



## POVERTY AND ITS CONSEQUENCES ON THE MORTALITY RATE IN NIGERIA

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### Abstract

The paper examined the consequences of poverty on mortality rate in Nigeria from 1980-2013 using Error-Correction Model as estimation technique. The paper revealed that economic growth, debt and poverty have significant relationships with mortality rate. On the other hand, corruption, inflation, investment, human capital development and unemployment presented negative relationships with mortality rate. Human capital development and unemployment was significant while corruption, inflation and investment proved to be insignificant. The paper further revealed that all the variables proved to be determinants of mortality rate in Nigeria except corruption, inflation and investment. The paper concluded that economic growth, debt and poverty aggravated or increased mortality rate while other variables reduced mortality rate in Nigeria. The paper therefore, recommends that government should put in place quality institutions and sincere poverty alleviation programmes to reduce mortality rate in Nigeria.

**Keywords:** Investigation, Consequences, Poverty, Mortality Rate and Error Correction Model

### Introduction

The menace of poverty is globally but most devastating in developing countries such as Nigeria. In the past decades, poverty has become pervasive in Nigeria, during the same period Nigeria has slipped from a position of a buoyant and up-coming economy to one ranked among the poorest 25 countries in the world (Anyanwu, 1997 and Obi, 2007). Hence, poverty varies from one cultural group to another, one economic group to another and from one nation to another, such that poverty is seen in all its manifestations and magnifications to have led to higher deaths. Thus, poverty has been recognized as a major blemish in developing economies ever since economists began to take interest in the Third World because they lack goods and services which others may take for granted around them (Mollie, 2007). On the whole, Nigeria's economy relies heavily on oil since 1970s when she abandoned the agricultural sector which used to be the mainstay of the economy. In 1973, the first oil shock brought a dramatic positive impact on most economic indicators; real per capita income, private consumption and real wages rose sharply (Olowa, 2012).

This made Anusionwu and Diejomoah, (1981), to assert that income inequality increased sharply, particularly between urban and rural areas due to rural-urban migration and primarily as a result of oil boom and its spin-offs. Between 1980 and 1985, economic conditions worsened, mainly because of the decrease in the international price of oil and there was a sharp fall in the standard of living of the people which brought the hand bite of poverty to the fore-front, especially among the professional classes, formal sector entrepreneurs and urban wage earners, who were the major beneficiaries of the oil wind fall (Okunmadewa, 1996). The oil boom contributed to a large appreciation of the naira (with a negative impact on non-oil tradables, especially agriculture, which subsequently harmed employment and income for the immobile).

This brought poverty to the fore-front in the discourse of the costs of economic growth and development in Nigeria. One of the surest ways to perceive poverty is to look at it in absolute term through the 'Basic Approach' which referred to the inability of an individual to acquire his or her basic needs like shelter, clothing and food that could keep him or her in a good and healthy condition. The inability to secure these basic necessities may lead to social and economic effects such as hunger, illness, lower productivity, low income and other hazards to life which may bring eternal end to life. Broadly speaking, poverty can be conceptualized in four ways; these are lack of access to basic needs/goods; lack of or impaired access to productive resources; outcome of inefficient use of common resources; and result of "exclusive mechanisms" (Olowa, 2012).

Poverty as lack of access to basic needs/goods is essentially economic or consumption oriented and it explains poverty in material terms and specifically employs consumption that is based on intake of calories to explain the extent and depth of poverty to determine who is and who is not poor. Thus, the poor are conceived as those individuals or households in a particular society, who are incapable of purchasing a specified basket of basic goods and services like nutrition, shelter/housing, good water, healthcare facilities, access to productive resources including education, working skills and tools, political and civil rights to participate in decisions concerning socio-economic conditions (Streeten and Burki, 1978 and Oyeranti and Olayiwola, 2005).

