



THE IMPACT OF INCOME INEQUALITY AND POVERTY ON THE ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

This study focused on investigating the comparative analysis of the impact of income inequality and poverty on Nigeria economic growth between 1986 and 2015. The source of data for this study is secondary; the main tool of analysis is the error correction model and the co-integration method for this research study. The result of the study showed clearly that a very high level of unemployment and low level per capital income of the populace significantly impact the economy negatively; these are consistent with the few studies that have investigated on the impact of income inequality and poverty on economic growth. This study thus concludes that since inequality and poverty are two major macroeconomic problems that are eating up the country and are inter woven and the indirect channel of unemployment contributing to the problem, policy measure toward the combat of one should not neglect the other as the efficacy of the policy measures is related to the other problem. Employment has been identified as an important outcome of any welfare intervention. It recommended that employment should be one of the major tools to be considered in the fight against poverty and inequality in Nigeria. This should not be left for the government alone, the private sectors are also encouraged to be actively involved in this as well as individuals through imbibing the spirit of entrepreneurship.

KEYWORDS : Income inequality, Poverty, Economic Growth

INTRODUCTION

The eradication of absolute poverty in a country has become a major policy objective to most government and international organization due to its importance to general well-being of the society According to the 2013 World Bank report; poverty levels have been trending downwards since the 1980's. Despite these improvements, extreme poverty still exist in various parts of the developing world with close to one billion people still living under \$1.25 a day and some 2.7 billion people living on less than \$2.50 a day (World Development Indicators, 2013). Most of these reduction occurred in middle and high income countries with very few reductions occurring in low income developing countries e.g U.SA etc.

Particular examples of such divided progress is the impressive improvement of poverty levels in china and India with the rest of the developing world particularly low income countries still experiencing almost the same levels of poverty that existed three decades ago. Though the Millennium Development Goals (MDG) halving poverty levels by 2015 is achievable, but most developing countries are still faced with enormous challenges in fighting poverty. Moreover, other equally important goals such as reductions in child and maternal mortality, gender equality and education are still significant developmental problems in most developing countries. Economic growth has been identified as the most important tool, if not the only mechanism, in the reduction of absolute poverty. In order to achieve significant economic growth and achieve significant progress in poverty reduction efforts, many developing countries adopted the structural reforms proposed by the Brettons Woods institutions in early 1980s. Some of the policies under the structural reforms included the adoption of flexible exchange rate policies and opening up to international trade. These policies attracted foreign investments, hence promoting economic growth. During the 1990's, the World Bank proposed a more general approach to bringing poverty levels down. This involved paying attention to environmental issues, investing in human capital, privatization of government owned-enterprises and improving economic development. Income inequality is defined according to Ogbeide and Agu (2015) as the inequality distribution in the of income among the members of a particular group, an economy or society. Income inequality can be measured generally using Lorenz curve, Gini

coefficient and General Entropy class. The neoclassical school sees income inequality to be as a result of different productive capacity of an individual or group of individuals and this leads to different wage levels and income levels. According to Kim (2014), if all the growth recorded by countries continued at the same rate as over the last 20 years with income distribution remaining unchanged, poverty will only fall by 10% by 2030, from 17.7% in 2010. It is further noted that increased income inequality can dampen the impact of growth in reducing poverty, such that inequality is not just a problem in itself, (Omobitan and Yaqub, 2015).

Poverty and income inequality have theoretically been identified to be inextricably linked and the existence of one often implies the existence of the other, (Burtless and Smeeding, 2001; Bourguignon, 2004). Inequality can have direct and indirect link with poverty. The direct link is more obvious when we look at the individual. Inequitable distribution of resources in the society, it hinders the person or group of persons affected negatively so that they will not have enough to take care of the basic needs of life as well as care for their children in terms of human capital development (education and health) thus they are classified as being poor, (Ogbeide and Agu, 2015). The indirect link between inequality and poverty are through growth, employment among others. The link through growth is based on the notable Kuznets's theory of the inverted U shaped relationship between inequality and growth although not generally accepted empirically. At the early period of economic development where the economy is growing and increase in inequality, those affected by rising inequality are classified as poor hence the negative impact of growth on inequality also leads to an increase in poverty given that there is a positive relationship between the level of inequality and poverty affecting an individual or in a country.

