

Poverty and Income Inequality in Nigeria: An Illustration of Lorenz Curve from NBS Survey

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Abstract

This study adopted the Nigerian Bureau of Statistics survey to examine poverty and income inequality in Nigeria. The objective was to examine the rate of poverty and income distribution in Nigeria using the Lorenz curve and Gini coefficient. Food poverty line, absolute poverty line, subjective poverty measure and dollar per day poverty line were used to measure poverty while Gini coefficient was used to measure income inequality. Findings reveal that significant proportions of Nigerian population are living below the poverty line adopted in this study. The study also found that there is wide gap between the rich and the poor in Nigeria. The study recommends implementable policies to reduce poverty and reduce income inequality in Nigeria.

Keywords: Poverty, Income Inequality, Nigeria, Lorenz Curve, Gini Coefficient, NBS Survey.

1. Introduction

Nigeria economy is a developing economy with abundant human and other natural resources; Nigeria is recognized as an oil producing country, a member of organization of petroleum exporting countries (OPEC), the tenth largest producer of crude oil in the world and African highest exporter of crude oil (Lucky and Nwosi, 2016). The country's crude oil reserve is estimated at 35 billion barrels with national gas reserve of 180 trillion cubic feet, a production capacity of 2.5 million barrels per day and annual production of 900,000,000 barrels (Ushie *et al.* 2012) but among the third world countries and ranked among the poorest. This is contrary to the global perception of Nigeria as a rich oil producing country.

The population is estimated at 189 million, 2.48% of total world population, 205 per km², the total land area is 910,802 km², 48.1% of the population is urban, the median age 18 years and the sex ratio is 1.026 that is 1,026 males per 1,000 females. The literacy rate is 56.6%, the dependency ratio is 78.8%, and child dependency ratio is 73.2%. 40.9% of the population are children under 15 years, 55.9% are between 15 and 64 years while 3.1% are 65 years and above. Apart from macroeconomic challenges such as galloping inflation, unemployment, balance of payment deficit, poor economic growth and depreciating Naira value, other challenges facing significant population of the country are poverty and income inequality. Traditionally, income distribution and poverty concerned how income was divided among the owners of business (for whom profits were the source of income), the owners of land (who receive rent) and the workers (who earned wages) (Colander, 2005).

Poverty and income inequality have theoretically been identified to be inextricably linked and that the existence of one often implies the existence of the other (Burtless and Smeeding, 2002; Bourguignon, 2004). A better income distribution helps people of the lowest income group to increase their income so that they can exit from their poverty. Achieving income equality and reduction on the growing level of poverty is one of the major developmental objectives of the developing countries because income inequality and growing level of poverty is a major limitation of economic development. Analysts have argued that solving the problems of poverty and inequality needs appropriate policies that aim at the gaps and ensure that the poor in a given population can benefit from it (Ogbeide and Agu, 2015).

Nigeria was ranked 156th position among 177 countries as compared to the 151st position in 2002 in human development index (HDI), Nigeria human poverty index (HPI) for 2009 was only 36.2% placing Nigeria at the 114th position and among the 7th poorest nations in the world while the ratio of the richest 10 percent to the poorest 10 percent was 16.3 with Gini index from 42.9 in 2004 to 44.7 in (National Bureau of Statistics - NBS, 2012; UNDP, 2013).

Yet the country ranks 6th and 7th as oil producer and exporter and ranks 10th as the most populous country in the world with a real GDP growth rate of 7.0 in 2009 which grew to 8.0 in 2010 which however dropped to 6.3 in 2013 (Ogbeide and Agu, 2015).

The argument on what constitute poverty level and income equality has long been a point of departure among economists. Economist who favour a relative measure of poverty argue that the poverty measure is too low since food is closer to a fourth of family's total budget, it would be reasonable to increase the poverty threshold by multiplying food expenditures by a number a bit less than four rather than by three. Economist who favour an absolute measure of poverty argue that the measure is too high as it does not capture non-cash transfers such as food stamps and housing assistance nor does it consider under reporting income or the saving people have.

From the classical perspective, income equality discourages savings. Income equality means a higher income for the working classes and a rise in their consumption. This, in turn, means rise in population. The classical believed that inequalities of incomes were necessary to provide the incentives for economic growth. The Keynesian economists pleaded for income equality to sustain economic growth. The Keynesian's opinion was that a society which saves more due to inequalities of income and wealth brings secular stagnation, because inequalities would reduce its consumption capacity and bring contraction in demand. Ultimately, it would lead to fall in production and slowing down the economic activity (Adegoke, 2013).

The Marxian also supported this claim. According to them, it was income inequality that would bring the doom of capitalism. Marx argued that income inequality meant less consumption for the poor masses. This would automatically lead to unsold stocks of goods and to a stop of further production. In this way these would be cumulative over-production and under consumption and the capitalist economy would move towards secular stagnations.

The post Keynesian economist carried Keynes views further. Keynes believed that encouraging consumption is alternative to savings. But the post-Keynesian economists showed that they are complementary. When there is income inequality it leads to excessive thriftiness and fall in inducement to invest as a result of declining marginal efficiency of capital. Economic growth requires the balancing of the two forces which is possible in a high wage low profit economy and investment free society. From the above this study intends to examine poverty and income inequality in Nigeria as other studies fail capture the various dimensions of poverty and income inequality. The rest part of this paper are as follows; section two discusses the concept of poverty, income inequality causes of poverty and policies for income redistribution, section three discusses the methods adopted in the study, section four presents and analyze results while section five concludes and make recommendations from the findings.

2. Literature Review

The Concept of Poverty

Poverty is the economic condition in which people lack sufficient income to obtain certain minimal levels of health services, food, housing, clothing and education which are necessities for standard of living (World Bank, 2011). The various definitions and measures of poverty lead to two perspectives which are income poverty and lack of basic need poverty. Income poverty occurs when an individual does not have enough money to meet up with the a certain standard of living while lack of basic need poverty occurs when one is unable to meet some of the basic needs such as food, shelter and clothing as identified by United Nations, Children's Fund (UNICEF). From the above definition of poverty, income definition is the most appropriate, therefore this study use the income definition of poverty (Ogbeide and Agu, 2015).