The first three are the basic needs/goods necessary for survival while impaired access to productive resources are agricultural land, physical capital and financial assets which leads to absolute low income, unemployment, undernourishment etc. Generally, impaired access to resources shifts the focus on poverty and it curtails the capability of individual to convert available productive resources to a higher quality of life as opined by (Sen, 1976; Ajakaiye and Adeyeye, 2001 and Ogwumike, 2001). On the other hand, poverty as an outcome of inefficient use of common resources was due to weak policy environment, inadequate infrastructure, weak access to technology, unavailability of credit instrument etc. The intensity of poverty in Nigeria can also be determined through international comparisons, the standard of \$1 a day and \$2 a day measured in 1985 by international price and adjusted to local currency in which purchasing power parity conversion factors were used to calculate the "Depth of poverty as well as its prevalence" in Nigeria as opined by Obadan, and Odusola (2001). Poverty gap at \$1 a day and \$2 a day are calculated at the mean shortfall below the poverty line, on the score of \$1 a day, 70.2% Nigerians live below the poverty line while at \$2 a day, 90.8% Nigerians live below the poverty line in the year 1992-1993 survey year. In this same year the poverty gap at \$1 a day was 34.9% while that of the \$2 a day was 59.0% (World Bank, 2001). The World Bank defined the new international poverty line as \$1.25 a day in 2010 equivalent to \$1 a day in 2001 U.S prices (The World Bank, 2011).

Generally, poverty can be considered from two perspectives which is the Absolute and Relative poverty in its broad terms. The misery linked to hunger, diseases, malnutrition, insufficient resource base, narrow margin and lack of income as absolute poverty. On the other hand, relative poverty is having access to basic necessities of life but not in the right proportion with the standard of living of the people in other places. On this note it is possible to say that the divergence between Nigeria's macroeconomic variables and their reality is that people die because they cannot afford three square meals a day as well as having access to basic public healthcare and education. This pointed to a gap in knowledge that the present paper intends to fill. The objective of the paper is to examine the relationship between poverty and the rate of mortality in Nigeria and to establish the determinants of death rate in Nigeria. The remaining part of the paper is divided into four sections. Section two deals with review of literature, section three presents the methodology of the study. Section four discusses the results while section five consists of conclusion and recommendations.

### Conceptual Review

Poverty is defined from both uni-dimensional and multi-dimensional perspectives. World Bank (2000) defined poverty as pronounced deprivation in well-being, such that an individual lacked access to basic resources required by him from various dimensions which include low incomes, inability to acquire basic goods and services necessary for survival with dignity and also it encompasses low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity to better one's life.

Aku, et al, (1997) defined poverty from five dimensions of deprivation, the first deprivation is personal and physical deprivation experienced from health, nutrition, literacy, education, disability and lack of self confidence. The second is economic deprivation drawn from lack of access to property, income, assets, factors of production and finance. The third is social deprivation as a result of denial from full participation in social, political and economic activities. The fourth is cultural deprivation in terms of lack of access to values, beliefs, knowledge, information and attitudes which deprives the people the opportunity to control their own destinies. The fifth dimension is political deprivation in terms

of lack of political voice to partake in decision making that affects their lives, this definition touches all aspects of physical human life in developing countries like Nigeria.

Generally, the causes of poverty in developing countries including Nigeria are over population, inadequate education, environmental degradation, unemployment, bad governance and structural changes. Others include, low economic growth performance, macroeconomic shocks and policy failure, migration, lag in human resource development, ill-health/diseases, debt burden, low-productivity and market imperfections. Additionally, political instability, corruption, non-diversification of the economy–oil over dependency, income inequality and laziness were identified as determinants of poverty in Nigeria (Ajakaiye and Adeyeye, 2001; Aigbokhan, 2008 and Oluwatayo, 2008).

### Poverty Profile in Nigeria

Poverty profile in Nigeria was 27.2% in 1980 rose marginally to 28.0 percent in 1981. This rate declined to 27.5 percent in 1982 and rose sharply to 46 percent in 1985. Poverty index declined marginally to 45 Percent in 1986 but increased sharply to 65 percent in 1996. It fluctuated between 62 and 66 percent during the periods of 1996 and 2001. The rate dropped again to 53 percent in 2002 and remained stable at an average of 54 percent over the periods of 2002 and 2009 while it stood at 70.2 percent in 2012 (Ijaiya, 2007; Kpakol, 2007 and Omoniyi, 2016).

