

## Fiscal Policy and Poverty Reduction in Some Selected Sub-Saharan Africa Countries

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*Received 9 November 2019*

*Revised 17 January 2020*

*Accepted 21 March 2020*

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**Abstract:** *The equally uncharacterized nature of government role in Sub Saharan African (SSA) region on the issue of poverty reduction have surged the modest research of this study. The issue on poverty is a continuous cause and need remedies so much and fast. This study examined the effect of fiscal policy on poverty reduction in Sub-Saharan Africa from 1999 to 2016. Pool Mean Group (PMG) was employed to estimate the dynamic cause effect in SSA countries. Conversely with the study, it was estimated that PMG yielded a robust results as the adjusted period is dynamically stable. The projected adjusted period of disequilibrium gives 39% recovery period from disequilibrium problem. The out of pocket expenditure is negatively significance to poverty reduction among the selected SSA countries. The tax revenue is positive but insignificant to poverty reduction in SSA. The short run effect shows that while out of pocket expenditure posits positive and significant effect on poverty reduction, tax revenue is positive but insignificant to drive poverty reduction. The cross sectional short run estimate shows that all countries long run adjusted models are dynamically stables except in Ghana. However, the adjustment coefficient of Nigeria tends to adjust fast than any countries follow by Zambia, Angola, Ivory Coast and Botswana respectively. This study concludes that fiscal policy does not have poverty reduction relations in the region. It is therefore recommended that appropriate mechanism to ensure tax restructuring and monitoring from the region should be the utmost concerns of the policy maker.*

**Keywords:** *Fiscal Policy, Poverty Reduction, Per Capita Income, Out of Pocket Expenditure Pool Mean Group.*

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### Introduction

The poverty is a worldwide issue and not peculiar to a particular continent, country or region. In fact it is the most pressing issue in the international development debate (Kema & Udeh, 2018). Poverty have been treated by different discipline in different dimension, however the general background to the definition has always been lack or deprivation of basic human needs such as food, drinkable water, good health facility, good education and information (Oloyede, 2014). Poverty has been defined and treated peculiarly in the literature using various discipline view. The economic view sees poverty as the external conditions that influence a person's behavior which are related to economic discussions and transactions such as the purchase of consumer goods, the acquisition of skills and the provision of productive services. In general poverty is seen as a state of deprivation in terms of both economic and social indicators such as income, education, health care, portable water, access to food, social status, self-esteem and self-actualization (Tibaijuka, 2010). From the global view, Sub-Saharan Africa (SSA) is synonyms to poverty. The issue of poverty in the region is not new to the world as several scholars have made a thorough review and solid policy towards poverty reduction from the region in the past (Yahie 1993; Ogwumike 2001; Craig and Porter 2003; Benneth, 2007; Martinez. 2008). But despite remarkably

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this studies are, SSA still languish in extreme poverty even far behind others regions who have once been in the same pole or even worst in the past. SSA housed about 28 of 31 countries in extreme poverty in the world (WHO, 2018). According to World Development Index, (2017), in 1990 to 2010, China, Indonesia, India, Pakistan and Vietnam accounted for alleviation of 715 million people out of the extreme poverty. However, the degree of poverty in SSA rose from 290 million to 414 million over the same period (WorldBank, 2016). More seriously, the concluded Millennium development goals (MDGs) in 2015 was remarkably significant in other parts of the world towards extreme poverty 5 years before the conclusion of the program, whereas, SSA still languished in the scenario even after the completion of the MDGs programs.

