Poverty and Unemployment: The Case of its Contradiction in Nigeria

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Abstract
The study examined the contradiction between poverty and unemployment in Nigeria using annual time series dataset for the period 1977-2019 drawn from Central Bank of Nigeria Statistical bulletins (2020) and World Bank Development Indicators (2020). Dickey-Fuller Generalized Least Square (DF-GLS) technique is employed to examine the order of integration, and Johansen co-integration test established the movement of the variables in the long-run. The estimated results from Ordinary Least Square (OLS) technique shows a positive and significant association between poverty and unemployment rate, while government capital expenditure and investment in human resources are negative but significant related to poverty rate in Nigeria. Further investigation using pairwise Granger causality test indicated the existence of no bilateral or unilateral causality relationship between poverty and unemployment rate in Nigeria. From the estimated OLS results, immediate policy effort to stimulate the economy through job creation, infrastructural development, human capital development and promotion of business environment could expedite growth and reduce poverty rate in Nigeria. Therefore, government should provide an enabling business environment that can drive investment in order to boost employment opportunities, so as to reduce high rate of unemployment and poverty in Nigeria.

1. Introduction

In the recent evolving world, the increasing unemployment rate has become an all reaching phenomenon of great concern. It posed a hilarious hurdle that most nations are facing under the current economic circumstances (Oppong and Sachs, 2015). Even the developed nations have not shown exception to this frightful social malady, although the up-surge is more pronounced in the developing countries. In Africa and especially Nigeria, graduate unemployment is strikingly defying in the labour market. Improbably enough, Balogun (2016) hinted that almost half of the 10 million graduates, churned out of the over 668 universities in Africa yearly, do not get proficient jobs. This by implication goes to establish that, graduate unemployment is one of the most critical developmental problems facing the African continent. No wonder, poverty is broadly ascribed as a global quandary affecting over four billion people in the world. It is a critical phenomenon that calls for an urgent attention and solution all over the world. The need to alleviate poverty arises in order to enhance the quality of life through the creation of favorable standard of living by effective production and distribution of consumer goods and services as well as effective employment generation. The scourge has also shown a rising tendency in the past couple of decades accounting for the nation's low development indicators and its ranking alongside the poorest nations in the

world United Nations Organization, (2001) Poverty level in Nigeria is widespread, counter to the wealth of the country that include human and natural resources.

In Nigeria, the country is blessed with increasing number of humans, oil, natural gas and solid minerals but yet soiled in abject penury. Indicators from World Bank (2001) revealed that, about 66 per cent of the Nigerian population now fall below poverty line a dollar per day compared to 43 percent in 1985, this in a country which is estimated to have earned about 280billion US dollars from oil during the past thirty years. It is obvious that the wealth from oil sector has not been felt through many sectors of the economy because poverty is still a growing problem in Nigeria, however if poverty is characterized by hunger, ill health, inadequate or poor housing, illiteracy, malnutrition and unemployment then, there is no doubt that the majority of Nigerians are living below the poverty line as set out by the World Bank in 1990. Assessing the world poorest, in 1988, seven out of ten poorest counties were African countries though in 1990 it was six, but by 1995 it had decreased to eight out of ten poorest countries. The Nigerian situation becomes more pathetic when compared with other less endowed developing countries in Africa and other parts of the third world. In 1990, Nigeria's per capita income of $240 was well below the average of over $500 for sub-Saharan Africa, using per capital income as a measure of poverty, in1988 the African country with the highest GNP per capital of $ 2,290 was South Africa, when the world average GNP was $3, 470.

Today, the Nigerian labour market is characterized by high rate of unemployment, low wages and poor working conditions which also brought about other problems such as increase in crime rate, threat to peace and stability, reduction in investment, population drift, retardation of economic development, acute fall in standard of living induced by poor income levels, high poverty rates and inequality gaps and rising prices. While successive governments identified it as political maladies at different times yet sound answers have never been proffered as palliatives. Therefore, this study will not dwell on the existing economic and financial structural reforms but examine the nature of the relationship between poverty and unemployment by determining if there exists a causal link between the two variables. Suffice to say very few works had been conducted on poverty and unemployment alone and doubtfully any testing the causality between the two variables especially on Nigerian data. Most works had been on each or both in relation to economic development, economic growth or in relation to other macro-economic variables. The remaining parts of the study have been structured into stylized facts for part two; literature review for section three; methodology took care of part four; results and discussions for section five and conclusion ends it.