### Theoretical Review

Recent literatures on poverty acknowledge individual theory, cultural theory, progressive social theory, geographical disparity theory and cumulative and cyclical interdependencies theory as theories of poverty (Bradshaw, 2006). Among these theories the cumulative and cyclical interdependencies theory form the basis of the paper and is discussed below because of its relevance to the theoretical framework on which the paper relied.

The cumulative and cyclical interdependencies theory observed that individual and their communities are caught in a spiral of opportunity and problems, and that once problems dominate, they close other opportunities and create a cumulative set of problems that make any effective response nearly impossible. The cyclical explanations explicitly looked at individual situations and community resources as mutually dependent, with a faltering economy which make economic survival harder for the community since people pay fewer taxes. Myrdal (1968) noted that personal and community well-being are closely linked in a cascade of personal and community problems including migration of people from a community, thus the interdependence of factors creating poverty accelerate once a circle decline started.

### Empirical Review of Literature

Dollar and Kraay (2001) examined the extent to which the poorest in society can benefit from economic growth. They empirically investigated the relationship between overall income growth and growth in the average incomes of the poor using a large sample of developed and developing countries. They discovered there was no robust responsiveness of poverty to growth since transformation begins. They claimed that urban economic growth brought significant gains to the rural poor as well as urban poor after reforms. They concluded that the rural poor have benefited more from urban economic growth in the post-reform economy but, do not have access to public goods and services as other groups do (World Bank, 1990). Agrawal (2008) examined the relationship between economic growth and poverty reduction in Kazakhstan from 1990 – 2004 using province level data on poverty rate, per capita GDP, Gini- coefficient as proxy for income inequality and unemployment rate. He used Ordinary Least Squares (OLS) as his estimation technique and concluded that both economic growth and enhanced government support for the social sectors are helpful to the reduction of poverty.

Vijayakumar (2009), in his study opined that growth is necessary but not sufficient to alleviate poverty in a country, went ahead to explain that the pattern of growth in a country is important and that it could be more effective in eradicating poverty. Furthermore, he claimed there was inverse relationship between poverty and economic growth, as the rate of economic growth is high it paves the way for a sustained and stable increase in productive capacity, employment opportunities with rising productivity are generated. This enables a country to absorb more employees in the production and allied activities and thereby decreasing underemployment and unemployment, in this process the poor could definitely achieve a higher productivity and increase their incomes in their existing occupations or to obtain new jobs with better remuneration than before. He concluded that better remuneration would make individuals spend their incomes on nutritional food, education, healthcare of their children and were able to save more and increase investment which eventually enhanced productivity of work force in the economy.

Bakare & Ilemobayo (2013), in their empirical findings demonstrated a significant and direct relationship between economic growth and poverty in Nigeria which shows that economic growth rate does not reduce poverty in Nigeria. In other words, the impressive growth of the economy in recent times could not yield improvement in poverty, the so-called “trickle down” phenomenon, underlying the view that growth improves poverty was not supported by Nigeria’s data. They concluded that policy makers should ensure equitable distribution and allocation of the national income as well as evaluating the pattern of public expenditures to ensure that they are properly harnessed to favour the poor in Nigeria.

Okoroafor and Nwaeze (2013), Studied poverty and economic growth in Nigeria from 1990-2011. They employed time series data on variables such as per capita income, life expectancy, adult literacy rate and discomfort index using both descriptive and ordinary least squares (OLS) as estimation techniques. They discovered that none of the explanatory variables was significant in explaining upward variations in the economy and they therefore conclude that there exist sharp disconnect between economic growth and poverty in Nigeria. The fact that emerged from the empirical studies presented here was that they concentrate on growth without any of the authors thinking about the effect of poverty on the rate of death which pointed to a gap in knowledge.