The Concept of Income Inequality

Inequality has to do with differences in the share of something between/among two or more persons where the share of one/some is greater than that of the others. According to Ray (1998), economic inequality occurs when one individual is given some material choice/resources and another is denied the same thing. Inequality can be in income, consumption, wealth, gender, employment, health variables and many more. But for this study we are interested in income inequality. Income inequality is defined as the inequitable distribution of income among the members of a particular group, an economy or society. Income inequality can be measured generally using the Lorenz curve, the Gini coefficient and general entropy class. The Gini coefficient is most frequently used measure and it is close to the Lorenz curve (Ogbeide and Agu, 2015).

Income Redistribution Policy

Social Transfers and Inequality

Redistribution can take place through social transfers, including social assistance benefits and social insurance programmes. The former typically target the needy and can therefore be expected to have a strong redistributive effect. In Nigeria however, social insurance programmes such as pensions and unemployment insurance is regressive rather than progressive; and this tendency is exacerbated by the fact that such programmes tend to exclude workers in the informal economy, who disproportionately comprise the poor. There is a relatively strong negative association

between spending on social transfers and inequality. Developing countries such as Nigeria have high rate income inequality to poor implementation of social transfer policies and fraudulent activities in the programmes. The negative relationship between income inequality and social transfers can be interpreted as evidence that high-inequality countries like Nigeria lack the economic or political means to fund social programmes.

The Role of Taxes in Income Redistribution

Redistribution can take place through taxation. Different taxes have different impacts on income distribution. Generally, personal income taxes and property taxes are progressive increasing equality, corporate taxes are u-shaped (regressive for small and large companies and progressive for medium-sized companies) and indirect taxes are regressive.

Together reliance on different taxes combines to define the extent of progressivity in the overall tax system. Typically, the overall tax system in poor countries is regressive (Gemmel and Morrissey 2005). Great care needs to be taken when using the tax instrument for redistribution purposes. It is crucial that taxes should not distort incentives to work, invest and create wealth. Any recourse to tax reform reduces income inequalities should therefore take into account the possible impact on economic growth and employment. Taxes are used for a variety of purposes; they can raise revenue for government, provide incentives or disincentives for certain activities and correct market failure, taxes and expenditures can also serve to distribute income and help reduce inequality.

Government Expenditures on Public Goods

Public expenditure concerns the expenses incurred by government for its own maintenance, the maintenance of the society and the economy at large. Expenditures incurred for helping countries form a part of total public expenditure. The starting point of the theory of public expenditure is the failure of the market mechanism to respond fully to the true needs of the society. In other words, market mechanism is not able to bridge the gap between private and social goods. Furthermore, the public sector considers it relevant to protect the economy from the evils of market mechanism such as labour exploitation, economic and social injustice. The public sector is on expanding the supply of merit goods and forcing the consumption upon the members of the society. Thus, theory of public expenditure started attracting increasing attention with the advent of welfare economics in which the role of the state was explicitly recognized and in which budgetary operations assumed a significant role. This tendency has been further reinforced by the widening interest of economists in the problems of economic growth, planning regional disparities, distributive justice and the like.

Investment in education, health and other social services can also exert a distributive effect. While taxes and social transfers have an immediate effect on income distribution, public provision of social services tends to have a more long-term impact. Government programmes in primary education or health care and infrastructure investment in areas such as water and sanitation help alleviate the deep-rooted aspects of inequality by creating opportunities. This is particularly the case with education and health programmes, which directly support low-income groups, since they tend to benefit all individuals more or less equally and replace private spending on health care and schooling. Education and health programmes help redistributive opportunities over the long run, enhancing human capital in all groups and thus changing income capabilities.

Income Inequality: The Political Class

Nigeria politicians earn the highest salaries the whole world. In Luxemburg where minimum wage is \$2,500, their lawmakers are paid \$7,400. In Libya where minimum wage is \$430, law-makers earn \$3000. In Nigeria where minimum wage is \$38 (n18, 000), law-makers earn \$65,000 (n29m).the Lagos pension law approved by former governor in 2007, a former governor will enjoy the following benefits for life: two houses, one in Lagos and another in Abuja. Property experts estimate such a house in Lagos to cost n500m and Abuja n700m.) Others are six brand new cars replaceable every three years; furniture allowance of 300 percent of annual salary to be paid every two years, and a close to n2.5m as pension (About N30m Pension Annually). He Will Also Enjoy Security Detail, Free Medicals Including For His Immediate Families. Other Benefits Are 10 Percent House Maintenance, 30 Percent Car Maintenance, 10 Percent Entertainment, 20 Percent Utility, and Several Domestic Staff.

In rivers, the law provides 100 percent of annual basic salaries for ex-governor and deputy, one residential house for former governor anywhere of his choice in Nigeria; one residential house anywhere in rivers for the deputy, three cars for the ex-governor every four years; two cars for the deputy every four years. His furniture is 300 percent of annual basic salary every four years en bloc. House maintenance is 10 percent of annual basic salary.

In Akwa Ibom, the law provides for n200m annual pay to ex governors, deputies. He enjoys a pension for life at a rate equivalent to the salary of the incumbent governor/deputy governor respectively. A new official car and a utility vehicle every four years; one personal aide and provision of adequate security; a cook, chauffeurs and security guards for the governor at a sum not exceeding n5m per month and n2.5m for the deputy governor. There is also a free medical service for governor and spouse at an amount not exceeding n100m for the governor per annum and n50m for the deputy governor. Also, there is a five-Bedroom Mansion in Abuja and Akwa Ibom and Allowance of

300 Percent of Annual Basic Salary For The Deputy Governor. He Takes A Furniture Allowance Of 300 Percent Of annual basic salary every four years in addition to severance gratuity.

