Inequality and Regional Poverty in Nigeria: A Decomposition Analysis from Foster-Greer-Thorbecke Index

Ambrose Nnaemeka Omeje
University of Nigeria Faculty of Social Sciences

Ndubuisi Obeka Chukwu (✉ ndubuisi.chukwu@unn.edu.ng)
University of Nigeria Faculty of Social Sciences  https://orcid.org/0000-0002-8648-6296

Paul Chukwuemeka Isiwu
Federal University of Technology Owerri

Research Article

Keywords: Inequality, Regional Poverty, Decomposition Analysis, FGT Index, Nigeria

Posted Date: May 17th, 2022

DOI: https://doi.org/10.21203/rs.3.rs-1643417/v1

License: © This work is licensed under a Creative Commons Attribution 4.0 International License. Read Full License
Abstract

This study examined inequality and regional poverty in Nigeria using the Nigeria Living Standard Survey – NLSS (2019), and adopted decomposition analysis of the Foster-Greer-Thorbecke Index. It was therefore found by the study that in this regard, inequality and regional poverty is more in the Northern Nigeria with North West having the greatest head count ratio or poverty incidence, poverty gap or poverty intensity and poverty severity. This is followed by the North East, and North Central. Going southern part of the country, it was found by the study that inequality and regional poverty is more in South West, followed by South-South, and least in the South East. The study therefore recommends that there is urgent need for national policies geared towards reduction of poverty incidence in all the geopolitical regions of the country. This could come through employment creation, increased investment in infrastructure, increased development and support of informal sector businesses, among other social investments that could increase incomes through increased employment.

1. Introduction

Since the last couple of decades, there is a growing concern on economic growth attainment that is not inclusive. In Africa, poverty and income inequality are twin problem that are mutually reinforcing developmental challenges (Ibrahim & Taiga, 2020). The increasing poverty profile and income inequality gap amongst Nigerian population is assuming a worrisome dimension every day that passes (Edoumiekumo, Karimo & Tombofa, 2014). According to 2019/2020 Nigerian living standards survey released by the National Bureau of statistics (NBS) 82.9 million (40.1%) of Nigerian population are poor (NBS, 2019). The survey further reveals a significant geographical and regional inequality in poverty spread. With greater number of poor people living in the rural area and in the northern region of Nigeria. Consequently, widespread hunger, starvation, and malnutrition, with their attendant impact on the health and social lives of the people in the region. This may have triggered kidnapping, terrorism, cattle rustling, insurgency, coordinated and uncoordinated armed robbery attacks.

The paradoxical story of Nigeria is overwhelming. The nation is richly endowed, but a greater number of people are poor (Omoyibo, 2013). As pointed out by Omotola (2008), Nigeria is hugely endowed and the nation’s wealth potentials is evident in the richly deposited natural resources. With the level of endowments, Nigeria should rank among the richest economies of the world. However, Okpe and Abu (2009) noted that inequality continues to widen among the people of Nigeria with a rising poverty incidence. With all the indicators of poverty pointing at almost extreme, for instance, the World Poverty Clock (2020) reports that more than 80% of Nigerians are extremely poor. This ranked Nigeria among the top 10 poor countries in Africa as shown in Fig. 1.1. This undermine the hope of Nigeria actualizing the United Nations’ Sustainable Development Goal (SDG) 1 of ending extreme poverty by 2030.