2. Literature Review

According to Sen (1983), poverty is the inability to procure basic goods and services due to low income which is insufficient to the basic needs, while World bank report (2000) perceived people with low income, low education, poor health, crime and violence, voiceless and powerlessness as poor. In like manner, Sancho (1996) further argued that the poor are those who are unable to obtain an adequate income, find a stable job, lack adequate level of education and cannot satisfy their

basic needs. In addition, Egunjobi (2003) and Odusola (1997) viewed poverty from a different dimension. They classified poverty into absolute and relative poverty. Absolute poverty indicates lack of minimum physical requirements of a person or household for existence, and is so extreme that those affected are no longer in a position to lead a life worthy of human dignity, while relative poverty shows the standard of living compared to economic standards of living within the same surroundings - someone may be considered poor despite meeting basic needs. Thus, relative poverty exists when the subject in consideration is poor in relation to other (Ajakaiye, 2003). Hence, there is no consensus on the key determinants of poverty, and to put in proper perspectives the mechanisms of poverty, various theories on the causes emerged. Such theories include Classical and neoclassical theories, and social exclusion and social capital theory. While classical theory perceived individual to be responsible for being poor, the neoclassical theory differs from the assertion. According to the postulate of Neoclassical theory, causes of poverty should not be only attributed to individuals alone, but also to other factors lack of social and private assets, as well as market failure that have resulted to the exclusion of poor individuals from activities that could improve the lives such as access to credit markets, barrier to education, poor health and barrier to employment. In addition, social exclusion and social capital theory is another strand of literature that emphasizes the cohesion between social exclusion and social capital. In as much of this theory never disputed the classical and neoclassical view, social exclusion and social capital theory believes that an important factor that could cause poverty is the structural characteristics of society and the situation of certain group.

In addition, Bello (2003) argued that unemployment from time immemorial has been a subject of great concern to policy makers in an attempt to finding solutions to poverty and economic rots of our age. According to Bello (2003), unemployment is a state in which people who can work are without jobs and are seeking for paid job. Furthermore, the international labour organisation (ILO) posited unemployed as those who either is out of work, want a job, have actively sought work in the last four weeks and are available to start work in the next two weeks or are out of work, have found a job, and are waiting to start it in the next two weeks. Hence, there seem to be an agreement on meaning of unemployment, but the main causes, and determinants of unemployment have attracted a divergent view and this has given rise to the emergence of different theories such as classical theory of unemployment as analyzed by Pigou (1933) and, McDonald and Solow (1981), and unemployment in the theory of innovation as developed by a German economist Von Mangoldt and edited by Ekelund and Hebert (2007). Hence, while the classical theory analyzed unemployment from the perspective of demand and supply of labour, the innovation theory of unemployment emphasizes on the factors that could promote profit making and generate more job opportunities for unemployed people. However, considering the fact that fast evolving nations aimed at achieving full employment, there has been so much empirical debate on the relationship between poverty and unemployment, as well as its implications in the Nigerian economy to enhance the understanding of policy makers in Nigeria.