In Nigeria, the increasing level of income inequality has been a concern to policy makers for a long time, for example, Oyekale, Adeoti and Oyekale (2006) found overall Gini index for Nigeria to be 0.580. In sectorial sense, the study found inequality to be higher in the rural areas as compared to urban areas with 0.5278. According to Olutayo (2008) in Adigun and Awoyemi (2015) variations in the levels of income obtained by people in the rural areas is on the increase which

could very much be linked to growing dimensions of poverty even among the rural households, which indicates a higher level of income inequality produces an unfavourable environment for economic growth and development.

Over the years, reforms and policies have helped most developing countries to achieve some success in economic growth. Nonetheless, many developing countries that experienced relatively high rates of economic growth realised that such growth had brought little benefit to lower income people. One possible reason is that economic growth has been associated with an increase in income inequality. High income inequality is seen as detrimental to growth since it reduces the benefits of economic growth to the poor. Extensive poverty and growing income inequality have become major issues in the development process and their reduction has become the principal objective of most economic development policies. An important concern that arises from this is whether the poor have really benefited from economic growth and to what extent does the distribution of income affect the fight against poverty.

In the light of the above, this paper attempts to analyze the impact of income inequality and poverty on Nigeria growth. Accordingly, the rest of the paper is structured into four sections. Section two reviews some relevant literatures on poverty and income distribution, while section three provides the theoretical framework and model specification. Section four contains the analysis of the econometric results and its policy relevance, while section five concludes.

Literature Review

Ogbeide and Agu (2015) identified that literatures on the poverty inequality link are most times connected to growth as a result of the theoretical link between inequality and growth. The literature on the empirical analysis of the relationship between poverty, inequality and economic growth has become quite substantial since early 1980 s. Empirical evidence has been conflicting with contradictory findings as a result of differences in samples used, econometric techniques, measurement of poverty, specifications and country peculiarities. Earlier studies before the past two decades tend to support Kuznets s inverted-U curve of an increase in income inequality at the early stage of growth of the economy which will decline as the economy grows. Most of these studies were done on cross-sectional basis.

However, most studies in the last two decades do not support the Kuznets s hypothesis mostly on country specific factors and some found no methodical relationship between growth and inequality Bourguignon (2003); Deininger and Squire (1998); Li, Squire and Zuo. (1998); Ravallion (1997) among others). The study carried out by Ravallion (1997) concludes that in the presence of high inequality, poverty may still rise irrespective of the high growth rate.

Economic Growth, Income inequality and Poverty level in Nigeria

Evidences in literatures point to the increasing level of income inequality in developing countries including Nigeria over the last two decades, (Kanbur and Lusting, 1999; Addison and Cornia,2001). Poverty reduction requires economies to address inequality and economic structures- in addition to sustaining high levels of economic growth, (Wangbugu and Munga, 2009). In Nigeria, the increasing level of income inequality has been a concern to policy makers for a long time. For example, Oyekale; Adeooti and Oyekale (2006) found the overall Gini index for Nigeria to be 0.580. In sectorial sense, the study found income inequality to be higher in rural areas as compared to urban areas with 0.5278. In Nigeria, the increasing level of income inequality has been a concern to policy makers for a long time.

According to Olutayo (2008) in Adigun and Awoyemi (2015) variations in the level of income obtained by people in the rural areas is on the increase which could very much be linked to the growing dimensions of poverty even among the rural households, which indicates a high level of income inequality produces an unfavourable environment for economic growth and development. Thus, in the 1970s and 1980s, the pre-occupation was for the growth of the economy and income as growth is seen as a prerequisite for improved welfare.