As shown in Fig. 1.1 above, among the top 10 African countries, Nigeria recorded the highest number of people with extreme poverty. More so, other indicators, such as, Human Development Index (HDI) value of 0.539 for 2019 ranks Nigeria 161 out of 189 countries positioning the country among the low human development category, with estimated GNI of $2030 and life expectancy at birth of 55 years (UNDP, 2020). Furthermore, the Nigeria scale of income inequality is overwhelming. Oxfam (2019) report on African commitment in tackling inequality ranked Nigeria 45 out of 45 countries, positioning Nigeria at the bottom in African ranking and undermining the possibility of Nigeria achieving the SDG 10 of closing income inequality gap in 2030.
However, several attempts have been made to upturn the incidence of poverty in Nigeria, by way of policies and programmes. For instance, Poverty Allaviation Programme (PAP) in 2000; National Poverty Eradication Programme (NAPEP) in 2001; National Economic Empowerment and Development Strategy (NEEDS) in 2003. A recent strategy is National Social investment Programme, i.e., N-power in 2016. In spite of all these strategies, Nigeria seems not to have achieved the expected objectives of reducing poverty and inequality. Hence, poverty and inequality keep widening the more. This continuous widening of poverty and inequality has made Nigeria to be referred to as the poverty capital of the world, necessitating the need to investigating inequality and regional poverty in Nigeria.

Several empirical attempts have been made in the past to evaluate the income inequality and poverty incidence in Nigeria by Olawuyi and Adetunji (2013), Igbalajobi et al. (2013), Akinbode (2013), Adetayo (2014), Awotide et al. (2015), Edoumiekumo et al. (2014), Asogwa, Umeh & Okwoche (2012), Ogbonna, Onyenweaku & Nwaru (2012) and Ibrahim & Taiga (2020). To the best of our knowledge none of the existing studies have used the recent Nigeria living standard survey to conduct income inequality and regional poverty analysis. Hence, this study departs from the previous studies in Nigeria by decomposing inequality and poverty by regions, with a focus on establishing the head count poverty ratio or incidence of poverty, poverty intensity, and the severity of poverty with respect to geopolitical regions using the most recent NGLSS data.

The rest of this study is structured as follows. Section 2 presents literature review. Section 3 presents the methodology, section 4 is the results and discussions, while section 5 presents the conclusion and policy recommendations.

2. Literature Review

Inequality in income according to Kopp (2019) is “an extreme disparity of income distribution with a high concentration in the hands of a small percentage of a population”. In the presence of income inequality, large gap exists between the wealth of one segment of the population relative to another. Income inequality can be investigated through a variety of segmentations, such as gender (male vs female), occupation, geographic location and ethnicity (Ibrahim & Taiga, 2020). Segmentations of income distribution on the basis of demographic features forms the basis for our studying income inequality and income disparity.

The concept of poverty is defined by Haughton and Khandker (2009) as a “pronounced deprivation in well-being”. Well-being in this respect can be measured broadly or narrowly. Well-being in the broad sense consists of physical and mental health conditions, competence and self-worth and social connections among others (Wellbeing & poverty Pathways, 2013). Well-being in a narrow definition is linked to commodities, that is, whether individuals or households have adequate resources to take care of their needs. In this instance, poverty is related to monetary terms, that is, household income or consumption expenditure. The theories of poverty are divergent and required difference approach in tackling issues of poverty. Theories reviewed are geographical disparity theory individual deficiency theory, and social exclusion theory.

Geographical Disparities Theory

The theory of geographical disparities relates poverty with geographical features, like rural poverty, ghetto poverty, third world poverty among others. The theory calls attention to the fact that individual, institutions and cultures in certain areas lack access to opportunities for wealth creation. This theory can also be likened to the
agglomeration theory which reveals how heavy domicile of similar industries and firms attracts supportive services and market links which attract more industries and firms, while impoverished communities generates more poverty (Danaan, 2018).

*Individual Deficiency Theory*

The individual deficiency theory was built on the premise of the neo-classical dictum that reinforced individualistic sources of poverty with the assumption that relates poverty to lack of hard work and bad choices of individuals. This theory assumes the poor to be responsible for creating their problems due to individual deficiencies. Other variants of this theory attributes poverty to a lack of generic attributes, IQ level and even punishment from God for sins committed (Danaan, 2018). This theory likens the poor to moral hazard with claim that poverty and inequality exist due to the poor are engaging in activities that counterproductive (Gwartney & McCaleb, 1985 cited in Danaan, 2018). Thus, poverty reduction and tightening inequality gap requires hard work, skill acquisition and resilience.