The Kano state pension rights of governor and deputy governor law 2007 provides for 100 percent of annual basic salaries for former governor and deputy. Furnished and equipped office, as well as a 6-bedroom house; well-furnished 4-bedroom for deputy, plus an office. The former governor is also entitled to free medical treatment along with his immediate families within and outside Nigeria where necessary. It is same for deputy. Two drivers are also for former governor and a driver for his deputy; and personal staff below the rank of a principal administrative officer and a pa not below grade level 10. There is a provision for a 30- day vacation within and outside Nigeria.

In Gombe, there are n300 million executive pension benefits for the ex-governor. In kwara, the 2010 law gives a former governor two cars and a security car, replaceable every three years, a well-furnished 5-bedroom duplex, furniture allowance of 300 per cent of his salary; five personal staff, free medical care for the governor and the deputy, 30 percent of salary for car maintenance, 20 per cent for utility, 10 percent for entertainment, 10 per cent for house maintenance.

The Zamfara version of the law, signed in 2006, gives former governors pension for life, two personal staff, two vehicles replaceable every four years, two drivers, free medical for the former governors and deputies and their immediate families in Nigeria or abroad. The law also gives the former governors a 4-bedroom house in zamfara and an office, free telephone and 30 days paid vacation outside Nigeria.

In Sokoto, former governors and deputy governors are to receive n200m and n180m respectively being monetization for other entitlements which include domestic aides, residence and vehicles that could be renewed after every four years. Section 2 (2) of the Sokoto state grant of pension (governor and deputy governor) law, 2013 states that the total annual pension to be paid to the governor and deputy governor, shall be at a rate equivalent to the annual total salary of the incumbent governor or deputy governor of the state respectively.

According To Rmafc, A Minister Receives An Annual Basic Salary Of n2m, Accommodation n4m, Vehicle Loan n8m, Furniture Allowance n6m, Utility N607, 920, Vehicle Maintenance N1.5m, Entertainment N911, 880 And Leave Allowance N202, 640. The Minister Also Receives N506, 600 For Personal Assistants, N1.5 Million For Domestic Staff, N303, 960 For Newspapers And N6m As Severance Gratuity. In Addition, The Minister Is Entitled To N35,000 As Duty Tour Allowance (Dta) Per Day. For Foreign Trips, A Minister Receives \$1,000 Per Day.

A Senator Earns A Basic Salary Of N2,026,400.00, Accommodation, Motor Vehicle Loan(400% Of Their Annual Basic Salary), Motor Vehicle Maintenance Allowance (75% Of Annual Basic Salary), Furniture Allowance(300% Of Their Annual Basic Salary), Utilities Allowance(30% Of Their Basic Salary), And Medical Allowance. Other Benefits They Are Earning Are Newspaper Allowances, Special Assistant (Between Grade Level 12 And 14), Personal Assistant, Two Legislative Aides, One Senior Legislative Aide, Entertainment Allowance, Wardrobe Allowance And Constituency Allowance And Severance Gratuity.

Section 2 (a) of the ccb law provides that a public officer shall not “receive or be paid the emoluments of any public office at the same time as he receives or is paid emoluments of any other public office; or (b) except where he is not employed on full time basis, engage or participate in the management or running of any private business, profession or trade; but nothing in this sub-paragraph shall prevent a public officer from engaging in farming.

Section 4 of the law says a public officer shall not, after his retirement from public service and while receiving pension from public funds, accept more than one remunerative position as chairman, director or employee of (a) a company owned or controlled by the government; or (b) any public authority. A retired public servant shall not receive any other remuneration from public funds in addition to his pension and the emolument of such one remunerative position.

Section 14 of the same law exempted lawmakers from the above provisions thus: in its application to public officers (a) members of legislative houses shall be exempted from the provisions of paragraph 4 of this code; and (b) the national assembly may by law exempt any cadre of public officers from the provisions of paragraph 4 and 11 of this code if it appears to it that their position in the public service is below the rank which it considers appropriate for the application of the provisions.

3. Research Methodology

The objective of this study is to examine dimension of poverty and income inequality in Nigeria, the descriptive methods of data analysis with the application of lorenz curve. Lorenz curve is an instrument to analyze curve, the numbers of income recipients are plotted on the horizontal axis, not in absolute terms but in cumulative percentages. The vertical axis shows the share of total income received by each percentage of population. The cumulative is up to 100%, meaning that both axes are equally long.

The entire figure is enclosed in a square and a diagonal line is drawn from the lower left corner (the origin) of the square to the upper right corner. At every point on that diagram, the percentage of income received is exactly equal to the percentage of income recipients for example; the point halfway along the length of the diagonal represents

50% of the income being distributed to exactly 50% of the population. The more the Lorenz curve line is away from the diagonal (perfect equality), the greater the degree of inequality represented.

4. Poverty Indicators

The major component in the computation of relative poverty measurement is the household expenditure. Expenditure refers to all goods and services for use of the household. It also includes all monetary transactions such as donations, savings, esusu contribution. Poverty line is a measure that divides the poor from non-poor. Using the mean per capita household expenditure one-third of it gives (separate) the extreme or core poor from the rest of the population while two-third of the mean per capita expenditure separate the moderate poor from the rest of the population. The accumulation of the core poor and moderate poor gives the poor population while the non-poor are the population greater than two-third of the population. In the course of computing the poverty profile for Nigeria using the harmonized Nigeria living standard survey, all the above approaches have been adopted. Though the use of country adult equivalent and household size seems to be the current method in the computation of absolute (objective) poverty measure, the nbs adopted per capita expenditure (total expenditure/household size) just for consistency. Absolute poverty measure used the per capita expenditure approach. However, the measurement of poverty is about individuals in poverty, hence the choice of per capita expenditure which will estimate the population as against adult-equivalent which under-estimate the population. For clarity, it is necessary to state the different measures and what they translate in monetary. The poverty lines for each of the measures are as follows:

