INTRODUCTION
There is a functional relationship between the rate of literacy, the level and distribution of poverty. It is at instance of this circumstance, this present policy makers in Nigeria includes literacy and community education on its priority list as part of a development strategy for poverty alleviation. The National Commission for Mass Literacy, Adult and Non-Formal Education Which was established in 1990 was part of the national drive to eliminate illiteracy in Nigeria. The policy makers believed that the high level of poverty in Nigeria has its root in the illiteracy problem. In attempt to alleviate poverty; the commission was charged with the responsibility to develop strategies for the eradication of illiteracy, to coordinate programs for the implementation of a National Mass Literacy Campaign, to monitor and promote literacy and post literacy programs, to organize in service training for staff, and to develop and disseminate teaching materials.

At the inception of the Commission for Mass Literacy, Adult and Non-Formal Education; the national literacy rate was 51% with 39% for women and 61% for men. In 1995 the literacy rate was estimated to be about 56.1%. The functional literacy for women had risen to 47% and that for men to 67%. However, a survey on women's education conducted by the Federal Government of Nigeria and UNICEF in 1993 indicates a drop in the average rate of literacy to 27% from 29% in 1992. The survey revealed a high dropout rate (86%) at women's education centers. The situation has thus deteriorated from year to year. The National Commission for Mass Literacy, Adult and Non-Formal Education submitted a proposal for UNESCO’s assistance. The submission requested an increase over its existing funding to realize its objectives of making 150,000 learners per state per year functionally literate. The goal was to raise the literacy rate to 67% (estimated to be at the rate of 5.55 million people per year) within four years at a total cost of US$31 million. A large proportion of the assistance needed is for training purposes. The delivery strategies in the submission are for basic literacy, functional literacy that will include skill acquisition and distance education for further education. The illiterate classification includes groups such as the Girl Child and Adolescent Girl, Adult Illiterates, Out of School Children and Youth, Nomadic Communities, Children on the Street, and School Dropouts (Moja 2000).

Within two years of establishing the Commission, 36 States and the Federal Capital Territory set up autonomous government agencies and increased the provision of non-formal education to address the problem of illiteracy and continuing education. The result has been a need to increase funding to cover the costs for additional personnel in the 16 field. The program includes basic literacy, post literacy, woman education, nomadic education, continuing education, Arabic integrated literacy, literacy for the blind, "Each One Teach One” (EOTO), worker education, functional literacy, vocational education and literacy for the disabled. The non-formal system is flexible, allowing for exit and re-entry points as well as movement between the formal and non-formal sector. The Commission has succeeded in creating
awareness through its sensitization and mobilization workshops at the national, state and local government levels. The 1995 data collected from about 50% of the states indicated that the total enrollment in the UNDP assisted mass literacy classes was 678,407, of whom 386,599 (57%) were females and 291,808 (43%) were males. It further indicated that a total of 15,505 instructors were trained across the nation, of whom 8,140 (52.50%) were males and 7,365 (47.50%) were females. Moreover, a total of 1,495 supervisors and organizers were trained, of whom 815 (54.52%) were females and 680 (45.48%) were males. A National Center for Adult Education, established in Kano in 1985, and three institutes, established in Uyo (1952), Maiduguri (1976) and Bauchi (1978) are part of the resources available for literacy education. The Center serves as a national non-formal education library, documentation and resources development and production center. The institutes offer training courses for mass literacy personnel. In-service training for the staff involved at state agencies for mass literacy and NGO literacy programs is conducted at the Center. In addition the Center carries out research on adult education and develops institutional and follow-up materials for nation-wide distribution. There is a network of literacy committees, organized by the National Commission for Mass Education (NMEC), in conjunction with the state agencies. Participatory committees have been set up (at class/center, village/ward, local and state government levels) to coordinate activities and aid material distribution; disseminate information; and provide feedback to the agencies. Learning centers have been established for the different categories of illiterates, such as: (a) Centers for adult nomads and migrant fishermen which offer literacy programs for them and their children, because they have been found not to make maximum use of the mobile school provided for them. (b) The functional literacy centers for adult women have been established nationwide by the Federal, State and Local Governments, NGOs and philanthropic individuals. A survey conducted in 1995 indicated that there are 720 women's functional literacy centers all over the country with a total enrollment figure of 157,554 learners. (c) Special schools for girls’ literacy have been established with the goal of using the programs as a bridge into formal schooling and as a strategy to increase girls' access to education. (d) The educational needs of street children and other under-served children have attracted increasing attention from governmental organizations. As of 1995, the number of such children in Lagos was estimated to be at least 10,000. A study of street children in Lagos made the following recommendations: i) the setting up of drop-in educational and vocational centers by education authorities and concerned NGOs; ii) an increase in the funding and expansion of non-formal remedial vocational continuing education programs which should be flexible and varied to meet the street children's needs and permit a wide choice of options for those with aptitude; iii) the training of education and welfare workers in the right methods of approach to street children (Moja 2000).

