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Is Economic Growth sufficient for Poverty Reduction? Empirical evidence from Tanzania

Bakari M Mgwadu

mgwadubakari@yahoo.com

Abstract

Tanzania like other developing countries implements a number of strategies aimed at reducing poverty and expedite the economy of the country. The initiatives made by Tanzania have raised real GDP at an average of 7.1% in 2017 compared to 7.0% in 2016. Currently, the World Bank has classified Tanzania as low middle income country. Despite the initiative made by Tanzania to reduce poverty, poverty rate reduction has been very slow. The study aims to examine if economic growth in Tanzania is sufficient for poverty reduction. The granger causality was employed and its result indicates that economic growth does not support poverty reduction. The study also uses VECM to examine the relationship between economic growth and poverty reduction. The result shows that the relationship between economic growth and poverty reduction is strong and positive over the period of analysis, and in long run, economic growth and poverty reduction will move together. The speed of adjustment of the economic growth and poverty reduction is 46% yearly for attaining long run equilibrium steady. These results recommend the policymakers that if a policy objective is to reduce the poverty then economic growth should simultaneously take into account as the final target. The government also should target vulnerable people such as the marginalized groups that have chronic poverty and exclusion from society.

Keyword: Economic Growth, Poverty Reduction, GDP, VECM, Stationary, Long run, Co-integration

1.0 INTRODUCTION

1.1 Background

Tanzania like other countries has been implementing a number of strategies that aim at reducing the poverty and expedite the economy. Poverty reduction strategies implemented by the government of Tanzania include but not limited to the National Strategy for Growth and Reduction of Poverty (NSGRPI&II) and the National Five Year Development Plan (FYDP I &II) URT 2010). The first National Strategy for Growth and Reduction of Poverty (2005/06-2009/2010) aimed at improving economic growth, reducing poverty, enhance good government and accountability as well as enhance the standard of living and social welfare of the people (URT, 2005). The completion of the first National Strategy for Growth and Reduction of Poverty was followed by the second National Strategy for Growth and Reduction of Poverty (2010/11-2014/15). The second strategy was dedicated to spurring the aspiration of Tanzania Development Vision 2025, Millennium Development Goal (MDGs), and transforming Tanzania into Middle income country by 2025 (URT 2010).

Moreover, the government of Tanzania introduced the most recent Five year Development plan (National Five Year Development Plan II (2016/17-2020/21) titled *Nurturing Industrialization for Economic Transformation and Human Development*" (URT, 2016). The National Five Year Development Plan aims to incorporate unfinished interventions from the First National Five Year Development Plan (2011/2012-2015716) and Second National Strategy for Growth and Reduction of Poverty (2010/11-2014/15) (URT, 2016). The priority area of this plan includes: enable Tanzania to become industrialize and back up the aspiration of transforming Tanzania into middle income and semi industrialized country by 2025.

Despite the strategies adopted in Tanzania to reduce the poverty, poverty rate reduction has been very slow (World Bank, 2019). Poverty in Tanzania reduced by eight percent in ten years, drops from 34.4 percent in 2007 to 24.4percent in 2018 (World Bank, 2019). It is shown that half of the population in Tanzania lived below the US Dollar 1.90 per person per day based on the international poverty line. The report revealed that a huge population who are above the poverty line are at risk of slipping below a poverty line. According to the Household Budget Survey

(2019), has identified high disparities of poverty levels across the geographical regions in Tanzania. It adds that the basic need poverty headcount has been declined mostly in rural areas. In terms of incidence of poverty, the report indicates that the rural area shows 31.3% higher than that of the urban area (15.8%). At the National level, the highest poverty incidence was Rukwa with 45%, while the lowest was Kilimanjaro regional with 8.0% (Household Budget Survey, 2019). Further, the overall poverty gap in Tanzania has decreased from 10 percent in 2007 to 6 percent in 2018 (Household Budget Survey, 2019).