- Food poverty line: This food poverty is an aspect of absolute poverty measure which considers only food expenditure for the affected households.
- Absolute poverty line: This is the second step in absolute (objective) poverty measure. Here, this method considers both food expenditure and non- food expenditure using the per capita expenditure approach
- The relative poverty line: This line separates the poor from the non-poor. All persons whose per capita expenditure is less than the above are considered to be poor while those above the stated amount are considered to be non-poor.
- The dollar per day poverty line: This measures, consider all individuals whose expenditure per day is less than a dollar per day using the exchange rate of naira to dollar.
- The subjective poverty measure is the perception of the citizenry. It is neither related to per capita expenditure of household nor the country adult equivalent scale.
- Another critical measure of poverty is the gini coefficient (inequality measurement). This measure can explain the spread of income or expenditure yet cannot explain increase or decrease of individuals or persons in poverty.

5. Data Presentation and Analysis

Table 1: Nigerian Poverty By Sector

Sector	Food Poor	Absolute Poor	Relative Poor	Dollar Per Day
Urban	26.7	52.0	61.8	52.4
Rural	48.3	66.1	73.2	66.3

Table 2: Analysis Of Nigerian Poverty By Geographical Region

Zone	Food Poor	Absolute Poor	Relative Poor	Dollar Per Day
North Central	38.6	59.5	67.5	59.7
North East	51.5	69.0	76.3	69.1
North West	51.8	70.0	77.7	70.4
South East	41.0	58.7	67.0	59.2
South-South	35.5	55.9	63.8	56.1
South West	25.4	49.8	59.1	50.1

Source: Nbs Survey 2010

Table 3: Dimension Of Nigeria Population In Poverty

	2004 (%)	2010 (%)	2011 (%)
Estimated Population (Million)	126.3	163	168
Relative Poverty	54.4	69	71.5
Absolute Poverty	54.7	60.9	61.9
Dollar Per Day	62.8	61.2	62.8

Table 4: Analysis Of Poverty By Region And State

		Food Poverty	Absolute Poverty	Moderately Poor	Dollar Per Day
	Food Poor	Non Poor	Poor	Non Poor	Poor
Sector	Urban	26.7	73.3	52.0	48.0
	Rural	48.3	51.7	66.1	33.9
Zone	North Central	38.6	61.4	59.5	40.5
	North East	51.5	48.5	69.0	31.0
	North West	51.8	48.2	70.0	30.0
	South East	41.0	59.0	58.7	41.3
	South South	35.5	64.5	55.9	44.1
	South West	25.4	74.6	49.8	50.2
	State	Abia	30.5	69.5	57.4
Adamawa		55.4	44.6	74.2	25.8
Akwaibom		35.6	64.4	53.7	46.3
Anambra		34.2	65.8	56.8	43.2
Bauchi		54.1	45.9	73.0	27.0
Bayelsa		23.3	76.7	47.0	53.0
Benue		48.5	51.5	67.1	32.9
Borno		33.2	66.8	55.1	44.9
Cross-Rivers		46.4	53.6	52.9	47.1
Delta		42.8	57.2	63.3	36.7
Ebonyi		63.5	36.5	73.6	26.4
Edo		39.4	60.6	65.6	34.4
Ekiti		35.8	64.2	52.4	47.6
Enugu		52.7	47.3	62.5	37.5
Gombe		71.5	28.5	74.2	25.8
Imo		33.3	66.7	50.5	49.5
Jigawa		71.1	28.9	74.1	25.9
Kaduna		41.7	58.3	61.5	38.5
Kano		48.3	51.7	65.6	34.4
Katsina		56.2	43.8	74.5	25.5
Kebbi		47.0	53.0	72.0	28.0
Kogi		50.1	49.9	67.1	32.9
Kwara		38.1	61.9	61.8	38.2
Lagos		14.6	85.4	48.6	51.4
Nassarawa		26.8	73.2	60.4	39.6
Niger		20.4	79.6	33.8	66.2
Ogun		41.8	58.2	62.3	37.7
Ondo		36.1	63.9	45.7	54.3
Osun		19.5	80.5	37.9	62.1
Oyo		24.6	75.4	51.8	48.2
Plateau		44.0	56.0	74.1	25.9
Rivers		26.3	73.7	50.4	49.6
Sokoto		56.6	43.4	81.2	18.8
Taraba		45.2	54.8	68.9	31.1
Yobe		58.5	41.5	73.8	26.2
Zamfara		44.4	55.6	70.8	29.2
Fct	32.5	67.5	55.6	44.4	

Source: Nbs Survey 2010

Table 5: Derived Subjective Poverty Measure

	Core Poor	Moderate Poor	Non-Poor	Total
Sector				
Urban	36.3	56.2	7.5	100.0
Rural	53.5	41.2	5.3	100.0
Total	46.7	47.2	6.1	100.0
North Central				
Benue	63.0	32.7	4.3	100.0
Kogi	38.0	58.7	3.3	100.0
Kwara	40.4	57.0	2.6	100.0
Nassarawa	34.0	60.0	6.1	100.0
Niger	32.0	59.6	8.4	100.0
Plateau	38.7	55.9	5.4	100.0
Fct Abuja	42.4	55.6	2.1	100.0
Total	42.4	52.8	4.8	100.0
North East				
Damawa	56.7	39.2	4.1	100.0
Bauchi	49.3	41.9	8.7	100.0
Borno	45.6	51.3	3.1	100.0
Gombe	50.0	46.3	3.7	100.0
Taraba	64.4	29.8	5.8	100.0
Yobe	46.4	49.7	3.9	100.0
Total	51.6	43.5	4.9	100.0
North West				
Jigawa	35.6	56.0	8.4	100.0
Kaduna	52.4	38.2	9.5	100.0
Kano	53.4	40.8	5.8	100.0
Katsina	48.6	46.2	5.2	100.0
Kebbi	46.2	46.3	7.5	100.0
Sokoto	31.9	59.4	8.7	100.0
Zamfara	52.6	43.6	3.8	100.0
Total	47.3	45.8	6.9	100.0
South East				
Abia	63.0	30.3	6.7	100.0
Anambra	47.6	45.0	7.4	100.0
Ebonyi	79.1	15.2	5.7	100.0
Enugu	49.4	42.2	8.4	100.0
Imo	67.0	30.4	2.6	100.0
Total	59.0	34.8	6.2	100.0
South South				
Akwa Ibom	50.4	43.3	6.3	100.0
Bayelsa	67.6	28.6	3.8	100.0
C/ River	69.6	26.0	4.4	100.0
Delta	57.1	36.2	6.7	100.0
Edo	33.7	59.1	7.2	100.0
Rivers	57.9	33.9	8.2	100.0
Total	54.3	39.2	6.6	100.0
South West				
Ekiti	45.6	51.1	3.3	100.0
Lagos	24.8	66.2	9.0	100.0
Ogun	24.6	69.2	6.3	100.0
Ondo	52.3	44.2	3.5	100.0