*Social Exclusion Theory*

The social exclusion theory focuses on the lack or denial of resources, right, goods and services and inability to partake in normal activities and relationship available to the majority of the people in the community. The theory was popularized in the 1960’s and stems from the fact that income inequality could be as result of social exclusion which exacerbates poverty (Ibrahim & Taiga, 2020; Levitas et al., 2007). The basis of this theory is that poverty is due to cumulative disadvantage where a comfortable minority co-exist with a disadvantaged majority who are collectively excluded from socio-economic opportunities in the community. Social exclusion is associated to unemployment and level of income (Gallie et al., 2003).

A good number of empirical studies have been conducted on inequality and poverty incidence, depth and severity in Nigeria for both rural and urban areas. For instance, Asogwa et al. (2012) investigated the determinants of poverty depth among farmers in the peri-urban area of Benue State, Nigeria. Result of the study revealed that household income, farm total economic efficiency, farm size, education, household size, age, credit access, membership of farmer association, extension contact and valuable farm asset significantly impact on poverty depth/incidence among respondents. In the like manner, Ogbonna et al. (2012) carried out an empirical investigation on the factors that influence poverty incidence among rural yam farmers in the south eastern Nigeria. The study result revealed that social group membership, education, participation in agricultural workshops, level of education, farming experience as negative drivers of poverty. Perhaps household dependency ratio indicates a positive relationship with rural poverty in the study.

Similar studies were carried out in the South-West region of Nigeria, in the likes of Olawuyi and Adetunji (2013), Igbalajobi et al. (2013), Akinbode (2013), Adetayo (2014) and Awotide et al. (2015). Olawuyi and Adetunji (2013) evaluated the severity, incidence and determinants of poverty among households in Ogbomoso Agricultural Zone of Oyo State, Nigeria. The study identified household size, gender, years spent in school, non-farm job and farm size as essential significant determinants of poverty in the study area. Igbalajobi et al. (2013) in the vein analysed the determinants of poverty among rural farm households in Ondo State, Nigeria. The logit regression result revealed that gender, age, marital status, household size, credit access, education level and farm income as core determinants of poverty among farm households. In another study, Akinbode (2013) used FGT index to assess poverty incidence, depth and severity and its determinants among urban households in the south west.
region in Nigeria. The result revealed that 34% of households were poor with a poverty severity and gap indices of 0.06 and 0.11 respectively. The study further revealed household size, gender of household head, dependency ratio, educational level, access to credit as significant determinants of household poverty in the study area. Similarly, Adetayo (2014) assessed poverty status of rural farm household in Ogun State, Nigeria. The study revealed that poverty incidence was higher among male headed household (60%) and household with over five members (66.1%). The Logit regression result further revealed that there is high tendency of falling into poverty for large households, non-educated farm household head and household with no access to credit and non-farm income. The finding is consistent with the study by Awotide et al. (2015) in Akinyele local government area of Oyo State, Nigeria. The study found that number of dependent ratio and household size significantly increases the tendency of falling below poverty line among respondent. While access to credit and access to extension services significantly reduces probability of falling below poverty line. Similar finding was found a study conducted in the northern region by Duniya and Rekwot (2015). They carried investigation on the determinants of poverty among groundnut farm households in Jigawa State. Result of their study revealed that age of household head, education, marital status of household head and membership of cooperative were negatively related to poverty incidence, while farming experience and access to extension services had positive significant relationship with poverty incidence in the study area.

