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## Effect of Income Inequality on the Economic Growth of Nigeria

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### Abstract

This study investigated the effect of income inequality on the economic growth in Nigeria from 1981-2021, Ordinary least squared (OLS) method of data analysis was adopted because of its Best Linear Unbiased Estimators (BLUE) properties. The variables used were sourced from Central Bank of Nigeria Statistical Bulletin. The variables used were income inequality, employment, education, poverty and government capital expenditure and real gross domestic product. The collected data were sourced from central bank of Nigeria (CBN) statistical bulletin 2021 The study adopted the unit root test, co-integration approach, as well as Error Correction Mechanism. E- View software was used for the analysis. The study found that: Income inequality has no significant effect on economic growth in Nigeria: Employment rate has significant positive effect on economic growth in Nigeria: Poverty has significant negative effect on economic growth in Nigeria: The study recommends that, there is need for the government to change the education system to ensure that new training methods, which develop existing skills and create skills where they do not exist are implemented. There is also a need to put in place training policies that will strengthen the competitive capacities of the work force and increase the competitiveness. The provision of employment opportunities is the peak of any economic and social reform plan that aims to improve quality of life by achieving sustainable human development.

**Keywords:** Income inequality, employment, education, poverty and government capital expenditure and real gross domestic product.

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### 1. Introduction

The concept of inequality is at the heart of sustainable economic development. Inequality is defined as the difference between the standard of living across a population (Gallo, 2002). According to Clark (2015), over 70% of the population in developing countries live in highly unequal societies. There are various types of inequality such as: gender, wealth, health and income. The most popular among them is income inequality, and that is the primary focus of this paper. Income inequality is defined as the disparity in income between rich and poor individuals in a society. Income inequality is a growing problem globally, and it is even more evident in developing countries like Nigeria. The issue of inequality in Nigeria peaked between 1985 and 2004 where the country's Gini coefficient increased from 0.43 to 0.49. This immediately placed Nigeria among the most unequal countries in the world. One of the main

causes of inequality was the growing level of corruption in the country and the absence of fair distribution of economic and human resources (Dali, 2015).

High rate of unemployment, unimpressive growth rates and poverty among other miseries of the populace, are the order of the day. For instance, facts available for the Nigerian economy show a high rate of unemployment and underemployment. The rate of open unemployment was 12% in March 2005; it rose to 19.7% in March 2009 while the rate of underemployment hovered around 19% in 1998 (Adebayo and Ogunrinola, 2006, NBS 2010). Among the youths in the 15-24 age cohorts, the rate of unemployment is over 40% according to the 2010 edition of the Labour Force Sample Survey of the National Bureau of Statistics. Thus, the issue of real output and employment growth in developing nations is a sine qua non for poverty reduction and a more equitable income distribution (Fofana 2001).

Education, as a key component of human capital formation is recognized as being vital in increasing the productive capacity of people. Education, especially at the higher level, contributes directly to economic growth by making individual workers more productive and leading to the creation of knowledge, ideas, and technological innovation (Todaro, 2007). However, the educational sector in Nigeria is plagued by many problems. This is attributed to the attention given to education by the Nigerian governments (both past and present) is relatively low. Even many years after independence, it is stunning to know that the adult illiteracy rate is still at 74% (Ibidapo-Obe, 2007) and the gross enrollment rate is also low. The minimum amount to be spent by a country on education as stated by the United Nations (UN) is 26% of the country's annual budget. Ironically, according to the data by Herbert (2002) from 1977-1998, the total education budget represented an average of 9.7% of total government expenditures, while its percentage share of the GDP from 1991-2009 has maintained a value of 0.85%. Its highest value was 5.11 % in 1981 and its lowest was 0.85% in 1991, 9.86% in 2012, 9.01% in 2013, 10.5% in 2014, 10.7% in 2015, 7.9% in 2016, 7.4% in 2017, 7.04% in 2018, 7.05% in 2019, 6.7% in 2020 and finally the lowest of it all in 2021 at 5.6% (UNESCO, 2011).

