Human Development Indices & the Incidences of Mass Poverty in Nigeria: A Correlational Study of the Nigerian Democratic Experience, 1999 - 2015

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Abstract

The research problem which this study sought to address was the relationship between Human Development Indices and the incidence of Mass Poverty in Nigeria. The study covered the period 1999 to 2015; corresponding with the period of democratic dispensation before the transition in leadership to another political party took place in May, 2015. For the purpose of conceptualization Human Development Index (HDI) measures a country's achievement on a basket of many variables from year to year including the level of health care delivery, quality of education, access to social infrastructure, income per capita and so on. It is in effect a measure and ranking of the "dividend of democracy" a country offers its citizens. The mean score can be high or low. The UNDP reports that Nigeria's score and rank over the years has been very low. Coincidently also the World Bank reports that 7% of the world's absolute poor (84 million people) live in Nigeria. These are people who live on\$1.00 or less a day. Our research objective is to find out if there was any significant relationship between HDI and mass poverty in Nigeria. operationalize the study relevant secondary data were generated from the UNDP, the CIA World Fact book and the National Bureau of statistics (NBS) and were subjected to statistical analysis. The methodology employed the Pearson's Product Moment. Correlation Coefficient, the t-statistic and Regression Analysis. Our finding was that there was no significant relationship between Human Development Index and the Incidence of Poverty. We accepted the null hypothesis. Our policy recommendation was that Government should step up the funding of education, health care delivery, access to basic utilities and infrastructure in order to reduce the scourge of poverty and increase Nigeria's HDI ranking among other countries with the same size economy...

Keywords: Mass Poverty, Human Development, Childhood deaths, Access to education, Supply of electricity, Environmental sanitation.

Backgroyund to the Study

Nigeria became a democracy again in 1999 when the military pulled out of government. From 1999 to date Nigerians have waited patiently for the so-called dividends of democracy which in effect translates into good life for the people. Coincidentally between 1999 and 2014 the Nigerian economy proxied statistically by the Gross Domestic Product (G.D.P) had grown in leaps and bounds making Nigeria the largest economy in Africa with a G.D.P. of N81 trillion (\$510 billion) by year end, 2014 (NBS, 2014). Also, Nigeria had been ranked by World Bank as the 26th largest economy in the world with a growth rate of 7.4%. The Global Average was put at 3.5% Nigeria, therefore, had been grouped with India and China as countries with fast growing economies in the world and peered with Argentina, 25th, Austria, 27th and South Africa 28th (Okeke, 2014 p.6). As reported by *Goldman Sachs* in Okonjo-Iweala (2012, pp 11-12) Nigeria, with Korea, Mexico, Indonesia, Turkey, Iran, Vietnam, Pakistan and Philippines have been predicted to join the BRIC. Countries in becoming the leading global economies by the year 2020. The BRIC countries are Brazil, Russia, India and China.

With all these heart warming *stories* what did the average Nigerian get in terms of good living from 1999 to 2015? What were the dividends of democracy in terms of Human Development Index? The evidences are rather paradoxical. According to World Bank Report 2014, 7% of the world's poorest (84 million) people lived in Nigeria. In other words, there is mass poverty in Nigeria if close to one half of the population are in absolute poverty.

Research Problem

Our problem in this study was the relationship between Human Development Index (HDI) and the incidence of Mass Poverty in Nigeria.

Research Objective

Our research objective was to find out if there was any significant relationship between low Nigerian HDI and the Incidence of Mass Poverty

Research Hypothesis

Ho: There is no significant relationship between Nigeria's HDI and the Incidence of Mass Poverty (P o.o5).

Conceptual Framework

The two conceptual issues in this work are Human Development Index (HDI) and Mass Poverty. They provided the framework within which we worked and they need to be explained.

Human Development Index (HDI)

The Human Development Index is an index that the United Nations Development Programme, UNDP uses to measure the average (mean) achievement of a country in terms of the welfare and quality of life of its people. Over the years, Nigeria had been ranking behind numerous countries with similar sized economies. Nigeria had been ranked with smaller economies like Liberia and Malawi which are respectively about the size of Lagos state. HDI scores are basically based on four criteria namely:

- 1. Life expectancy at birth,
- 2. Mean years of schooling,
- 3. Expected years of schooling and
- 4. Gross National Income (GNI) per capita.