Osun	25.4	65.3	9.3	100.0
Oyo	46.0	49.5	4.5	100.0
Total	34.4	59.1	6.5	100.0

Source: Nbs Survey 2010

Table 6: Household Assessment of Livelihood

	Very Poor	Poor	Moderate	Fairly Rich	Rich	Total
Sector						
Urban	6.1	30.1	56.2	6.3	1.2	100.0
Rural	11.6	41.9	41.2	4.5	0.8	100.0
Total	9.5	37.2	47.2	5.2	0.9	100.0
North Central						
Benue	12.6	50.4	32.7	3.8	0.5	100.0
Kogi	5.8	32.2	58.7	2.9	0.4	100.0
Kwara	3.8	36.6	57.0	2.4	0.2	100.0
Nasarawa	7.0	26.9	60.0	5.9	0.2	100.0
Niger	6.9	25.1	59.6	7.7	0.7	100.0
Plateau	7.6	31.1	55.9	4.0	1.4	100.0
Fct	3.3	39.0	55.6	1.3	0.8	100.0
Total	7.3	35.1	52.8	4.2	0.6	100.0
North East						
Adamawa	10.2	46.6	39.2	3.5	0.6	100.0
Bauchi	7.1	42.3	41.9	8.1	0.6	100.0
Borno	3.9	41.7	51.3	2.4	0.7	100.0
Gombe	7.5	42.6	46.3	2.9	0.8	100.0
Taraba	10.1	54.3	29.8	5.4	0.4	100.0
Yobe	11.0	35.4	49.7	3.3	0.5	100.0
Total	7.8	43.8	43.5	4.3	0.6	100.0
North West						
Jigawa	4.9	30.7	56.0	7.3	1.0	100.0
Kaduna	8.8	43.5	38.2	9.0	0.5	100.0
Kano	11.5	41.9	40.8	5.2	0.6	100.0
Katsina	7.9	40.8	46.2	4.5	0.7	100.0
Kebbi	6.6	39.6	46.3	5.3	2.2	100.0
Sokoto	8.6	23.3	59.4	7.5	1.1	100.0
Zamfara	15.3	37.2	43.6	2.8	1.0	100.0
Total	9.3	38.0	45.8	6.0	0.9	100.0
South East						
Abia	15.8	47.2	30.3	4.9	1.8	100.0
Anambra	10.1	37.5	45.0	5.1	2.2	100.0
Ebonyi	27.6	51.4	15.2	5.2	0.5	100.0
Enugu	13.2	36.2	42.2	7.7	0.8	100.0
Imo	20.3	46.7	30.4	1.8	0.8	100.0
Total	16.3	42.8	34.8	4.9	1.3	100.0
South South						
Akwaibom	14.0	36.4	43.3	4.5	1.8	100.0
Bayelsa	32.6	35.0	28.6	1.7	2.1	100.0
Cross River	17.0	52.7	26.0	3.7	0.7	100.0
Delta	13.6	43.5	36.2	6.0	0.7	100.0
Edo	3.9	29.8	59.1	6.1	1.1	100.0
Rivers	12.0	45.9	33.9	6.2	1.9	100.0
Total	13.6	40.6	39.2	5.2	1.4	100.0

South West						
Ekiti	8.0	37.6	51.1	2.7	0.6	100.0
Lagos	4.3	20.5	66.2	8.3	0.7	100.0
Ogun	2.7	21.8	69.2	5.2	1.0	100.0
Ondo	5.9	46.4	44.2	3.4	0.0	100.0
Osun	1.9	23.6	65.3	7.0	2.3	100.0
Oyo	7.6	38.3	49.5	3.9	0.6	100.0
Total	4.9	29.4	59.1	5.7	0.8	100.0

Source: Nbs Survey 2010

Table 7: Income Inequality

	Income Inequality		% Change From
National	0.4296	0.447	4.1
State			
Abia	0.3524	0.3968	12.6
Adamawa	0.4414	0.4339	-1.7
Akwaibom	0.3645	0.4381	20.2
Anambra	0.3534	0.3803	7.6
Bauchi	0.4705	0.3348	-28.9
Bayelsa	0.3333	0.337	1.1
Benue	0.3888	0.4069	4.6
Borno	0.3604	0.3841	6.7
Cross-Rivers	0.3977	0.4369	9.8
Delta	0.3582	0.4698	31.1
Ebonyi	0.3598	0.425	18.1
Edo	0.3742	0.4177	11.6
Ekiti	0.3695	0.4831	30.7
Enugu	0.3976	0.4273	7.5
Gombe	0.3652	0.4217	15.5
Imo	0.3844	0.425	10.6
Jigawa	0.3368	0.3976	18.1
Kaduna	0.3668	0.4005	9.2
Kano	0.375	0.4692	25.1
Katsina	0.4174	0.374	-10.4
Kebbi	0.3046	0.3259	7
Kogi	0.4914	0.4145	-15.7
Kwara	0.4848	0.3594	-25.9
Lagos	0.504	0.3719	-26.2
Nassarawa	0.3494	0.34	-2.7
Niger	0.3665	0.3675	0.3
Ogun	0.3984	0.4076	2.3
Ondo	0.3274	0.3869	18.2
Osun	0.3482	0.3856	10.7
Oyo	0.3295	0.3923	19.1
Plateau	0.4242	0.3995	-5.8
Rivers	0.4052	0.4614	13.9
Sokoto	0.3574	0.355	-0.7
Taraba	0.3664	0.5241	43
Yobe	0.3283	0.523	59.3
Zamfara	0.3506	0.3397	-3.1
Fct	0.4062	0.5116	26