The real GDP in Tanzania grew at an average of 7.1% in 2017 compared to 7.0% in 2016 (Mgwadu, 2019). The author revealed that the higher economic growth in Tanzania has associated with improvement of a number of sectors such as agriculture, mining and infrastructures. The result of higher economic growth in Tanzania has led to slow down poverty, although the rate of this reduction has been relatively slow (World Bank, 2019). It is estimated that 10 percent of the Growth Domestic Product in Tanzania can be expected to slow down the poverty rate by about 4.5 percent low compared to estimates for other developing countries (World Bank, 2019). Currently, the World Bank has classified Tanzania into a lower middle income

Several countries have shown the influence of economic growth in reducing the poverty. A country like Mozambique has been able to reduce poverty for a very short period from 1996 to 2002 and the economy grew by 62% (Turrey and Maqbool, 2018). The authors revealed that the economic growth in Mozambique has been able to reduce poverty from 69 percent in 1996 to 54 percent in 2002. This result indicates that the real GDP in Mozambique has a positive impact on nearly all the people in the country. In fact, it believed that economic growth in any country has a positive impact on nearly all citizens. If it happens that economic growth raises the income of a people in an equal proportion, therefore it is expected that there is an equal distribution of the income of the people and there no changes, implies that no big gap between the rich and poor. But if the economic growth raises the income of a certain group of people, then changes will occur in the distribution of income and will divide the people with higher income people (richer) and low income people (poor).

This paper presents an empirical analysis of the relationship between economic growth and poverty reduction. To achieve the key objective the study employed a Vector Error Correction Model to estimate if the relationship is a long run or short run relationship. It also used Granger causality to estimate whether economic growth is a result of poverty reduction. The study focuses on two variables namely the Gross Domestic Product (GDP) and Poverty reduction (POVR)

The rest of this paper proceeds as the following, section two presents a literature review, section three presents the data and methodology used while section four describes the results. Section five concludes the paper and presents recommendations

2.0 LITERATURE REVIEWS

2.1 Theoretical literature

2.1.1 Theories of the Causes of Poverty

Critically poverty can be discussed by refers to the thought of different economic schools such as classical and neoclassical. Classical tradition view that poverty to some extent caused by an individual who determines their own destiny (Davis and Sanchez-Martinez, 2015). The individual is one who chooses to become poor by forming lone parent families and lack of appropriate role models in the family. Neoclassical identified reasons that cause poverty to occur. Among the reasons includes lack of social as well as private assets, fall for the market that excludes the poor from market credit, limited education, poor health and increase of unemployment (Davis and Sanchez-Martinez, 2015). Classical and Neoclassical approach underline the influence of incentives on individual behaviour and examine their relationship between productivity and income. Also, highlight the importance of the use of the monetary unit to measure poverty as well as supported policy prescription should put in practice.

2.1.2 Theories of Economic Growth

2.1.2.1 Classical economic growth theory

The classical model has developed by Smith in a wealth of National (1776). Smith outline several factors that enable the economy of the country to grow (Pettinger, 2019). Among the factors mentioned by Smith are; the role of markets in determining supply and demand; productivity of labor; the role of trade in enabling greater specialization and increase returns to scale. Other scholars who developed classical model are Ricardo and Malthus. Ricardo and Malthus their discussion based on the role of technology in production (Pettinger, 2019). Their model postulate that technological change was constant and increasing inputs could lead diminishing returns. Malthus's prediction is that the population would grow faster than the capacity of the world to feed itself.

2.1.2.2 Neoclassical growth theory

Neoclassical growth theory is an economic model of growth that explaining the three factors of production that result in the growth of the economy. Neoclassical growth theory identified labor, capital and technology as the factors necessary for a growing economy. The theory noted that short-term economic is a result of a combination of labor and capital that play the role in the process of production, while technological factor influences the overall functioning of the economy. However, the theory postulates that the short-term equilibrium is different from long-term equilibrium and does not include any of the three mentioned factors. The theory concludes that capital accumulation, how people make use of it, and the relationship between capital and labor, is important for determining economic growth in any country (Pettinger, 2019).