Countries like Norway, Australia, New Zealand, the USA and Ireland have consistently remained at the top with very high HDI. In arriving at the index of a particular country the UNDP computes the mean score of the country on a basket of variables including, but not exclusive to, those stated above because the underlying data / criteria and methods vary from time to time. Using the per capita income in the case of Nigeria, however, is apparently inappropriate because of the gross inequality in income distribution between the few rich and the poor masses. The middle class has virtually been wiped out in Nigeria by the leadership who owe arrears of salaries up to nine months in many states of the federation.

In table 1 we tabulate Nigeria's HDI Ranking from 2009 to 2013

Table 1: Nigeria's HDI Ranking from 2009 to 2013

| Year | Rank | No. of Countries Surveyed |
|------|------|---------------------------|
| 2009 | 158 | 182 |
| 2011 | 156 | 187 |
| 2012 | 153 | 187 |
| 2013 | 153 | 186 |

Source: UNDP HDI For Nigeria 2009-2013

The Concept of Mass Poverty

By the incidence of mass poverty in this work, we mean the extent to which a large number of poor people is recorded periodically. Available statistics show that the incidence is high in Nigeria following the gradual disappearance of the middle class. (NBS,2011). In literature, poverty is considered from two different perspectives poverty of lack of money and poverty of lack of power e.g. information and expert power. A man is poor if he has insufficient cash and adequate resources to satisfy his basic needs as a human being. He is also poor because he lacks the power or opportunity to change his situation in life. People in this station in life, according to World Bank, live below poverty line of \$1.00 a day. Consequently, these people have inadequate feeding, lack education and are not well informed. Poor people cannot satisfy their basic health needs also and generally have short life span. They live in slums, and have no access to safe water. For example, in Makoko Lagos 250,000 people live on floating slum. And because they are uninformed they lack modern family planning techniques and have too many children than they can take care of. They exhibit extreme religiosity and attribute everything to God including preventable deaths: God giveth and God taketh.

Omorogbe and Mbaegbu, (2007 pp 87-97) have differentiated between urban poverty and rural poverty which are respectively associated with those who live in urban and rural areas. It is not clear which one is worse. Those in the rural areas of Nigeria tend to mitigate this

scourge of poverty by feeding from rural subsistence farming at seasons but they generally lack urban amenities. Since majority of Nigerians live in the rural areas, according to Anam (2014), there are more poor people in rural areas. Their roads are in more dilapidated conditions. They lack pipe borne water and electricity supply and generally live from hand to mouth. The urban poor, on the other hand, make do with odd jobs to earn their stipend. Some of them convert any available space in town into an illegal market place for street trading. Others resort to begging, yet others go to motor parks as touts (*Agbenro*) fighting for passengers to earn their own stipend from drivers. There are also itinerant shoe shiners and "pastors" carrying the Bible up and down and asking people to support their "ministries" with money. They are the ones that "eat from the Lord's vine yard". Some "smart guys" among the poor folks in Nigeria have taken to the practice of herbal medicine to survive claiming to cure all manner of diseases and exploiting the ignorance of those who cannot afford medical bills from orthodox hospitals.

In table 2 we present available data on Nigeria's population in Poverty from 1999-2010

Table 2: Nigerian Population in Poverty 1999-2010

| S/N | Year | Population in Poverty |
|-----|------|-----------------------|
| 1 | 1999 | 56 Million |
| 2 | 2000 | 60 " |
| 3 | 2001 | 63 " |
| 4 | 2002 | 65 " |
| 5 | 2003 | 67 " |
| 6 | 2004 | 68 " |
| 7 | 2005 | 67 " |
| 8 | 2006 | 68 " |
| 9 | 2007 | 70 " |
| 10 | 2008 | 69 " |
| 11 | 2009 | 68 " |
| 12 | 2010 | 70 " |

