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AN EXAMINATION OF THE CAUSAL RELATION BETWEEN UNEMPLOYMENT, ECONOMIC GROWTH AND POVERTY IN NIGERIA (1980-2020)

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ABSTRACT

The study appraised the response of poverty to unemployment rate and economic growth in Nigeria between 1980 and 2020.It also analyzed the trend and pattern of poverty, unemployment and economic growth, and determined the causality relationship among poverty, unemployment and economic growth in Nigeria. Annual time series secondary data covering the period within 1980 to 2020 were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin (2020) World Development Indicator (WDI) and National Bureau of Statistics. The study made used of Vector Autoregressive estimation techniques (VAR) and Vector Error Correction Model (VECM). Pair wise Granger Causality was used to check the direction of causality. The descriptive statistics indicate a good level of consistency in the data series. The econometric analysis shows a bidirectional causal relationship, running poverty to unemployment. while there is an independent causal relationship running from economic growth to poverty. This result does not conform to the a-priori expectation. The result shows that, even if economic growth expands, it does not reduce poverty incidence in the Nigerian. The study discovers that while GDP was growing, poverty situation in Nigeria did not improve, instead, it got worsened. The study concluded that promoting end poverty and unemployment policy and programmes in Nigeria and achieving any sustainable economic growth, there should be targeted interventions of the government to economic growth unemployment and poverty reduction simultaneously and not indirectly depending on the trickle- down effect of economic growth alone.

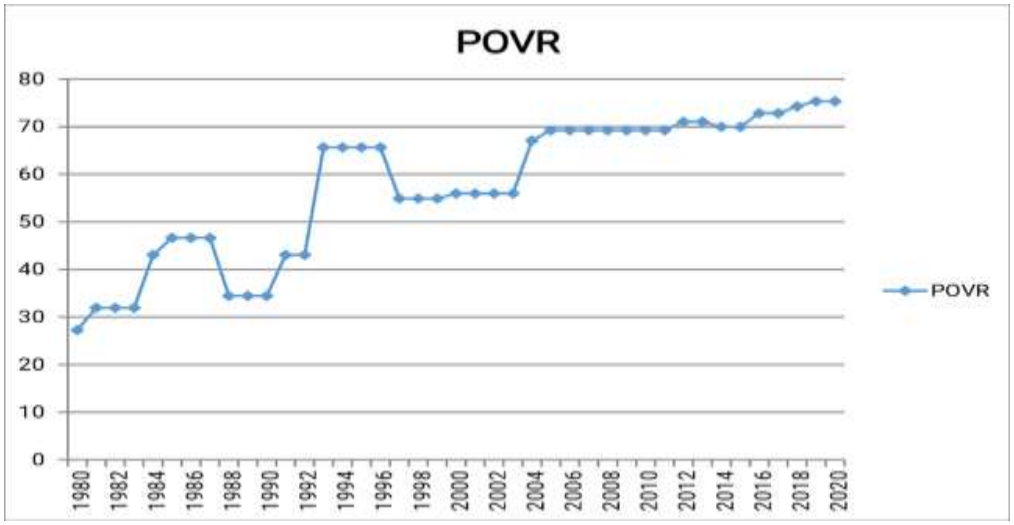
1.0 Introduction

Over many years, there is a noticeable increase in the population that is impoverished. Consequently, the outcomes of a World Bank study conducted in 2019 showed that worldwide poverty has grown to be an extensive issue. The persistence of low standards of living in many parts of the world would be one area that raises concerns about global development for both individuals and organisations, according to Rizwanu (2004). More than four billion people live in poverty worldwide, according to World Bank data (2020). As a result, world leaders and policymakers in both developed and developing nations now consider it imperative to address and combat poverty. By offering a more favorable standard of living and generating job possibilities, this seeks to improve people's quality of life. As to Anigbogu's (2014) assertion, the phrase "to tackle poverty" denotes the act of minimizing or mitigating poverty.

However, lowering the rate of poverty is the main goal of contemporary economic development (as stated in the Sustainable Development Goals and the Millennium Development Goals) in the twenty-first century. Eliminating poverty by 2030 is one of the main objectives of the Sustainable Development Goals (SDGs), especially in emerging and underdeveloped countries like Nigeria. Apart from the primary objective of the Millennium Development Goals (MDGs), which is to decrease the high prevalence of poverty worldwide (Anigbogu, 2014), eradicating poverty was a significant goal. However, unemployment and poverty remain major obstacles to development in Africa, especially when it comes to the rate of economic growth on the continent. The pattern of poverty and economic progress in Nigeria has caused concern and sparked scholarly study in this topic.

The connection between unemployment, the alleviation of poverty, and economic progress in Nigeria has sparked a great deal of discussion among academics over the nature of the relationship and whether or not it is a unidirectional or bidirectional chain of causation. The role of the government, on the other hand, is unavoidable in any nation that wishes to successfully combat poverty and boost its rate of economic expansion. It is imperative that the government redouble its efforts to bring the unemployment rate down (Bournguignon, 2003). This is a finding that cannot be refuted. Unemployment and poverty are both extremely widespread in Nigeria, a country in which earnings and money are highly unequally distributed and tend to concentrate in the hands of a small number of people (Ajibola, Loto, & Enilolobo, 2018). According to one school of thought, unemployment is the primary factor contributing to poverty (Debroy & Bhandari, 2007). The exceptionally high proportion of poverty in Nigeria has had a negative impact on the country's economy as a whole. The problems of poverty, unemployment, and the lack of progress in human development cannot be completely neglected if long-term growth and development are to be achieved (Jelilov, 2016).

Akeju and Olanipekun (2014) used Okun's law to conduct research on unemployment and economic growth in Nigeria. Their findings demonstrated that there is a negative correlation between unemployment and economic growth in the country. Poverty and unemployment have persisted as fundamental challenges for the economy, much like they do in other African nations. It has resulted in the denial of choice and chances for humans to live a life that is bearable (United Nations, 1997), despite the fact that there is enough. In addition to this, the number of young people in Nigeria who are without jobs continues to rise, even as the wealth gap between the country's rich and poor widens. In light of this, the purpose of this study is to investigate the nexus of unemployment, poverty, and economic growth in Nigeria by establishing a long-run and causal relationship between unemployment, poverty, and economic growth. Specifically, the authors of this study looked at data from the country.