The government therefore introduced series of economic reform measures, starting with the Economic Stabilization Measures in 1982, Economic Emergency Measures in 1985 and Structural Adjustment Programme (SAP) in 1986. The implementation of Structural Adjustment Programme (SAP) was part of policy efforts by the government to tackle the problem of severe economic crisis which worsened the lives of many Nigerians. Components of SAP include market-determined exchange and interest rates, liberalized financial sector, trade liberalization, commercialization and privatization of a number of enterprises,(Agbokhan,2008). Other efforts of the government aimed at poverty alleviation include the establishment of specialized agencies which include: Agricultural Development Programmes, (ADPs) Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB), National Agricultural Insurance Scheme (NAIS), National Directorate of Employment (NDE), National Primary Health Care Agency, Peoples Bank, Urban Mass Transit, mass education through Universal Basic Education (UBE), Rural Electrification Schemes (RES), Strategic Grain Reserve, National Agricultural Land Development Agency, National Directorate for Food, Roads and Rural Development (DFRRI) and National Economic Reconstruction Fund. Others are Better Life Programme, and Family Employment and Advancement Programme. In 1994, the Poverty Alleviation Programme Development Committee was established, which produced the Community Action Programme for Poverty Alleviation (CAPPA). In 1999, the Poverty Alleviation Programme (PAP) was established, with the objective of creating 200,000 jobs annually. PAP however, failed to have any appreciable impact on poverty reduction in the country, due to "state capture" and leakages, among other reasons,(Ogwumike,2002;Aigbokhan,2008). It was replaced in 2003 by the National Poverty Eradication Programme (NAPEP), with five main programme areas. It is observed that four of the programmes have employment components. It is estimated that since inception, NAPEP has been able to train 130,000 youths and engaged 216, 000 persons who are attached to various establishments, (Olaniyan and Awoyemi,2006). However, like the PAP, beneficiaries are largely non-poor. Up till June 2003, there was no clear economic strategy in the country, and monetary policy was totally ineffective to check expansionary fiscal operations. Weak institutions and legal environment stymied the benefits that would have accrued from oil earnings, which had started to firm up, (Adedipe, 2004). The entire scenario however changed in 2004, with the formal announcement and presentation of the Federal Government's economic agenda, tagged the National Economic Empowerment and Development Strategy (NEEDS). It was launched along with State Economic Empowerment Development Strategy (SEEDS). NEEDS is a medium-term strategy that seeks to implement series of reforms that would lay a solid foundation for a diversified Nigerian economy by 2007. It sets specific goals in major growth indices as wealth creation, employment generation, institutional reforms and social charter. The conceptual issues on NEEDS/SEEDS are based on four goals which are: Poverty reduction, Wealth creation, Employment generation and value re-orientation. The framework for actualizing the goals of NEEDS is anchored on three pillars namely; empowering people and improving social delivery, fostering private sector led growth through creating the

appropriate enabling environment, and enhancing the efficiency and effectiveness of government, by changing the way government does its work, (NEEDS, 2004). Recently, one of the seven-point development agenda is to fight poverty and diseases. Like earlier reform packages, the strategy considers economic growth as crucial to poverty reduction. The major issues of the seven point agenda include: Power and Energy, food security, wealth creation, transport, land reforms, security and education.

According to FOS (1996) the economic growth approach is based on the assumption that economic deprivation caused by lack of access to property, income, assets, factors of production and finance are the root cause of all poverty and that non-economic causes of poverty are only secondary arising from the primary economic causes. Attention is therefore focused on rapid economic growth as measured by rate of growth in real per capita or per capita national income, price stability and declining unemployment, among others. All these are to be attained through proper harmonization of monetary and fiscal policies. Furthermore, FOS stated that the approach could work through trickle-down effects, which holds that as economic growth continues the effects will progressively trickle down to the core poor and most disadvantaged in the society. As observed by Edwards (1995) economic growth can reduce poverty through two channels; (i) when there is increase in employment and improvement in the opportunities for productive activities among the poor. This suggest that growth that emphasized labour-intensive strategy is generally more effective in reducing poverty than growth that is biased against export; (ii) when economic growth is associated to increase in productivity it will improve wages and under most circumstance the poor segments of the society will see an improvement in their living condition. This form of approach (economic growth approach) is evidence in most East Asian countries e.g. Japan, Hongkong, South Korea, Malaysia, Singapore and Indonesia, which given the remarkable increase in their GDP, per capita income, welfare and improvement in the quality of their social services, inequality and poverty have reduced.