Source: CIA World Facts book June 30, 2015

http://www.indexmundi.com/g/g.aspx?c = ni & v = 69

Theoretical Framework

According to Meir (1975 p. 519) many studies of economic growth in advanced countries have confirmed the importance of non material investment, to wit, investment in Human Capital or the improvement in intangible human qualities. These investments include expenditure on education/training, improvement of health and application of research which raise the quality of the population. As posited by Myint, (1954pp132-63) Poor countries do not make many such investments in the formation of human capital, *ipso facto*, they remain poor and economically backward. The UNDP concept of Human Development Index therefore has

many, age long theoretical foundations. See also Schultz, (1962 pp 2-3) on reflections on investment in man.

Review of Related Literature

There is quite a good number of research outputs dealing with the correlates of Mass Poverty in Nigeria. For example: Omorogbe and Mbaegbu (2006) examined the impact of foreign investment on poverty alleviation in Nigeria. Mbaegbu, Okoronkwo and Agbajeogu (2015) studied the effect of official corruption by public office holders. Recently Mbaegbu, Obasi and Ugwoke (2015) examined the impact of mismanagement of resources. This instant study makes further contribution to knowledge by analyzing the relationship between Low Human Development Index and Mass Poverty by examining the state of health care delivery, education, social amenities – electricity supply and so on.

The State of Health Care Delivery

It is not an overstatement to say that health care delivery in Nigeria is very poor and this has impacted negatively on Nigeria's HDI and poverty level. There is no single hospital, including the tertiary/ teaching hospitals in Nigeria that is of international standard. Consequently, Nigerian public office holder habitually jet out to Europe, America, and Asia for even minor illnesses as mark of prestige.

According to the Managing Director / CEO of Nigerian Export Import Bank Nigeria spent more than N1 trillion on Nigerians traveling to India, Dubai and other countries for medical tourism in 2014 (Orya, 2015p. 49). This amount is enough to upgrade National Hospital Abuja to an internationally recognized specialist hospital with full diagnostic centres and teaching facilities where young doctors could do their internship. Presently it is difficult for new doctors to get positions of internship (house manship) without tears and without offering bribes because the positions are limited in all such hospitals.

In 2010 President Yar' Adua spent months in a Saudi Arabian hospital and finally died there at public expense. After 55 years of independence why can't Nigerian leaders upgrade one government hospital so that the rich would not jet out again to spend scarce foreign exchange on illnesses that could be treated locally? This is because thieves govern Nigeria at all levels. (Musa 2015, pp 21-26). They would rather steal the money than use it to develop hospitals. It is now prestigious to say that somebody's father died abroad in an Indian hospital! Ghanaians have Korle Bu Teaching Hospital in Accra and the Camerounians have the National Hospital Yaounde. They do not jet out for medical treatment abroad like rich Nigerians. As noted by W.H.O. in Oteh (2009 p.3) very few Nigerians have access to essential drugs and there are three physicians per 10,000 people. At 10% of live births Nigeria's infant mortality rate in 2009 was one of the highest in Africa and it was worse than those of Ghana, Burkina Faso and Benin Republic respectively at 6%, 8% and 9%. Also, skilled professionals – midwives, nurses etc assisted only one-third of deliveries. Immunization against polio etc was a menace in Nigeria until this year 2015.

The so called National Health Insurance Scheme (NHIS) does not cover everybody. It is only for federal civil servants.

With poor health delivery many Nigerians, particularly the rural poor fall prey to herbalists who mix concoctions and claim to cure all manner of diseases including HIV-AIDS. Akin to poor health delivery service in Nigeria is poor environmental sanitation – poor refuse disposal system, lack of public toilets, drainage systems blocked by waste and oozing out abominable stench that constitute health hazards.

Poor Funding of Education

The Nigerian system of education in reality is purposeless and of low quality, to say the least. A lot of noise is made about entrepreneurship education yet entrepreneurship is taught in Nigerian schools like literature in English. Workshops and laboratories have no equipment in them because of poor funding of education.