2.1.2.3 Endogenous growth theory

The Endogenous growth theory states that economic growth in any country is generated internally in the economy. It explains that economic growth is from endogenous forces and not through exogenous. The theory criticizes the neoclassical growth model, which mentioned the external factors such as technological progress as the main sources of economic growth. The

policy key implication of the endogenous theory is the government policies can raise the economy of the country if those policies directed toward enhancing more market competition and stimulate the use of innovation in production and process (Pettinger, 2019).

2.2 Empirical literature

Studies have been conducted to examine the relationship between economic growth and poverty reduction. Several studies found that if the country experiences rapid economic growth, then the rate of poverty of that country keeps reducing. A study of 26 developing countries revealed that the growth of the economy of those countries led to reducing the poverty in almost all countries (Rozilee et.al. 2012). From this study, the authors found that the countries which have higher rapid growth for more than thirty years have managed to reduce the poverty rate. Rozilee et.al. (2012) revealed that in the countries which had to experience rapid economic growth although the income distribution is not well distributed but the poor do better. The conclusion of this study is that economic growth still a powerful instrument for reduced the poverty of any country.

Warr (2001) using the time series data period covering from 1960s to 1990 and six selected countries (India, Taipei, China, Indonesia, Philippines, and Thailand). The study aimed to examine the relationship between changes in the headcount as a measure of the absolute poverty incidence and Gross Domestic Product (GDP) as the proxy to economic growth. The results of the study found that the absolute poverty incidence and economic growth are significant and approximately the same for all countries. The overall results indicate that economic growth has a significant influence on poverty reduction in all countries.

Rozilee et.al. (2012) conducted the study aimed to examine if the economic growth in Malaysia is sufficient for poverty alleviation. Authors used the data covering from the period of 1970 to 2009 with the variables Gross Domestic Product (GDP) as a proxy of economic growth and Poverty reduction (POV). Vector Error Correction Model was used to examine the long run and short run equilibrium and Granger causality were used to determine the causality between the variables. The results indicate that there is a negative long run relationship between poverty reduction and economic growth in Malaysia. Granger causality results indicate that there is only one way short causality relation between GDP and POV running from POV to GDP. The authors

concluded that the economic growth alone in Malaysia is not sufficient for poverty reduction therefore if the policy objective is to reduce the poverty also the economic growth should be simultaneous as the final target.

The study done by Stevans and Sessions (2005), used the time series data from 1959 to 1999 and the formal error correction model revealed that the increase of the economic growth leads to reductions in the poverty rate for all families in the United States economic growth in United State. However, economic growth in the United State was found to have more pronounced effect during the period of the 1960s, 1970s, 1980s, and 1990. Another study done by Mashindano and Maro (2011), examines the reason why economic growth in Tanzania has not led to poverty reduction. The authors used analysis data from national accounting data and findings collected from the literature. The findings of this study realized that the main reasons for not mismatch between the growth of economic and poverty reduction were inaccuracies in reporting of the economic data, under-educated population and low growth rate in the agriculture sector. Authors concluded that the government should put effort into training rural farmers and emphasize rural investment in order to increase production, this will led to reducing the rural poverty and the gap of rural-urban income distribution.

Agrawal (2007), examines the relationship between economic growth and poverty reduction in Kazakhstan and used province-level data. The results of his study show that the provinces which have a higher economic growth rate achieved to reduce the poverty. Increasing in oil revenues since 1998 have helped to raise the Gross of Domestic Product and Government revenue. Part of the revenue collected was used to fund a pension and social protection program. Authors also revealed that the reduction of the poverty rate in Kazakhstan was due to an increase in employment and higher real wages paid. The findings show that the increased government expenditure on social sectors did contribute significantly reduction of poverty. Therefore, this recommends the government that both economic growth and increasing government support for the social sectors are helpful for poverty reduction.

