between the variables over the long and short-runs. The following model is used to estimate the long-term relationship.

$$POV_t = \alpha_0 + \alpha_1 \sum_{i=1}^{n} POV_{t-1} + \alpha_2 \sum_{i=0}^{n} CFLOW_{t-1} + \alpha_3 \sum_{i=0}^{n} GCF_{t-1} + \alpha_4 \sum_{i=0}^{n} HUM_{t-1} + \alpha_5 \sum_{i=0}^{n} GOVE_{t-1} \quad (4)$$

For short-term connection, the ARDL-ECM model is employed. The usage of the ECM model is appropriate if the variables are co-integrated. This model is derived when short-run dynamic parameters are calculated by estimating an error correction model based on long-run estimates. This might be presented as follows

1 It has the advantage of combining I(0) and I(1) variables together

$$\Delta POV_t = \alpha_0 + \alpha_1 \sum_{i=1}^{n} \Delta POV_{t-1} + \alpha_2 \sum_{i=0}^{n} \Delta CFLOW_{t-1} + \alpha_3 \sum_{i=0}^{n} \Delta GCF_{t-1} + \alpha_4 \sum_{i=0}^{n} \Delta HUM_{t-1} + \alpha_5 \sum_{i=0}^{n} \Delta GOVE_{t-1} + ECM_t + \varepsilon_{1t} \quad (5)$$

4 Measurement of Variable and Data Source

4.1 Data Description and Sources

Annual time series data from the period 1986 to 2020 is used. This period is chosen because of data accessibility. The variables include the poverty level (POV) which is determined by Household's final consumption expenditure (% of GDP). Personal remittances received as a percentage of GDP are used as a measurement of capital flow (CFLOW). For Gross Capital Formation (GCF) as a percentage of GDP, gross fixed capital formation is used. The entire labour force is used to measure human capital (HUM). Government expenditure of consumption as a percentage of GDP is used for government expenditure (GOVE). All of the variables' data were sourced from the World Development Indicator (WDI). Appendix A1 and Appendix A2 present both the descriptive statistics and correlation matrix of the variables respectively. Since the mean and median values of all the series are consistently within the minimum and maximum values of these series, Appendix A1 demonstrates that all of the series exhibit a high level of consistency. The relatively small standard deviations of the series show that there are very few differences between the actual data and their mean values. Since all of the variables' kurtoses are below three, Appendix 1 also demonstrates that they are all kurtosis.

The correlation matrix between the dependent and independent variables is presented in Appendix 2. The correlation Matrix shows the potential degree of the connection between the variables. In summary, the correlation matrix reveals that the correlation coefficient is high in terms of

magnitude and that all the variables are positive, except gross capital formation, which is negative. The correlation matrix shows a positive correlation between capital inflows and poverty reduction. The correlation value is 0.886. This seems to imply that a rise in capital inflow will result in a significant decrease in poverty. Since there is a negative correlation between gross capital formation and poverty reduction, these two variables are inversely connected. The correlation matrix also reveals a positive association between government spending and the reduction of poverty as well as a positive relationship between human capital and the reduction of poverty. Interesting findings on the connection between the dependent variable and independent variables have been shown by the correlation matrix. However, the correlation matrix must be used with caution because the correlation matrix is unable to offer a trustworthy indicator of the connection in a manner which controls for other explanatory variables. The correlation between each variable and other explanatory variables is not taken into account when looking at the bivariate correlation in a typical matrix. Because of this, the investigation continued and used multivariate analysis.

5 Empirical Analysis

5.1 Unit root test

The investigation of the unit root test serves as the first step in this study's analysis. To ascertain the variables' stationarity, this is very essential. Therefore, this study used Augmented Dicky-Fuller (ADF) and Phillip-Perron (PP) unit root tests. Table 1 displays the outcomes of the unit root tests. Both the Augmented Dicky-Fuller and Phillip-Perron results demonstrates that all the variables are stationary at level. However, both tests indicate that all the variables are stationary at first difference.

Table 1: Unit Root Test

Variables	ADF		PP	
	Level	First Difference	Level	First Difference
POV	-1.9967	-7.6304***	-1.8260	-11.2554***
REM	-1.8811	-5.6965***	-1.7350	-6.6900***
GCF	-1.6264	-5.4219***	-1.6298	-5.4419***
HUM	-1.2222	-4.3423***	-0.0275	-2.8401*
GOVE	-0.8433	-4.9082***	-0.9673	-4.9734***

Note: (*) (***) denotes significance at 10% and 1% level respectively.