**Methodology**

***Theoretical Framework***

The model used in this study adopts a similar econometric framework as that of Aigbokhan (2000a and 2000b) and Bakare and Ilemobayo (2013).

***Model Specification***

The model of Aigbokhan (2000) and Bakare and Ilemobayo (2013) were slightly modified to capture mortality so that it becomes usable in the present study. The model is specified in functional term as:

MOR = f (POV, GDP, UMP, COR, INF, SSE, INV, DEBT.)..... (1)

The econometric model is written as:

MOR = a<sub>0</sub> + a<sub>1</sub>POV + a<sub>2</sub>GDP + a<sub>3</sub>UMP + a<sub>4</sub>COR + a<sub>5</sub>INF + a<sub>6</sub>SSE + a<sub>7</sub>INV + a<sub>8</sub>Debt + U<sub>t</sub>..... (2)

Where,

MOR = Mortality Rate

POV = Poverty Index.

GDP = Proxy for economic Growth

COR = Corruption Index.

UMP = Unemployment Rate

INF = Inflation Rate.

SSE = Secondary School Enrollment (Proxy for human capital development)

INV= Investment.

DEBT = Internal and external debts used to finance some economic projects.

a<sub>0</sub>= Constant term.

a<sub>1</sub> - a<sub>8</sub> = Parameters to be Estimated.

$U_t$ = Stochastic error term

A Priori Expectation

The a priori behaviour of the explanatory variables to be estimated is postulated below as:

$a_1 > 0, a_2 < 0, a_3 > 0, a_4 > 0, a_5 > 0, a_6 < 0, a_7 < 0$  and  $a_8 > 0$

***Estimation Technique and Sources of Data***

The study employs Johansen error correction model (ECM) as the estimation technique. The ECM is extensively used in regression analysis primarily because it is an efficient technique for estimations that involve long-run relationships. The study employed secondary time series data obtained from Central Bank of Nigeria (CBN), Statistical Bulletin, National Bureau of Statistics (NBS) and Amnesty International.

**Discussion of Result**

This section focuses on the empirical analysis of the consequences of poverty on mortality rate in Nigeria.

***Unit Root Test***

Unit root tests - the ADF tests were used to test for the order of integration of the variables which appeared in the model. The unit root tests performed considered the null hypothesis of a random walk with drift and linear trend.

The result of the unit root tests is reported in the table below.

Variable	Level	1 <sup>st</sup> difference	2 <sup>nd</sup> difference	Order of Integration
GDP		-5.293365		I(1)
POV		-5.365464		I(1)
COR		-5.386687		I(1)
UMP		-4.930884		I(1)
INF	-3.011328			I(0)
SSE		-9.560607		I(1)
INV		-3.949046		I(1)
LXP		-5.738263		I(1)
MOR			-4.392031	I(2)
DEBT		-3.613447		I(1)
ECM(-1)	-3.692042			I(0)

**Source: Author’s Computation (2016)**

Test of critical values: 1% level -3.661661, 5% level -2.960411, 10% level -2.619160

Table 1 reports the result of the stationarity test using the Augmented Dickey Fuller (ADF) Unit root test. Gross Domestic Product (GDP), Poverty Index (POV), Corruption (COR), Unemployment (UMP), Secondary School Enrolment (SSE), Investment (INV), Life Expectancy (LXP) and Debt are integrated of order one I(1) and Mortality (MOR) is integrated of order two I(2) while Inflation (INF) is stationary and integrated of order zero I(0). Then the variables are investigated to determine whether their linear combination is stationary. The co-integration test in line with Johansen is used for this investigation; the result is as shown in tables 1 and 2 below. The trace test and the maximum Eigen value are used for the investigation in the co-integration test and possible long run relationship between the variables is determined. The assumption is that the model has intercept and trend in their co-integration equations (CEs).