Why does SSA poverty rate increases despite overwhelming practicable programs in the region? Significant studies on poverty pointed to fiscal-poverty reduction scenario. The UNDP (2005) juxtaposed on the government financing as the main integral forces behind any poverty reduction as essential for achieving the MDGS goals. The essential stabilizing policy for this instability is through fiscal policy. Contrarily, there are daunting opinions on fiscal-poverty reduction, Lustig, (2017) point that fiscal-poverty reduction relationship has limited impact. He concluded that fiscal policy only limited to reduce inequality and not affects poverty reduction derivative. The attestation to this was confirmed by Ames, Brown, Deverajan and Izquiereo (2001). Brahima and Dhruv (2018) reveal that SSA faces some sizeable shortfalls in financing for investment. This short falls are due to low government savings rates partly from the tax revenue structure from the region. In fiscal-policy-poverty reduction, Enami, Lustig, and Aranda (2018) shown that the power of the policy maker to decrease poverty through redistributive in SSA region depend on the size and composition of government finance as well as the progressivity of all the taxes and government spending combined. The essential indicators of a government's commitment to equalizing opportunities and reducing poverty and social exclusion are the share of total income devoted to social spending and how equalizing and pro-poor this spending is. Typically, redistributive social spending includes cash benefits and benefits in kind such as spending on education and health (Lustig, 2018). However, the health finances in SSA region are mainly finances by household (Konan, Oga, Toure and Kouadio, 2019). The composition of this private health finances are excluded by the government in SSA region. This has causes a defiant catastrophe on the household poverty rate (Chuma and Maina, 2012). Ewelukwa, Onoka and Onwujekwe (2013) explained that the poor ones mostly abandoned treatments or borrowed money to pay for high cost treatment. These have a defiant implication on the poverty reduction in the SSA region.

And now, the choice of SSA as a case study in Fiscal policy-Poverty reduction cannot be timelier than now. Fiscal-policy-Poverty reduction relation is a current issue of various intergovernmental policy discussion and reform in SSA countries. However, there is dearth of empirical evidence in the literature to verify the scenario and its resultant impact of fiscal policy on poverty reduction from the region. The few studies on the fiscal policy and poverty reduction have been a country study and have been narrowly limited to the trend of intergovernmental fiscal relations context of political economy in a country study. This study aims to examine the extent to which fiscal policy drives poverty reduction in Sub Saharan Africa. The rest of this research article is organized as follows: Section 2 describes the literature review in the context of empirical review and stylized facts on poverty indexes in Sub Saharan African countries. Section 3 presents the methodology of the study. Section 4 presents the results and the discussion while section 5 concludes with recommendation for policy-makers in Sub Saharan Africa and international audience.

## **Literature Review**

In as much as there is high rate of poverty around the world, and in Africa in particular there are as many studies justifying the needs to influence the poverty rate with effective fiscal policy. In a developing country, government has to play crucial role for promoting economic growth and breaking the vicious cycle of poverty (Musgrave & Musgrave, 1989). The fiscal policy is a major instrument for attaining this purpose. Fiscal policy is the deliberate manipulation of government instruments of revenue and public expenditure to influence the economic activities. Fiscal policy has conventionally been associated with the use of taxation and public expenditure to influence the level of economic activities. The

implementation of fiscal policy is essentially routed through government's budget. Zulfiqar (2018) asserts that fiscal policy plays a significant role in achieving inclusive economic growth as it can reduce inequalities and mitigate poverty and generate productive employment opportunities by regulating public expenditures and taxes. Lopez, Thomas and Wang (2010) concluded that Fiscal policy is one of the most powerful measurements that governments use to maintain macroeconomic stability for growth, as well as for intra and intergenerational transfers of wealth. Zulfiqar (2018) in examining the role of fiscal policy in plummeting poverty, reducing inequality, generating productive employment and attaining broad based inclusive economic growth for Pakistan, various components of government expenditure and taxes are evaluated by estimating multiple vector autoregressive (VAR) models and by computing elasticities on the basis of cumulative impulse response functions (IRFs). The analysis suggests that fiscal policy is not playing an effective role in promoting broad-based inclusive economic growth.