THE PROBLEM AND THE OBJECTIVES OF THE STUDY

In spite of the efforts listed above, available data shows distinct underperformance in enrolments at the secondary and tertiary levels. Furthermore, there is a decline of quality of education in universities as well as a reduction of research output. This is concomitant to a declining real value of Government allocations for education and deteriorating facilities. The poor result achieved by the education sector is worrisome. At the tertiary level for instance, only a minority of students is enrolled on the basis of academic performance, majority were built on sentiments. In the meantime, criticism has been leveled at the weak governance of universities. As a consequence of all these factors; Nigerian degrees now lack recognition by overseas universities. However, to build the workforce that meet the requirements of twenty-first century, the government will have to overcome the aforementioned challenges of the education sector.

In addition to this, a review of the country’s economic situations revealed that the country is underdeveloped. Poverty and inequality is wide spread with about 71 million Nigerians living below $1 a day and the gini coefficient of 0.49. Socio statistics such as infant, under 5, and maternal mortality rate as well as unemployment rate are higher than the averages for developing countries (Fakiyesi and Ajakaiye, 2009). In the light of Nigeria’s current economic problems, and particularly its poverty situation, this paper takes the position that educational development should be given utmost attention in a bid to enhance sustainable economic growth and development (Dauda 2010). Since a healthy and well-educated people make an economy more productive, it is apparent that capacity building through investment in human capital, particularly education can enhance economic growth, alleviate poverty and protect the Nigerian economy from further distortions. Accordingly, there is however, a need to critically examine the relationship between literacy rate and incidence of poverty in Nigeria, with a view to deriving implications for policy direction. This indeed constitutes the major objective of this paper. The paper attempts to examine and test whether a significant relationship exist between literacy rate and the incidence of poverty in Nigeria. The rest of the paper is therefore organized as follows. Following the introductory section, Section 2 reviews the literature. The methodology of the study is discussed in Section 3. An econometric analysis of the impact of the literacy rate on the incidence of poverty in Nigerian is
considered in Section 4. Finally, Section 5 presents the summary and conclusions of the paper.

LITERATURE REVIEW

The linkages among education, poverty, unemployment, income inequality and economic growth in an economy have been discussed in many studies. Authors like Abiodun, A.A. (2002), Larocque (2008), Dahlin (2005), Heckman and Klenow (1997) Michaelowa (2000), Dauda (2010), Fakiyesi and Ajakaiye (2009), Yesufu (2000) and Todaro (2007), Bakare (2006) have made notable contributions to knowledge in this area. According to Larocque (2008) education, as a key component of human capital formation is recognized as being vital in increasing the productive capacity and living standard of people. In their own views Dahlin (2005), Heckman and Klenow (1997) and Michaelowa (2000) discovered that education, especially at the higher level, contributes directly to economic growth by making individual workers more productive and indirectly by leading to the creation of knowledge, ideas, and technological innovation. They affirm that: the higher the level of education; the greater the opportunity to secure viable jobs and earn higher wages. The increase in individual’s wage has a direct positive effect on one’s living standard and poverty reduction. Most people that are poor in the society are uneducated. Hence education is basic to development, and also regarded as the only instrument through which the society can be transformed.