**Co-integration Test**

In this study, dynamism is a priority therefore, there is the need to test that the variables in the model have long-run relationships among themselves by testing for possible co-integration among these variables. Adopting the Johansen test, the result is hereby presented below:

**Table 2: Co-integration Test (Trace Test)**  
Unrestricted Co-integration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.995888	760.5366	239.2354	0.0000
At most 1 *	0.995008	584.7360	197.3709	0.0001
At most 2 *	0.987501	415.1365	159.5297	0.0000
At most 3 *	0.932585	274.9095	125.6154	0.0000
At most 4 *	0.890053	188.6091	95.75366	0.0000
At most 5 *	0.765455	117.9608	69.81889	0.0000
At most 6 *	0.687565	71.55737	47.85613	0.0001
At most 7 *	0.540044	34.32991	29.79707	0.0140
At most 8	0.241566	9.477916	15.49471	0.3230
At most 9	0.019493	0.629932	3.841466	0.4274

Trace test indicates 8 co-integrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Source: Author’s Computation (2016)

The trace test is done using the Osterwald-Lenum critical values. The test shows eight co-integrating equations at 5 percent level. This means that the equation is co-integrated and as such has a long run relationship.

**Table 3: Co-integration Test (Maximum Eigen value)**  
Unrestricted Co-integration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.995888	175.8005	64.50472	0.0000
At most 1 *	0.995008	169.5995	58.43354	0.0000
At most 2 *	0.987501	140.2271	52.36261	0.0000
At most 3 *	0.932585	86.30032	46.23142	0.0000
At most 4 *	0.890053	70.64831	40.07757	0.0000
At most 5 *	0.765455	46.40346	33.87687	0.0010
At most 6 *	0.687565	37.22746	27.58434	0.0021
At most 7 *	0.540044	24.85199	21.13162	0.0143
At most 8	0.241566	8.847983	14.26460	0.2990
At most 9	0.019493	0.629932	3.841466	0.4274

Max-eigenvalue test indicates 8 co-integrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Source: Author’s Computation (2016)

The Maximum Eigen value is evaluated using the Osterwald-Lenum critical values. The test also shows eight co-integrating equations at 5 percent level. This means that the variables have long run relationship and therefore one can go ahead to estimate the long run equation.

**Table 4: Estimate of Consequences of Poverty on Mortality in Nigeria**

Dependent Variable: MOR  
 Method: Least Squares  
 Date: 05/19/15 Time: 16:02  
 Sample: 1980 2013  
 Included Observation 34

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	921.5685	18.26249	50.46236	0.0000
GDP	-3.73E-06	1.02E-06	-3.650854	0.0012
COR	-2.229908	4.559752	-0.489042	0.6291
DEBT	5.67E-06	1.79E-06	3.160769	0.0041
INF	-0.114981	0.126115	-0.911716	0.3706
INV	-6.35E-05	9.15E-05	-0.693979	0.4941
POV	0.604868	0.238810	2.532845	0.0180
SSE	-1.450211	0.353982	-4.096850	0.0004
UMP	-1.308191	0.763265	-1.713941	0.0989
R-squared	0.937905	Mean dependent var	889.5152	
Adjusted R-squared	0.918035	S.D. dependent var	33.82173	
S.E. of regression	9.683020	Akaike info criterion	7.600552	
Sum squared resid	2344.022	Schwarz criterion	8.004588	
Log likelihood	-120.2094	Hannan-Quinn criter.	7.738340	
F-statistic	47.20117	Durbin-Watson stat	1.831186	
Prob(F-statistic)	0.000000			

**Source: Author's Computation (2016)**

Table 4 above discussed the consequences of poverty on mortality rate in Nigeria. The result shows that there is negative relationship between economic growth (GDP) and the rate of mortality (MOR) in Nigeria. This indicates that economic growth possesses the power to lower mortality rate in Nigeria. This claim is supported by the coefficient of GDP -3.73E-06 which indicate that 1% increase in economic growth may reduce the rate of mortality by 3.373% in Nigeria. The reason for this outcome is due to the fact that when income increases, there is the tendency that individual will have access to improved level of income which could be used to enhance quality of life through improved standards of living, access to education and better health care which may likely reduce the rate of mortality in Nigeria. The variable also becomes statistically significant at 5% level of significance with t-value -3.650854. GDP proved to be a determinant of mortality rate in Nigeria and also conform to a priori expectation.