Adelowokan, Ajibowo and Edewor (2019) using autoregressive distributed lag modelling investigated the implication of health status, health quality on economic performance in Nigeria from 1986 to 2016. The health quality was proxy by the ratio of government health expenditure on real gross domestic product while health status was proxy by life expectancy and the economic performance was proxy by per capital income. The finding of the study reveals that while health quality has an inverse and insignificant effect on per capital income, health status positively reveal a significant effect on per capital income in Nigeria. The short run effect equally reveals that health quality posits an insignificant negative effect on per capital income the life expectancy provides a low positive and significant effect on per capital income. The findings from Salotti and Trecroci (2015) provides illuminations of how inequality is sensitive to fiscal policy (the bottom and the top tail of income distribution). Using data from advanced countries, they found fiscal policy (public debts) elasticity on inequality to range between -0.05 and -0.18 while those of government final consumption expenditure ranged between -0.23 and -0.55. When efficiency and quality of government spending is assured, public expenditure is potent for redistribution of wealth and opportunities to the lowest quintiles of the population. The equalizing impact of public spending on education, health and social spending is prominent.

Mengistu (2013) investigates the economy-wide impacts of these fiscal policy changes on poverty. The study used a static computable general equilibrium (CGE) model linked to a micro simulation (MS) model. The CGE model used the 2005/06 social accounting matrix (SAM) and the MS model used the 2004/05 Household Income, Consumption and Expenditure (HICE) survey to investigate household poverty by way of the consumption expenditure changes from the CGE model. The fiscal policies simulated are domestic indirect taxes, government consumption expenditures, and government transfers to households. The findings of the study suggest that the increase in revenue from indirect taxes has worsened the poverty state of households. The results from the CGE model have all shown decline in real GDP, sectorial output, employment and welfare. In contrast, the study found improvements in the poverty state of households as a result of the introduction of various short-run expenditure measures. García and Giraldo (2018) use a Computable General Equilibrium model calibrated for the Colombian economy, to analyze the efficiency and the impacts of changes in the tax system on growth, welfare and income distribution. The findings are:

- the low cost of compensation that is required to avoid the reduction of welfare of households with lower incomes, so that they do not see their welfare altered (measured through compensated variation) after an increase on indirect taxes.
- it is convenient to move from taxing the production process to taxing the results of the process (through taxes on personal income), decreasing corporate income tax rates and compensating for it, with an increase in personal income tax, even maintaining a zero tax on the lower income population.

On the links between government investment on human welfare and economic development, Adelowokan, Ajibowo and Lamina (2018) investigated the contribution of public spending on education and health towards ensuring pro-poor growth and overall development of the Nigerian economy between 1986 and 2015. The study uses batteries of estimation techniques in place of fully Modify Ordinary

Least square, Dynamic Ordinary Least Squares and Canonical Co-integrating Regression. The findings shows that public health spending, gross investment and currency depreciation have positive impact on human welfare but government expenditures on health was not significant at the conventional level. The result also indicated that the coefficients of public expenditures on education and labor are negative, indicating inverse effects on human development. However, both were not significant to human welfare development.

Despite an encouraging study on poverty reduction in SSA countries, the region still harbors a significant population living in extreme poverty. An economy in SSA may not be in a poverty trap at the macroeconomic level through Positive exogenous shocks such as improvements in terms of trade, particularly the steady rise in the prices of commodities, increase in the flows of FDI and remittances, and better macroeconomic management, all contributed to reviving growth and spreading it across many countries in SSA countries, on the other hand, progress in poverty and wealth creation is not keeping pace with the growth story. It is changing very slowly and it is worrying, particularly in light of recent findings that fiscal policy purposively hinders any positive poverty reduction in the region.

### Stylised Fact on Poverty Indexes in SSA Countries

The damaging economic and the impacts on poverty rate in Africa’s are widely recognized in the body of fiscal policy. Poverty in Sub Saharan African have increased over the years, however, careful analysis should be explored here as the population from the region have also increases over the here substantially. The trends of poverty indexes in the SSA countries are presented in the figures below