Empirical Review

Kolawole, Omobitan and Yaqub (2015) examined the relationship among poverty, inequality and economic growth in Nigeria by employing macroeconomic variables which include GDP growth rate, per capita income, literacy rate, government expenditure on education, and government expenditure on health. Time series data over the period from 1980 to 2012 were fitted into the Ordinary Least Square (OLS) regression equations using various econometric techniques such as Augmented Dickey Fuller (ADF) unit root test, Phillips-Perron unit root test, Johansen co-integration test, and Error Correction Mechanism (ECM) technique. The OLS results reveal that GDP growth rate increases inequality, but reduces poverty in the country. It is thus suggested that, aside boosting the GDP, an increased effective government spending on education and public health facilities, as well as programmes that are meant primarily for the non-privileged like children, women and the poor in general, be provided for poverty and inequality to reduce in the country.

Adigun, Awoyemi and Omonoma (2011) analyzed income growth and inequality elasticity's of poverty in Nigeria over a period of time. The result was based on the analysis of secondary data obtained from National Consumer Survey of 1996 and 2003/2004 Nigeria Living Standard Survey. They used changes in mean per capita expenditure as a yardstick of economic growth and adopted simple but powerful ratio estimates of Economic Growth and Inequality elasticities of poverty. The growth elasticity of poverty indicates that 1 percent increase in income growth will lead to 0.624 percent reduction in poverty. The inequality elasticity of poverty shows

that a decrease of inequality by 1 percent would have decreased poverty by just 0.34 percent. The result implies that what matters for poverty reduction is mainly accelerated economic growth, redistribution and reductions in inequality.

Alao (2015) examined the challenges of inequality and poverty reduction among Nigerian women and youth with focus on inclusive growth in post 2015 Millennium Development Goal. Content analysis of secondary literature was undertaken to address the problem of the study. Findings indicated that poverty in Nigeria is not affected due to misdirection of programmes from rural to urban areas, inadequate funding, and lack of control, transparency and accountability and inadequate coverage of the poor. The study suggested that entrepreneurial training programmes and capability creation, combined with an all-inclusive effort aimed at providing education and health facility, integrated growth, income distribution, and financing land ownership are highly required. Conclusively, poverty in Nigeria can be substantively reduced if an all-inclusive approach is adopted covering entrepreneurial training backed with monitoring and accommodation of large coverage of the poor in the programme in post 2015 MDG plans.

Osahon and Osarobo (2011) attempts to empirically assess the relationship between poverty, income distribution and the growth of the Nigerian economy. To do this, a co-integration technique was employed to test for the unit root and the error correction mechanism (ECM). The Real Gross Domestic product was regressed on Private Consumption Expenditure, Per Capita Income, Registered Unemployment, and Government Expenditure on Health and Education. Arising from the findings, the paper recommends that, for there to be sustainable improvements in the economy, the government at all levels should, amongst others, focus more on the development of essential social services for easier access to education, health, transportation and financial services. This should be complemented by executing relevant development programmes that will boost the income level of the poor, which is desirable for both income redistribution and poverty alleviation purpose.

Theoretical Review

While economists have a theory of economic inequality, there is no theory of poverty in the conventional sense of the word (Akeredolu- Ale, 1975). Rather, poverty theories are woven around the objects and subjects, as well as the nature of the phenomenon (Tella, 1997). The capitalist entrepreneurial theory opines that the rather crude exploitation of the poor by means of low wages and poor conditions of services allows for a possible rise in savings among the entrepreneurial class. The resultant inequality in income could result in the preponderance of poverty among the peasant majority. The individual attributes theory, on the other hand, posits that an individual's location in the society's hierarchy of income and wealth is presumed to be determined above all, by his motivations, attitudes and abilities (McClelland, 1961; Hagen, 1962). The national-circumstantial theories identify factors such as geographical locations and natural endowments of the environment in which persons live including such other variables as unemployment, old-age, physical disabilities, e.t.c as culprit of poverty (Akeredolu-Ale,1975). The power theory recognizes the structure of political power in the society as the main determinant of the extent and distribution of poverty among the population.