Corruption exhibits negative relationship with mortality rate indicating that it has the power to reduce mortality rate in Nigeria. This claim is buttressed by the coefficient -2.229908 and the t-value -0.489042. The result indicates that 1% increase in corruption may lead to about 2.23% reduction in the rate of mortality in Nigeria. The implication of the result is that extra income received from corruption could be used for improved quality of life such that it helps to increase life span of the individuals which subsequently leads to reduction in the rate of mortality. In spite of this impressive result, it may not be dependable because of the statistically insignificance of corruption. Corruption is therefore not a determinant of mortality in Nigeria but, conform to a priori expectation as the sign depicted coincides with economic theory.

Debt (DEBT) exhibits positive relationship with the rate of mortality in Nigeria meaning that it enhances or aggravate mortality rate in Nigeria. To buttress this claim, the coefficients 5.76E-06 shows that 1% increase in DEBT may lead to increase of 5.67% in the rate of mortality in Nigeria. The implication of this result is that living in perpetual debt may cause extra ordinary stress through anxiety and fears which may increase individual's state of health which may subsequently lead to untimely death of people in such condition or situation in Nigeria. In addition, DEBT came up to be statistically significant at 5% level of significance with the t-value 3.160769. This result made debt to be a vital determinant of mortality in Nigeria and it also agrees with economic theory in term of a priori expectation.

Inflation (INF) exhibits negative relationship with mortality rate in Nigeria meaning that it has the potential to reduce mortality rate in Nigeria. This is supported by its coefficient -0.114981 which says that 1% increase in inflation

may lead to less than proportionate decrease of 0.115% in mortality rate in Nigeria. The result indicate that the current rate of inflation may not cause harm to the people due to its low level and does not pose any stress on unhappiness to life of the people such that it was able to reduce the level of mortality in Nigeria. However, inflation came up to be statistically insignificant which count it out of the determinant of mortality in Nigeria. This variable behaved inversely to a priori expectation.

Investment (INV) on its own part exhibits negative relationship with mortality rate which meant that it has the capacity to reduce mortality rate in Nigeria. This claim is indicated by the coefficients of investment  $-6.35E-05$  which indicate that 1% increase in investment may lead to a reduction of 6.35% in mortality rate in Nigeria. The implication of the result is that increase in investment may create further employment through which the unemployed could secure employment, earn income which individuals could use to improve their quality of lives and subsequently lessen dependency ratio and stress thereby leading to reduction in mortality rate. However, the variable turned to be statistically insignificant with the t-value  $-0.693979$  which prevent it from being a determinant of mortality in Nigeria but met its a priori expectation.

Furthermore, poverty which is the variable of interest show positive relationship with mortality rate in Nigeria which indicates that it has the ability to increase or aggravate mortality in Nigeria. This is supported by the coefficient of the variable  $0.604868$  which indicate that 1% increase in poverty may increase or aggravate mortality by 0.6% in Nigeria. The implication of the result is that when poverty increases more people lack the level of income that could enhance the quality of their lives such that they become liable to death or ill-health which lower their productivity and subsequently led to untimely death or shorter life expectancy among Nigerians. The result is further supported as the variable came up to be statistically significant at 5% level of significance with the t-value  $2.532845$ . Poverty then became a determinant of mortality in Nigeria. As a consequence, poverty aggravates the rate of mortality in Nigeria. It also conforms to a priori expectation.

In furtherance of the discussion of the result, secondary school enrolment (SSE) which stands as proxy for human capital development exhibits negative relationship with mortality rate in Nigeria which means that it has the influence to reduce mortality rate in Nigeria. In tandem with this claim is the coefficient of the variable  $-1.450211$  which indicates that 1% increase in secondary school enrolment may lead to about 1.5% reduction in the rate of mortality in Nigeria. This outcome may be due to the fact that the level of awareness of the educated person gives him the opportunity to take appropriate step, make adequate decision or eat appropriate balanced diet and visit hospital for medical check-ups which increases life span hence, as more people acquire more education, level of awareness increases which subsequently led to reduction in mortality rate. The variable also became the strongest variable with the t-value  $-4.096850$  which signifies that the variable is statistically significant at 1% level of significance. SSE therefore become a prominent determinant of mortality in Nigeria and agrees with its a priori expectation.