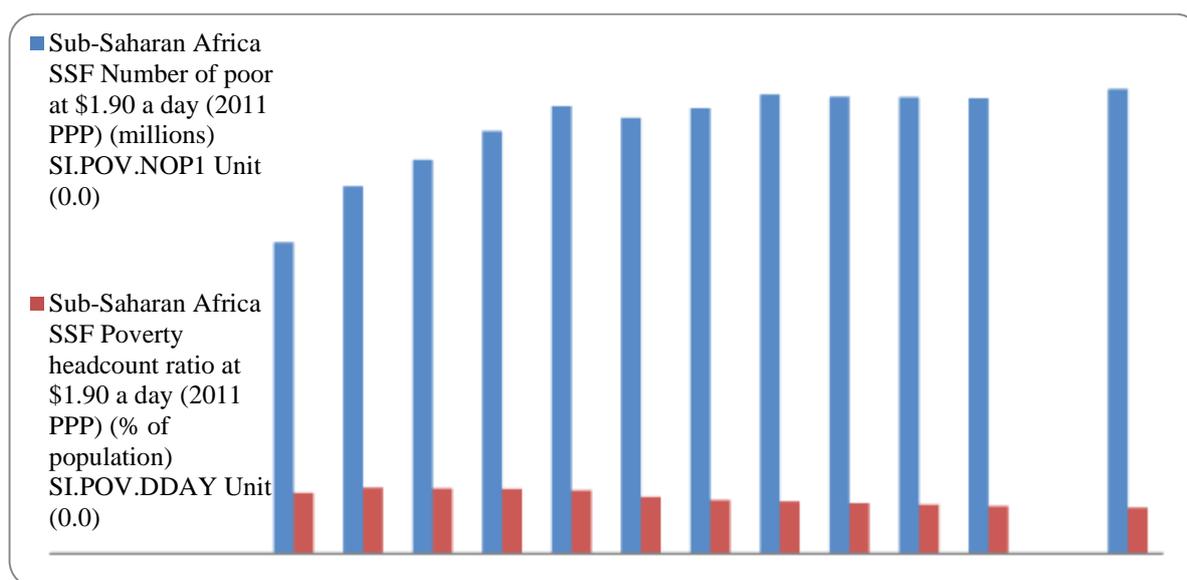
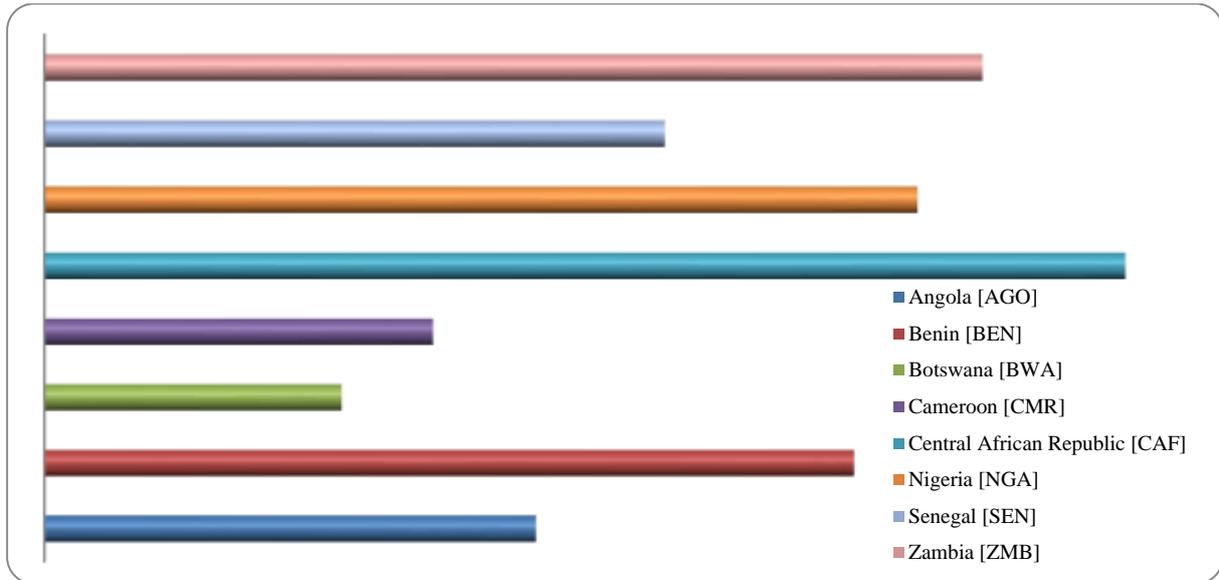