Dauda (2010), Yesufu (2000) and Todaro, (2007) opined that education is a salient factor in transition programme; it equips human resources with the needed knowledge, skills and competencies, which would make them functional, and contribute to the all-round development of the nation. It does not only help to supply the essential human capital which is a necessary condition for sustained economic growth but it is a key to poverty reduction and vehicle for promoting equity, fairness and social justice. There is no doubt that education plays an important role in the developmental process. The Studies sponsored by the World Bank lends support to the idea that human resource development has an important bearing on economy. It is estimated that three quarter of the world’s poor, those earning less than a dollar—a day, majority of who are females live in the rural areas, where non – attendance in school drop out early as students, adult literacy and gender inequality are disproportionately high. It has also been established that educational factors-higher attainment and more equal distribution of education play a significant role in making income distribution to be more). In many part of the world, education is highly subsidized. Public expenditures on education are estimated to account for about 6 percent of GDP in OECD Countries. Apart from the direct benefit itself, education is a means of acquiring special skills and raising the level of productivity of the individual. The more years spent in acquiring education, the more skills and the higher return will accrue. The survey of World Bank, (2004) had found that the average earnings of workers with complete primary education were about 1.7 times that of illiterates. Workers with secondary education had average earning of about 1.6 times the level of primary school graduate and about 2.7 times that of illiterates, while university graduates had average earnings about 12 times the level of illiterates and about 4.5 time the level of secondary school graduate. In a similar study the World Bank concluded that the income disparity between primary and secondary school graduate was about 50 percent while the disparity between primary and secondary school graduates was about 60 percent.

It has been argued that lack of education is a major but not the only factor responsible for poverty especially in Nigeria. Mismanagement of resources plays dominant roles. The survey of World Bank, (2004) opined that; though Nigeria has the potential to build a prosperous economy, reduce poverty significantly, and provide the health, education, and infrastructure services that its population needs, yet poverty is widespread and Nigeria's basic social indicators place it among the twenty poorest countries in the world. Poverty, which has no geographical boundary, is seen in all part of the country, rural and urban areas inclusive. Although the incidence of poverty is much higher in the rural areas than in the urban centers, the urban slum-dwellers form one of the more deprived groups in Nigeria. But contrary to the findings of the World Bank; Amaghionyeodiwe and Osinubi (2004) found that poverty is a product of illiteracy. The poor are basically the uneducated who are unable to find a stable job, obtain adequate income, own property or maintain healthy living conditions and satisfy their basic needs. As such the poor are often illiterate with poor health and have a short life span.

In addressing the growth implications of functional literacy; Jorgenson and Fraumeni (1992), Gyfason and Zoega (2003), Ayara (2003), Ararat (2007), Akram and Pada (2009) and Dauda (2010) carried out empirical studies and came out with different findings. Whereas Akram and Pada (2009) and Dauda (2010 and Gyfason and Zoega (2003) found a positive and significant relationship between functional literacy and economic growth, Ararat (2007) and Ayara (2003) found a negative and significant relationship between functional literacy and economic growth. The channel through which functional literacy is transmitted to impact on poverty positively or negatively is economic growth. A growing economy has the potential to increase the living standard of its citizen. Specifically Ararat (2007) analysed the role and impact of education on
economic growth in the two largest economies of the former Soviet Bloc, namely, the Russian Federation and Ukraine. The study attempts to estimate the significance of different educational levels, including secondary and tertiary education, for initiating substantial economic growth that now takes place in the two countries. This study estimated the model of endogenous economic growth and the system of linear and log-linear equations that account for different time lags in the possible impact of higher education on economic growth. The model estimation shows that there is no significant impact of educational attainment on economic growth. The results from the system of equations indicate that an increase in access of population to higher education brings positive results for the per capita GDP growth in the long term. Increasing the number of college-educated specialists leads to sustainable economic growth. In summary the literature is fairly settled on the functional relationship between poverty and literacy rate, and few empirical study exist on the relationship. The extent and the magnitude of the relationship have scarcely been estimated empirically. This study fills this gap.

**METHOD AND MATERIALS**

**Research Design and Strategy**

Research design is the structure and strategy for investigating the relationship between the variables of the study. The research design adopted for this work is the experimental research design. The reason is that experimental research design combines the theoretical consideration with empirical observation. It enables a researcher therefore to observe the effects of explanatory variables on the dependent variables.