One of the most challenging topics for economists is to explain how countries become rich (Tridico, 2016). Nigeria may be the most challenging and important developing country in the world today. It has the smallest manufacturing sector of any large economy in the world, and the greatest concentration of export and government revenue dependence on a natural resource commodity. It is a country of spectacularly failed economic policies, whose GDP per capita is no higher than it was forty years ago. It is a country of rising poverty and increasing income inequality (King, 2013). Achieving equitable distribution of income and alleviation of poverty has for some time been a major development objective. Studies have, therefore, especially in the 1970s, appraised development policies in terms of how far these objectives are being realized.

In the 1980s many less developed countries (LDCs) introduced SAPs in an effort to promote growth and redress the negative trends in a number of economic indicators. Studies have found that adjustment policies have had negative impact on some socioeconomic groups. Recently the depth and severity of extreme poverty in Nigeria has been alarming. And over the years, the government undertook some macroeconomic policies with the aim of reducing, if not

totally eradicating income inequality. These policies were expected to at least raise the standard of living of Nigerians. The impact of these policies on income inequality has been contentious. Some studies in the past have argued that the poor has benefited more from these policies (Obadan, 2014); while some found that there was positive real growth yet inequality still worsened (Aigbokhan, 2010). There is now a growing agreement that both the rate and the distributional impact of growth are important in fighting poverty. This means that pro-poorness of a given growth rate is more important in certain cases than in others.

The Nigerian problem in the 20th century has been the inability to get the best from her human resources (World Bank, 2010). The problem goes beyond low income, savings and growth. It includes high inequality, which includes among others, unequal access to basic infrastructure and unequal capabilities (education and health status). Incidentally, the importance of unequal access to opportunities, assets, income and expenditure cannot be overemphasized as it plays important roles in reducing income inequality and spurring the economy to long-term development. Nigeria has experienced a high incidence of income inequality over the last two decades (Olaniyan and Awoyemi, 2015). The impact of the incidence becomes more important because of the high inequality associated with even this low level of household income and expenditure. This is precisely the approach followed in this paper. It is thus against this background that the study seeks to examine the effect of income inequality on economic growth in Nigeria.

## **1.2 Objectives of the Study**

The broad objective of this study is to analyze the effect of income inequality on economic growth of Nigeria. This study specifically identified the following objectives:

- i. To determine the effect of income inequality on economic growth in Nigeria.
- ii. To evaluate the extent to employment rate affects economic growth in Nigeria.
- iii. To determine the effect of poverty rate on economic growth in Nigeria
- iv. To evaluate the extent to government capital expenditure affects economic growth in Nigeria.
- v. To determine the effect of education on economic growth in Nigeria

## **2. Review of Related Literature**

### **2.1 Conceptual Review**

#### **2.1.1 Income Inequality**

Kopp (2019) defines income inequality as “an extreme disparity of income distribution with a high concentration of income usually in the hands of a small percentage of a population”. When income inequality occurs, there is a large gap between the wealth of a population segment in comparison to another. Income inequality and income disparity segregations can be analyzed through a variety of segmentations such as occupation, historical income, male vs. female, ethnicity, and geographic location. Segmentations of income disparity analysis are used for analyzing different types of income distributions, as such, income distributions by

demography. Segmentation forms the basis for studying income inequality and income disparity. Inequality has to do with differences in the share of something between/among two or more persons where the share of one/some is greater than that of the others.

### **2.1.2 Economic growth**

Economic growth is a primary focus of macroeconomists, who rely on quantifiable metrics such as gross national product or aggregate income (Feldman, et al, 2014). Economic growth can be defined as the increase or improvement in the inflation-adjusted market value of the goods and services produced by an economy over a certain period of time. Statisticians conventionally measure such growth as the percent rate of increase in the real gross domestic product, or real GDP. Growth is usually calculated in real terms – i.e., inflation-adjusted terms – to eliminate the distorting effect of inflation on the prices of goods produced. Measurement of economic growth uses national income accounting. Since economic growth is measured as the annual percent change of gross domestic product (GDP), it has all the advantages and drawbacks of that measure. The economic growth-rates of countries are commonly compared using the ratio of the GDP to population (per-capita income) Akpolih and Farayibi, 2012.