Source: Author computation based on data from NBS and World Development Indicator

Figure 1: Trend of Poverty Growth Rate in Nigeria over the years (1980 -2020)

2.0 Literature Review

2.1 Empirical Review

Nyasha, Gwenhure, and Odhiambo (2017) and Nuruddeen and Ibrahim (2014) has discovered that there is a unidirectional causality flowing from low income to increased economic growth. It follows that the rate of economic expansion has a major bearing on the level of poverty. Other researchers (Afzal, 2012; Garza-Rodriguez, 2018; Dewi et al., 2018) have discovered that the nexus between poverty and economic growth has a long-run bi-directional causality. This was found in their investigations. Okoroafor and Chinweoke (2013) and Nindi and Odhiambo (2015) have argued that there is a short-run bi-directional relationship between economic growth and poverty in the case of Nigeria, but that in the long run, the variables do not have a statistically significant impact on one another. In the long run, the variables are not statistically significant.

Using annual data sets spanning the years 1980 to 2015, Maku and Alimi (2018) investigate the ways in which various fiscal policy measures influenced the establishment of employment opportunities in Nigeria. The revenue from taxes and expenditures made by the government were used as measurements of fiscal tools, and the degree of employment in rural, urban, and national areas was taken into consideration. The findings of the Engel and Granger co-integration test suggest that there is a connection, at least in the long run, between the various employment levels and the fiscal policy instruments utilized in Nigeria. According to the results obtained using the method of ordinary least squares, the level of manufacturing production and the level of spending by the government both have a beneficial impact on employment generation. This suggests that there is a decrease in the unemployment rate that may be attributed to an increase in the production from the manufacturing business in Nigeria as well as an increase in the government's spending. The fact that the coefficients for tax income and agricultural output were negative shows that these factors do not make employment levels go up.

Bakare and Ilemobayo (2013) revealed a clear association between the rate of growth in Nigeria economy and poverty rate. This suggests that as economic growth rate rises, poverty level also rises. Productivity and the number of job prospects both have the potential to increase continuously and over time when the growth rate is high. In 2017, Gangas conducted an empirical investigation into the association between the progress of the economic and alleviation of poverty in Nigeria (2017). The OLS was used to conduct an analysis on the secondary

data, which covered the years 1980 to 2013, and the data span (ordinary least square). The findings revealed that the connection that exist between poverty and economic growth is one that is antagonistic to one another.

2.2 Theorical Review

Keynesian Approach

According to Aghion and Bolton (1997), Keynesians believe that economic expansion not only promotes economic progress but also leads to a reduction in poverty levels. It provides further justification for Keynes's suggestion that state intervention in the market system is important and necessary. Involuntary unemployment, social inequality, and income inequality are all problems that must be addressed through government involvement (Dollar & Kraay 2002). The Keynesian school of thought argues that governments should place a high priority on economic growth, believing that expansion will lead to poverty reduction. That is, in the long run, the less fortunate will benefit from a country's higher economic growth (Bourguignon 2004). Therefore, policies and programs aimed at reducing poverty should focus on promoting economic growth (Aghion and Bolton, 1997). The "trickle-down hypothesis" suggests that economic growth is an important part of poverty reduction in any country, as long as the way money is distributed remains the same (Thorbecke, 2013).

Keynes's view emphasizes macroeconomic factors and the role of government, with the aim of ensuring both the provision of public goods and maintaining economic stability (Todaro 1997). The neoclassical view of employment is based entirely on "market supply and effective demand", which leads to production, which in turn leads to increased income, which in turn creates available employment opportunities (Dollar and Kraay, 2002).

The key principle in Keynes' analysis of this phenomenon is that poverty is not a choice and unemployment is the root of the problem. This suggests that the main reason why people are poor is because they are unemployed. Adekoya (2018) argues that reducing the number of people living in poverty can be achieved by focusing on promoting economic growth, reducing income inequality, and reducing unemployment.

Some recent studies are based on endogenous and exogenous methods (Fosu, 2010; Easterley, 2000; Bourguignon, 2003), but due to the complexity of the topic, no conclusions can yet be supported. The exogenous method is based on the groundbreaking work of Kuznets (1955) and many other researchers emphasizing the trickle-down mechanism. In the long run, this suggests that the poor will naturally benefit from growth if it "waters down" them. The endogenous approach revisits the Kuznets U-shaped curve and argues that economic progress does not automatically "trickle down" to the poorest in the long run. This view is supported by the fact that Kuznets himself proposed the endogenous approach (Fosu, 2010; Easterley, 2000; Bourguignon, 2003).

3.0 Methodology

3.1 Data Description and Sources

Ex-post factor research design is used in this study's quantitative analysis. 41 years of data were used in the study (1980 - 2020). The World Development Indicator, the Central Bank of Nigeria Statistical Bulletin (2020), and publications of the National Bureau of Statistics were used to acquire secondary data using an econometric approach.

This study used yearly data time series spanning the years 1980 to 2020 in order to estimate the relevant models and assess the statistical direction of the variables.

3.2 Model Specification

To investigate the relationship between poverty, unemployment and economic rate in Nigeria, a single model will be specified.

$$POVR = f(GDP, UNM, HDI)$$

Where; GDP represents Economic Growth, UNM represents Unemployment, HDI represents Human Development Index and POVR represents Poverty index.

According to Granger (1969), a variable X is said to Granger cause another variable Y, if Y can be better predicted from the past of X and Y together than the past of Y alone, other relevant information is used in the prediction.

$$PCI = \beta_0 + \beta_1 FDI + \beta_2 AGP + \beta_3 INF + \beta_4 GFCF + \beta_5 EXR + \beta_6 INT + \mu$$

A priori expectation: $\beta_1, \beta_2, \beta_4 > 0$; $\beta_3, \beta_5, \beta_6 < 0$