Finally, unemployment rate show negative relationship with mortality as it has the potential to reduce mortality rate in Nigeria. This is buttressed by the coefficient of the variable  $-1.308191$  which indicate that 1% increases in unemployment rate may lead to a reduction of 1.3% in mortality rate in Nigeria. The result is sequential to the fact that increase in unemployment reduced stress which is the greatest killer of human life such that it reduced mortality rate in Nigeria. The variable also came up to be statistically significant at 10% level of significance with t-value  $-1.713941$ . The variable also became a determinant of mortality in Nigeria and works in tandem with its a priori expectation.

Further revealed in the result are the tests of reliability of the model in which the coefficient of determination ( $R^2$ ) have the value  $0.937905$ . The value shows that the explanatory variables accounted for about 94% of total variation in the rate of mortality (the dependent variable). This shows that the model is of good fit. The F-statistic  $47.20117$  revealed that the variables in the model are jointly significant at 5% level of significance while the Durbin Watson (DW)  $1.831186$  show the absence of autocorrelation in the model.

### Conclusion

The paper concluded that Poverty which was the variable of interest increased or aggravated mortality in Nigeria which proved that poverty has devastating consequences on mortality rate. Economic growth led to lower mortality rate in Nigeria.. Corruption also reduced mortality rate in Nigeria. Debt (DEBT) enhanced or aggravated mortality rate in Nigeria. Inflation (INF) has the potential to reduce mortality rate in Nigeria. But it is not a significant determinant of mortality which serves as consequences of poverty in Nigeria. Investment (INV) on its own part has the capacity to reduce mortality rate in Nigeria. Secondary School Enrolment (SSE) which stood as proxy for human capital

development reduced mortality rate and acted as determinant of mortality in Nigeria. Unemployment rate led to reduction in mortality rate in Nigeria. Finally, all the variables proved to be determinants of mortality in Nigeria except corruption, investment and inflation.

### Recommendation

Based on the findings of this study, the following suggestions are made to the government for sustenance of long-term reduction in mortality rate in Nigeria. Government should put in place quality institutions and sincere poverty alleviation programmes which would take care of the poor to reduce the rate of mortality in Nigeria.

Government and individuals should reduce the volume of public and personal debt which may cause anxiety and unhappiness to reduce mortality in Nigeria. Government should make effort at reducing the rate of inflation which may aggravate the plight of the poor to ensure that it drastically reduce death rate and become a determinant of mortality in Nigeria. Finally, government should create conducive environment for investment to hold to enable it create employment and generate income which will substantially reduce mortality rate in Nigeria.