## **2.2 Theoretical Framework**

### **2.2.1 Marxist Theory of Income Inequality**

Marxists theorize that inequality and poverty are functional components of the capitalist mode of production: capitalism necessarily produces inegalitarian social structures. Inequality is transferred from one generation to another through the environment of services and opportunities which surrounds each individual. The social geography of the city is made up of a hierarchy of community environments reproducing the hierarchical class structure. Change in the system results from change in the demand for labor. Continuing poverty in American cities results from a continued system need to produce and reproduce an industrial reserve army. Inequality and poverty cannot be eradicated without fundamental changes in the mode of production

The Marxist view is that inequality is inherent in the capitalist mode of production. It is inevitably produced during the normal operation of capitalist economies, and cannot be eradicated without fundamentally altering the mechanism of capitalism. In addition, it is functional to the system, which means that power holders have a vested interest in preserving social inequality. There is little point, therefore, in devoting political energies to the advocacy of policies which deal only with the symptoms of inequality without altering its basic generating forces. Hence, the call for social and economic revolution, the overthrow of capitalism, and the substitution of a method of production and an associated way of life designed around the principles of equality and social justice. Marxism favours an eventual society where distribution is based on an individual's need rather than his ability to produce, inheritance, or other such factors. In such a system, inequality would be minimal. Marxists believe economic equality is necessary for political freedom; that when there is economic inequality then political inequality is assured (Peet, 1975). Marxists are of the view that the more the distribution of resources in favour of the rich, the more the tendency for

overinvestment and under consumption and this will result in economic crisis and will have negative implication on economic growth.

## **2.2. Empirical Review**

Onwuka, (2022) examined the relationship between poverty, income inequality and economic growth in Nigeria. The study used time series data from National Bureau of Statistics (NBS) and Central Bank of Nigeria (CBN) Statistical Bulletin between the periods from 1981 to 2019. The study employed the use of Augmented Dickey Fuller test, Co-integration test and Error Correction technique. From the study, the findings revealed that income inequality has a negative relationship with economic growth in the country while poverty was found to be positively related to economic growth. Similarly, the findings also revealed that poverty and income inequality has an insignificant effect on economic growth in Nigeria. Based on the findings, it can be concluded that poverty and income inequality has not significant relationship with economic growth in Nigeria. Thus, the study concludes that there is need for government of the country to come up with an all-inclusive policy and programme that will be targeted to the poor and give them ample opportunities to improve their welfare.

Seher (2022) determined whether the effect of income inequality on economic growth is realized through transmission channels theoretically expressed. This relationship is examined for 143 countries and the periods between 1980 and 2017 through positive and negative channels. The findings highlight the complexity of the impact of income inequality on economic growth. Therefore, indirect impact needs to be scrutinized and policy recommendations need to be carefully designed.

Manyeki and Balázs (2020) investigation on the relationship between income inequality and economic growth and the hypothesis addressed was: inequality is harmful for growth. We contribute to the literature by employing an autoregressive distributed lag model using a time series data spanning from 1990–2015. The study found a significant positive but weak long run relationship between income inequality and growth. The short run was a strong positive relationship, which was significant at 1% level.

Danso and Boateng (2020) examined the relationship between inequality and economic growth, this paper focused on the top ten biggest economies in Africa. There was positive correlation between income inequality and economic growth in the long term. Mean School Year and Gross Savings also regressed positively because it was established that a 1% increase in the number of years spent in school within these countries will causes the economy to grow about 214.76%, and 1% increase in gross savings pushes economic growth by 3.61% annually. Expectedly, unemployment had negative relationship with economic growth. A 1% decrease in unemployment rate within these countries will boost long term economic growth by 7.72%.