3.3 Estimation Techniques

To determine the link between poverty, unemployment, and economic growth in Nigeria, the study will use the VAR model. Hamilton (1994) asserts that VAR is really a condensed version of several simultaneous equation models. As all of the variables in a VAR are endogenous, it only has lag variables on the right-hand side and can help determine which contemporaneous variables are exogenous. Thus, the following describes a VAR model;

$$Z_t = \alpha_0 + \sum_{i=1}^{p} \beta Z_{t-1} + \varepsilon_t$$

Where Z_t is a vector of endogenic variables, α_0 is an (nx1) vector of constants, β is an (nxn) matrix of co-efficient, p is the maximum lag length, and ε_t is an (nxn) vector of error terms. Although, the dynamic relationships among variables are modeled empirically as a VAR, but a simple linear model based on economic theory is used to model the contemporaneous relationships. To model the variables of interest in a VAR process, we have equations (5) to (7) as stated below:

$$GDP = \theta_0 + \sum_{i=1}^{n}\theta_1 GDP_{t-i} + \sum_{i=0}^{n}\theta_2 POVR_{t-i} + \sum_{i=0}^{n}\theta_3 \Delta UNM_{t-i} + \sum_{i=0}^{n}\theta_4 HDI_{t-i} + \mu_1 \quad \ldots\ldots 3$$

$$POVR = \beta_0 + \sum_{i=1}^{n}\beta_1 GDP_{t-i} + \sum_{i=0}^{n}\beta_2 POVR_{t-i} + \sum_{i=0}^{n}\beta_3 \Delta UNM_{t-i} + \sum_{i=0}^{n}\beta_4 HDI_{t-i} \quad \ldots\ldots\ldots 4$$

$$UNM = \propto_0 + \sum_{i=1}^{n}\propto_1 GDP_{t-i} + \sum_{i=0}^{n}\propto_2 POVR_{t-i} + \sum_{i=0}^{n}\propto_3 \Delta UNM_{t-i} + \sum_{i=0}^{n}\propto_4 HDI_{t-i} \quad \ldots. 5$$

One of the benefits of VAR technique is that, it accounts for the dynamic properties and relation of time series variable. VAR technique is better compared to a single approach for capturing the long run dynamic relationship among variables (Ahmet, 2008). VAR model is a common framework that is used to explain the dynamic interrelationship among stationary variables.4.0 Result and Discussion

4.1 Vector Error Correction Model (VECM)

The value of the error correction coefficient indicates how quickly the model will change to recover its equilibrium after any shocks. The fact that the coefficient of ECT with POVR and GDP as dependent variables is both negative and statistically significant indicates that there is a convergence from short-term dynamics towards long-term equilibrium. In the event that the situation is one that is out of equilibrium, the adjustment coefficients are 0.48 and 0.35 percent, respectively, working toward long-term equilibrium. In the cases of UNMR and HDI, the adjustment coefficients are positive, but they are not statistically significant. This shows that neither of the two out-of-balance situations has made any real changes to move toward long-term equilibrium.

***Table 1**: Vector Error Correction Estimates*

Cointegrating Eq:	CointEq1			
POVR(-1)	1.000000			
GDP(-1)	0.002962			
	(0.00254)			
	[1.16789]			
UNMR(-1)	-0.352093			
	(0.83938)			
	[-0.41947]			
HDI(-1)	-2.027038			
	(0.37700)			
	[-5.37681]			
C	8.319420			
Error Correction:	D(POVR)	D(GDP)	D(UNMR)	D(HDI)
CointEq1	-0.480184	-0.348288	0.003991	0.010129
	(0.09588)	(5.26638)	(0.01504)	(0.01941)
	[-5.00822]	[-0.06613]	[0.26545]	[0.52195]
D(POVR(-1))	-0.033677	8.575733	-0.027046	-0.011665
	(0.12862)	(7.06490)	(0.02017)	(0.02603)
	[-0.26183]	[1.21385]	[-1.34086]	[-0.44808]
D(GDP(-1))	-0.000774	0.407590	0.000666	-1.66E-05
	(0.00203)	(0.11146)	(0.00032)	(0.00041)
	[-0.38135]	[3.65668]	[2.09259]	[-0.04037]
D(UNMR(-1))	-6.074943	138.8927	0.417789	-0.059655
	(1.11404)	(61.1912)	(0.17470)	(0.22549)
	[-5.45306]	[2.26981]	[2.39143]	[-0.26455]
D(HDI(-1))	-0.884180	97.04624	-0.040997	-0.050829
	(0.86305)	(47.4049)	(0.13534)	(0.17469)
	[-1.02448]	[2.04718]	[-0.30291]	[-0.29097]
C	5.152289	-102.8900	0.413077	0.898914
	(1.12145)	(61.5983)	(0.17586)	(0.22699)
	[4.59430]	[-1.67034]	[2.34884]	[3.96009]
R-squared	0.533744	Mean dependent var		1.110256
Adjusted R-squared	0.463099	S.D. dependent var		5.380559
S.E. of regression	3.942526	Akaike info criterion		5.722158
Sum squared resid	512.9358	Schwarz criterion		5.978091
Log likelihood	-105.5821	Hannan-Quinn criter.		5.813985
F-statistic	7.555310	Durbin-Watson stat		2.402674
Prob(F-statistic)	0.000080			

According to table 4.6 the fact that the long coefficient C(1) is negative and significant demonstrates that there is a causal relationship between UNMR, HDI, GDP, and POVR in the long run. The presence of a negative sign in the coefficient indicates the capacity to return to an equilibrium state. The plus symbol denotes motion in the opposite direction of maintaining balance. The short run coefficient C(2), an increase in the POVR as a percentage, will result in a 0.03 percentage point decrease in the POVR. C(3) An increase of one percentage point in GDP will cause the POVR to go down by

0.0007 percent. C(4) A percentage increase in UNMR results in a 6.07 percentage point decrease in POVR. C(5) A 0.88 percent decrease in POVR will occur as a result of a 0.88 percent increase in HDI. While C(6) might be thought of as a constant or an intercept.

4.2 Causality among Poverty Reduction, Unemployment and Economic Growth

Table 4.8 presents the findings of the Pairwise Granger causality test. The results show that economic growth (GDP) and poverty (POVR) do not granger cause one another, as their respective probability values are greater than the 0.05 level of significance. As a result, we believe the alternative hypothesis, which states that GDP does not Granger cause POVR and that POVR does not cause GDP. As a consequence of this, the variables each have their own independent causality. According to this result, it appears that the rate of economic growth in Nigeria has had no impact on the level of poverty in the country, and vice versa. This suggests that neither variable has any significant effect on the level of poverty that is experienced over the long term in Nigeria or vice versa.

Both unemployment (UNMR) and poverty (POVR) are examples of variables that exhibit granger causality due to the fact that their respective probability values are lower than 0.05 (0.0090 and 0.0103, respectively). As a result, we conclude that the null hypothesis that UNMR does not granger cause POVR and vice versa cannot be supported. As a consequence, the relationship goes in both directions. Based on these findings, it appears that an increase in the level of poverty has an impact on the unemployment rate and vice versa. This suggests that an increase in the level of poverty results in an increase in the level of unemployment in the long-run in Nigeria and that the level of unemployment results in an increase in the level of poverty. This result fits with the Keynesian school of thought, which says that unemployment is unavoidable and that people who live in poverty don't choose to stay poor; rather, they stay poor because there aren't enough jobs that pay well.