Source: Computation done by the authors

5.2 Co-integration Analysis

The study does a co-integration test after determining the stationarity of the variables. This is important since it helps identify whether the variables used in this study have a long-run connection or not. The literature contains a number econometrics methods that can be applied to investigate

correlations among variables. For instance, the literature frequently employs full information maximum likelihood completely modified OLS methodology developed by Engle and Granger (1987) and Philip and Hansen (1990) for univariate co-integration. However, for multivariate co-integration, the majority of studies adopt the complete information maximum likelihood approach developed by Johansen (1988) and Johansen and Juselius (1990). Because Johansen co-integration has the advantage of accepting bias caused by small sample sizes and can present more than a co-integration relationship, it is used in the majority of investigations. The technique does, however, have a significant limitation in that it necessitates the integration of all the variables in the same sequence or order. Due to its strengths over other multivariate co-integration approaches and its ability to address the shortcomings of Johansen co-integration, the ARDL methodology created by Pesaran and Smith (1995) and Pesaran et al. (2001) is used in this study. Table 2 displays the outcomes of the co-integration test. The Bound test demonstrate that the variables have a long-run relationship. Because the calculated F-statistics (22.4558) is higher than the critical value's upper bound (5.5320), the null hypothesis that there is no co-integration is rejected.

Table 2: Co-integration results

Model	Calculated F –statistic	
GDP = f(REM, GCF, HUM, GOVE)	22.4558	
	K = 4,	N= 35
Critical Values	Lower bound	Upper bound
1%	4.0930	5.5320
5%	2.9470	4.0880

Notes: Critical bounds of F -statistic are shown in Narayan (2005). K stands for the number of independent variables. N refers to the number of observations.

Source: Authors Computation

5.3 Long-run and Short-run Results

Prior to estimating the long-run coefficient, it is crucial to establish the lag order of the model. Schwarz-Bayes Criterion (SBC) is used to determine the ideal lag order of all the variables in the model based on the actual statistics of sample data. The variable with the highest lag order is number 4, and the most appropriate is found to be ARDL (4, 4, 4, 4, 4). Table 3 presents the long-run results. The findings from Table 3 show that capital inflow, measured by REM, has an impact on reducing poverty because its coefficient is significant and positive at 5%. This suggests that capital inflow is anticipated to eventually lower the degree of poverty. Adams and Page (2005), Gulpa et al. (2009), Anyanwu and Erhijakor (2010), and Waheed et al. (2013) all supports this conclusion. Additionally, it is consistent with a priori expectations that rising capital

inflows into an economy will improve the rate at which poverty is eradicated in that economy. If capital inflows are handled wisely. They will raise people's standard of living, especially the impoverished, which will lower the degree of poverty to a manageable level. Government spending has a negative and statistically significant coefficient, which suggests that it has a long-run negative impact on reducing poverty. Given the inverse relationship between government spending and the alleviation of poverty, it is implied that over time, government spending will result in a rise in the level of poverty. This can be as a result of these two reasons among others; firstly, when government spending is too much it can increase the cost of living via subsidies that drive inflation which will have adverse effect mostly on the poor and secondly, if there is decreasing in government spending which can lead to reduction in demand for goods and services in the economy and thereby lead to reduction in economic growth which in invariably lead to rise in the level of poverty in the country. Economic growth is significantly hampered by gross capital formation. At 1%, the gross capital formation coefficient is significant. This is consistent with the finding made by Akinlo (2021) and Asian and Altinoz (2021) that gross capital formation has a detrimental effect on economic growth. This result, however, contradicts the findings of Nweke et al. (2017) and Ajose and Oyedokun (2018), who concluded that gross capital accumulation had a minimal impact on economic growth in Nigeria. This is a sign that Nigeria needs to develop its infrastructure. The limited resources cannot be used rationally due to a lack of physical infrastructure. Large scale production and an increase in employment are prevented by the wasteful use of resources, which can lower poverty. Although positive, the human capital coefficient is insignificant. The insignificancy of human capital can be as a result of decrease in the standard of education. The development of human capital helps to eradicate poverty. The findings of Adelakun (2011), Anyanwu et al. (2015), and Osoba and Tella (2017), who concluded that human capital promotes economic growth, contradict this submission.