In a study by Oni (2006), he argued that solutions to the problem of unemployment and poverty cannot be realized within one single epistemological approach. The reality of his argument is that

objectives of macroeconomic stability (although necessary in achieving economic growth) is not sufficient for the effective management of the labour market in the context of the lack of access to credit, lack of competitiveness, weak infrastructures and other constraints. Evidence in his research is the fact that macroeconomic stability alone cannot reduce poverty. Hence it should be accompanied with job creation which will reduce unemployment and other anti- poor strategies liable of ameliorating poverty. The evidence as provided by Oni (2006) supported the postulates of German economist Von Mangoldt and edited by Ekelund and Hebert (2007) on innovation theory of unemployment and the social exclusion and social capital theory. In addition, Onwioduokut (2006) pointed that a robust economic growth is achievable by good macroeconomic management proficiently viable of shrinking unemployment and poverty. According to his study, this can be achieved by expanding the level of economic activity and thereby creating employment and generating income. He however also included the role of the private sector, especially the small and medium enterprises and the need to re-examine the educational curriculum of various institutions to ensure that there is an effective nexus between what is produced and what is demanded in the labour market was emphasized, therefore government and the private sectors need to refocus on human investment and training which will reduce unemployment and generate income in the long-run.

Steward, (1985) investigates a model capturing Nigerian economy for growth and employment, which reflect some key features of the Nigerian economy and the important role of government investment in the economy. The investigations from the findings show that, increase in domestic investment in the country is either through augmented government or foreign capital which positively and strongly impact on growth, poverty reduction and employment. In like manner, Iwayemi (2006) assessed the macroeconomic growth, unemployment and poverty in Nigeria with the aid of three stage least square estimation technique on time series data from 1970 – 2000. The results show that poverty is positively related to unemployment rate, this implies that efforts geared towards reducing poverty will have a positive impact on unemployment, thus curbing unemployment. Similarly, key indicators of the state basic services in relation to the poor in Nigeria capable of influencing poverty like income inequality, potable water supply, and education was investigated by Dudley (1975). Since poverty could be seen largely in the light of the need for personal growth in Nigeria, which in economic literature is translated to imply basic needs which includes what any society should provide for its members such as food, clothing, shelter, education, health, work and mobility. Egunjobi, (2014) examined the relationship between poverty and unemployment in Nigeria over the period 1977 to 2010 using time series data set from secondary source. Estimation results from co integration, error correction modeling and causality test affirm that, all the explanatory variables significantly influence poverty with bilateral causal link. A comprehensive study on basic needs was undertaken by Fan (2002) vis-avis Nigerian poverty. The study revealed that, there is a substantial under-reporting in basic indicators especially in child mortality, diseases and morbidity. It also confirmed that, there is a positive urban bias in government expenditure for basic services to meeting basic food needs let alone basic services. This means that, the unemployed majority presumes acute government efforts inadequately taking care of their basic needs. In sharp contrast, Steward (1985) analyzed the

specific roles of public investment in promoting agricultural growth and poverty reduction in India using data from 1970 – 1993. It was reaffirmed by the estimation results that; components of government expenditure will not only arouse growth by generating income but also engender employment to reduce poverty. According to Iwayemi (2006), poverty can be drastically abated through the creation of viable employment outlets in Nigeria, Indonesia and Malaysia. It was further corroborated by findings of Todaro (1989) who substantiated that, poverty can be curbed in developing countries through the provision of employment opportunities for the very poor. Furthermore, the negative consequences of youth unemployment like poverty, psychological problem, frustration, depression, food insecurity and all manners of criminal behavior associated with urbanization was spotted by Adebayo, (1990). To this effect, every attempt to assist in abating unemployment among the poor youths will be drastically reduced, while providing an analytical framework for poverty reduction in Nigeria.

Idowu (1987) empirically examined the role of household physical and human assets endowments as means of determining poverty in Nigeria between 1985 and 1996 from data collected from national consumer surveys of 1985, 1992 and 1996. Estimated results from probits for the three periods revealed that, household endowments are considerable determinant of poverty among both rural and urban family circle. Out of all these endowments the education of the household stands as the most important determinant of poverty in Nigeria. In similar study, Meir (1989) justified that only those equipped with skills and good health can be employed and earns income. Therefore, education, health and general well- being of the majority of people in industrialized nations are as a result of national prosperity which indirectly implies reduction in unemployment and poverty.