Figure (1): Number of Poor at 1.9\$ and Poverty Head Counts in SSA Region

Figure 1 shows the level and composition poverty in SSA from 1990 to 2015. The composition of poverty include the number of poor living below 1.90 dollars using purchasing power parity of 2011 and poverty headcount ratio at 1.9 dollars a day as percent of population. The graph indicates that number of poor at 1.90 dollars a day has substantially increases over the years in SSA. the trend indicates an upward trends rising from 1990 up till 2002. The trend of people living below 1.9 dollars reduces after 2002. This shows initial effect of the MDGS, however after recession of 2008, poverty in the SSA returns as the poverty rate from the region increases and reaching an all-time in 2015. The poverty rate headcounts per population shows a steady decreases in the poverty rate in SSA reaching its lowest in 2015. Conversely the trends shows inverse movement, however the population in SSA have resulted in the increases in poverty.



*Figure (2): Poverty headcount ratio at 1.9\$ a day Percent of population in some selected SSA countries*

WDI, (2017) refer poverty rate as the poverty headcount ratio at \$1.90 a day is the percentage of the population living on less than \$1.90 a day at 2011 international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions. This trend shows that the Central Africa Republic (CAR) is most strike by poverty as more than 60% percent of the population lives below 1.90 dollars a day. Although majority of the SSA countries population of 50% are drawn in the poverty lane. Nigeria estimation of 53.7 % of its population lives below 1.90 dollars in day as at 2017 while Zambia 57 % population lives in extreme poverty. However, Botswana have the minimum among the SSA countries as about 18 % of its population lives below 1.90 dollars a day follow by Cameroon whose population of 23 % lives below poverty.

*Figure (3): Level of Income Share among Group Earners in Selected SSA Countries*

The figure 3 shows various poverty indexes among selected SSA countries. The trends shows that level of income distribution among SSA countries are unequal. The trend shows that the region has high unequal income distribution in the world. About first 20% of the population hold more than 60 % of the income in Zambia, CRA and Benin while second 20% of the population holds about 22% of income, the third 20% hold about 10% of the income. The fourth and fifth 20% hold 6% and 2% of the income distribution in Zambia, CRA and Benin respectively. The income distribution in Botswana shows high unequal distribution of income. While about 85% of income are held by 40% of the population, while 60% of the remaining population shared 15% of the income in the country. However Nigeria, Ghana, Cameroon and Angola shared similar income distribution in the region. While the 20% of the population shared about 49% of the countries income, another 20% of the population hold 22% of the income, while the third, fourth and fifth of the population holds 14%, 9% and 6% of the income respectively. This assertion holds that concentrations of socio-economic asset were held by few people within the countries in Sub-Saharan region.

#### Methodology

The methodology employed was panel data modeling, this entails the combination of both cross sectional data and a times series data. The Estimation techniques employed for this study was Panel Mean Group (PMG) as a result of its efficiency estimator providing low heterogeneity in the short run coefficient and error variance and at the same time its imposition of homogeneity in the long. The PMG estimator is consistent under the assumption of long run slope homogeneity. This study follows Pesaran

et al. (1999) to construct the empirical model. The base model between poverty reduction and fiscal policy as presented in ARDL (1, 1):

$$PCI = \mu_i + \lambda_i PCI_{it-1} + \varphi_{10} TXR_{it} + \varphi_{11} TXR_{it-1} + \varphi_{12} OP_{it} + \varphi_{13} OP_{it-1} + \varepsilon_{it}$$

While the long run of the equation is giving below:

$$\Delta PCI_t = \phi(\Delta PCI_t - \varphi TXR_{t-1} - \varphi_{t-1} OP)$$

This study takes consideration of some pre-estimation test of the study. Some of these tests were descriptive statistics, correlation matrix, Im, Pesaran and Shin W-stat Panel unit of root test. Using the first generation tests of panel unit root due to Im, Pesaran and Shin (2003) test of panel unit root of Pesaran (2005). These tests are less restrictive and more efficient than the test developed by Levin and Lin (1993, 2002), which does not allow for heterogeneity in the autoregressive coefficient. The tests proposed by Im, Pesaran and Shin (2003) permit to solve Levin and Lin's serial correlation problem by assuming heterogeneity between units in a dynamic panel framework. The basic equation for the panel unit root tests for Im, Pesaran and Shin (2003) is as follows:

$$\Delta Y_{i,t} = \alpha_i + \rho_i Y_{i,t-1} + \sum_{j=i}^P \phi_{ij} \Delta Y_{i,t-1} + \varepsilon_{i,t}$$