**Population of the Study**

The study will cover Nigeria data from the years 1975 to 2008 which is a period of thirty (33) years. This period is believed to be long enough to capture the long-run relationship between oil revenue and the standard of living in Nigeria.

**The Model**

To determine the model for a relationship between literacy rate and poverty we first state the functional relationship of the two variables

\[ POV = f(\text{LIT}) \]

Where POV denotes the size of poverty in Nigeria and LIT the literacy rate. The equation suggests that the size of poverty in Nigeria depends on the level of literacy. To grasp the relevance of this specification to the objective proposed in this paper, we incorporate some other variables that determine poverty such as real wage rate, Gross Domestic Product (GDP), Nominal Exchange Rate, Public Expenditures and specify the following poverty regression model:

\[
POV = f (\text{LIT, WR, NEXCH, GDP, PUBEX, INFRA, INFL})
\]

Where:

- **POV** = Poverty level.
- **LIT** = Literacy rate.
- **RWAG** = Real Wages.
- **INFRA** = Infrastructure such as road, water supply, power supply etc.
- **GDP** = Gross Domestic output.
- **NEXR** = Nominal Exchange Rate.
- **PUBEX** = Public Expenditure.
- **INFL** = Inflation Rate.

Equation 3 could be expressed in a linear form as

\[
POV = \gamma_0 + \gamma_1 \text{LIT} + \gamma_2 \text{RWAG} + \gamma_3 \text{INFRA} + \gamma_4 \text{GDP} + \gamma_5 \text{NEXCH} + \gamma_6 \text{PUBEX} + \gamma_7 \text{INFL} + \mu_t
\]

Econometrically, to include random term, the model is expressed as:

\[
POV = \gamma_0 + \gamma_1 \text{LIT} + \gamma_2 \text{RWAG} + \gamma_3 \text{INFRA} + \gamma_4 \text{GDP} + \gamma_5 \text{NEXCH} + \gamma_6 \text{PUBEX} + \gamma_7 \text{INFL} + \mu_t
\]

Where \( \mu_t \) = Error Term.

This model implies that poverty in Nigeria will negatively or positively be related to literacy rates, real wages, infrastructure, Nominal Exchange Rate, Gross Domestic output, public expenditure and inflation.

**A Priori Expectation/Theoretical Clarification of the Model**

From the model, the a priori expectation may be mathematically denoted by:

\[
\gamma_1 < 0, \gamma_2 < 0, \gamma_3 < 0, \gamma_4 < 0, \gamma_5 < 0, \gamma_6 < 0, \gamma_7 < 0
\]

In line with the poverty model, literacy rate to a large extent; theoretically determine the level of poverty. Thus literacy rate is expected to have an inverse relationship with the level of poverty. Thus we expect the coefficient of literacy rate to be negative i.e. \( \gamma_1 < 0 \). The higher the literacy rate, the lower the level of poverty. Theoretically, the effect of real wage on the level of poverty is inverse; the higher the real wage, the lower the level of poverty. Infrastructure is expected to be negatively related to the level of poverty. Availability of basic infrastructure such as good road, water supply, power supply automatically improve living standard and eradicate poverty i.e. the more the availability of the basic infrastructure, the lower the level of poverty. The effect of public expenditure on the level of poverty is complementary to the effect of infrastructure. Blejer and Khan (1984) argued that government investment in infrastructure is complementary because the provision of infrastructure constitutes a direct improvement to human welfare. Thus we expect the coefficient of public investment to be negative. Gross Domestic Input (GDP) is expected to impact positively on poverty. If the GDP is evenly distributed, the living standard will improve and poverty will be eradicated. Economic theory suggested that inflation erodes purchasing power as well as a deteriorating exchange.
rate. Thus we expect the coefficients of inflation and exchange rate to be negative i.e. $Y_t < 0, Y_t < 0$.