Source: Nbs Survey 2010

6. Findings of the Study

- Food poverty line is n39, 759.49.
- Absolute poverty line is n54, 401.16, while the total expenditure of food and non-food produce a poverty incidence of 60.2 percent or 89,096,000 Nigerians living in poverty.
- The relative poverty line is n66, 802.20 while relative poverty measure showed that 69% or 112,470,000 of Nigerians are living in poverty.
- The dollar per day poverty line is n54, 750, while cpi and the exchange rate it gave n59.2 to one us\$. When annualized, it gives a poverty incidence of 56.6%
- The core poor is 46.7 percent, moderate poor is 47.2 percent while the non poor is 6.1 percent
- Gini coefficient was 0.4296 and was 0.4470 indicating that inequality increased by 4.1 percent nationally.
- Subjective poverty rate: the incidence of poverty was 75.5 percent; however the perception index of household living in poverty had risen to 92.5 percent.

Poverty

Rate

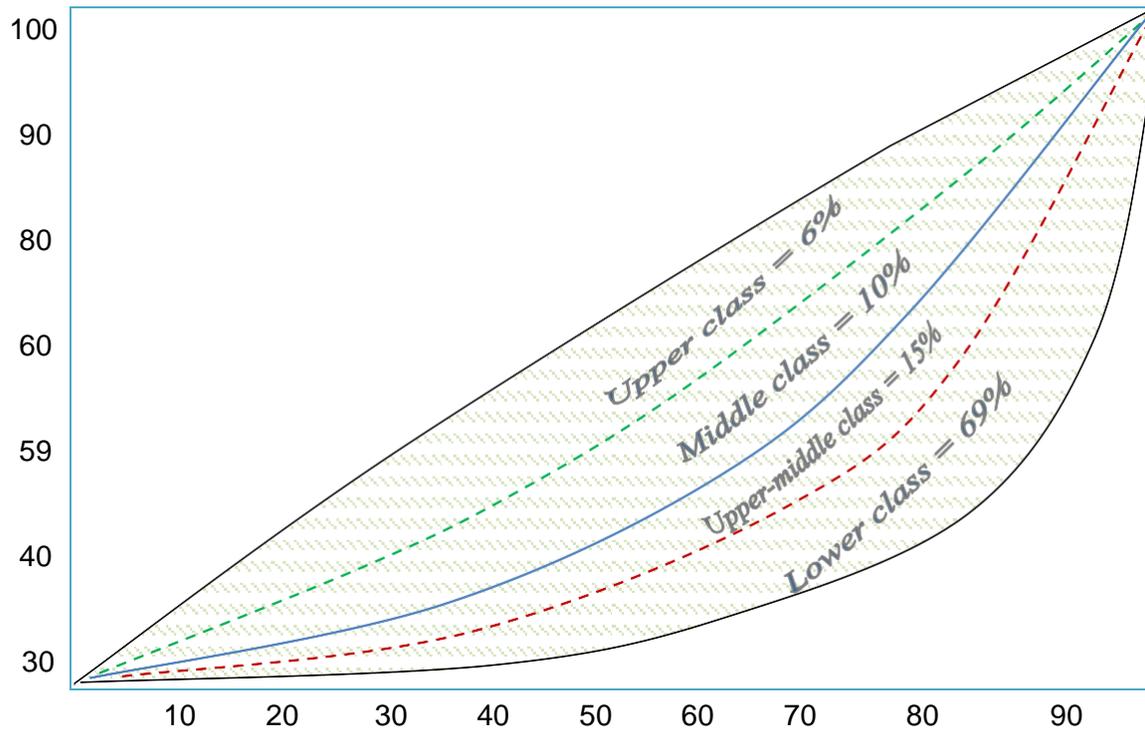


Figure1: Lorenz curve for Nigeria showing income distribution according to class (upper, middle, upper middle, and lower classes)

Lower Class

This is primarily comprised of lower-level citizens, white-collar workers. These workers are typically not educated and lack the graduate degrees needed to advance to higher levels of employment, or have a degree but remain unemployed but manage to put food on its table. Income for these workers generally falls between n160,500 and n200,000. This category is trapped in the poverty rate of 69% of the total population.

Middle Class

They typically have post-graduate degrees and work at high-level, white-collar positions. They are mostly civil servant, traders and vocational professional: household income for these workers is often above n1m naira annually, 10% of nigerian adult population is in this class.

Upper Middle Class

These professional class workers earn enough to be in the top one-third of nigeria's incomes. They earn above n4m naira annually, nigeria have 15% of this category.

Upper Class

This income level is what is commonly called the high class. This category is mainly occupied by politician and business moguls, those that control the nigeria oil money and children of nigerian past leaders.