Where

$$i = 1, 2 \dots N, t = 1, 2 \dots T$$

Where  $Y_{i,t}$  stands for each variable under consideration in the model,  $\alpha_i$  is the individual fixed effect and  $\rho_i$  is selected to make the residuals uncorrelated over time. The null hypothesis is that  $\rho_i = 0$  for all  $i$  versus the alternative hypothesis is that  $\rho_i < 0$  for some  $i = 1 \dots N-1$  and  $\rho_i = 0$  for  $i = N-1+1 \dots N$

The Im, Pesaran and Shin (2003) statistic is based on averaging individual ADF statistics and can be written as follows:

$$\bar{t} = \frac{1}{N} \sum_{i=1}^N (t_{iT})$$

Where  $t_{iT}$  is the ADF t-statistic Im, Pesaran and Shin (2003) show that under the null hypothesis of non-stationary, the t-statistic follows the standard normal distribution asymptotically?

## Results and Discussion

*Table (1): descriptive statistics*

	GDPPCI	OPEXP	TXREV
Mean	3.193731	57.53243	14.33381
Median	2.428735	60.48491	14.44528
Maximum	30.34224	80.49705	29.31213
Minimum	-10.09972	16.14622	0.905462
Std. Dev.	5.327132	15.98530	6.048902
Skewness	2.011800	-1.310725	-0.202980
Kurtosis	11.34871	3.998968	4.004103
Jarque-Bera	282.7223	25.90521	3.861216
Probability	0.000000	0.000002	0.145060
Sum	252.3048	4545.062	1132.371
Sum Sq. Dev.	2213.510	19931.32	2853.958
Observations	79	79	79

Source: Author, 2019

NOTE: PCI is the per capita income, OPEXP out of pocket expenditure, TXREV tax revenue

The descriptive statistics of the PCI, OPEXP and TXREV were presented in the table 1. The mean of the PCI, OPEXP and TXREV were 3.193, 57.53 and 14.334 respectively. The minimum of the variables were -10.099, 16.146 and 0.905, the maximum shows values of 30.34, 80.497, 29.312 for PCI, OPEXP and TXREV respectively. The mean of their variables are consistent as the value ranges between

minimum and maximum. Contrary to the Jarque-Bera statistics, both PCI and OPEX are not normally distributed; this is evident from the probability of Jarque-Bera statistics which accepted the null hypothesis of the existence of normality of the series in the model.

### Correlation Matrix

**Table (2): Correlation Matrix**

	OPEXP	TXREV
OPEXP	1	
TXREV	-0.024634	1

Source: Author, 2019

NOTE: PCI is the per capita income, OPEXP out of pocket expenditure, TXREV tax revenue

Table 2 presents the correlation coefficients OPEXP and TXREV. While the coefficient between exact a correlation of -0.025, Since the correlation coefficients between the independent variables are less than 0.95, the study concluded that occurrence of multi-collinearity problem in the analysis is minimal

### Lag Selection Criteria

Model Selection Criteria Table					
Dependent Variable: GDPPCI					
Date: 03/26/19 Time: 21:20					
Sample: 1999 2015					
Included observations: 79					
Model	LogL	AIC*	BIC	HQ	Specification
4	-95.723003	4.170836	5.618694	4.743757	ARDL(2, 2, 2)
2	-107.803034	4.352329	5.602752	4.847125	ARDL(1, 2, 2)
3	-129.987179	4.835438	5.888426	5.252108	ARDL(2, 1, 1)
1	-138.168681	4.900558	5.756110	5.239102	ARDL(1, 1, 1)

Source: Author, 2019

NOTE: PCI is the per capita income, OPEXP out of pocket expenditure, TXREV tax revenue

The lag length criteria test computes various criteria to select the lag order of the model. In selecting the appropriate lag number, the combination of AIC and HQ criteria provides the optimal lag selection. Hence the combination of 2, 2, 2 model is sufficient.