In contrast, when it comes to the relationship between human development and poverty, we conclude that the null hypothesis that HDI does not Granger cause POVR cannot be correct because the probability value is lower than 0.05. However, taking into account the probability value of 0.9634 and the fact that we are using a significance level of 5%, we have decided to accept the alternative hypothesis that POVR does not granger cause HDI. The findings point to the existence of a unidirectional causality relationship between HDI and POVR at the 5% significance level, whereas there is no such relationship between POVR and HDI. Based on these findings, it appears that an increase in the human development index does not have an effect on the level of poverty, but rather that the level of poverty in Nigeria has an effect on the human development index. This means that long-term poverty makes the level of human development go down, but long-term human development has no effect on the level of poverty in Nigeria.

***Table 2**: Pairwise Granger Causality Tests*

Null Hypothesis:	Obs	F-Statistic	Prob.
GDP does not Granger Cause POVR	39	1.25524	0.2979
POVR does not Granger Cause GDP		1.20736	0.3115
UNMR does not Granger Cause POVR	39	5.42910	0.0090
POVR does not Granger Cause UNMR		5.25122	0.0103
HDI does not Granger Cause POVR	39	4.30621	0.0215
POVR does not Granger Cause HDI		0.03737	0.9634
UNMR does not Granger Cause GDP	39	5.05458	0.0120

GDP does not Granger Cause UNMR		2.41291	0.1047
HDI does not Granger Cause GDP	39	5.12882	0.0113
GDP does not Granger Cause HDI		2.14058	0.1332

In a similar vein, when it comes to unemployment and economic growth, we reject the null hypothesis that UNMR does not affect GDP because the probability value (0.0120) is lower than 0.05. This is because the null hypothesis states that unemployment does not cause GDP. However, given that the alternative hypothesis has a probability value of 0.1047 at the 5% significance level, we have decided to adopt it. It states that GDP does not cause UNMR. The findings point to the existence of a unidirectional causality relationship between UNMR and GDP at a significance level of 5%, but there is no evidence of a causality relationship running in the opposite direction from GDP to UNMR. This conclusion indicates that the rate of economic growth in Nigeria is affected not by the degree of unemployment in Nigeria, but rather the rate of unemployment in Nigeria affects the rate of economic growth in Nigeria. This means that long-term unemployment hurts economic growth, but long-term economic growth has no effect on poverty in Nigeria.

We therefore reject the null hypothesis that HDI does not cause LGDP at a 0.05 level of significance of 0.0113 and accept the alternative hypothesis that HDI Grange causes GDP at a 5% significance level of 0.1332. Considering the result that HDI does not cause GDP, we therefore reject the null hypothesis that HDI does not cause LGDP at a 0.05 level of significance. According to the findings, there is a one-way causation relationship flowing from HDI to GDP at a significance level of 5%, but there is no such relationship running from GDP to HDI. Based on these findings, it appears that the level of economic growth in Nigeria is influenced by human development. However, the relationship between economic growth and human development is absent. This indicates that a considerable rise in the level of economic growth will follow from an increase in the amount of government investment in human development in Nigeria. So, the results point to a relationship of cause and effect that works in only one direction.

As a result of our investigation into the empirical connection between the factors, we came to the conclusion that there is a separate and distinct causal connection running from economic growth to poverty, although economic growth itself is not related to poverty. This suggests that a rise in Nigeria's economic growth over the period does not impact the incidence of poverty in the country. This outcome does not fit within the parameters of the a-priori assumption. The conclusion contradicts the central tenet of the traditional theory of welfare, which states that "wealth or income is a function of output." The findings indicate that an increase in output does not, in the case of Nigeria, result in a reduction in the percentage of the population living in poverty inside the country. This suggests that those who are less fortunate do not gain from the economy as a whole, which is especially true when there is an uneven distribution of wealth and income. The vast majority of academics have previously argued that there is no meaningful relationship between Nigeria's economic growth and the country's level of poverty (see Aigbokhan 2000; Stephen and Simeon 2013; and Gangas 2017). According to the results of this study, Nigeria's level of poverty did not get better even though the country's GDP grew. Instead, it got worse. When looking at the unemployment coefficient, we can see that it fits in quite nicely with the a-priori expectation, which suggests that there is a positive association between unemployment and poverty. This is

also consistent with the Keynesian school of thought, which maintains that unemployment is unavoidable and that those living in poverty do not want to live in poverty but are instead unable to find work. The outcome is likewise comparable to what Hassan experienced (2012).

5.0 Conclusion

This research empirical determine the causal relationships among poverty, unemployment rate and economic growth in Nigeria. The direct and indirect methods are the two strategies that have been proposed as potential solutions to the problem of poverty in Nigeria and in general over the course of time. It has been determined that the neoclassical prescription of taking an indirect approach to fighting poverty does not produce the desired effects. The interventionist strategy adopted by the government of Nigeria is clearly justified by the dismal performance of poverty alleviation policies and programmes in that country. Without the effort of the government to concurrently promote economic growth and poverty alleviation, poverty alleviation programmes in Nigeria cannot be said to have achieved any sustainable decrease in the levels of poverty they are attempting to combat. From these results, we can say that there is a one-way chain of cause and effect between economic growth and the poverty index in Nigeria during the study period.

According to the findings of this study, policies and programmes that aim to alleviate poverty through an indirect method that places a premium on economic growth under the assumption that it will reduce poverty through trickle-down effects in the long run are not applicable in Nigeria. This conclusion was reached as a result of the study. In Nigeria, the fight against poverty is not much helped by economic growth, which is an important and powerful strategy elsewhere. Despite this, the country is seeing genuine growth at a rate that is both positive and somewhat high. The coefficient of unemployment demonstrates that there is a positive association between unemployment and poverty indices in Nigeria. This is shown by the fact that the coefficient is positive. It suggests that if the rate of unemployment continues to rise, the number of people living in poverty will likewise rise. Nevertheless, there is a clear indication of a positive association between economic output and growth throughout the time period under consideration. This demonstrates that economic expansion alone is not sufficient to alleviate poverty and unemployment in Nigeria. On the other hand, this gap makes policymakers very worried about people who are poor and about the country as a whole.

REFERENCES

Addae-Korankye, A. (2014) Cause of Poverty Africa. A Review of Literature. *American International Journal of Social Science*,*3*(7), 147–153.