Ibrahim and Taiga (2020) assessed the impact of income inequality on poverty in Nigeria spanning the period of 1986 to 2018. The Autoregressive Distributed Lag (ARDL) model was used to carry out this objective. Findings from the study revealed that income inequality significantly contributed to the rising poverty in Nigeria, increasing poverty by 75%. Similarly, unemployment and the rising inflation exacerbated the poverty situation in the country. Conversely, growth in per capita income dampened the negative effect of poverty over the

period of study. To tackle the pervasive income inequality, the study recommended improved distribution of human capital, a well-targeted social protection, while expanding the coverage of the government's social investment program to capture more unemployed people.

Muhammad et. al. (2019) examined the changes in income inequality based on three different indices, which are Gini, Atkinson and generalized entropy using the household incomes data available from the surveys conducted in 2007, 2009, 2012 and 2014. Modification for each index is employed by taking sample weights into account for better measurement. Lorenz curves are fitted to the data to describe how the incomes of different household income groups are distributed over the time period. All the indices show a decreasing trend from 2007 to 2014, indicating an overall improvement of income distribution.

Nwosa, (2019) examined the relationship between income inequality and economic growth in Nigeria and its implication for economic development. The study covered the period 1981 to 2017 and employed the autoregressive distributed lag estimation technique. The results of the study showed that economic growth had positive but insignificant impact on income inequality in Nigeria.

### 3. Methodology

#### 3.1 Model Specification

An economic model is the representation of the basic features of an economic phenomenon. In order to identify the nature of relationship between inequality and the economic growth, it is imperative to establish a model or paradigm for analysis, whereby the parameter estimates of inequality can be determined. Thus a linear regression model is stated in a functional form as,

$$RGDP = F(ICE, EDU, EMP, POV, GCE)$$

Where

RGDP = Real gross domestic product

ICE = income inequality (a proxy for Gini coefficient)

EDU= education

EMP= Employment

POV= Poverty rate

GCE= government capital expenditure

F= functional notation

The above equation can be restated in a functional form as;

$$RGDP = \beta_0 + \beta_1 ICE + \beta_2 EDU + \beta_3 EMP + \beta_4 POV + \beta_5 GCE + \text{Where;}$$

$\beta_0$  = Autonomous or Intercept

$\beta_1$  = Coefficient of Parameter ICE

$\beta_2$  = Coefficient of parameter EDU

$\beta_3$  = Coefficient of parameter EMP

$\beta_4$  = Coefficient of parameter POV

$\beta_5$  = Coefficient of parameter GCE

$\mu$  = Stochastic variable or error term

The above can be restated in its log form as

$$\text{Log RGDP} = C + \beta_1 \text{ICE} + \beta_2 \text{EDU} + \beta_3 \text{EMP} + \beta_4 \text{POV} + \beta_5 \text{GCE} + \mu$$

Where Log = logged values of the variables.

### 3.2 Estimation procedure

In this work, the data analysis procedure in this study is Ordinary Least Square (OLS) which would be engaged to establish the existence of the relationship between the dependent and independent variable (E-view). The choice of the estimation procedure (OLS), was as a result of its advantage over other methods or techniques of estimation, OLS is an estimation technique which is preferred given its desirable properties of unbiased consistency, efficiency, sufficiency, best linear. Gujarati (2004) the technique also has computational simplicity.

### 3.3 Sources of Data

Data for the survey were sourced from the secondary methods. The secondary sources of data or information are with respect to existing literature, research reports, and CBN documents etc. These secondary sources of data for this study were sought through the following sources, including Central Bank of Nigeria (CBN) statistical Bulletin, and world bank data from 1981-2021.

s/n	Variables	Sources
1	Real Gross Domestic Product (RGDP)	CBN Statistical bulletin
2	Income Inequality proxied by Gini Coefficient (ICE)	World bank data
3	Education (EDU)	CBN Statistical bulletin
4	Employment rate (EMP)	World bank data
5	Poverty rate (POV)	World bank data
6	Government Capital Expenditure (GCE)	CBN Statistical bulletin

## 4. Presentation and Analysis of Result

### 4.1 Unit Root Test

The time series variables when used in their natural form, often leads to spurious regression results and this misleads policy makers. In order not to obtain spurious result the variables were first tested for stationarity by employing the Augmented Dickey Fuller test (ADF). The Result obtained from the analysis is presented in the table below

**Table 4.1 Unit Root Result**

Variables	ADF	Integration	Significance
RGDP	-4.425669	I (1)	1%
ICE	-9.700939	1 (1)	1%
EMP	-7.502730	1 (1)	1%
POV	-6.327872	1 (1)	1%
GCE	-6.474062	1 (1)	1%

Source: E-view 11 version.