The national budget for education has hardly exceeded 13% annually. During the military regime it was as low as 1% on the average. The UNESCO minimum for sustainable development and poverty reduction is 26%. This year 2015 it is said that the highest allocation of N392 billion was to education out of the total budget of N4,493 trillion, just 8.7%. With poor funding of education half-baked graduates with little or no skills are produced. It should also be noted that because of poor funding of education the university system has not expanded *pari pasu* with demand by aspirants. Between 850,000 and 1 million Nigerians yearly apply for admission into Nigerian universities but the carrying capacity of all universities is only 147,800 annually. (Tell, May 2007 p. 27). Access to university education in USA is 84% but in Nigeria it is abysmal 5%. Many Nigerians, therefore, seek admission abroad regularly. According to Saturday Sun Newspaper editorial of August, 24, 2013 some N60 billion is spent annually by 75,000 Nigerian students in Ghana alone. This money and population of students are enough to start another university in Nigeria.

The result of poor access to quality education is ignorance, superstition, extreme religiosity, mysticism, little faith in science and poor innovative value system. To the victims: as it was in the beginning so shall it be world without end while mass poverty ravaged the people.

Table 2: Budgetary Allocation to education 1999-2015

| S/N | Year | Allocation in N billions | % |
|-----|------|--------------------------|-------|
| 1 | 1999 | 23.047 | 11.20 |
| 2 | 2000 | 44.225 | 8.30 |
| 3 | 2001 | 39.885 | 7.00 |
| 4 | 2002 | 100.2 | 5.09 |
| 5 | 2003 | 64.78 | 1.83 |
| 6 | 2004 | 72.22 | 7.80 |
| 7 | 2005 | 92.59 | 8.30 |
| 8 | 2006 | 166.6 | 8.70 |
| 9 | 2007 | 137.48 | 6.07 |
| 10 | 2008 | 210.00 | 13.00 |
| 11 | 2009 | 164.64 | 13.00 |
| 12 | 2010 | 149.08 | 12.00 |
| 13 | 2011 | 356.51 | 7.7 |
| 14 | 2012 | 400.15 | 8.0 |
| 15 | 2013 | 427.52 | 8.6 |
| 16 | 2014 | 493.45 | 8.5 |
| 17 | 2015 | 392.00 | 8.7 |

Source: www.newtelgraphonline.com/education Wednesday, May 28, 2014

Irregular Electric Power Supply & poor Telecommunication

One of the factors that contribute to low score on HDI by Nigeria relates to irregular supply of electricity. Over the years investment in the electric power sector had yielded no result because much of the funds were fretted away by corruption of public office holders (Mbaegbu, Okoronkwo & Agbajeogu, 2015). Yet nothing can be done without electric power: entrepreneurship and small /medium enterprises depend on power supply to alleviate poverty. However, in 2005 the Electric Power Sector Reform (EPSR) Act was promulgated to provide the first ever legal template for serious action in the sector. In 2006 the name National Electric Power

Authority (NEPA) was changed to Power Holding Company of Nigeria (PHCN) following the unbundling of the sector into separate businesses namely: Generation, Transmission and Distribution Companies. There after a total sum of a whooping \$16 billion was pumped into the sector with no effective result and power supply by the year end was as low as 2800 mega watts (Ajanuku, 2012 p. 24). In 2010 a concise road map was drawn to strategically improve the power generation transmission and distribution. The abundant supply of gas in the country was linked to the essentially thermal power stations in the country yet irregular supply of power persisted. South Africa with a population of 47 million people generates 40, 000 mega watts while Nigeria with a population of 170 million people generates less than 5,000 mega watts. (See Daily Sun Monday 25, vol. 10 No. 3149, 2015 p. 8).

The problem of irregular power supply also affects telecommunication. Following the privatization of the telecommunication sector telecommunication is now also, private sector business, with more than 100 million Nigerians linked with mobile phones according to a survey conducted by Channel Television News, of second November 2012. However, because of irregular power supply the companies, Globacom, M.T.N etc generate practically their own power. This is very expensive and impacts negatively on telecommunication in Nigeria - high cost of communication per minute, congested networks and so on.