**DATA ANALYSIS, RESULTS AND DISCUSSIONS**

Stationarity and Co-integration Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Test Statistics</th>
<th>Critical Value</th>
<th>Level of Significance</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIT</td>
<td>-3.782463</td>
<td>-3.6752</td>
<td>1%</td>
<td>1(0)</td>
</tr>
<tr>
<td>POV</td>
<td>-4.720624</td>
<td>-3.6752</td>
<td>1%</td>
<td>1(0)</td>
</tr>
<tr>
<td>GDP</td>
<td>-5.4998</td>
<td>-3.7667</td>
<td>1%</td>
<td>1(0)</td>
</tr>
<tr>
<td>PUBINV</td>
<td>-3.6079</td>
<td>-2.9969</td>
<td>10%</td>
<td>1(0)</td>
</tr>
<tr>
<td>NEXR</td>
<td>-3.6079</td>
<td>-2.9969</td>
<td>5%</td>
<td>1(0)</td>
</tr>
<tr>
<td>WR</td>
<td>-3.356013</td>
<td>-2.9665</td>
<td>5%</td>
<td>1(0)</td>
</tr>
<tr>
<td>INFL</td>
<td>-4.248488</td>
<td>-3.6752</td>
<td>1%</td>
<td>1(1)</td>
</tr>
<tr>
<td>INFRA</td>
<td>-3.2052</td>
<td>-2.9969</td>
<td>5%</td>
<td>1(0)</td>
</tr>
</tbody>
</table>

**SOURCE: Computed by the Author**

Table 1 shows the summary of the unit root test of the variable used for empirical study. The test show that literacy rate (LIT) poverty (POV); gross domestic product (GDP); public investment as a percentage of nominal GDP (PUBINV); nominal exchange rate (NEXR); wage rate (WR); and infrastructures (INFRA) were stationary at levels 1 percent, 1 percent, 1 percent, 10 percent, 5 percent, 5 percent, 5 percent level of significance respectively. Whereas, inflation rate (INFL) was stationary in the first difference at 1 percent level of significance.

**DISCUSSIONS**

**DATA ANALYSIS, RESULTS AND DISCUSSIONS**

**Stationarity and Co-integration Test**

<table>
<thead>
<tr>
<th>Lags interval: No lags</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eigenvalue</td>
</tr>
<tr>
<td>0.955547</td>
</tr>
<tr>
<td>0.785213</td>
</tr>
<tr>
<td>0.722056</td>
</tr>
<tr>
<td>0.615022</td>
</tr>
<tr>
<td>0.438577</td>
</tr>
<tr>
<td>0.221803</td>
</tr>
<tr>
<td>0.144499</td>
</tr>
<tr>
<td>0.087527</td>
</tr>
</tbody>
</table>

**SOURCE: Computed by the Author**

The next step after finding out the order of integration was to establish whether the non-stationary variables are co-integrated. Differencing of variables to achieve stationarity leads to loss of long run properties. The concept of co-integration implies that if there is a long run relationship between two or more non-stationary variables, deviations from this long run path are stationary (Johansen, S 1988). To establish this, Engel Granger’s two-step procedure was used (Granger, C.W. 1986; Granger, C.W. J. and Newbold, P. 1974). This was done by generating residuals from the long run equation of the non-stationary variables, using DF and ADF tests. The residuals found to be stationary for the model. The results of the co-integration test are summarized on Table 2. Since the likelihood ratios for almost all the variables were greater than the corresponding critical values; it implies there is long run relationship among the variables, hence the variables were co-integrated.