The modern theoretical approach, however, considers the income dimension as the core of most poverty-related problems. To this end poverty may arise from (a) change in average income and, (b) change in the distribution of income. Assuming a relationship between poverty line (L) and the average income of the population (Y), the poverty index will

increase/decrease as L/Y increases/decreases. So, the higher average income is above the poverty line, ceteris paribus, there will be less poverty. Also, if for instance two countries with identical mean income (and poverty line, L), but with one having a wider spread of distribution of income, poverty will generally be greater in the country with higher inequality, since there will be relatively more people with incomes lower than the poverty line (L).

METHODOLOGY

The source of data for this study is secondary, obtained from the Central Bank of Nigeria statistical bulletins and annual reports, of various years. The main tool of analysis is the error correction model and the co-integration method for this research study. Also, The Co-integration test results were also used for the analysis, followed by well-articulated interpretation, trend analysis and explicit discussion of findings.

MODEL SPECIFICATION

Our model was developed to access the comparative analysis of the impact of income inequality and poverty on Nigeria economic growth. The time series data considered (1986 – 2015) was used to model the equation as follows:

Model1: $LNRGDP = \beta_0 + \beta_1 PCE + \beta_2 GEH + \beta_3 GEE + \beta_4 LNPCI + \beta_5 UEPN + U$

WHERE:-

- RGDP**= Real GDP (N'Billion))
- PCE**= Private Consumption Expenditure (N'Billion)
- GEH**= Government Expenditure on Health (N'Billion)
- GEE**= Government Expenditure on Education (N'Billion)
- PCI**= Per capital income, current \$US
- UEP**= Unemployment rate (%)

ESTIMATION TECHNIQUE

A dynamic version of Equation and are estimated using the co- integration technique. This is so to capture the long run impact of the debt variables on economic growth. The co-integration technique is based on primarily on Engle and Granger (1989) and Yoo (1987). It is called the 3 stage co-

The normalized long run equation is thus estimated as:

LNRGDP	PCE	GEH	GEE	LNPCI	UEP	C
1.000000	0.008283 (0.00414)	0.034623 (0.00658)	0.020531 (0.00397)	-0.807059 (0.12988)	-0.041327 (0.01152)	-5.830735
Log likelihood	-263.2757					

The co-integration test presented in table above is the summary of the co-integration analysis carried out, using Johansen maximum likelihood ratio approach. The LR test request the null hypothesis of no co-integration among the variables. The rejection of the null hypothesis in the model implies that there are at most 4 co-integration equations among the integrated variables at both 1% and 5% level of significance. This is so because the trace statistics are greater than the critical values respectively at the 1% and 5% levels. The normalized co-integration equations to real gross domestic product is presented in the Equation. While the PCE, GEH, GEE are positively signed i.e have positive relationships with the dimension of economic growth, the per capital income and unemployment rate both negatively impact the economic growth indicator. The negatively signed income per capital implies that even though individual income contribution to the GDP has progressively increase over the years, it has however proven to testify that fewer richer household contributions or individual have continued to influence this changes. The unemployment's negative impact is also a testimony that a huge portion of the population are significantly living below poverty line and thus are not able to impact the economy positively.

integration analysis. The first stage is to determine the level stationarity of the variable, by so doing the levels of integration of the variables are determined. The essence of determining this is to avoid spurious regression which can arise if the variables do not actually exhibit a long run relationship with economic growth, but are forced due to the interference of another variable, say time. The implication of stationarity and non stationarity are discussed below.

RESULT AND DISCUSSION

This study presents the result of the analyses carried out to discuss the comparative analysis of the impact of income inequality and poverty on Nigeria economic growth between 1986 and 2015. The real gross domestic product (RGDP) was used as the dependent variable while the Private Consumption Expenditure (PCE), Government Expenditure on Health (GEH), Government Expenditure on Education (GEE) Per capital income, current \$US (PCI) and Unemployment rate (UEP) were used to predict the value of the dependent variables. The data, covering 1986 to 2015 were analyzed employing the techniques of co-integration, error correction model (ECM) and granger causality test respectively.