### References

- Agrawal, P. (2008). Economic Growth and Poverty Reduction: Evidence from Kazakhstan. *Asian Development Review*, Vol. 24, No. 2, 90 – 115.
- Aigbokhan, B. E. (2000a). Poverty, Growth and Inequality in Nigeria. African Economic Research Consortium, *Research Report* No. 102 (October).
- Aigbokhan, B. E. (2000b). Determinants of Regional Poverty in Nigeria. Development Policy Centre, Ibadan, *Working Paper* No. 22, March.
- Aigbokhan, B.E. (2008). Growth, Inequality and Poverty in Nigeria. A Paper Prepared for United Nations Economic Commission for Africa (UNECA), Addis Ababa, Ethiopia.
- Ajakaiye, D. O. and Adeyeye, V. A. (2001). Concept, Measurement and Causes of Poverty in Nigeria, *CBN Economic and Financial Review*, Vol. 39 No. 4, 1 – 17.
- Aku, P.S., Ibrahim, M.T. and Bulus, Y.D. (1997). Perspective on Poverty Alleviation Strategies in Nigeria. Proceedings of the Nigerian Economic Society Annual Conference on Poverty Alleviation in Nigeria, *Nigerian Economic Society*, Ibadan, 41-54.
- Anusionwu, E. and Diejomoah, V. (1981). The Structure of Income Inequality in Nigeria: A Macro Analysis in H. Bienen and V. Diejomoah eds., *The Political Economy of Income Distribution in Nigeria*. New York: Holmes and Meier Publishers Inc.
- Anyanwu, J.C. (1997). Poverty in Nigeria; Concepts, Measurement and Determinants. Nigerian Economic Society, *Selected Papers for the Annual Conference on Poverty Alleviation in Nigeria*, 93-120.
- Bakare, A.S. and Ilemobayo, A.S. (2013). Does Economic Growth Reduce Poverty in Nigeria? *Journal of Developing Country Studies*, Vol. 3, No.4, 62-68.
- Bradshaw, T.K. (2006). Theories of Poverty and Anti-Poverty Programmes in Community Development. *Rural Poverty Research Centre*. (RPRC), <http://www>.
- Dollar, D and Kraay, A. (2000). Growth is good for the Poor. World Bank, *Mimeo*, March, Washington D.C
- Ijaiya, G. T., Ijaiya, M. A., Bello, R. A. and Ajayi, M. A. (2011). Economic Growth and Poverty Reduction in Nigeria, *International Journal of Business and Social Science*, Vol. 2, No 15, 147-154
- Ijaiya, G.T. (2007). Poverty Alleviation Programmes in Nigeria. In *Nigeria's Reform Programme: Issues and Challenges*, 471-485.
- Kpakol, M. (2007). Poverty Eradication Efforts in Nigeria. *Nigeria's Reform Programme: Issues and Challenges*, 445-470.
- Mollie, O. (2007), Understanding Poverty. *World Bank Development Report*, Washington D.C
- Myrdal, G. (1968). *Asian Drama: An Enquiry into the Poverty of Nations*, New York.
- Obadan, M. and Odusola, A., (2001). The Economy and Poverty in Nigeria, A Paper Presented at the National Conference on Law and Poverty. *Nigerian Institute of Advanced Legal Studies*, 26-28 June, Kaduna.
- Obi, B.O. (2007). Fiscal Policy and Poverty Allevation: Some Policy Options for Nigeria. *AERC Research paper 164*, African Economic Research Consortium, Nairobi, February, 2007.
- Olowa, W. O. (2012). Concept, Measurement and Causes of Poverty: Nigeria in Perspective. *American Journal of Economics*, 2(1), 25-36.

- Oluwatayo, I. B. (2008). Explaining Inequality and Welfare Status of Households in Rural Nigeria: Evidence from Ekiti State. *Human Social Science Journal*, 3(1), 70-80.
- Omoniyi, B. B. (2016). Impact of Poverty on Economic Growth: A Comparative Analysis of Nigeria and Ghana, *Unpublished Ph.D Thesis*, 1-264.
- Oyeranti, O. and Olayiwola, K. (2005). Policies and Programmes for Poverty Reduction in Rural Nigeria. *African Economic Research Consortium (AERC)*, Nairobi, 1-51.
- Sen, A. (1976). Poverty: An Ordinal Approach to Measurement. *Econometrica*, 44(2), 437-446.
- Sreeten, P. and Burki, S. J. (1978). Basic Needs: Some Issues, *World Development*, 6(3), 411-42
- Vijayakumar, S. (2013). An Empirical Study on the Nexus of Poverty, GDP Growth, Dependency Ratio and Employment in Developing Countries, *Journal of Competitiveness*, Vol.5, Issue 2, 67-82.
- World Bank (1990). Poverty: World Development Report, Oxford University Press, New York.
- World Bank (2000). Attacking Poverty. *World Development Report*, Washington D. C. National Bureau of Statistics (NBS),. *Publications* (Various Years).
- World Bank (2005). World Bank Annual Report on Addressing Worldwide Poverty, Washington D C.