Another study done in Swaziland imply that economic growth does not reduce the poverty (Nindi and Odhiambo, 2015). Authors used time series data from 1980-2011, and also used

Vector Error Correction model and Granger causality. The result shows that economic growth granger does not cause poverty reduction in Swaziland. Although the result has shown that their relationship moves from poverty reduction to economic growth. The result also shows that there is no long run and short run relation. This result is against other studies which indicate that there is a positive relationship between economic growth and poverty reduction. The studies show that when the level of income inequality is too high, the economic growth alone failed to reduce the poverty. The result of other variables such as economic growth and financial development shows that there is a distinct short run and long run relation move from economic growth to final development. Nindi and Odhiambo (2015) revealed that results are in line with trickle-u theory asserts, thus economic growth does not help the poor people rather the process of economic growth tickle-up to middle income and rich income classes. This in return tend to increase income inequality which then increases poverty

3.0 METHODOLOGY

3.1 Data

Both annual series data which are real Gross Domestic Product (GDP) as a proxy to Economic Growth and headcount ratio at $ 1.90 as a measure for Poverty rate (POVR) were used as variables. Poverty headcount ratio at $ 1.90 a day is the percentage of population living less than $ 1.90 a day at 2011international prices. Both headcount ratio (POVR) and GDP are elaborated based on World Bank data (n.d). The period of analysis spans from 1991 to 2017.

3.2 Data analysis

This research applied Vector Error Correction Model (VECM) to estimate the relationship between economic growth and poverty reduction. Granger causality employed to determine whether economic growth is useful for poverty reduction or other way around. The analysis begins by estimating the unit root test, Order of integration, Co-integration test and Lag selection. The purpose of testing the unit root test was to determine if the variables are stationary tests or non-stationary tests. Both variables should be stationary time series data as recommended by Gujarati (2003). To check the stationary test the study employed Augmented Dickey-Fuller

test (Dickey and Fuller, 1979) and Phillips Perron (Philips and Perron, 1988). E-view 11 software analysis were employed

3.2.1 Unit root test

Before estimating the economic model the first stage is testing the stationarity of the time series data. The purpose of testing the stationarity is to ensure that the variables are free from spurious correlation and to determine the availability of an attractor (Gujarati, 2003). Gujarati (2003) noted that if the variables are said to be stationary then those variables are integrated at order one I(1) after the first difference. As stated above the study employed Augmented Dickey-Fuller test and Phillips Perron to determine the stationarity test. All these tests involved two models equations as follows:

1. $\Delta Z = \alpha_0 + \alpha Z_{t-1} + \sum_{i=0}^{n} \alpha \Delta Zt + e_t$ (Equation with Constant)……..…….1
2. $\Delta Z = \alpha_0 + \alpha_{1t} + \alpha_2 Z_{t-1} + \sum_{i=0}^{n} \alpha \Delta Zt + e_t$ (Equation with Constant and Trends)…….…...2

Where Z = Variables of interest

t = time trends

Δ= first difference

α= represent constant terms

n= number of lag

e= random term error

3.2.2 Co-integration test

Several statistical methods have developed for testing the co-integration. Johansen co-integration test (Johansen, 1988) and Engle-Granger Co-integration test (Engle and Granger, 1987) are the most common method used to test co-integration. In this study, the Johansen co-integration test was employed. Johansen co-integration divided into two tests; trace test (from algebra) and eigenvalue test (from scalar). Both tests were employed.

Johansen-co-integration test involves VAR (Vector Auto Regression) Model.

Consider the VAR of order *p*

$Z_t = A_1 Z_{t-1} + A_p Z_{t-1} + BX_t + e_t$……..……..…….3

Where Z_t is non-stationary variables that integrated by order one I (*1*)

X_t is a deterministic variable

e_t is the vector of innovation

Therefore VAR may rewrite as

$$\Delta Z_t = MZ_{t-1} + \sum_{i=1}^{p-1} T_i \ \Delta Z_{t-1} BX_t + e_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 4$$

Where M= $\sum_{i=1}^{p-1} A_i - I$, $T_i = \sum_{j=i+1}^{p} T_i$ Aj

The trace statistic test for the null hypothesis can be calculated as

Trace statistic test $= \quad -T \ \sum_{i=r+1}^{n} \log(1 - \lambda)$ ……..…….5

Maximum eigenvalue test= -T log (1- λ_{r+1})……..…….6

Where T is the sample size and λ is the estimated eigenvalue

In these models, the null hypothesis in term of trace test is r less or equal to co-integration vectors

Therefore for the null hypothesis is r of no co-integrating vectors and the alternative hypothesis is r+1 with co-integrating vectors.