Co-integration Result

Johansen Co-integration Test Result

Sample: 1986 -2015

Included observation: 28

Test assumption: linear deterministic trend in the data

Series: LNRGDP PCE GEH GEE LNPCI UEP

Lags interval: 1 to 1

	Likelihood	5 Percent	1 Percent	Hypothesized
Eigenvalue	Ratio	Critical Value	Critical Value	No. of CE(s)
0.942226	161.5657	94.15	103.18	None **
0.712896	81.73192	68.52	76.07	At most 1 **
0.642091	46.79040	47.21	54.46	At most 2
0.369015	18.02108	29.68	35.65	At most 3
0.161247	5.127843	15.41	20.04	At most 4
0.007272	0.204352	3.76	6.65	At most 5

*(**) denotes rejection of hypothesis at 5% (1%) significant levels. LR test indicate 3 co-integrating equations at 5%

4.3.3 Error Correction Model

The co-integration result equation implies that there exists a long run equilibrium relationship among the variables. The speed at which the short run Equation converges to equilibrium in the long run is shown by the ECM Co-efficient.

After establishing that long run relationship existed between the dependent variable and the independent variables through Johansen co-integration estimation of the normalized co-integration equation, Error Correction modeling (ECM) was also carried out, using autoregressive distributed lags (ARDL) techniques, in order to validate the presence of such long run relationship.

Overparameterized (ECM)

Dependent Variable: D(LNRGDP;2)

Method: Least Squares

Sample(adjusted): 1989 2015

Included observations: 27 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.003046	0.006295	0.483952	0.6359
D(LNRGDP (-1),2)	-0.410455	0.196436	-2.089511	0.0554

D(PCE,2)	0.001924	0.002838	0.678047	0.5088
D(PCE(-1),2)	0.007523	0.003526	2.133467	0.0511
D(GEH,2)	0.000428	0.000367	1.164830	0.2636
D(GEH(-1),2)	0.000210	0.000300	0.700477	0.4951
D(GEE,2)	-0.000466	0.000280	-1.665127	0.1181
D(GEE(-1),2)	-0.000239	0.000263	-0.912324	0.3770
D(LNPCI,2)	0.035296	0.022774	1.549847	0.1435
D(LNPCI(-1),2)	-0.003171	0.029039	-0.109199	0.9146
D(UEP,2)	0.003869	0.002771	1.396612	0.1843
D(UEP(-1),2)	0.001701	0.002909	0.584932	0.5679
ECM(-1)	0.337087	0.126768	-2.659090	0.0187
R-squared	0.562599	Mean dependent var	-0.001222	
Adjusted R-squared	0.187684	S.D. dependent var	0.034836	
S.E. of regression	0.031397	Akaike info criterion	-3.778033	
Sum squared resid	0.013801	Schwarz criterion	-3.154111	
Log likelihood	64.00344	F-statistic	1.500603	
Durbin-Watson stat	2.232961	Prob(F-statistic)	0.232295	

Parsimonious (ECM)

Dependent Variable: D(LNRGDP2)

Method: Least Squares

Sample(adjusted): 1989 2015

Included observations: 27 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002523	0.005761	0.437866	0.6664
D(LNRGDP (-1),2)	-0.355788	0.173923	-2.045669	0.0549
D(PCE(-1),2)	0.004954	0.002440	2.030169	0.0566
D(GEH,2)	0.000179	0.000236	0.759369	0.4570
D(GEE,2)	0.000250	0.000212	-1.175595	0.2543
D(LNPCI,2)	-0.036651	0.017655	2.075955	0.0517
D(UEP,2)	-0.003705	0.002195	1.688402	0.1077
ECM(-1)	0.252738	0.094734	-2.667880	0.0152
R-squared	0.483663	Mean dependent var	-0.001222	
Adjusted R-squared	0.293433	S.D. dependent var	0.034836	
S.E. of regression	0.029282	Akaike info criterion	-3.982493	
Sum squared resid	0.016291	Schwarz criterion	-3.598542	
Log likelihood	61.76366	F-statistic	2.542520	
Durbin-Watson stat	2.166164	Prob(F-statistic)	0.050071	

$$RGDP = 0.002523 - 0.355788LNRGDP + 0.004954PCE_{t-1} + 0.000179GEH + 0.000250GEE - 0.036651PCI - 0.003705UEP + 0.252738ECM_{t-1}$$