**Regression Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-3216.686</td>
<td>1167.133</td>
<td>-2.756058</td>
<td>0.0223</td>
</tr>
<tr>
<td>LIT</td>
<td>-158.6720</td>
<td>37.25749</td>
<td>-4.258796</td>
<td>0.0021</td>
</tr>
<tr>
<td>LIT(-2)</td>
<td>161.1522</td>
<td>43.92380</td>
<td>3.668905</td>
<td>0.0052</td>
</tr>
<tr>
<td>WR</td>
<td>27.25154</td>
<td>9.045832</td>
<td>3.012807</td>
<td>0.0147</td>
</tr>
<tr>
<td>WR(-1)</td>
<td>-7.191124</td>
<td>6.440056</td>
<td>-1.116625</td>
<td>0.2931</td>
</tr>
<tr>
<td>NEXR</td>
<td>4.858953</td>
<td>1.427653</td>
<td>3.403456</td>
<td>0.0078</td>
</tr>
<tr>
<td>NEXR(-1)</td>
<td>-5.458843</td>
<td>2.405876</td>
<td>-2.260862</td>
<td>0.0494</td>
</tr>
<tr>
<td>NEXR(-2)</td>
<td>-8.200354</td>
<td>3.017813</td>
<td>-2.717317</td>
<td>0.0217</td>
</tr>
<tr>
<td>GDP</td>
<td>23.10789</td>
<td>9.978567</td>
<td>2.315752</td>
<td>0.0458</td>
</tr>
<tr>
<td>GDP(-1)</td>
<td>32.70541</td>
<td>9.064364</td>
<td>3.608131</td>
<td>0.0057</td>
</tr>
<tr>
<td>GDP(-2)</td>
<td>24.59308</td>
<td>5.497100</td>
<td>4.743829</td>
<td>0.0015</td>
</tr>
<tr>
<td>PUBEX</td>
<td>-16.63677</td>
<td>12.01320</td>
<td>-1.384873</td>
<td>0.1995</td>
</tr>
<tr>
<td>PUBEX(-3)</td>
<td>26.65885</td>
<td>21.32428</td>
<td>1.250164</td>
<td>0.2428</td>
</tr>
<tr>
<td>INFR</td>
<td>-21.59220</td>
<td>6.725072</td>
<td>-3.210702</td>
<td>0.0106</td>
</tr>
<tr>
<td>INFR(-1)</td>
<td>-8.024017</td>
<td>7.556809</td>
<td>-1.061826</td>
<td>0.3160</td>
</tr>
<tr>
<td>INFLE</td>
<td>6.228015</td>
<td>1.727491</td>
<td>3.605238</td>
<td>0.0057</td>
</tr>
<tr>
<td>INFRA</td>
<td>3.970525</td>
<td>1.508050</td>
<td>2.633899</td>
<td>0.0272</td>
</tr>
<tr>
<td>ECM(-1)</td>
<td>-0.497458</td>
<td>0.194954</td>
<td>-2.551671</td>
<td>0.0311</td>
</tr>
</tbody>
</table>

**R-squared** 0.909346  Mean dependent var 206.8966
Adjusted R-squared 0.717996  S.D. dependent var 156.2759
S.E. of regression 82.99230  Akaike info criterion 11.88463
Sum squared resid 61990.84  Schwarz criterion 12.82760
Log likelihood -82.99230  Durbin-Watson stat 2.856723
Akaike -2 log likelihood 1167.133  Prob(F-statistic) 0.010610

**DISCUSSIONS**

The Statistical Significance of the Parameter Estimate

The statistical significance of the parameter estimate can be verified by the error correction mechanism, standard error test; the adjusted R-squared, t-statistics, the F-statistic and the Durbin-Watson statistics.

- The lagged error correction ECM (t-1) included in both model to capture the long run dynamics between the series are correctly signed (negative) and statistically significant. The coefficients indicate adjustment of 49% for the model from actual changes in the previous year to equilibrium rate of poverty. This adjustment implies that errors are corrected within one year. The ECM also reveals a long run relationship between explanatory and dependent variables in the model.

- For the model, when compared half of each coefficient with its standard error, it was found that the standard errors are less than half of the values of the coefficients of the variables. This shows that the estimated values are all statistically significant.

- The value of the adjusted R-squared ($R^2$) for the model is high, pegged at 0.717966 or 72%. It
imply that literacy rate, real wages, Infrastructure, Nominal Exchange Rate, Gross domestic output, public expenditure and inflation explained about 77% systematic variations in poverty level over the observed years in the Nigerian economy while the remaining 23% variation is explained by other determining variables outside the model.

- The t-statistics is used to test for the statistical significance of the parameter estimate. But very often such formal testing can be shortcut by adopting the "2-t" rule of significance. The rule state that if the number of degrees of freedom is 20 and more and if the level of significance, is set at 0.05, then the null hypothesis $\beta_2= 0$ can be rejected if the t value exceeds 2 in absolute value, implying that the parameter estimate is statistically significant. Of course, one can always refer to the t table to obtain the precise level of significance, and should always do so when the df are fewer than 20. In our regression results the degree of freedom is 28 and the estimated values of $t$ exceed 2 in absolute value for all the variables; hence our parameter estimate is statistically significant.