Adebobola, O., Rafiu, S., and Akeremale, I. D. (2015). Poverty and Rate of Unemployment in Nigeria. *International Journal of Management and business*, *3*(2), 55-70.

Adekoya, O. (2017). An Examination of the Effect of Entrepreneurial Capabilities on the Prospects and Challenges of Setting-up a Small-scale Business in Nigeria: A case study of Bank of Industry, Nigeria. *International Journal of Entrepreneurship, Innovation, and Management*,*1*(2): 55-67.

Adekoya, O. D. (2018). Impact of Human Capital Development on Poverty Alleviation in Nigeria. *Int J Econ ManagSci*,*7*(544).doi: 10.4172/2162-6359.1000544

Adelakun, O.J. (2011). Human Capital Development and Economic Growth in Nigeria. *European Journal of Business and Management*,*3*: 21-30.

Agbasi, O. E., Edoko, T. D. and Ezeanolue, U. S (2018). Economic Growth and

Poverty Reduction in Nigeria. *Sumerianz Journal of Economics and Finance,1*(1), 31 – 36.

Aghion, P.,and Bolton, P. (1997).A Trickle-down Theory of Growth and Development." *Review of Economic Studies*, *64*(2), 151–172.

Ahluwalia, M. S. (1976). Inequality Poverty and Development. *Journal of Development Economics*, *3*(4), 307–342.

Aigbokhan, B. E. (2000). Determinants of Regional Poverty in Nigeria. *Research report No. 22. Ibadan*: *Development Policy Centre*.

Aigbokhan, B. E.(2008). Growth, Inequality and Poverty in Nigeria. A paper prepared for *United Nations Economic Commission for Africa (UNECA)*, Addis Ababa, Ethiopia, February, 2008.

Aiyedogbon, J. O. and Ohwofasa, B. O. (2012). Poverty andYouth Unemployment in Nigeria. *International Journal of Businnes and Social Science*, *3*(20).

Ajakaiye, D.O, and Olomola, A. S. (2003). Overview of Poverty and Poverty Reduction in Nigeria. Poverty in Nigeria: A Multi-Dimensional Perspective.

Akinbode, S. O. (2013). Profiles and Determinants of Poverty among Urban Households in South – West Nigeria. *American Journal of Economics*, *3*(6), 322 -329.

Aku, P.S., Ibrahim, M.T.& Bulus, Y. D.(1997).Perspective on Poverty Alleviation Strategies in Nigeria. *Proceedings of the Nigerian Economic Society Annual Conference on Poverty Alleviation in Nigeria, Nigerian Economic Society, Ibadan*, *22*(24), 41–54.

Anand, R., Tulin, V., and Kumar, N. (2014). India: Defining and Explaining Inclusive Growth and Poverty Reduction, *IMF Working Paper WP/14/63*, Washington.

Anand, S., and Kanbur, R.S. M. (1993). The Kuznets process and the Inequality-Development Relationship. *Journal of Development Economics*, *40*(1), 25–52.

Anigbogu, T. U., Onwuteaka, C. I. Anyanwu, K. N. and Okoli, M. I. (2014). Impact of household Composition and Anti-poverty Programmes on Welfare in Nigeria: A Comparative Analysis. *European Journal of Business and Social Sciences*, *3*(5), 23-36.

Anyanwu, J. C., (1997). Poverty in Nigeria; Concepts, Measurement and Determinants. Selected Papers for the Annual Conference on Poverty Alleviation in Nigeria, *Nigerian Economic Society, Ibadan*, *22*(24) 93–120.

Ariyo, A., and Jerome, A. (2005) Utility Privatization and the Poor in Nigeria. *Ibadan: Centre for Public-Private Cooperation.*

Arrow, K. J. (1962). The Economic Implications of Learning by Doing. *Review of Economic Studies*, 29(1): 157-173.

Atoloye, A. S. F. (1997). Strategy for Growth-led Poverty Alleviation in Nigeria. *In proceedings of the Nigeria Economic Society-annual Conference on Poverty Alleviation in Nigeria Ibadan: NES*, 569-85.

Aye, G. C. (2013). Causality between Financial Depending, Economic Growth and Poverty in Nigeria. *The Business & Management Review*, *3*(3) March 2013.

Bakare, A.S., and Ilemobayo, A. S. 2013, Does Economic Growth Reduce Poverty in

Nigeria?. *Journal of Developing Country Studies*,*3*(4), 62–68.

Barro, B. J. (1989). A Cross-Country Study of Growth, Saving and Government. NBER *Working Paper*, No.2855 (February).

Barro, R. J. (1991). Economic Growth in a Cross Section of Countries. *Quarterly Journal of Economics*, 106(1), 407 – 443.

Barro, P. J. (1999). Human Capital and Growth in Cross – Country Regressions. Swedish *Economics Policy Review*, *6*(1), 237-277.

Barro, R. J., & Lee, J. W. (1994). Sources of Economic Growth. *Carnegie-Rochester Conference Series on Public Policy*,*40*(1), 1- 46.

Barro, R.J. (2000), Inequality and Growth in a Panel of Countries. *Journal of Economic Growth*, 5(1), 5-32.

Bourguignon F. (2004). The Poverty-Growth-Inequality Triangle. *A paper presented at the Indian Council for Research on International Economic Relations, New Delhi*, on February 4, 2004.

Besley, T. (1997). Political Economy of Alleviating Poverty: Theory and Institutions. *Annual World Bank Conference on Development Economics*, Washington DC: World Bank 117 – 134.

Bourguignon, F. (2003). The Growth Elasticity of Poverty Reduction: Explaining Heterogeneity Across Countries and Time Periods. T. S. Eicher, S. J. Turnovsky (Eds.). Inequality and Growth: Theory and Policy Implications. *Cambridge, MA: MIT Press*, 3–26.

Bourguignon, F. (2004). The Poverty-Growth-Triangle.*Working Paper 125.Indian Council for Research on International Economic Relation*.

Bruno, M. M., Ravallion L., and Squire. (1996). Equity and Growth in Developing Countries Old and new perspectives on the policy issues. Policy Research Working Paper 1563, *Development Economics and Policy Research Department*, World Bank.

Chen, S., and Ravallion, M. (2010). The Developing world is poorer than we thought, but no less successful in the fight against Poverty. *Quarterly Journal of Economics*, 125(4), 1577- 1625. http://dx.doi.org/10.1162/qjec.2010.125.4.1577

Chen, S., & Ravallion, M. (2001). How did the World's poorest fare in the 1990s? *Review of Income and Wealth*, 47(3), 283-300. http://dx.doi.org/10.1111/1475-4991.000018

Cohen, D., &Soto, M. (2007). Growth and Human Capital: Good Data, Good Results, *Journal of Economic Growth*, 12(1).