Table 3. Estimated ARDL long-run coefficients: ARDL (4, 4, 4, 4, 4)

Regressor	Coefficient	t-statistics	Probability
GCF	-2.2370***	-5.5231	0.0313
CFLOW	14.7485*	4.1884	0.0526
GOVE	-10.7485***	-4.4506	0.0470
HUM	3.05E-07*	0.7559	0.5286
C	224.1556***	6.4169	0.0234

Note: (*) and (***) denotes significance at 10% and 1% level respectively.

Source: Computation done by the authors

The short-run outcomes using the error correction model are shown in Table 4. Starting with the coefficient. The fact that the coefficient of is negative indicates that it has the right sign. The coefficient of is statistically significant at 1%, according to the definition of significance. In the short-run poverty reduction has an adverse connection with capital inflows. At 1%, the capital inflow coefficient is significant and positive. During the study period, government spending had negative impact on Nigeria's poverty levels. In the short run, poverty cannot be eradicated by gross capital formation. Thus, the short-run relationship between gross capital formation and poverty reduction is inverse. However, a one-period lag in gross capital formation helps to reduce poverty. Based on its 10% negative and significant coefficient, human capital does not, in the short-run, reduce poverty. In the short-run, the inverse relationship between human capital and reduction in poverty may be as a result of unemployment of human capital which can improve quality of life and promoting social and change in economy.

Table 4. Estimated ARDL short-run coefficients: ARDL (4, 4, 4, 4, 4)

Regressor	Coefficient	t-statistics	Probability
ΔPOV_{-1}	1.3996***	-4.6824	0.0046
$\Delta GOVE$	-3.2298***	-15.6081	0.0061
$\Delta GOVE_{-1}$	0.7396	2.4021	0.1383
$\Delta GOVE_{-2}$	-0.9447**	-4.2729	0.0506
$\Delta GOVE_{-3}$	-3.5499***	-15.8174	0.0040
$\Delta CFLOW$	3.7503***	17.0212	0.0034
$\Delta CFLOW_{-1}$	-8.5027***	-21.2581	0.0022
$\Delta CFLOW_{-2}$	-7.0320***	-19.9560	0.0025
$\Delta CFLOW_{-3}$	-2.9869***	-8.8080	0.0126
ΔHUM	-1.29E-06	-3.4854	0.0734
ΔHUM_{-1}	2.81E-06***	6.1691	0.0254
ΔHUM_{-2}	1.68E-07	0.3678	0.7483
ΔHUM_{-3}	4.50E-06***	10.7223	0.0086
ΔGCF	-0.6761***	-7.1017	0.0193
ΔGCF_{-1}	3.0868***	19.0124	0.0028
ΔGCF_{-2}	2.9968***	18.5530	0.0029
ΔGCF_{-3}	0.9341***	6.4402	0.0233
ECM_{-1}	-3.3040***	-21.7157	0.0021

Note: (***) signifies significance at 1% level.

5.4 Diagnostic Tests

Table 5 contains a presentation of the diagnostic tests. To examine the residual's distribution, J-B normality is used. Since one of the assumptions of CLRM residual is normally distributed with zero mean and constant variance, this is often essential. The Breusch-Godfrey LM test is used to check for serial autocorrelation in the model, while Autoregressive Conditional Heterogeneity (ARCH) is used to check for autocorrelation in the variance of the error term. To check whether the model's functional misspecification, Ramsey's reset test is applied. The results of the diagnostic tests show that the model is correctly specified. The results of the diagnostic tests show that the model is not mis-specified. Heteroskedasticity and serial correlation issues are also not present. For instance, the residual is normally distributed if the likelihood of the J-B normality residual is negligible. Similar to how the model is well-specified, the probabilities of the Ramsey's reset test and the Autoregressive conditional heteroskedasticity are both small demonstrating that there is no heteroskedasticity problem.