3. Method

The study adopted Error-Correction Model in establishing the relationship between poverty and unemployment in Nigeria. The study used time series data that covers the periods 1977 to 2020 for the estimation, which was generated from Central bank of Nigeria statistical bulletins and statement of accounts. The relationship between poverty and unemployment in Nigeria is expressed in economic model as indicated in equations (1) and (2), which is transformed into linear model in equation (3):

$$POV = f(UNR) \text{ --- (1)}$$

It can be refocused in an estimable form as;

$$POV = f(UNR, GCX, HCD) \text{ ----------------------------------- (2)}$$

Thereby giving rise to the model;

$$POV_t = \alpha + \beta\, UNR_t + \theta\, GCX_t + \varpi\, HCD_t + \mu_t \text{ ------------------------------- (3)}$$

where: POV is the poverty level to be proxied with per-capita income. In some instances, poverty is measured using per capita consumption; per capita income, real GDP per head; real investment rate. However, due to limitations inherent with data generating process in Nigeria, per capita

income is considered the most appropriate proxy for. *UNR* represents unemployment rate which could be defined as people who can work are without jobs and are seeking for paid job. It shall be proxied using unemployment rate. *GCX* denotes per-capita government gross capital formation used as a measured of public expenditure on capital goods to capture the influence of public expenditure on poverty reduction. *HCD* is human capital resources development proxied with per-capita government capital expenditure on education. This variable was introduced into the model to capture the influence of investment in human resources development especially in education and training on poverty reduction in Nigeria. Thus, improvement in human capital resources development may results to improvement in the income of the people, standard of living, poverty reduction, and create more job opportunities. Hence, expressing equation 3 in error-correction model (ECM), equation 4 emerged.

$$POV_t = \alpha + \theta_1 UNR_t + \theta_2 GCX_t + \theta_3 HCD_t + \delta\ ECM_{t-1} + \varepsilon_t ----------------------(4)$$

where ECM_{t-1} depicts one period lag of the residual term from the long-run relationship if there exist co-integration; δ is the speed at which shocks in the short-run can be absorbed in the long run ; $\theta =_{1-3}$ explain the parameter estimate of the independent variables while ε is presumed to be normally distributed and white noise. In addition, using equations (5) and (6), we established the causal direction between poverty and unemployment.

$$POV_t = \sum_{t-1}^{n} \theta_i UN_{t-i} + \sum_{t-1}^{n} \phi_j POV_{t-j} + \mu_{1t} --------------------------------(5)$$

$$UNR_t = \sum_{t=1}^{n} \beta_i POV_{t-i} + \sum_{t=j}^{m} \varphi_j UNR_{t-j} + \mu_{2t} ------------------------------(6)$$

From equations 5 and 6 above, it is obvious that, the current level of poverty is related to the past values (POV_{t-1}) as well as that of the unemployment rate. Noteworthy are the elasticities of the parameter estimates drawn from the model like $\theta, \emptyset, \beta\ and\ \varphi$. The underlining apriori expectation is set to design if POV_t and UNR_t would be statistically significantly different from zero. Therefore, if $\sum \alpha_i \neq 0$ and $\sum \beta_j \neq 0$ holds, it implied a bilateral causality tie between POV_t and UNR_t in Nigeria. In addition, in estimating equation (3) and (4), Ordinary Least Square (OLS) is adopted. The estimation procedure began by pre-testing the time series properties of the data using the Dickey-Fuller Generalized Least Square (DFGLS) de-trending unit root test proposed by Elliot, Rothenberg and Stock, (1996) since most economic variables have been shown to be non-stationary. The choice of DF-GLS is necessitated by its performance in terms of sample size and strength. The test of stationarity was then followed by the Johansen co-integration test which sought to establish whether or not the dependent variable is co-integrated with the explanatory variables. Here, the confirmation of co-integration relationship means that the long run model cannot be spurious (Johansen, 1998). Also, an error correction mechanism was also employed using the error correction model (ECM). The study employed Granger Causality to ascertain the direction of causality between poverty and unemployment in Nigeria. Granger proposed that for a pair of linear covariance stationarity time series X and Y; X causes Y if the past values of X can be used to predict Y more accurately than simply using the past values of Y. The Granger causality

test requires the use of F-statistic to affirm whether lagged information on a variable say "Y" offer any relevant statistical information about another variable say "X", if not then 'Y' does not Granger cause 'X'. The decision rule will be made with the help of the probability value of the F-statistic. If the computed probability value of the F-statistics exceeds the critical value at 5% (0.05) level of significance, the null hypothesis will be rejected or otherwise do not reject.