Daniel, E.I.G., Moses, M. D. and Bankole, O. (2009). Poverty Alleviation in Nigeria: Which way Nigeria? *Holler Africa Publication*, Lagos.

Dennis, B. E., and ThankGod, M. (2018). Human Capital Development and Poverty Reduction in Nigeria. *The Asian Institute of Research Journal of Economics and Business*, *1*(2), 2018: 150-163 ISSN 2615-3726

Deininger, K.; Squire, L. (1998). New Ways of Looking at old Issues: Inequality and Growth. *Journal of Development Economics*, 57(2): 259–287. http://dx.doi.org/10.1016/S0304-3878(98)00099-6

Dewi, S., Abd-Majid, M. S., Aliasuddin, and Kassim, S. (2018). Dynamics of Financial Development, Economic Growth, and Poverty Alleviation: The Indonesian experience. *South East European Journal of Economics and*

Business, 13(1), 17–30. https://doi.org/10.2478/jeb- 2018-0002.

Dickey, D. A., and Fuller, W. A. (1981). Likelihood ratio statistics for autoregressive time series with a unit root. *Journal of the Econometric Society*, 1057-1072.

Dollar, D., and Kraay, A. (2002). Growth is good for the poor. *Journal of Economic Growth*, 7(3), 195–225. http://dx.doi.org/10.1023/A:1020139631000

Dollar, D., andKraay, A. (2000). Growth is good for the poor. *World Bank, Mimeo, Washington, DC.*

Easterley, W. (2000). The effect of IMF and World Bank programs on poverty. *Mimeo.World Bank, Washington, D.C.*

Ebong, F. S. (2010). Public expenditure, economic growth and Poverty in Nigeria, 1970-2005. *Ph.D Thesis. Department of Economics, University of Ibadan, Ibadan*, (unpublished).

El-Laithy, L. M. and Barneji, A. (2003). Poverty and Economic Growth in Egypt,1995 – 2000. *World Bank Policy Research Working Paper No. 3068* (June)

Ekpe, A. E (2011). Poverty Alleviation in Nigeria through Capitalism Economic Framework: Problems and Challenges. *Journal of Sustainable Development in Africa*, 13(1), 181-192.

Ekpo, A. H., and Umoh, J. (2015). An Overview of the Nigerian Economic Growth and Development. *Online Nigeria, community portal of Nigeria*.

Elias, A. U., and Obi. K (2015) Determinants of Economic Growth in Nigeria: Evidence from error correction model approach. *Developing Country Studies www.iiste.org* ISSN 2224-607X (Paper) ISSN 2225-0565 (Online) *5*(9), 2015

Engel, R. F. and Granger, C. W. (1987). Cointegration and Error correction: Representation, estimation and testing. *Econometrica*, *55*(2), 251-276.

Ewere, F.O. (2014). Globalization and Poverty rate in Nigeria: An empirical analysis. *International Journal of Humanities and Social Science*, *4*(11).

Faloye, O., and Bakare A. M. (2015). Empirical Assessment of Economic Growth on Poverty Reduction in Nigeria. *American Journal of Economics 2015*, 5(6): 565-573 DOI: 10.5923/j.economics.20150506.02

Ferreira, F., Leite, P. G., and Ravallion, M. (2010). Poverty reduction without Economic Growth? Explaining Brasil's poverty dynamics, 1985–2004.*Journal of Development Economics*, *93*(1), 20–36. http://dx.doi.org/10.1016/j.jdeveco.2009.06.001

Foster, J. E., and Szekely, M. (2001). Is Economic Growth good for the poor? Tracking low incomes using General Means. *Working Paper 453.American Development Bank, Washington N.Y.*

Fosu, A. K. (2010). Inequality, Income, and Poverty: Comparative Global Evidence. *Social Science Quarterly, 91*(5), 1432-1446.

Francois, I. K. (2015). Fundamental causes of Poverty in Sub-Saharan Africa. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, *20*(6), 78-81.

Friday, S., and Fidelis, O. O. (2013). Economic Growth and Poverty Reduction in Nigeria: An empirical investigation. *Journal of Economics and Sustainable Development www.iiste.org ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online,)4*(7).

Gangas, S. (2017). Relationship between Economic Growth and Poverty

Reduction in Nigeria.*Pyrex Journal of Business and Finance Management Research*, *3*(2), 34-56.

Garza-Rodriguez, J. (2018). Poverty and Economic Growth in Mexico. *Social Sciences*,*7*(10). https://doi.org/10.3390/socsci7100183

Ghura, D. C., Leite, A. andTsangarides, C. (2002). Is growth enough? Macroeconomic policy and poverty reduction. *IMF Working Paper, No. WP/02/118, Washington, DC: International Monetary Fund.*

Gujarati, D., and Porter, D.C. (2009). Basic econometrics. *Fifth Edition. New York: Mc. Graw Hill Companies.*

Granger, C. W. and Newbold, P (1977). Spurious Regression in Econometric. *Journal of Economics*, *2*(1), 111-20.

Handley, G., Higgins, K., and Sharma, B. (2009). Poverty and poverty reduction in Sub-Saharan Africa: An overview of key issues. *Working Paper 299, Overseas Development Institute*, January 2009.

Harbison, F., and Charles, M. (1964). Education, Manpower, and Economic Growth: strategy of human resource development. *USA: McGraw Hill Book Company*.

Hassan, M. S., &Kalim, R. (2012). The triangular causality among education, health and economic growth: A time series analysis of Pakistan. *World Applied Sciences Journal*, 18(2), 196–207. https://doi.org/10.5829/idosi.wasj.2012.18.0 2.3332.

Hoeper, B. (2014). What are the factors that cause poverty and what are the resources that enable development. *Development Cooperation Handbook Wikibooks, U.K. 2014*.

Holding, L., and Biddle, J. (2016). The introduction of human capital theory into education policy in the United States. *Michigan State University Press*.

Hout, W. (2016). Classical approaches to development: Modernisation and dependency. *The Palgrave Handbook of International Development*,pp: 21-39.

IFAD, (2012).Rural poverty in Nigeria.*Available: http://www.ruralpovertyportal.org*

Ijaiya, G.T. (2007). Poverty alleviation programmes. In: Saliu H, Amali E, Olawepo R (eds.) Nigeria's reform programme: Issues and Challenges. *Concept Publishing, Lagos*.