3.2.3 Vector Error Correction Model (VECM)

Vector Error Correction Model is an analysis used to find the relationship between the variables. The analysis aims to determine if the two variables have a long run or short run relationship. The VECM is a restricted VAR model designed to use non-stationary time series variables and to be co-integration after the first differential. The first step before estimating the VECM is lag selection. The lag selection based on lag length criterion. The co-integration term is called the

Error correction term. The error correction term is a deviation from long-run equilibrium after corrected from the series of partial short-run adjustments.

Consider the following two variables with one co-integrating equation and with no lag difference term

Thus

$Z_2t = \beta Z_1 t$

The VEC model will be formulated as follow

$\Delta Z_1t = \alpha_1 (Z_{2\,t-1} - \beta Zt_{-1}) + e_{1t}$ ……..7

$\Delta Z_2t = \alpha_2 (Z_{2\,t-1} - \beta Z_{t-1}) + e_{1t}$ ……..8

In this model, the right hand side variables represent the error correction terms

α= represent the coefficient that measures the speed of adjustment.

3.2.4 Granger causality test

Granger causality is the statistical hypothesis test that determines if one-time series variable is useful in forecasting another. In this study, the variables of interest are GDP and POV. GDP said to be granger cause POV if POV is good predicted using the histories of GDP and POV.

Let's Z and X represent time series variables

Then the granger causality by estimating VAR model

$Z_t = b_0 + b_1Z_{t-1} + ... + b_pZ_{t-p} + ... + b_pX_{t-p} + u_t$ ……...9

$X_t = c_0 + c_1X_{t-1} + … + c_p X_{t-p} + dZ_{t-1} + … + d_pZ_{t-p} + v_t$…….…….10

For the null hypothesis

Then for the testing H_0: $b_1 = b_2 = \ldots = b_p = 0$, H_A: Not H_0 X does not granger cause Z

H_0: $d_1 = d_2 = d_p = 0$, H_A: Not H_0, Z does not granger cause X

Where H_0 is the Null hypothesis

H_A is Alternative Hypothesis

4.0 RESULTS

4.1 The results of the Unit test

Table 1. Shows the results of unit root test based on Augmented Dickey-Fuller test (ADF) and Phillips- Perron (PP). As previously stated that before performing the analysis, the variables should be stationary after the first difference. The results of ADF and PP at level, shows that the GDP and [1]DPOVR have the P-value greater than 5% and critical values (both 1% and 5%) are greater than t-statistic, these indicate that variables are non- stationary both constant and constant &trend. The results of ADF and PP at first difference shows that the variables have P-value less than 5% and the critical value both (1% and 5%) are less than t-statistic, these imply that the variables become stationary (both constant and constant & trend) which are the requirement of this study.

Table 1: Result of unit root test

		Level					First difference				
Type of Test	Variables	Critical Value		P-Value	T-Statistic	Trend level	Critical value		P-Value	T-Statistic	Trend level
		1%	5%				1%	5%			
ADF	GDP	-3.71	-2.98	0.261	-2.061	Constant	-3.72	-2.98	0.000	-7.52	Constant
	GDP	-4.46	-3.60	0.24	-2.72	Constant & Trend	-4.39	-3.61	0.001	-5.75	Constant & Trend
	[2]DPOVR	-3.72	-2.99	0.41	-1.73	Constant	-3.73	-2.99	0.000	-4.86	Constant
	DPOVR	-4.37	-3.60	0.20	-2.82	Constant & Trend	-4.39	-3.61	0.003	-4.92	Constant & Trend