Uncontrolled Population Growth

Part of Nigeria's problem with Human Development relates to uncontrolled population which makes planning ineffective. The Nigerian population estimated at 170 million people with growth rate of 3.0% is among the largest in developing countries (NBS, 2014). The average fertility of 6.9 children per female per year is also among the highest in the developing world which is 5.4 children on the average. (Akinyemi, 2014).

The Implication of these statistics is that Nigeria is tending towards over population with all the fears of Thomas Maltus; the average available resource use can not adequately support the current level of population. Nigeria needs a population policy like China, India and even Lee Kuan Yew's Singapore to manage her population growth effectively so that Nigeria's population grows in tandem with economic development. In China it is 1 child per couple policy. According to This Day editorial (Wednesday Sept 9 2015 p. 15) Nigeria's projected population will within the next three years hit 200 million from the estimated population of 178.5 million as at July 2014. What is worrisome is that the population, though youthful with a medium age of 17.8 is idle and largely illiterate with high rate of out of school children in a new world driven by technology, skills and knowledge.

Materials and Methods

This work is a correlational study making use of secondary data generated from the CIA World Fact book, the UNDP and the yearly budget allocations to education in Nigeria from 1999 to 2015.

The data for Human Development Index were sparce and tinted with methodological nuaces and therefore could not be used in our correlation analysis with poverty data. We, therefore, opted to use the Budgetary Allocation to Education from 1999 to 2015 as proxy for Human Development Indices or efforts. Investment in education is a major component in the computation of the composite HDI statistic of countries and therefore can be used as proxy.

The data analysis employed the Pearson's Product Moment Coefficient of Correlation (r) to analyse the relationship between the incidence of poverty and budgetary allocation to education. The budgetary allocation is assumed to be the independent variable (iv) while incidence of poverty is the dependent variable (dv). The t-statistic was used to test the significance of the relationship between the two variables while the regression analysis was used for further analysis of causality.

Data Analyses and Test of Hypothesis

The data analyses begin with tabulation of the incidence of poverty and the budgetary allocation to education in table 4.

Table 4: Nigerian Budgetary Allocation to Education and Population in Poverty 1999 to 2010.

| S/n | Year | Budgetary Allocation (Y) % | Population in Poverty |
|-----|------|----------------------------|-----------------------|
| | | | (x) |
| 1 | 1999 | 11.20 | 56 Million People |
| 2 | 2000 | 8.30 | 60 " " |
| 3 | 2001 | 7.00 | 63 " " |
| 4 | 2002 | 5.00 | 68 " " |
| 5 | 2003 | 1.83 | 67 " " |
| 6 | 2004 | 7.80 | 68 " " |
| 7 | 2005 | 8.30 | 67 " " |
| 8 | 2006 | 8.70 | 68 " " |
| 9 | 2007 | 6.07 | 70 " " |
| 10 | 2008 | 13 | 69 " " |
| 11 | 2009 | 13 | 68 " " |
| 12 | 2010 | 12 | 70 " " |

Sources: FGN Annual Budget from 1999 to 2010 CIA World Fact book

http://www.indexmundi.com/g/g.aspx?c=ni&v=69

The computation of the Pearson's Coefficient of Correlation (r) was done with the formualr below:

$$r = n(XY) - (X)(Y)$$

$$\sqrt{(n(\Sigma X^{2}) - (\Sigma X)^{2}(n(\Sigma Y^{2}) - (\Sigma Y)^{2})}$$

 $The \, computation \, shows \, that: \,$

$$r = \frac{-164.81}{189.6} = -0.087 = -0.1$$

The analysis shows that there is an insignificant negative relationship between budgetary allocation and population in poverty. To test for significance we used the t – statistic

Where
$$t = r$$
 $n-2$ $1-r^2$

and degrees of freedom = 10. The computation shows that:

$$t = -0.1 \sqrt{10.10} = -0.1 \times 3.2$$

 $t = -0.32$

t - Critical = 1.812. Since this is more than -0.32

We accept the null hypothesis that there is no significant relationship between budgetary allocations to education and the incidence of poverty. The regression analysis which also shows that there is no relationship is presented in the appendix.