Ijaiya. G.T., Ijaiya, M.A.A., Bello. R.A., and Ajayi. M.A. (2011). Economic growth and poverty reduction in Nigeria. *International Journal of Business and Social Science*, (2)15.

Ilesanmi O. A., and Lasisi, F. A. (2015). The interface between government policies, human capital development and poverty reduction in Nigeria. *European Journal of Business and Innovation Research*, *3*(1), 11-25.

ILO. (1976). Employment, growth and basic needs. *Geneva: International Labour Organization*.

Jha, S. (1996). The Kuzents curve: A reassessments.*World Development*, *24*(4), 773–780.

Johansen, S., &Juselius, K. (1990).Maximum likelihood estimation and inference on cointegration—with applications to the demand for money.*Oxford Bulletin of Economics and statistics*, *52*(2), 169-210.

Johansen, S. (1991). Estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive 129 model. *Econometrica* 59: 325-346.

Jung, S., and Smith, R. (2007). The economics of poverty: Explanatory theories to inform Practice. *Journal of Human Behavior in the Social Environment*, *16*(1-2), 21-39.

Kayode, A. (2012). Human capital development and poverty alleviation in Nigeria: A symbiotic overview. *Journal of Public Administration and Governance*, pp: 1-15.

Khan, A., Iqbal, T., andRehman, Z. (2016).Impact of human capital on poverty alleviation in district Karak, Khyber Pakhtunkhwa.*The Dialogue*, 11(2), 229-241.

Kolawole, B.O., Omobitan, 1.O.A., andYaqub. J.O. (2015). Poverty, inequality and rising growth in Nigeria: Further empirical evidence. *International Journal of Economics and Finance*, *7*(2).

Komolafe, S. O. (1996). Cointegration theory: Technique and application: Macroeconomic Policy Analysis, Tools, Technique and Application to Nigeria. Obadan, M.I.*Institute of International Economics*.

Kulkarni, K. G. (2006). Economic growth and income distribution in Malaysia: A test of the Kuzent's inverted U hypothesis. *Readings in International Economics. New Delhi: Serials Publications*, 2006.

Kuznets, S. (1955). Economic growth and inequality.*American Economic Review*, 45(1), 1-28.

Lin, S. C., Huang H. C.,andWeng H. W. (2006).A Semi-parametric partially linear investigation of the Kuznets hypothesis.*Journal of Comparative Economics*, *34*(3), 634–647.

Lustig, N., Arias, O., andRigolini. J. (2000). Poverty reduction and economic growth: A two – way causality. *Inter – American Development Bank, Sustainable Development, 240*(57).

Mallick, L., Das, P.K. & Pradhan, K.C. (2016). Impact of educational expenditure on economic growth in major Asian countries: Evidence from econometric analysis. *Theoretical and Applied Economics Volume*, *13*(2), 173-186.

Melikhova, O., andJakub, C. (2014).Kuznets inverted U-curve hypothesis examined on up-to date observations for 145 Countries.*Article in Prague Economic Papers*. DOI: 10.18267/j.pep.490

Marinko, Š. andRomina, P. D. (2016). Poverty and economic growth: A review. *Technological and Economic Development of Economy*. doi:10.3846/20294913.2015.1125965

Mercan, M., andSezer, S. (2014). The effect of education expenditure on economic growth: The case of Turkey. *Procedia - Social and Behavioral Sciences*,*109*(1), 925-930. https://doi.org/10.1016/j.sbspro.2013.12.565

McKay, A. (2013). Growth and poverty reduction in Africa in the last two decades: Evidence from an AERC growth-poverty project and beyond.

McKay, A. (1997). Poverty reduction through economic growth: Some issues.*Journal of International Development*, 9(4), 665-678. http://dx.doi.org/10.1002/(SICI)1099--

Mckinnon, H.M. (1999). Co-integration results for variables to the service sector.*Shodhganga*, pp. 1–8. http://shodhganga.inflibnet.ac.in/bitstream/10603/12092/13/13_appendix.pdf

Milanovic, B. (2000). Determinants of cross-country income inequality: An augmented Kuznets' hypothesis.

Franicevic, V., Uvalic, M., eds., Equality, Participation, Transition: *Essays in Honour of BrankoHorvat. London: Macmillan & Co*, pp. 48–79.

Moran, T. P. (2005). Kuznets inverted U-curve hypothesis: The rise, demise, and continued relevance of a socioeconomic law. *Sociological Forum*, Vol. 20, No. 2, pp. 209–244.

National Bureau of Statistics, (NBS).(2005). Poverty Profile for Nigeria, Abuja.

National Bureau of Statistics, (NBS). (2012). The Nigeria poverty profile 2010 report of the national bureau of statistics harmonized Nigeria living standard survey (HNLSS).

Nindi, A. G., andOdhiambo, N. M. (2015). Poverty and economic growth in Swaziland. *International Research Journal*,*13*(1), 59-74.

Norton, S. W. (2002). Economic growth and poverty: in search of trickle – down. *Cato J. 22*, 263.

Nuruddeen, T., & Ibrahim, S. S. (2014).An empirical study on the relationship between poverty, inequality and economic growth in Nigeria.*Journal of Economics and Sustainable Development*, *5*(26), 20–25.

Nyasha, S., Gwenhure, Y., &Odhiambo, N. M. (2017). Poverty and economic growth in Ethiopia: Aultivariate causal linkage. *The Journal of Developing Areas*, 51(1), 343–359. https://doi.org/10.1353/jda.2017.0019.

Obadan, M.I. (1997). Analytical frame work for poverty reduction: Issues of economic growth versus strategies: In Poverty Alleviation in Nigeria.*Annual conference of Nigerian Economic Society*.

Obadan, M. &Odusola, A., (2001).The economy and poverty in Nigeria. A Paper Presented at the National Conference on Law and Poverty, *Nigerian Institute of Advanced Legal Studies, Kaduna*, 26–28th June.

OECD, (1998). Human capital investment: An international comparison, Paris

Ogujiuba, K. (2013).The impact of human capital formation on economic growth in Nigeria. *Journal of Economics* 4: 121-132.

Ogwmike, F. O. (1998). Poverty alleviation strategies in Nigeria. In Measuring and Monitoring Poverty in Nigeria, *Proceeding of the seventh Annual conference of Zonal Research Unites of Central Bank of Nigeria.*

Ogwumike, F. O., (2001) Appraisal of poverty reduction strategies in Nigeria.*CBN Economic and Financial Review*, *39*(4), 45–71.