Related studies have also been conducted in the south-south region of Nigeria. For instance, Edoumiekumo et al. (2014) examined the incidence, depth and severity of poverty in Bayelsa state. The study used 2009-10 NLSS data. Result of the FGT model revealed that 25% of households are income poor. Result from the logit model revealed that agriculture and household size rise the probability of household falling below poverty line while dwelling in the urban area. Whereas the male headed household, a naira increase in household per capita expenditure on health, education, number of years spent in school by household head reduces the probability of household falling below poverty line. In another study in region, Akpan, Patrick & Amama (2016) analysed poverty and inequality as well as its determinants among youth in the rural areas of Akwa Ibom State, Nigeria. Data used in the study were collected from 300 youth spread across rural areas of Akwa Ibom State. The logit regression result revealed that level of formal education, age of youths, amount of non-farm income, farm size and access to agricultural extension services reduces the probability of poverty incidence among youth farmers in the State. While household size and dependent ratio were positive drivers of poverty in the State.

Using a nationally representative data from NBS 2010 survey, Lucky and Achebelema (2018) examined poverty and inequality in Nigeria. Dollar per day poverty line, subjective poverty measure, food poverty line and absolute poverty line were used to measure poverty and Gini coefficient was used to measure income inequality. Result of the study revealed that significant number of the Nigerian population are living below the poverty line and there is wide income gap between the rich and the poor in Nigeria.

Other studies in Nigeria used time series data with different economic approaches. For instance, Brown and Ogbonna (2018) investigated the relationship between income inequality and poverty in Nigeria using data from 1980 to 2017. The study adopted Error Correction Model (ECM) and the following variables inequality, poverty, unemployment and life expectancy at birth. The result revealed that national poverty index increased inequality though was statistical insignificant. In the same vein, Ibrahim & Taiga (2020) examined the impact of income inequality on poverty using Nigerian data from 1986 to 2018. The study employed Autoregressive Distributed Lag (ARDL) model and found that income inequality significantly contributes to the incidence of poverty in
Nigeria by 75%. Also, inflation and rising unemployment were found to exacerbate the poverty situation in Nigeria.

From the empirical literature reviewed, it is observed that most studies on income inequality and poverty in Nigeria focused on a particular region or State in Nigeria. To the best of our knowledge none of the existing studies have used the recent Nigeria living standard survey to conduct income inequality and regional poverty analysis. Hence, this study shall use the recent NGLSS to evaluate income inequality and regional poverty using FGT model.

3. Methodology And Data

3.1 Theoretical Framework

The theoretical framework of this study is anchored on the Geographical Disparities Theory of poverty. This theory considers poverty to have emanated from political, discrimination, economic and social distortions, that restrain individuals from accessing resources and opportunities in order to create wealth and overcome poverty. The proponents of the Geographical Disparities Theory, waged attack on the individual theory of poverty advocators, with the argument that economic and social systems overrode and create individual poverty situations. Their argument was that people may be working hard and have acceptable attitudes but still fall in to poverty trap because of dysfunctional economic and social systems existing in the country they found themselves. Also, according to this theory poverty could be due to discrimination of people based on personal characteristics, such as race, gender, religion, disability, among others, which limit their opportunities in spite of their inherent capabilities. This theory is relevant to this study and the case of Nigeria with its different geopolitical regions, where marginalization is always being stressed on by other regions of the country in terms of political, economic, religious, and tribal discriminations, which makes people believe are the reasons why they are poor.

3.2 Model Specification for Decomposing Poverty by Regions

This study adopted the Foster–Greer–Thorbecke (FGT) decomposition index in order to decompose Nigeria's regional poverty by headcount (incidence of poverty), poverty gap (poverty intensity), and poverty severity. The FGT measure for headcount poverty, poverty gap, and poverty severity has different weights which is assigned on individuals that are poor, and as such, combines these measures for poverty and income inequality. Therefore, following FGT (1984; 2010) this study specifies the decomposition model in its general form as seen below:

\[
FGT_b = \frac{1}{h} \sum_{j=1}^{k} \left( \frac{x - y_j}{x} \right)^b
\]

where; \( x \) = poverty line or threshold

\( h \) = the population of the whole country (Nigeria)