From the result in table 4.1 above, it is well observed that none of the variables (Real gross domestic product. Income inequality, employment, poverty. Government expenditure on health government expenditure on education) was found to be stationary at level, but the entire variables were stationary at 1st difference. This implies that all the variables are stationary at first differencing with ADF values are higher than their critical values at 5% significance. and this result gives us a lead way to co-integration analysis.

#### 4.2 Co-integration Test

The second step is the testing of the level of co-integration between the variables, order that is if in the long run two or more variables move closely together, it implies a long run equilibrium relationship as the difference between them is not stationary. A lack of co-integration suggests that such variables have no long-run relationship.

**Table 4.2 Johansen Co-integration Test**

Hypothesized no of (ECS)	Max-Eigen value	Critical value	Trace statistics	5% Critical value
None *	43.66217	36.63019	127.2488	83.93712
At most 1 *	35.89736	30.43961	83.58658	60.06141
At most 2 *	24.99929	24.15921	47.68922	40.17493
At most 3	15.22193	17.79730	22.68993	24.27596
At most 4	6.820060	11.22480	7.467996	12.32090
At most 5	0.647935	4.129906	0.647935	4.129906

Source: E-view 11 version

Max-eigen value test and Trace statistics indicates 3 co-integration equations at 0.05 \*denotes rejection of the hypothesis at 0.05 level. \*\*Mackinnon-Haug-Michelis (1999) p- values.

Since co-integration is a pre-requisite for the Error correction Mechanism, and following our co-integration result, there is a long-run equilibrium relationship among the variables.

The result of the Johansen co-integration presented above in tables 4.4 was carried out assuming linear deterministic trend in co-integrating equation. The trace test indicates three co-integrating equation at 5% significance level likewise. In line with this, there exist long-run equilibrium relationship that between income inequality and economic growth in Nigeria. From this findings, we move ahead to present our regression result.



### 4.3 Lag Length Selection

Below is the tabular summary of the lag length selected for the study

**Table 4.3: Lag length selection for the study.**

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-647.7380	NA	7.45e+08	34.61779	35.04873	34.77112
1	-554.3866	152.3101	20836887*	31.02035*	32.52865*	31.55699*
2	-543.6795	14.65190	48397405	31.77260	34.35827	32.69256
3	-505.4615	42.24097*	30337752	31.07692	34.73994	32.38019

Source: E-view 11 version

To determine the optimum lag length, we begin with a lag of twenty but finally selected an optimum lag of one. We employed the sequential modified LR test, the final prediction error (FPE) test, Akaike information criterion (AIC) test, Schwarz information criterion (SC) test and Hannan Quinn (HQ) information criterion at 5 percent level of significance to carry out the selection. However, we settled for the Schwarz information criterion which indicates a lag order of one. Therefore, the maximum lag length for the result is a lag order of one (1).