[1] DPOVR Meaning that the first difference of POVR

PP	GDP	-3.71	-2.98	0.36	-1.82	Constant	-3.72	-2.99	0.000	8.21	Constant
	GDP	-4.36	-3.60	0.28	-2.6	Constant & Trend	-4.37	-3.60	0.000	-18.30	Constant & Trend
	DPOVR	-3.71	2.98	0.88	-0.47	Constant	3.74	2.99	0.000	-4.86	Constant
	DPOVR	-4.36	-3.60	-0.13	-0.50	Constant & Trend	-4.39	-3.61	0.003	-4.92	Constant & Trend

4.2 Co-integration test results

The results in **Table 1** indicate that the two variables are stationary after the first difference. Since the variables are stationary then it is recommended to perform the Johnsen Co-integration test for testing the availability of the co-integration. If the test shows the availability of co-integration between the two variables then the variables have long run relationship. **Table 2** shows the Johnsen Co-integration test results with Trace Statistics test and Maximum Eigenvalue test. In the trace statistic test, the critical value (15.49) is less than the trace statistic (25.04) at None and the probability value (0.001) is less than 5%, indicates that there is no co-integration. The variables show the existence of co-integration in At most 1, where the critical value (3.84) is greater than the trace statistic value (1.59) and its probability value (0.207) greater than 5%.

The maximum Eigenvalue test result has the same results as the trace statistic test. The maximum Eigenvalue test result shows that the Critical value of (14.26) becomes less than the Max-Eigen statistic (23.45) with a probability value (0.001) less than 5% which implies that no co-integration at None. The existence of co-integration is appeared at (At most 1) where the critical value (3.84) is greater than the Max-Eigen statistic (1.59) and its probability value (0.207) greater than 5%. Since the results of both Trace statistic test and Maximum Eigenvalue tests show the existence of co-integration then the next step is to estimate the Vector Error Correction Model.

Table 2: Result of Trace statistics test and Maximum eigenvalue test

	Trace statistics test			Maximum Eigenvalue test		
No. of Co-integration(s)	Trace Statistics	Critical Value	P-value	Max-Eigen Statistic	Critical Value	P-value
None	25.04	15.49	0.001	23.45	14.26	0.001
At most 1	1.59	3.84	0.207	1.59	3.84	0.207

Sources: Own Computation using the E-views software

4.3 The Result of Vector Error Correction Modal (VECM)

Table 3.

As stated above the VECM is useful for estimate both the long run and short run effect of time series variables. Before estimating the VECM, it is important to select the number of lag using the criterion test. **Table 3** shows the results of lag selection based on five lag criterion tests (LR, FPE, AIC, SC and HQ). Out of the five criterion tests, three criterion (LR, SC and HQ) have select lag two while two criterion (AIC and FPE) has select lag 3. The guideline for selecting the best lag is to choose the lowest criterion value (Venus, 2004). The result shows that Final Prediction Error (FPE) has the lowest criterion value of 1.699551with a lag 3. Therefore, lag 3 is the best criterion to be used in the VECM model

Table 3: Result of lag selected by criterion

Lag	**LR**	**FPE**	**AIC**	**SC**	**HQ**
0	NA	312.7020	11.42090	11.51963	11.44573
1	94.47811	3.943429	7.044815	7.341031	7.119313
2	21.78199*	1.683503	6.182531	6.676224*	6.306693*
3	5.825031	1.699551*	6.166292*	6.857463	6.340120
4	2.376998	2.131271	6.344333	7.232981	6.567825

* indicates lag order selected by criterion

Sources: Own Computation using the E-views software

LR= Sequential Modified LR test statistic

FPE= Final Prediction Error

AIC= Akaike Information Criterion

SC = Schwarz Information Criterion

HQ = Hannan Quinn Information Criterion

Table 4

After getting the number of lag to be used then the next step is to estimate the long run and short run effect. **Table 4** shows the result of the long run and short run causality between the variables (GDP and POVR). The C (1) represent the speed of adjustment toward the long run equilibrium and it is negative as expected. Since the value of C(1) is negative and is statistically significant (p=0.03) then the variables GDP and POVR have long run relationship running from GDP to POVR and the speed of adjustment to attaining long run equilibrium steady is 46% yearly. The coefficients C (2), C(3), ...C(8) represent the short run causality. The coefficients of C (2), C(3),……C(8) have a p-value greater than 5% and not significant, this indicates that no short run causality between the variables.