### Panel Unit Root Test

The time series behavior of each of the panel series was presented in Tables 4.3, using the Im, Pesaran and Shin W-stat unit root tests at both level and first differences of the series.

**Table (3): Im, Pesaran and Shin W-stat Test Result**

VAR	Level & (P-value)	First Diff (P-value)	ORDER OF INTEGRATION	MAX. NO LAGS
GDPPCI	0.61502 (0.2693)	-3.34254 (0.0004)***	I (1)	2
OPEXP	-0.11093 (0.4558)	2.71097 ( 0.0034)***	I (1)	2
TXREV	-0.43959 (0.3301)	-2.63432 (0.0042)***	I (1)	2

Source: Author, 2019

NOTE: PCI is the per capita income, OPEXP out of pocket expenditure, TXREV tax revenue

The table 3 reports the outcome for the Im, Pesaran and Shin W-stat unit root tests. The results shows that the null hypothesis of the unit roots for the panel data for GDPPCI, OPEXP, and TXREV cannot be rejected at level. However this hypothesis was rejected when the series are in their first differences. The result strongly indicates that the series were not stationary at their level but became stationary at their first differences.

**Dependent Variable: D (GDPPCI)**

**Method: PMG**

**Selected Model: ARDL (2, 2, 2)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
<i>Long-Run Equation</i>				
OPEXP	-0.573313	0.116563	-4.918480***	0.0000
TXREV	0.525218	0.277896	1.889981*	0.0671
<i>Short Run Equation</i>				
ECT(-1)	-0.395989	0.122586	-3.230285***	0.0027
D(GDPPCI(-1))	0.051488	0.261348	0.197010	0.8450
D(OPEXP)	0.306181	0.118990	2.573169**	0.0145
D(OPEXP(-1))	0.026011	0.093229	0.279005	0.7819
D(TXREV)	0.142086	0.260502	0.545431	0.5889
D(TXREV(-1))	0.129622	0.583760	0.222046	0.8256
C	13.94543	4.748066	2.937076***	0.0058

Source: Author, 2019

NOTE: PCI is the per capita income, OPEXP out of pocket expenditure, TXREV tax revenue

The Pool Mean Group of Auto regressive distributed lag model provides the short run and long run coefficient along with the cross section short run analysis. Contrary to the out of pocket expenditure, the long run coefficient shows a negative significant on poverty reduction with the coefficient of -0.573. While the tax revenue is positively but insignificant to poverty reduction in selected SSA countries. However, the speed of adjustment has a sufficient sign and significant at 5 % level. The speed of adjustment coefficient -0.396 with the probability value of 0.002 is statistical significant stating that about 39.6 speed of adjustment to equilibrium from disequilibrium position. The short run coefficient out of pocket expenditure is positively significant to poverty reduction.

**Table (4): Cross sectional short run of Pool Mean group**

GDPPCI						
Variable	Angola	Ivory Coast	Botswana	Ghana	Nigeria	Zambia
ECT(-1)	-0.372846 (0.0007)***	-0.302173 (0.0015)***	-0.248649 (0.0123)**	-0.005765 (0.9252)	-0.886501 (0.0000)***	-0.560001 (0.0001)***
D(GDPPCI(-1))	0.848728 (0.0009)***	-0.121450 (0.0105)**	-0.140096 (0.1312)	-0.854300 (0.0001)***	-0.167242 (0.0000)***	0.743288 (0.0009)***
D(OPEXP)	0.529224 (0.0006)***	-0.087109 (0.0480)**	0.129466 (0.1143)	0.554673 (0.0001)***	0.602910 (0.0001)***	0.107920 (0.0000)***
D(OPEXP(-1))	-0.338131 (0.0004)***	0.139733 (0.0261)**	-0.138414 (0.0212)**	0.182181 (0.0023)***	0.278504 (0.0000)***	0.032195 (0.0000)***
D(TXREV)	0.102901 (0.3260)	0.198071 (0.3215)	0.970971 (0.0020)***	0.466102 (0.0001)***	0.084031 (0.2828)	-0.969562 (0.0000)***
D(TXREV(-1))	-1.081123 (0.0021)***	2.656018 (0.0002)***	0.941067 (0.0191)**	-0.208197 (0.0015)***	-0.738773 (0.0301)**	-0.791262 (0.0001)***
C	13.04316 (0.7286)	8.043415 (0.6236)	7.031442 (0.8664)	1.898629 (0.5911)	34.43809 (0.2841)	19.21784 (0.4057)