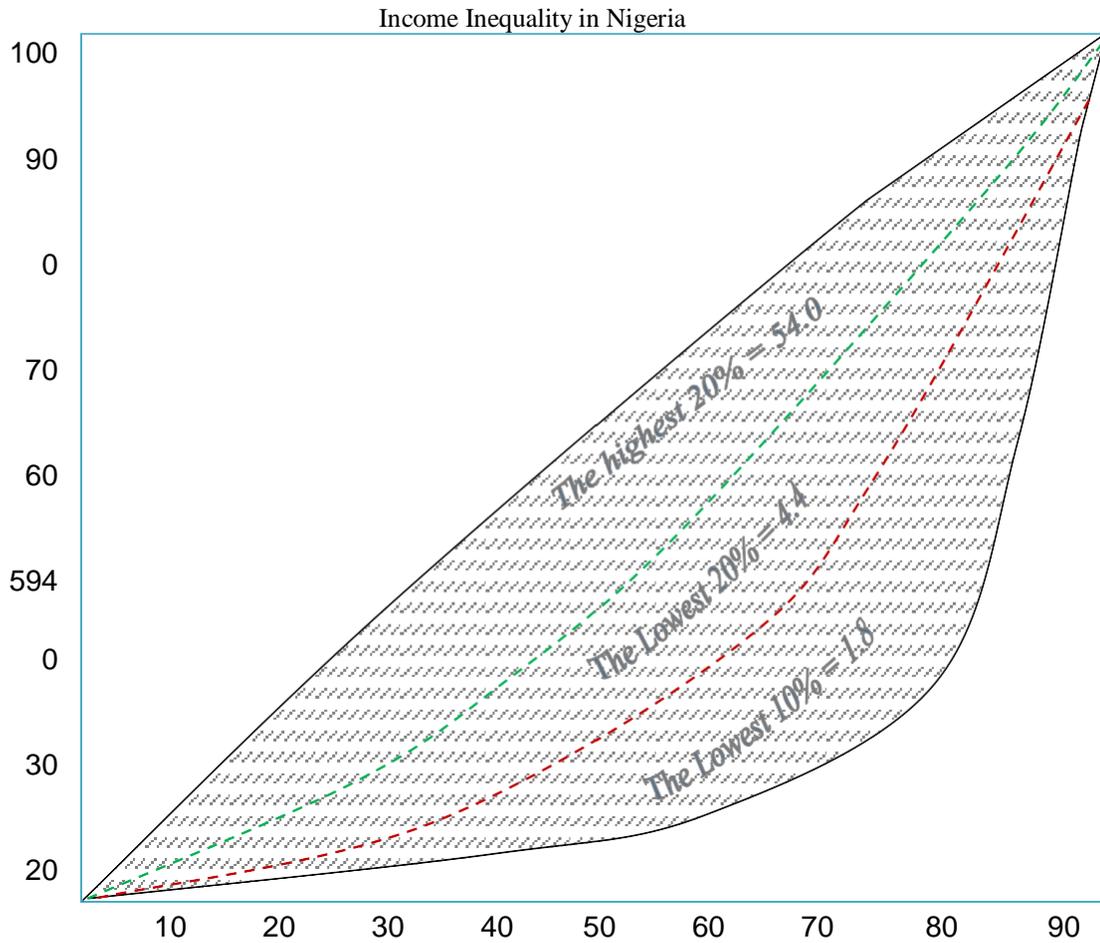


Figure 2: Plot of Difference between Share of Income the Highest 20%, Lowest 20% and Lowest 10%

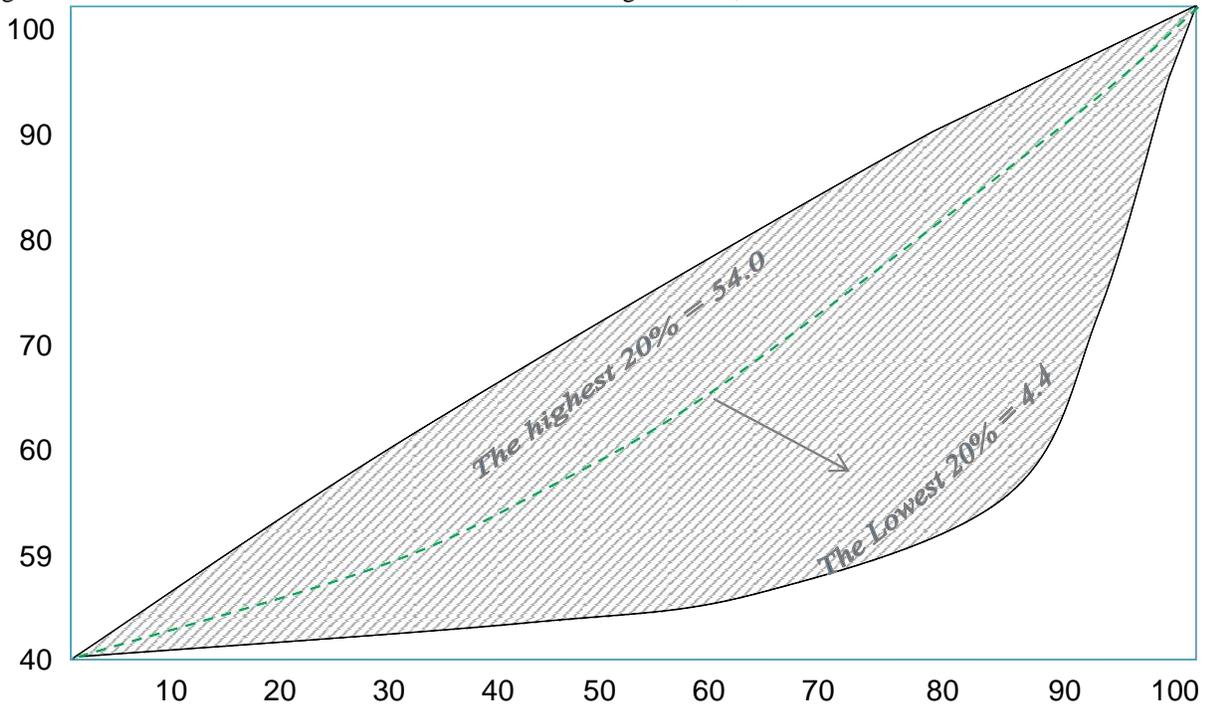


Figure 3: Plot of Difference between Share of Income the Highest 20% and the Lowest 20%