4. Results

The study first presents the descriptive statistic for a clearer picture on the behaviour of the data employed for the study as shown below. After the discussion of the results of the descriptive statistic, we presented and discussed the results of DF-GLS unit root test, Johansen Co-integration test, Estimated long-run, Error correction model and Pairwise Granger Causality.

Table 1: Summary results of descriptive statistic

	POV	UNR	GCX	HCD
Mean	8.230435	7.249008	11.30251	9.546254
Median	6.150000	7.340540	11.40722	9.545695
Maximum	18.10000	12.84545	16.5486	15.71526
Minimum	1.900000	3.170323	7.500364	5.729125
Std. Dev	4.890665	2.258974	2.242577	2.275229
Skewness	0.548029	0.709195	0.496607	1.186236
Kurtosis	1.712336	4.322659	3.675539	5.238245
Jarque-Bera	5.480562	7.209071	2.765416	20.39019
Probability	0.064552	0.027200	0.250898	0.000037

Source: Author's computation

From the descriptive statistic in table 1 above, the mean and median of the variables are not too far from each other. Also, the skewness, Kurtosis and Standard deviation statistics explains the differences in the variables not to be too significant. This analysis indicates that variables capable of curbing poverty toward enhancing sustainable growth in Nigeria over the period 1977- 2019 are significant. In addition, the Dickey Fuller-Generalized Least Square (DF-GLS) is employed (see table 2 below) to appraise the null hypothesis of non-stationarity which is rejected if the DF-GLS is more negative or greater than the critical values in absolute sense at 5% level of significance.

Table 2 Results of DF-GLS unit root test

	At Levels		At First Difference		
Variable	DF-GLS Stat	Crit Val @ 5%	DF-GLS Stat	Crit Val @ 5%	Ord of integration
POV	-1.3624	-1.9483	-4.5798**	-1.9485	I(1)
UNR	0.7093	-1.9483	-5.1236**	-1.9485	I(1)
GCX	0.6969	-1.9483	-5.3179**	-1.9484	I(1)
HCD	0.7531	-1.9483	-6.3489**	-1.9485	I(1)

Source: *Author's computation*

The DF-GLS unit root test affirms that the variables are stationary at first difference. Since the variables are integrated of the same order, we suspect that the variables are cointegrated and thus, finding their long-run relationship becomes expedient. Hence, he co-integrating test results originating from the variables in equation 3 are as shown below:

Table 3: Summary of Johansen Co-integration test for the variables

No. of Cointeg equations	Eigen Value	Trace Statistic	Critical Val @ 5%	Prob Value
None*	0.6124	54.6899	39.8189	0.0101
At Most 1*	0.4062	34.2097	42.0139	0.1208
At Most 2*	0.2437	20.046	29.7971	0.3897

Source: Author's computation

Null hypothesis for 'None' states that "there is no co-integration among the variables". However, since the probability value (0.0101) is less than 5%, the null hypothesis of no co-integration is rejected and therefore accepts the alternative that, there is co-integration. For the 'At most 1', the null hypothesis states that there is at most one co-integrating equation. Since the probability value (0.1208) is greater than 5%, the null hypothesis of having at most one co-integrating equation should not be rejected. The probability value (0.3897) for the co-integrating equation (At most 2) is more than 5%. This means the null hypothesis cannot be rejected and thus, there are at most two co-integrating equations among the variables. The confirmation of co-integration amongst the variables suggests that there is a long run relationship and that the regression result at level is justifiable. Hence, the long-run estimation on the impact of unemployment (UNR) and other control variables (GCX and HCD) are presented on table 4 below

Table 4: Estimated long-run results (Dependent Variable – POV)