### 4.4 Presentation of Regression Result

**Table 4.5: Regression Result (Dependent Variable: LRGDP)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.014628	0.008314	1.759537	0.0894
D(ICE)	-0.004462	0.005741	-0.777270	0.4435
D(ICE(-1))	0.068835	0.017025	4.043243	0.0004
D(EMP)	-0.000412	0.005443	-0.075618	0.9403
D(EMP(-1))	0.021487	0.007494	2.867173	0.0078
D(POV)	-0.001776	0.002077	-0.855177	0.3997
D(POV(-1))	0.007969	0.002308	3.453041	0.0018
D(LGCE)	0.001952	0.010138	0.192556	0.8487
D(LGCE(-1))	-0.057988	0.017559	-3.302416	0.0026
D(EDU)	-0.000791	0.002358	-0.335450	0.7394
D(EDU(-1))	0.012850	0.003776	3.402807	0.0018
D(ECM(-1))	-0.568311	0.141863	-4.006066	0.0004
<b>R-squared</b>	<b>0.521578</b>	<b>Mean dependent var</b>	<b>0.035427</b>	
<b>Adjusted R-squared</b>	<b>0.535656</b>	<b>S.D. dependent var</b>	<b>0.045116</b>	
<b>S.E. of regression</b>	<b>0.039443</b>	<b>Akaike info criterion</b>	<b>-3.406966</b>	
<b>Sum squared resid</b>	<b>0.043562</b>	<b>Schwarz criterion</b>	<b>-2.976023</b>	
<b>Log likelihood</b>	<b>74.73236</b>	<b>Hannan-Quinn criter.</b>	<b>-3.253640</b>	
<b>F-statistic</b>	<b>2.267506</b>	<b>Durbin-Watson stat</b>	<b>2.249618</b>	
<b>Prob(F-statistic)</b>	<b>0.047147</b>			

Source: E-view 11 version

## Discussion of the Result

The R<sup>2</sup> which is the coefficient of determination or the measure of goodness of fit shows the degree of variation in the dependent variables, as explained by the independent variables all taken together. The closer our R<sup>2</sup> is to 1, the better the goodness of fit of the model. From the result in table 4.3 above, we found out that our R<sup>2</sup>= 0.521578. This indicates that our model displayed a good fit. The adjusted R<sup>2</sup> of 0.535656= 0.53 this implies that despite the adjustment in the degree of freedom our variables can still explain about 53% of the changes or variation in the model. Thus, it is in line with the result of the goodness of fit of the model.

The F-statistics is used to test the overall statistical significance of our parameter in the model. If the probability of F in the computed model is greater than the desired level of significance (0.5) we accept the null hypothesis and reject the alternative. From the result in table 4.3 above the computed value of f is 2.267506 while its probability is 0.04 Since its probability is less than 0.05 we accept alternative hypothesis which states that the independent variables are jointly statistically significant in explaining the dependent variable in the model.

The a priori expectation is determined by the existing economic theory and it indicates the signs of the economic relationship under consideration. From the result of our estimated model it was discovered that income inequality rate has a negative sign given its value as -0.004462. This implies that decrease in income inequality rate increase the real gross domestic product by 4%.

Employment rate at 2nd lag has a positive sign given its value as 0.021 this suggests that increases the employment increase the real gross domestic product by 2%. This conforms to our theoretical expectation.

Poverty rate has a negative sign given its value as -0.007969; this implies that decrease in poverty rate increase the real gross domestic product by 7%. this conform to a priori expectation

Government expenditure has a positive sign given its value as 0.192556, this means that increase in government spending increase the real gross domestic product by 1%, this conform to theoretical expectation

Lastly, education has a positive sign given its value as 0.000791, this further shows that increase in education spending increases the real gross domestic product by 7%, this conform to a priori expectation

The t-statistics, this helps in detecting the individual statistical significance of parameter in the model. It was discovered that income inequality is statistically insignificant; this implies that it has not contributed significantly to economic growth of Nigeria. However, employment rate, government expenditure and education spending are statistically significant, at respective significant rate. This further implies that they contributed significantly to economic growth of Nigeria. Poverty rate is negative and statistically significant at 5% level of significant, this implies the impact of poverty on economic growth is moderately/slightly felt in the economy.

The Durbin Watson statistic is used to test for the presence or otherwise of autocorrelation in our regression model. When the value of our d-w statistics is 2, it means the absence of autocorrelation among the explanatory variables in the model. From our model the durbin-watson statistics is (2.2) which is close to 2, this implies that our model is free from the problem of autocorrelation.