- The F-statistics is used to test for stability in the regression parameter estimate when sample size increases, as well as the overall significance of the estimated regression model. Thus, we compare the calculated F* with the critical value at 5% level (0.05) at K-1, i.e. (29-1 = 28 and N-K=29-8=21 degree of freedom for the model. Where; k = the number of parameter estimated, and N= the number of the observed years. If F*> F0.05, we reject the null hypothesis and accept the alternative hypothesis and vice versa. From the statistic table, F0.05 at (21, 28) degree of freedom is 2.03 while estimated F* is 4.7515. Obviously F*> F0.05 that is (4.7515 > 2.03). This implies that the parameter estimate is statistically significant and stable.

- The value of Durbin Watson is 2.557 for the model. This falls within the determine region and implies that there is a negative first order serial autocorrelation among the explanatory variables in the model.

In summary, since all the econometric test applied in this study show a statistically significant relationship between the dependent and independent variables from the model, thus, we accept the alternative hypothesis which states that: literacy rate has significant economic implications on the poverty level in Nigerian economy.

The Theoretical Significance of the Parameter Estimate

For the theoretical significance of the overall estimates, we evaluated the signs and the sizes of the coefficients of the variables. According to the results, only infrastructure has correct sign, (i.e. has negative coefficient) but statistically significant only in the short run. This is in consonance with our a priori expectations. It implies that increased in the supply of infrastructure reduces poverty in the short run. But in the long run infrastructure is not different from zero. It does not make significant impact on poverty. Wage rate and naira exchange rate have wrong signs and statistically significant in the short run. It implies that changes in the Wage rate and deterioration in naira exchange rate does not reduce poverty. But in the long run wage rate has correct sign but statistically insignificant, whereas naira exchange rate has correct sign and statistically significant. This result suggests that naira exchange rate has long run and positive impact on poverty in Nigeria. This result is unexpected. It might be so perhaps because of fluctuations in the naira exchange rate so that when it sometimes appreciates it reduces poverty. Public expenditure has no statistical significant impact on poverty both in the short and long run. It suggests that there is no significant relationship between public expenditure and poverty in Nigeria. The increase in public expenditure leave poverty unchanged. Gross Domestic Output (GDP) though statistically significant but has wrong signs both in the short and long run. This implies that the increase in national income over the year makes no positive impact no poverty. In other words, poverty continues to deepen despite the oil windfall. This is perhaps as a result of noticeable corruption and unequal distribution of income in Nigeria. Most important for the objective of this study is the relationship between literacy rate and poverty. Literacy rate only has a positive and statistical significant impact on poverty in the short run. In the long run there is negative but significant relationship between literacy rate and poverty level. The increase in literacy rate leave poverty unchanged.

CONCLUSIONS

Specifically, this study examined the relationship between literacy rate and poverty level in Nigeria. In trying to achieve this objective, an ordinary least square multiple regression approach was adopted for the data analysis. From the previous arguments in this paper and from the empirical results, it is clear that there is a significant relationship between literacy rate and poverty level in Nigeria. With 77 percent of the changes in poverty being explained by the model, it is only logical to summarize that other factors, for which a major share are qualitative factors, explain the 33 percent of the variability in poverty in Nigeria. The study has therefore brought out in clear terms the macroeconomic variables that contribute to and those that do not contribute to poverty in Nigeria. It shows in simple terms that literacy rate did not contribute meaningfully to poverty alleviation in Nigeria. In other words the education system of Nigeria is not productive. The policy did not fulfill its target and goals. Our findings and conclusion support the need
for the government review its education policy and system. In complement of the above, it is important for the government to consolidate and adopt education policy and system that can eradicate poverty. More generally; the Nigerian experience shows that although the positive benefits of literate rate are disputable, positive results will be achieved on the long run if the conditions needed for education to work properly are set in place. Finally, a strong will by government is required to concentrate efforts on increasing correct system of education capable of promoting self-reliance, reduce unemployment and alleviate poverty.

REFERENCES