Table 5: Diagnostic Tests

ARDL – VECM model diagnostic tests	
Test statistics	LM
Serial correlation	$\chi^2(1) = 0.0783\ (0.9978)$
Functional form	$\chi^2(1) = 9.0535(0.107)$
Normality	$\chi^2(2) = 0.0026\ (0.9987)$
Heteroscedasticity	$\chi^2(1) = 8.8858\ (0.1060)$

5.5 Stability Test

A stability test is crucial according to Bahmani-Oskooee and Brooks (1999), because the co-integration of variables does not automatically imply the stability of the computed coefficients. Therefore, the study plots the cumulative sum of recursive residuals (CUSUM) and the cumulative sum of recursive residuals of square (CUSUM) to test the stability of the models. In Appendix A4, I show the stability results. The graph of the CUSUM and CUSUMS statistics is shown in the figure to be between the critical boundaries. This demonstrates the stability of the predicted coefficients. Because there is no divergence between CUSUM and CUSUMS graphs, the long-run estimations in the ARDL models are also steady

6 Conclusion and Recommendations

In this study, the effects of capital inflow on poverty reduction in Nigeria between 1986 and 2020 are investigated. The study found that capital inflows reduce poverty in both the short and long runs using the ARDL model. The study also discovered a long-run and short-run inverse relationship between gross capital formation and poverty reduction. Government spending is determined in the study to have no long or short run impact on the decrease of poverty. Long-run poverty reduction is not impacted. This study's

findings on the beneficial impact of capital inflow on reducing poverty urge the government to increase capital inflow. Capital inflows bring about increase in savings and investment rates, changes in technology which will reduce capital deficiency and make business transactions easy among different ethnic groups. Capital inflows will lead to reduction in employment which invariably will lead to reduction in poverty. To minimize the level of poverty, the study recommends the following: first, the government must look for means of increasing capital inflows into Nigeria. Increase in capital inflows will reduce poverty level if it is properly channeled to the right people especially the poor and also to productive activities. Capital inflow will reduce unemployment rates in the country if it is used properly because there are many graduates that have the necessary skills and education to contribute to economic growth but are unemployed and are also financially incapacitated. Capital inflows will also reduce crime rate when most, if not all the unemployed people are employed. There is a high level of poverty in Nigeria today, more than in the past decades. People decided to be involved in different types of crimes such as internet fraud, kidnapping, banditry etc. to escape poverty. The level of poverty has increased at a very high rate as a result of many vices such as high level of unemployment, corruption, unstable policies of the government and bad leadership and this can be resolved through capital inflows. Second, the government must create specialized departments or organizations to oversee money inflows. The organs will see to how to get more sources of capital inflows and also ensure appropriate disbursement of the capital to productive activities that will reduce poverty in the country.

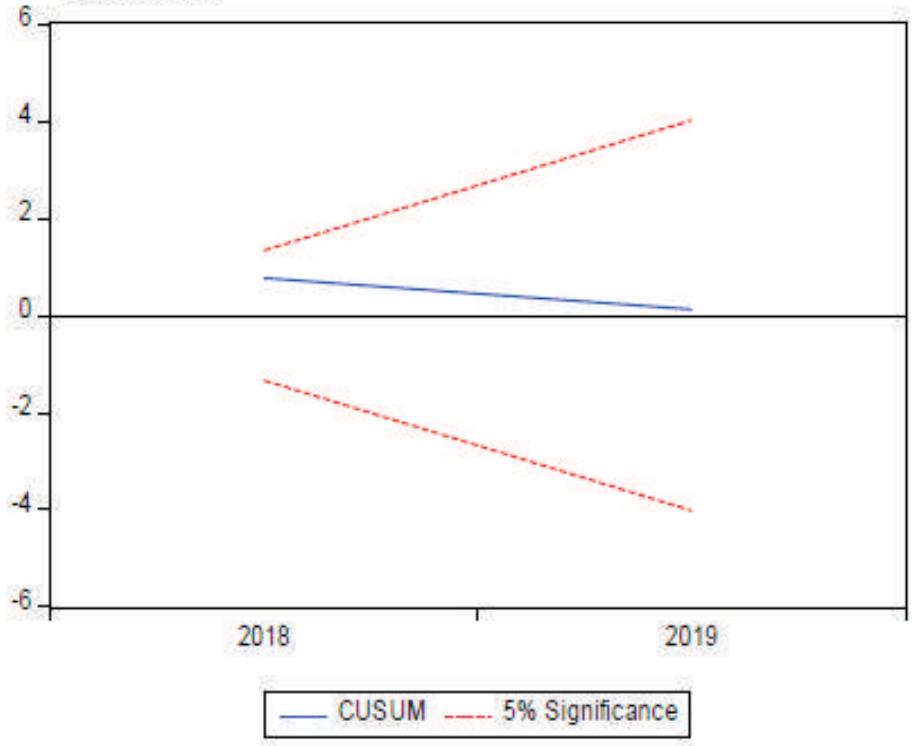
Appendix A1: Descriptive Statistics of the Variables