Variable.	Coefficient	t-statistic	Probability
UNR	0.5926	4.0127	0.0021
GCX	-0.5629	-2.3752	0.0176
HCD	-0.4890	-3.1063	0.0429
C	0.3728	1.8723	0.6245
R^2 = 0.793334			
R-Adjusted = 0.770371			
F-stat. = 34.54846			
Prob(F-Stat) = 0.00000			
Durbin Watson = 1.158770			

Source: Author's Computation

From table 4 above, it is obvious that the entire variables are appropriately signed and significant in influencing poverty. By implication, any one percent rise in Unemployment rate result to 59.26 percent increase in poverty supporting the results of empirical studies conducted in Nigeria by Egunjobi, (2014) and statistically significant. On the other hand, per capita Government gross capital formation as a measured of government capital expenditure is negative but statistically significant in influencing poverty status in Nigeria. This means that, if government capital expenditure rise by one percent, it could lead to 56 percent fall in poverty. If the needed infrastructures are provided by the government, viable foundation capable of ensuring investment prospects would strive to boost production and growth in Nigeria. Thus, negative and statistically relevant relationships exist between government gross capital expenditure and the level of poverty in Nigeria agreed with the study of Oduwole, (2015). Finally, Per capita government capital expenditure on education as a measure for human capital resources development is negative and statistically significant in influencing the rate of poverty in Nigeria. By implication, any one

percent rise or fall in human capital resources development will lead to 49 percent fall or rise in poverty. This is achievable if more attention is given to developing the human capital. Thus, since most variables are co-integrated after the first difference, the needs to restore any possible deviation capable of influencing the model in its drive to equilibrium become necessary. Hence, the short-run dynamic relationship is established using error correction mechanism (ECM). The ECM specifies the short run adjustments dynamics and is employed to correct any deviations from the long run equilibrium relationship between the dependent variable and the explanatory variables (see table 5).

Table 5: Error Correction Estimated Results

Variable	Coefficient	t-statistic	Prob. Value
C	0.8194	2.1943	0.0411
UNR	-11.6012	-0.8266	0.5621
GCX	8.2714	1.4197	0.0658
HCD	0.9456	2.4317	0.0342
ECM(-1)	-5.6945	-2.5186	0.0429
R^2 = 0.5981			
R^2 Adjusted = 0.5706			
F-statistic = 5.6310			
Durbin Watson stat = 1.8431			

Source: Author's Computation

The coefficient estimate for the error correction model (-5.6945) term is negative and statistically significant (-2.5186) justifying that, any seeming change in an attempt to check poverty in Nigeria will be restored at a speed of 57% the next year by Unemployment rate, government capital expenditure and human capital resources development. The statistically significant error correction model reaffirms the existence of a long-run relationship running from the dependent to the independent variable. The study further investigates the causal direction between poverty and unemployment using Pairwise Granger causality techniques stated in equations (5) and (6) above. The results are presented in table 6 below.

Table 6: Pairwise Granger Causality Test Result between poverty and unemployment

Null Hypothesis	Observation	F-statistics	Prob. value
UNR does not Granger cause POV	42	3.3265	0.36792
POV does not Granger cause UNR	42	1.3826	0.08693

Source: Author's Computation

From the Granger Causality test table above, it is affirmed that there is no causality tie existing between Unemployment and poverty at 5% level of significance owing to the fact that, the probability values of their F-statistics deduced from the pair of null hypotheses were all greater than the critical value at 5% level of significance.