Finding and Discussion of Finding

The finding of this paper is that there is no significant relationship between budgetary allocation to education in Nigeria and the incidence of poverty. This is consistent with UNESCO's postulate that for a country to make meaningful development and reduce the incidence of poverty the budgetary allocation to education should not be less than 26%. Nigeria has never allocated more then 13%. In the military regimes it was less than 1% in some years; consequently there is mass poverty in Nigeria. The finding is also consistent with Myint's (1954pp132-63) theory on the interpretation of economic backwardness as well as Shultz's (1962pp 2-3) reflection on investment in man. Since education is a major component of human development index, the logic is that human development index has had no significant relationship with the incident of poverty in Nigeria.

Investment in human development has been too low to impact on poverty reduction as an intervening variable. In 2009 Nigeria ranked 158 out of 182 countries in terms of HDI. In 2011 she ranked 156 out of 187 countries. In 2012 she ranked 153 out of 187 countries and in 2013 she ranked 153 out of 186 countries. She has always been at the bottom ranks. *A priori* expectation is that education, skill acquisition, adult literacy, health care, access to safe water and other social amenities, should reduce the scourge of poverty but this has not been so with Nigeria. As stated by Mbaegbu, Obasi and Ugwoke (2015). There is mass poverty in Nigeria because of massive leakages from the circular flow of income. This is basically through official corruption and mismanagement of resources. The finding is consistent with the theory of the circular flow of income (see Samuelson 1976 and Jhingan 2010). The thesis of this paper, therefore, is that human development efforts have had no significant impact in ameliorating the effects of those correlates of mass poverty in Nigeria.

Conclusion

Nigeria has consistently scored low on Human Development Index, ranking with Liberia, Malawi and other lesser economies. This is because of poor health care delivery, little investment in education and poor access to social infrastructure. The Human Development Index, therefore, has had no significant impact on poverty level which has continued to rise with the gradual erosion of the middle class of contractors, business people, professionals, senior civil servants and lecturers through non payment by government for work done.

Recommendations

Policy makers should step up budgetary allocation to education so that Nigerian educational system will become functional and entrepreneurial so that mass poverty can be reduced. Efforts should also be made to increase investment in health care delivery. It is a shame that Nigeria has not one single hospital that is of international standard where other Africans can be referred to instead rich Nigerians regularly jet out to European, American and Asian hospitals for treatment.

Investment in social infrastructure should be stepped up. The companies that supply electricity (DISCOS) should be monitored and targeted to deliver on their mission statements.

In summary Nigerians need a big push in human development efforts before they can be uplifted from the doldrum of ignorance, diseases and squalor.

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Appendix REGRESSION OUTPUT

Dependent Variable: PBP Method: Least Squares Date: 10/06/15 Time: 05:10

Sample: 1999 2010

Included observations: 12

| Variable | Coefficient | Std. Error | t-Statistics | Prob. |
|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------------------------|
| C BE | 67.02055 -0.109948 | 3.623251 0.397534 | 18.49735 -0.276576 | o.oooo o.7877 |
| R-squared Adjusted R-square S.E of regression Sum squared resid Log likelihood Durbin-watson stat | 0.007591 -0091650 4.443046 197.4066 -33.82942 0.300202 | Mean depen S.D develop Akaike infoc Schwarz crit F-statistics Prob(F-stati | ment var criterion erion | 66.08333 4.252450 5.971569 6.052387 0.076494 0.787738 |

| Data Used | | |
|-----------|-----|------|
| YEAR | PBP | BE |
| 1999 | 56 | 11.2 |
| 2000 | 60 | 8.3 |
| 2001 | 63 | 7 |
| 2002 | 68 | 5.09 |
| 2003 | 67 | 1.83 |
| 2004 | 68 | 7.8 |
| 2005 | 67 | 8.3 |
| 2006 | 68 | 8.7 |
| 2007 | 70 | 6.07 |
| 2008 | 68 | 13 |
| 2009 | 68 | 13 |
| 2010 | 70 | 12 |

PBP = Percentage of the Population below Poverty Line BE= Percentage of Budget Allocation to Education