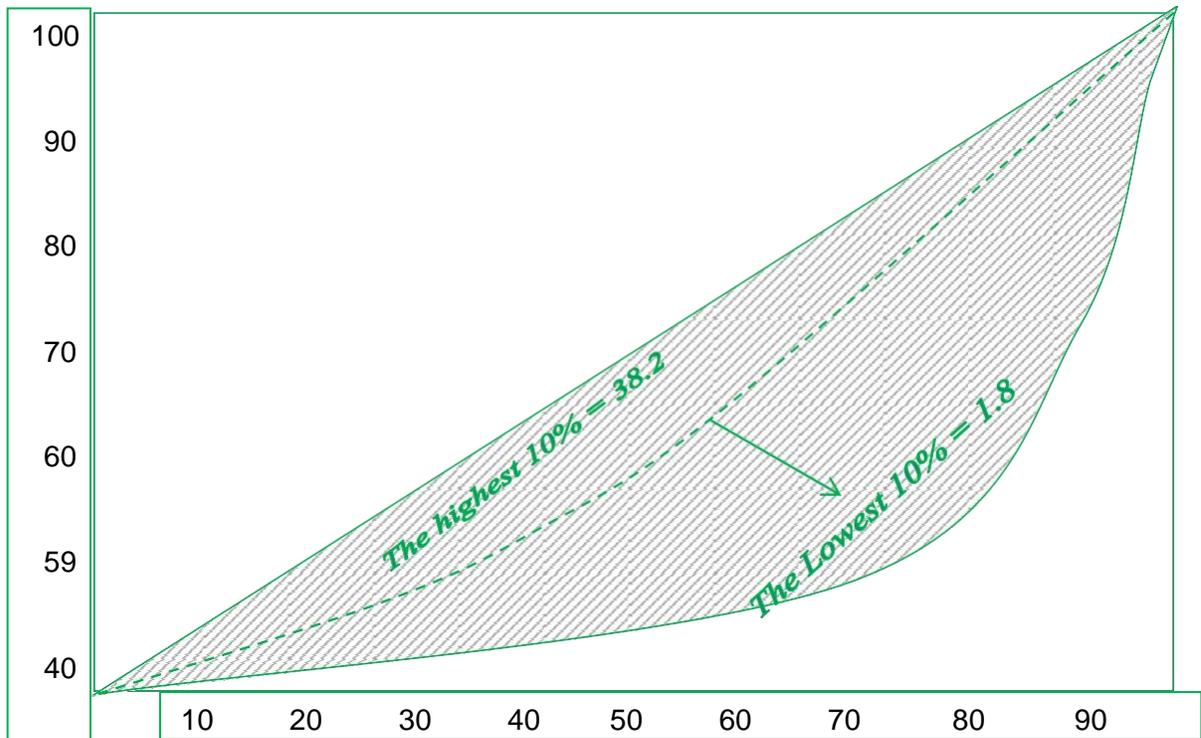


Figure 4: Plot of Difference between Share of Income Held by the Highest 10% and the Lowest 10%

According to nbs report 2018, inequality in Nigeria worsened between 2004 and 2013 but improved in 2016 using either the gini coefficient or theil. Inequality as measured by the gini worsened from 0.356 in 2004 to 0.41 in 2013 but improves to 0.391 in 2016. Using theil, inequality worsened from 0.217 in 2003 to 0.395 in 2013 but improved to 0.31 in 2016. With respect to consumption shares (and using consumption as a proxy for income), in 2004, the bottom 10% (poorest of the poor) of the population consumed 2.56% of goods and services, while the top 10% (super rich) consumed 26.59% of all goods and services. The richest 10% were responsible for 26.59% of national expenditure or income in 2016. This increased to 33.72% in 2013 but decreased to 31.09% in 2016. The top 20% were responsible for 42.40% of national income/expenditure in 2004. This increased to 48.28% in 2013 but declined to 46.63% in 2016. While no agreed standard definition of the Nigerian middle class exists, for the purpose of this report we have classified decile 01-03 as the lower class, decile 04-07 as the middle class and decile 08-10 as the upper class.

Accordingly, the upper class was responsible for 58.39% of national income/expenditure down from 59.42% in 2013. The share of the upper class in national income had been rising between 2004 and 2013 before reducing in 2016. The middle class on the other hand accounted for 30.26% of national income/expenditure in 2016, higher than 29.14% in 2013. The share of the middle class had been declining between 2004 and 2013 in favor of the higher class but that reversed in 2016. Finally, the lower class accounted for 11.35% of national income/expenditure in 2016 lower than 11.43% in 2013. The biggest gainers of income/expenditure shares between 2013 and 2016 has therefore been the middle class, while the lower-class share remained constant while the high-class shares reduced. This widening gap between the rich and the poor in Nigeria is contrary to Kuznets' hypothesis.

7. Conclusion and Recommendation

Despite the fact that Nigerian economy is paradoxically growing, the proportion of Nigerians living in poverty is increasing every year. The proportion of the population living below the poverty line increased significantly over the past three decades despite policies formulated over time to reduce poverty and income inequality in the country. The increasing rate of poverty can be traced to the politicization of politics, embezzlement of public funds and capital flight. It is imperative that the management of national wealth and the reduction of poverty are the key questions of political economy all over the world today, Nigeria has to do more to bring its people out of poverty rate. According to nbs survey 2010, the increase in poverty at national levels shows a number of variables at other levels of disaggregation. The poverty profile of Nigeria recognizes the role of the World Bank, the UK department of international development (DFID) other development partners in their effort in helping countries improve the

availability of statistical data on which effective poverty monitoring and evaluation depend on. Government at all levels should ensure implementable policies that will reduce poverty and the widen gap between the rich and the poor in Nigeria.

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