Oke, R., Oladeji S.I., &Olofin, O.P. (2020).Education and the challenge of poverty alleviation in Nigeria.*Asian Research Journal of Arts & Social Sciences*, *11*(1), 12-23, 2020; Article no.ARJASS.55595 ISSN: 2456-4761

Okoro, E.G.,&Kigho, P.E., (2013). Why poverty? The effect on standard of living, health and education in Nigeria: A review of conceptual issues.*Journal of Research in Peace, Gender and Development*, *3*(2), 18–23.

Okoroafor, M. O.,&Chinweoke.N. (2013).Poverty and economic growth in Nigeria 1990–2011. *The Macrotheme Review*,*2*(6), 105–115.

Oladeji, S.I &Abiola A.G. (2000). Poverty alleviation with economic growth strategy: prospects and challenges in contemporary Nigeria. *Journal of Social Development In Africa*, *15*(2).

Omadjohwoefe, O. S. (2011). Evolving poverty profile and the millennium

development goals In Nigeria. *JORIND*, *9*(1): 177-85.

Omoniyi, B. B.(2018). An examination of the causes of poverty on economic growth in Nigeria. *Africa's Public Service Delivery and Performance Review*,*6*(1), a175. https://doi.org/10.4102/apsdpr.v6i1.175

Omoniyi, B. B.(2016). Impact of poverty on economic growth: A comparative analysis of Nigeria and Ghana.*Unpublished PhD thesis, Ekiti State University, Ado-Ekiti*.

Onyedikachi. O.M.,&Chinweoke. N. (2013).Poverty and economic growth in Nigeria (1990-2011).*The Macrotheme Review: A multidisciplinary Journal of global Micro Trends*.

Oyegoke, O. E.,&Wasiu, A. Y. (2018).Effects of economic growth on poverty reduction in Nigeria. *IOSR Journal of Economics and Finance*,9(5), 25-29.

Pemberton, S., Sutton, E.,&Fahmy, E. (2013).A review of the qualitative evidence relating to the experience of poverty and exclusion.*PSE-UK Working Paper Methods Series* No.22

Perry, G. E., Lopez, H., Maloney, W., & Arias, O. (2006). Poverty reduction and growth virtuous and vicious circles.*The World Bank, Washington*. http://dx.doi.org/10.1596/978-0-8213-6511-3

Pervez, S. (2014). Impact of education on poverty reduction: A co-integration analysis for Pakistan. *Journal of Research in Economics and International Finance (JREIF)*, *3*(4) pp. 83–89.

Phillips, P. C. B., & Hansen, B. E. (1990). Statistical inference in instrumental variables regression with I(1) processes. *Review of Economics Studies*, 57: 99–125.

Piketty. T., Saez, E., and Stantcheva, S. (2014). Optimal taxation of top labor incomes: A tale of three elasticties. *American Economic Journal; Economic Policy*, *6*(1), 230 – 71.

Ravallion, M. (2001). Growth inequality and poverty: Looking beyond average. *World Development*, *29*(11), 1803-1815. http://dx.doi.org/10.1016/S0305-750X(01)00072-9

Ravallion, M. (1995). Growth and poverty: Evidence for developing countries in the 1980s. *Economic Letters*, *48*(3/4), 411-417. http://dx.doi.org/10.1016/0165-1765(94)00620-H

Ravallion, M. (2010). Do poor Countries have less capacity for redistribution? *Journal of Globalizations and development*, *1*(2), 1-29. http://dx.doi.org/10.2202/1948-1837.1105

Ravallion, M. (2009). Are there lessons for Africa from China's success against poverty.*World development*, *37*(2), 303-313.http://dx.doi.org/10.1016/J.worlddev.2008.06.00

Ribeiro, A. P., Tavares, S. T., & Duarte, G. 2015. Macroeconomic fundamentals of Poverty and Deprivation: An Empirical study for Developed Countries.*European Journal of Development Research*, *27*(1): 37–66. http://dx.doi.org/10.1057/ejdr.2014.16

Saifullahi, S. (2014).An Empirical Study on the relationship between Poverty, Inequality and Economic Growth in Nigeria.*Journal of Economics and Sustainable Development*,5(26).

Squire, L. (1993).Fighting poverty.*American Economic Review papers and Proceedings*, *83*(2), 377-382.

Smith, A. (1776).The wealth of nations.*Modern Library, New York: USA*.

Son, H. H. &Kakwani, N. (2004). Economic Growth and Poverty reduction: Initial conditions matter. *United Nations development programme, International poverty centre, working paper*.

Stephen. B.A.,&Simoen. I.A. (2013). Does Economic Growth Reduce Poverty in Nigeria? *ISSN 2224 607X (Paper) ISSN 2225-0565 (Online), 3*(9).

Taiwo, J. N., and Agwu, E. (2016). Problems and Prospects of Poverty Alleviation Programmes in Nigeria. *International Journal of business and management review*, *4*(6), 18-30.

Tam, H. (2008).An economic or political Kuzentscurve?"*Public Choice*, *134*(3–4), 367-389.

Thorebecke, E. (2013). Multidimensional poverty: Conceptual and Measurement Issues. *The Many Dimensions of Poverty, 3*(19).

Todaro, M. P. (1997). Urbanization, Unemployment and Migration in Africa: Theory and policy.

Ukpong. I.G., Ekpebu. I.D.&Ofem. N.I. (2013).Cointegration inferences on issues of Poverty and Population Growth in Nigeria.*Academic Journals,5*(7), 277-283, DOI 0.5897/JDAE12.151,ISSN 2006-9774

Ullah and Rauf (2013). Impacts of Macroeconomic variable on Economic Growth: A panel data analysis of selected Asian countries. *International Journal of Information, Business and Management, 5*(2), 4.

UNDP, 2013, International human development indicators data base, viewed 04 March 2018, from http://hdrstats.undp.org/en/tables

United Nations Commission Economic for Africa (UNECA), Economic Report on Africa, 2014

Vijayakumar S. (2013), An Empirical study on the nexus of Poverty, GDP growth, Dependency ratio and Employment in Developing Countries. *Journal of Competitiveness*, *5*(2), 67-82, DOI: 10.7441/joc.2013.02.05

Williamson, J. G. (1991) British inequality during the industrial revolution: Accounting for the Kuznetscurve" in Brenner, Y.S., Kaelble H., Thomas, M., eds., Income Distribution in Historical Perspective. *Cambridge: Cambridge University Press*.