The coefficient of the error correction term carries the correct sign and it is statistically significant at 5 per cent level with the speed of convergence to equilibrium of 77 per cent

#### **4.5 Hypothesis Testing**

In a bid to carry out the necessary empirical analysis a hypothesis were formulated and have to be tested to verify the validity or otherwise of such proposition.

##### **Hypothesis One**

Ho1: Income inequality has no significant effect on economic growth in Nigeria.

From the above regression result, it was observed that t-test on Income inequality is statistically significant; at first lag 4.043243 (0.004) . The probability result of income inequality which is 004 and less than 0.05 suggest that the null hypothesis of no significant effect of income inequality on economic growth should be rejected and alternative hypothesis alternative. The implication of this result shows that income inequality affect the growth of the economy. This is in line with economic theory which posit that inequality of income does not support the growth of the economy.

##### **Hypothesis Two**

Ho2: Employment rate has no significant effect on economic growth in Nigeria.

From the above regression result it was observes that t-test on Employment rate is statistically significant, with its values as 2.867173 (0.0078). The probability result of Employment rate which is 007 and less than 0.5 suggest that the null hypothesis of no significant effect of Employment rate on economic growth should be rejected and alternative hypothesis alternative. The implication of this result shows that Employment rate affect the growth of the economy. This is in line with economic theory which posits that Employment rate support the growth of the economy.

##### **Hypothesis Three**

Ho3: Poverty has no significant effect on economic growth in Nigeria

Meanwhile, drawing inference from table 4.3 above we find out that the computed value of T-test for poverty is -3.453041 While it's probability is -0.0018 since it's probability is less than 0.05% level of significance, we reject the null hypotheses (H0) and accept the alternative hypothesis which says that Poverty has significant negative effect on economic growth in Nigeria. The implication of this result shows that Poverty affect the growth of the economy. This is in line with economic theory which posit that Poverty negatively affect the growth of the economy.

### **Hypothesis Four**

Ho4: Government capital expenditure has no significant effect on economic growth in Nigeria.

From table 4.3 above we find out that the computed value of T- test is 3.302416 while its probability is 0.0026 since its probability is less than 0.05% level of significance, we reject the null (H0) hypothesis and accept the alternative hypothesis which says government capital expenditure has significant effect on economic growth in Nigeria. The implication of this result shows that government capital expenditure affect the growth of the economy. This is in line with economic theory which posits that government capital expenditure support the growth of the economy.

### **Hypothesis Five**

Ho5: Education has no significant effect on economic growth in Nigeria

From table 4.3 above we find out that the computed value of T- test is 3.3402807, while its probability is 0.0018 since its probability is less than 0.05% level of significance, we reject the null (H0) hypothesis and accept the alternative hypothesis which says Education has significant effect on economic growth in Nigeria. The implication of this result shows that Education expenditure affect the growth of the economy. This is in line with economic theory which posits that Education support the growth of the economy.

## **5. Recommendations and Conclusion**

### **5.1 Conclusion**

This study carried out an empirical analysis on the effect of income inequality on economic growth of Nigeria. Consequently, the results indicated that income Inequality has no significant effect on the economy. There was evidence that poverty was, however, largely promoted by income inequality in Nigeria. In other words, the study established that non-inclusive growth and high income inequality were the main reasons for the poor distributional impact of growth on poverty reduction in Nigeria. The study concluded that policy measures required to address these imbalances should recognize these and develop strong strategies to reorganize the economic structure. This should be supported by high expansion in industrial base and manufacturing capacity of the economy.

### **5.2 Recommendations**

1. There is need for the government to improve the education system to ensure that new training methods, which develop existing skills and create skills where they do not exist are implemented.
2. The provision of employment opportunities is the peak of any economic and social reform plan that aims to improve quality of life by achieving sustainable human development.
3. Government should direct its expenditure to more productive sector through investment in job and growth enhancing sectors of the economy

4. Income inequality can be reduced directly by decreasing the incomes of the richest or by increasing the incomes of the poorest. Policies focusing on the latter include increasing employment or wages and transferring income

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