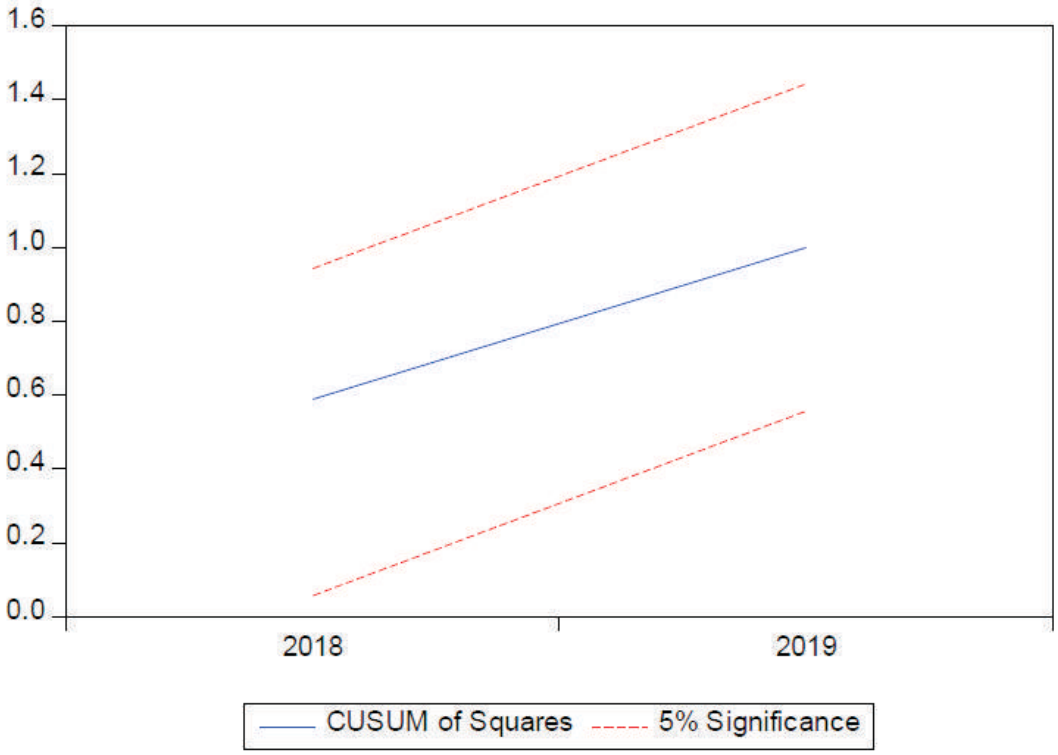
	Mean	Median	Max	Min	Std. Dev.	Skew.	Kurtosis	Obs.
POV	59.6067	60.2574	81.5353	29.8772	13.3367	-0.354	2.5239	31
GCF	28.6535	27.4971	53.1867	14.9039	11.2144	0.4245	2.0815	31
GOVE	4.4330	4.5446	9.4483	0.9112	3.0601	0.3115	1.6062	31
CFLOW	3.3905	3.8412	8.3119	0.0185	2.4147	0.1931	1.7890	31
HUM	4686	4714	6226	3179	9349	-0.014	1.7837	31

Appendix A2: Correlation Matrix

	POV	GCF	GOVE	REM	HUM
POV	1				
GCF	-0.8044	1			
GOVE	0.5387	-0.7780	1		
CFLOW	0.8859	-0.8856	0.7756	1	
HUM	0.6021	-0.7323	0.7743	0.7531	1

Appendix A4


6
4
2
0
-2
-4
-6
2018
2019
CUSUM
5% Significance


1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2018
2019
CUSUM of Squares
5% Significance

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