The results of the overparameterised and parsimonious error correction model as presented in table above showed the coefficient of the parameters estimated, alongside with the standard errors, t-values and the probability values used in conducting diagnostic test to verify the stability and predictive accuracy of the series. The model is written in its auto regressive distributed lag (ADL) form. The results show that the co-efficient of ECM (-1) are 0.337087 and 0.252738 are properly signed. While the over parameterised is insignificant, the parsimonious is significant indicating that the adjustments are in the right direction to restore the long run relationship. The estimate of the ECM co-efficient for the parsimonious shows that the speed of adjustment is slow at 25%. The estimate also shows that PCE, GEH, GEE all positively impact the economic growth of Nigeria in the long run, even though they meet the short run needs. In agreement with the co-integrated result, the per capital income and

unemployment rate both have negative impact on the economy. This also suggests that as unemployment rate increases over time, its impacts is sustained beyond the year the most shock was experienced.

The result recorded R-square value of about 48%. It thus implied that about 48% of the systematic variations in the dependent variables can be jointly explained by variations in the explanatory variables.

The result showed that while the over parameterised model is insignificant, the overall parsimonious model is significant, given the f-statistics probability values of 0.232295 and 0.050071 respectively. This implies that the R-square value of 48% for the parsimonious is significantly different from zero. However, the model is good-fit i.e they lack specification error.

Finally, the Durbin Watson Statistics of 2.166164 for the model also revealed that there is no auto-correlation between the error term of one period and that of another.

CONCLUSION AND RECOMMENDATION

In Nigeria, poverty and inequality have been identified as two evils that are highly related with feedback impacts which seem indisputable and must be fought at together. This study focused on investigating the comparative analysis of the impact of income inequality and poverty on Nigeria economic growth between 1986 and 2015. The result of the study showed clearly that a very high level of unemployment and low level per capital income of the populace significantly impact the economy negatively; these are consistent with the few studies that have investigated on the impact of the two on economic growth.

It recommends that employment should be one of the major tools to be considered in the fight against poverty and inequality in Nigeria. This should not be left for the government alone, the private sectors are also encouraged to be actively involved in this as well as individuals through imbibing the spirit of entrepreneurship. This study thus concludes that since inequality and poverty are two major macroeconomic problems that are eating up the country and are inter woven and the indirect channel of unemployment contributing to the problem, policy measure toward the combat of one should not neglect the other as the efficacy of the policy measures is related to the other problem. Employment has been identified as an important outcome of any welfare intervention.

REFERENCES

- Adedipe B.(2004). The impact of oil on Nigeria's economic policy formulation. Text of a paper presented at the conference on Nigeria: Maximizing pro-poor growth: Regenerating the socio-economic database, organized by overseas development Institute in collaboration with the Nigerian Economic Summit Group.
- Adigun, G. T; Awoyemi, T. T and Omonona, B.T (2011). Estimating Economic Growth and Inequality Elasticities of Poverty in Rural Nigeria, Journal of Agricultural Economics and Rural Development, 4(1), 205-35.
- Aigbokhan B.E(2008). Poverty, growth and inequity in Nigeria: A case study. African Economic Research Consortium Research Paper, 102.
- Aigbokhan, B. (1997) Poverty Alleviation in Nigeria: Some Macroeconomic Issues. Nigerian Economic Society's Annual Conference Proceedings, Ibadan.
- Akeredolu-Ale, E.O(1975) Poverty as a social Issue: A theoretical note. In: Poverty in Nigeria, O. Teriba (ed.), the Nigerian Economic Society, Ibadan.
- Alao, E. M (2015). Inequality, Poverty, and Among Nigeria Women and Youth and Challenges of Inclusive Growth in Post Millennium Development Goals, International Journal of Development and Economic Sustainability, 3(5), 15-25.
- Bourguignon, F (2003). The growth elasticity of poverty reduction: Explaining heterogeneity across countries and time periods, in T. Eichler and S. Turnovsky (Eds), Growth and inequality. Cambridge: MIT Press.
- Bourguignon, F (2004). The poverty-growth-inequality triangle. A Paper Presented at the Indian Council for Research on International Economic Relations, New Delhi.
- Burtless, G. and T.M. Smeeding, (2002). The level, trend and composition of American poverty: National and international perspective. 27-68 in understanding poverty, (Eds). S.H Danziger and R. Haveman. Cambridge, MA: Harvard University.