5. Discussion

Evidence from the findings shows that increase in unemployment rates results to an increase of rate of poverty in Nigeria. This implies that a unit increase in unemployment rate result to 59.26 significant increases in poverty in Nigeria (see table 4). Therefore, a significant increase in poverty reduction in Nigeria could be achieved by policy initiation that can create more job opportunities. Such policies include creating friendly business environment and incentives such tax holiday, removal levies, provision of social amenities and adequate credit facilities. Thus, these would promote growth and development of small and medium enterprises and facilitate significant reduction in poverty through job creation in Nigeria. Hence, these findings were found to be consistent with the study by Egunjobi, (2014) which also stressed that reduction in unemployment rates will statistically reduce poverty rate in Nigeria. Similarly, further investigation revealed that per capita government gross capital formation as a measured of government capital expenditure (GCX) is negative but statistically significant in influencing poverty in Nigeria. This means that, a unit increase in government capital expenditure, result to -0.5629 fall in poverty reduction in Nigeria. Thus, these findings support the important of infrastructural development and the postulates of unemployment in the theory of innovation as developed by a German economist Von Mangoldt and expanded by Ekelund and Hebert (2007). Consequently, improvement in infrastructure may ensure investment prospects that can boost production and growth in Nigeria. Hence, this finding also supported the evidence as provided by Oduwole (2015). Furthermore, we further control for the influence of per-capita government capital expenditure on education (proxied with human capital development - HCD) in poverty. Hence, an inverse relationship between human capital development and poverty were observed. This suggests that a unit increase in HCD, result to a decrease in poverty by -0.4890. Therefore, a significant improvement in per-capita government expenditure in education would significantly promote poverty reduction vis-a-vis. This stressed the important human capital development as a means of addressing poverty. From these findings, to achieve a significant reduction in the rate of poverty in Nigeria, policy initiatives that promote human capital development should be initiated and encouraged.

In addition, since most variables were observed to be co-integrated, the short-run dynamic (ECM) is examined to correct the possible disequilibrium in the model (see table 5). The ECM specifies the short run adjustments dynamics, employed to correct any form of deviations from the long run equilibrium relationship between the dependent variable and the explanatory variables. The ECM (-1) result (-5.6945) is negative and statistically significant, suggesting that last year's deviation from a long-run equilibrium, influences its short-run dynamics. Thus ECM (-1) directly estimate the speed (57%) at which poverty rate (POV) returns to equilibrium after a change in unemployment rate (UNR), government capital expenditure (GCX) and human capital resources development (HCD). Also, the statistically significant of ECM (-1) reaffirms the existence of a long-run relationship existing between poverty, unemployment and other control variables in the long run. This implies that an increase or decrease in UNR, GCX and HCD would cause a significant increase or decrease in poverty rate in the long run in Nigeria. Therefore, the need to improve on infrastructural development and human capital development is paramount to promote

investment and in turn create job opportunities that may enhance per-capita income and expenditure of the households in Nigeria. In order to investigate the direction of causality between poverty and unemployment, Pairwise Granger causality test (see table 6) is estimated and the results show no evidence of causality relationship between poverty and unemployment at 5% level of significance.

6. Conclusion

The study investigated the contradiction of poverty and unemployment over time using the most recent dataset from Nigeria between 1977 and 2019 with all the variables appropriately signed and statistically significant. The estimation procedure began by pre-testing the time series properties of the data using the Dickey-Fuller Generalized Least Square (DFGLS) de-trending unit root test. It was affirmed by DF-GLS that, all the variables are integrated of order one I(1). The test of stationarity was then followed by the Johansen co-integration test which established that, dependent variable is co-integrated with the explanatory variables. Here, the confirmation of co-integration relationship means that the long run model cannot be spurious (Johansen, 1998). Based on the Granger Causality test, there exists no bi or unilateral causality relationship between poverty and unemployment rate in Nigeria. Estimation results from Ordinary Least Square confirmed that, there exists a positive and significant relationship between unemployment rate and poverty while government capital expenditure and investment in human resources are negative but statistically significant in influencing poverty in Nigeria. This condition therefore calls for an immediate policy effort to stimulate the economy in the path of curtailing acute poverty and disparities in order to restore and strengthen the economy by creating employment outlets, investing in human capital development and skill acquisition by providing a favorable environment for investment to thrive. This study however submits that, Government should provide the necessary infrastructures capable of making investment thrives by not only increasing its capital expenditure but investing in projects that will generate more employment opportunities to curb the tempo of poverty of mind. Government should also make monetary and fiscal policies viable to encourage the private sector as well as the foreign allies to invest thereby creating more employment opportunities.

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