Source: Author, 2019

NOTE: PCI is the per capita income, OPEXP out of pocket expenditure, TXREV tax revenue

The cross sectional short run and the long run adjustment was presented in the table 6. All error correction term of the countries has a negative and statistically significant value except Ghana. These imply that, models are dynamically stables except the Ghana ECT. However, the adjustment coefficient of Nigeria tends to adjust fast than any countries follow by Zambia, Angola, Ivory Coast and Botswana respectively. The model of the Ghana adjustment coefficient tends to be dynamically unstable. Furthermore, results suggest that, in the short-run, out of pocket expenditure is positively and statistically influence per capita income in Angola, Ghana, Nigeria and Zambia whereas in the Ivory-Coast study, out of pocket expenditure is inversely significant on per capita income. Only Botswana is

positively insignificant on per capita income. The tax revenue coefficient of the cross sectional countries shows that at Angola, Ivory Coast and Nigeria posits positive but insignificant effect on per capita income, the tax revenue of Ghana is positively significant on per capital, while the coefficient of Zambia tax revue is negatively significant both at level and lag one. The lag one tax revenue of Angola, Ghana and Nigeria have negative and significant effect on per capital income.

### **Conclusion and Recommendations**

The equally uncharacterized nature of government role in this region on the issue of poverty reduction have surged the modest research of this study. The issue on poverty is a continuous cause and need a remedies so much and fast. The ever increase poverty rate in SSA has been a continuous trends while global extreme poverty rapidly on decline. It is projected that by 2030 that 9 of every 10 people in extreme poverty will be from SSA. This study examined the effect of fiscal policy on poverty reduction in Sub-Saharan employing Pool mean Group (PMG) to estimate the cause effect. Conversely with the study, it was estimated that PMG yielded a robust results as the adjusted period is dynamical stable giving the negative value and its significant effect. The projected adjusted period of disequilibrium gives 39 % recovery period from disequilibrium issues. The out of pocket expenditure is negatively significant to poverty reduction among the selected SSA countries. The tax revenue is positive but insignificant to poverty reduction in SSA. The short run effect shows that while out of pocket expenditure posits positive and significant effect on poverty reduction, tax revenue is positive but insignificant to drive poverty reduction.

The cross sectional short run estimate shows that all countries long run adjusted models are dynamically stables except in Ghana. However, the adjustment coefficient of Nigeria tends to adjust fast than any countries follow by Zambia, Angola, Ivory Coast and Botswana respectively. Furthermore, results suggest that, in the short-run, out of pocket expenditure is positively and statistically influence poverty reduction in Angola, Ghana, Nigeria and Zambia whereas in the Ivory Coast study, out of pocket expenditure is inversely significant on per capita income. Only Botswana is positively insignificant to determine poverty reduction. The tax revenue in the short run reveals positive but insignificant effect on poverty reduction in Angola, Ivory Coast and Nigeria respectively. This study concluded that fiscal policy have been periodically addressed in SSA countries in such a way that does not reflect on the poverty reduction. The tax revenue has been equally insignificant in SSA while out of pocket expenditure has continued to cause more poverty increase in the region. This study recommends that appropriate mechanism to ensure tax restructuring and monitoring from the region should be the utmost concerns of the policy maker from the region. In addition the policy maker from the region should endeavor to finance appropriately any viable poverty eradication programs to ensure positive significantly outcomes of the programs.

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