10. Calamitsis, E. A. (1999) Adjustment and Growth in Sub-Saharan Africa: The Unfinished Agenda. *IMF Finance and Development*, 36, (1), 6-9.
11. Deinger, K and Squire, L. (1996). New ways of Looking at old Issues: Inequality and Growth, *The Journal of Development Economics*, 52(2), 259-287.
12. Dollar, D & Kraay, A (2000) *Growth is Good for the Poor*. The World Bank. Washington D.C
13. Federal Government of Nigeria. (2004). National economic empowerment and development strategy-NEEDS. National Planning Commission, Abuja.
14. Hernandez-Cata, E (1999). Sub-Saharan Africa: Economic Policy and Outlook for Growth. *IMF Finance and Development*. 36 (1) 10-13.
15. Herrick, B and Kindleberger, C. P (1983). *Economics Development* Singapore: Mc Graw Hill.
16. Jhingan, M.L (1985) *The Economic of Development and Planning*. Delhi: Vikas Publishing House.
17. Kanbur R and Lustig N. (1999). Why is inequality back on the agenda? Paper Prepared for the Annual Bank Conference on Development Economics, World Bank Washington DC.
18. Kim, J. Y. (2014). Nigeria: World Bank – Extreme Income Inequality, Disincentive to Poverty Reduction. Retrieved from <http://allafrica.com/stories/201404110500.html>
19. Kolawole, B.A; Omobitan, O.A and Yaqub, J.O (2015). Poverty, Inequality and Rising Growth in Nigeria: Further Empirical Evidence *International Journal of Economics and Finance*, 7, (2)
20. Li, H., L. Squire and H. Zou, (1998). Explaining international and intertemporal variations in income inequality. *Economic Journal*, 108(446): 26-43.
21. Meire, G (1985). *Lending Issues in Development Economics*, (ed.) London :Oxford University Press.
22. Ogwumike, F (2002). An appraisal of poverty reduction strategies in Nigeria: Department of Economics, University of Ibadan, Ibadan – Nigeria. *CBN Economic & Financial Review*. 39(4).
23. Olaniyan, O and Awoyemi, T.T (2006). Inequality in the distribution of household expenditure in rural Nigeria: A decomposition analysis. A research report submitted to the Africa Economic Research Consortium (AERC), Nairobi for the Second Phase Collaborative Poverty Research Project.
25. Oluwatayo I.B. (2008). Explaining income inequality and welfare status of households in rural Nigeria: Evidence from Ekiti State. *Humanity and Social Sciences Journal*. (3)1:70-80.
26. Osahon and Osarobo, (2011). Poverty and Income Inequality in Nigeria: An Empirical Assessment, *JORIND* 9(2), 447-456
27. Oyekale, O.S, Adeoti A., I, Oyekale, T.O. (2006). Measurement and sources of income inequality in rural and urban Nigeria. Revised final report submitted to Poverty and Economic Policy Network (PEP), Universite Laval, Canada.
28. Ouattara, A.D. (1999) *Africa: An Agenda for the 21st Century*. IMF Finance and Development 36(1), 2-5.
29. Ravallion M, Datt G. (1996). How important to India's poor is the sectoral composition of Economic growth? Harvard Institute for International Development, Cambridge, Massachusetts. *World Bank Economic Review*. 10(4):1-25.
30. Ravallion M, Chen S. (1997). What can new survey data tell us about recent changes in distribution and poverty? *World Bank Economic Review*, 11(2):357-382.
31. Ravallion M. (2001). Growth, inequality and poverty: Looking beyond averages. *World Development*, 29(11):1803-1815.
32. Tadaro, M.O (1997) *Economic for a Developing World*. London Longman Press.
33. Theilwall, A. P (1982) *Growth and the Developing World*. London: Longman Press.
34. Wanbugu A, Munga B. (2009). Growth, poverty and income inequality in Kenya: Suggested policy options. The Kenya Institute for Public Policy Research and Analysis.
35. World Bank (2013) *Selected World Development Indicators*. World Development Report New York: Oxford University Press.
36. World Bank (2013) *African Development Indicators 2008*. New York : Oxford University Press.