Table 4: Result of Vector Error Correction Model

	Coefficient	Std. Error	T-statistic	Prob.
C(1)	-0.465569	0.201410	-2.311552	0.0365
C(2)	-0.437485	0.217254	-2.013704	0.0637
C(3)	-0.376909	0.232007	-1.624557	0.1265
C(4)	-0.008432	0.228082	-0.036968	0.9710
C(5)	-0.330424	0.195593	-1.689347	0.1133
C(6)	-0.119726	0.200550	-0.596987	0.5600
C(7)	-0.016222	0.197317	-0.082212	0.9356
C(8)	0.295666	0.245159	1.206018	0.2478

Sources: Own Computation using the E-views software

4.4 Granger causality test result

Table 5 indicates the results of the Granger causality between the variables. The number of lag selected is lag 3 as suggested by Final Prediction Error. The null hypothesis in this model should be accepted because the probability value is greater than 5%, meaning that the GDP does not cause POVR and also DPOVR does not cause GDP.

Table 5: Result of granger causality

Null Hypothesis	No. of lag	Obs	F-statistic	Prob
DPOVR does not Granger Cause GDP	3	23	1.40691	0.2772
GDP does not Granger Cause DPOVR			0.73861	0.5443

Sources: Own Computation using the E-views software

5.0 CONCLUSION AND RECOMMENDATION

5.1 Conclusion

Overall results show that economic growth is essential but not sufficient to support poverty reduction, however in long run, economic growth and poverty reduction will move together. The speed of adjustment of economic growth and poverty reduction to attaining long run equilibrium steady is 46% yearly. This speed gives hope to the government of Tanzania that in the future poverty will be minimized and people will enjoy the benefits of economic growth. Economists believed that economic growth benefits all people and therefore reduced the poverty. It could happen that the economic growth not support poverty reduction but is unlikely, as many studies' results show the positive impact of economic growth in poverty reduction. If the country experiences economic growth without poverty reduction implies that the distribution of income of the people is not equal. Meaning that economic growth raises the income of a certain group of people as result it creates a widening gap between those who have and those who have not. The above literature indicates that the countries with an equal income of distribution growing quickly, and the countries with a higher rate of economic growth over 30years have been able to reduce the poverty. Therefore, the findings can be concluded that the government of Tanzania

needs to put more effort to make sure that economic growth benefits nearly all people in the country.

5.2 Recommendation

The result indicates that economic growth is not enough to reduce the poverty but in the long run the economic growth will have a positive impact on poverty reduction. The higher speed obtained toward long run equilibrium it might be due to a number of strategies and development plans implemented by the Tanzania government. Based on these results the following recommendation can be forwarding. Firstly, Policymakers should take in mind that if the policy objective is to reduce the poverty as well as economic growth should simultaneously take into account as the final target. Secondly, the government should continue to improve transport and communication infrastructure, electricity should reach in rural areas, modernization of the market and trade sector, tourism sector and agricultural sectors should be improved. The improvement of these sectors is the ways of distributing income to the people because these sectors will generate more productive employment. Thirdly, the government should target vulnerable peoples that do not benefit from the public programme, such peoples are Women, Children, Elders, Persons with disabilities and other marginalized groups that have chronic poverty and exclusion from society.

Apart from the findings above, two limitations should be noted in this paper. Firstly, the scope of this study was just to investigate the relationship between economic growth and poverty reduction statistically and does not underlie the reasons for their relationship and secondly the analysis limited to the GDP and poverty reduction data, it would be very interesting to expand the study to other variables.

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