\( k \) = number of poor (poor individuals having incomes at or below \( x \))

\( y_j \) = income of each individual, \( j \).
\( b \) = the metric weights which is assigned on the poorest individuals

The greater the weight assigned on the poorest individuals, the higher would be the value of \( b \). Thus, the more the FGT statistic, the higher poverty severity in the country. Therefore, whenever \( b = 0 \), then the FGT index collapses to the headcount ratio (incidence of poverty), (that is; the fraction of the population that lives below the poverty line) as given below:

\[
FGT_0 = \frac{k}{h} \tag{2}
\]

Again, whenever \( b = 1 \), the FGT index collapses to the poverty gap (poverty intensity) index given below as:

\[
FGT_1 = \frac{1}{h} \sum_{j=1}^{k} \left( \frac{x - y_j}{x} \right) \tag{3}
\]

Equation (3) can be rewritten as shown in Eq. (4):

\[
FGT_1 = \frac{k}{h} \left( \frac{x - \bar{y}_p}{x} \right) \tag{4}
\]

where;

\[
\bar{y}_p = \frac{1}{k} \sum_{j=1}^{k} y_j \tag{5}
\]

Equation (5) is the average income gap of the poor people in the country (poverty gap). In line with this, FGT\(_1\) may be specified as the product of average income gap of the poor and FGT\(_0\). This poverty gap measurement has the merit of revealing how much would have to be transferred/given to the poor in order to bring them up to the poverty line.

In order to decompose poverty in Nigeria region by poverty severity or the spread of the poor around the level of the average poor, this study specifies FGT\(_2\), which is the lowest parameter used to weigh income inequality alongside poverty. Hence, FGT\(_2\) exists whenever \( b = 2 \) and as such, can be specified as given below in Eq. (6):

\[
FGT_2 = \frac{1}{h} \sum_{j=1}^{k} \left( \frac{x - y_j}{x} \right)^2 \tag{6}
\]

The poverty severity equation given in Eq. (6) can be rewritten in order to capture the coefficient of income variations among the poor as given below:

\[
FGT_2 = \frac{k}{h} \left[ \theta^2 + (1 - \theta^2)C_v^2 \right] \tag{7}
\]

where; \( C_v \) = coefficient of income variations among the poor people in the country, \( k = \) population of the poor, while \( \theta \) is represented by:
A major advantage of the poverty severity index, otherwise called the squared poverty gap index, is that it takes into account of the inequality among the poor people in the country. Therefore, any transfer(s) from a poor person to a poorer individual would collapse the index even further and any transfer coming from a very poor individual to someone who is less poor would on the average raise the index. The reason why this study chose to adopt the FGT decomposition measures is as a result of its decomposable nature by sub-group (in this case, geopolitical regions of Nigeria) and the fact that it is very consistent in satisfying the axioms of monotonicity and inequality/income transfers (Sen, 1976; Foster, Greer & Thorbecke, 2010). This study used Nigeria Living Standard Survey – NLSS (2019).

### 4. Results And Discussions

This study applied the FGT index to decompose inequality/poverty by geopolitical regions of Nigeria with the objectives of getting the head count poverty/ratio, poverty incidence, and poverty severity in these regions. The results of the decomposition analysis is presented in Table 4.1 given below:
Table 4.1
Regional Poverty Decomposition Results

<table>
<thead>
<tr>
<th>Foster-Greer-Thorbecke poverty indices, FGT((b))</th>
<th>All observation</th>
<th>b = 0</th>
<th>b = 1</th>
<th>b = 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.63818</td>
<td>0.28797</td>
<td>0.17126</td>
</tr>
</tbody>
</table>

Subgroup FGT index estimates, FGT(\(b\))

<table>
<thead>
<tr>
<th>zone</th>
<th>b = 0</th>
<th>b = 1</th>
<th>b = 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>South South</td>
<td>0.46404</td>
<td>0.20142</td>
<td>0.07469</td>
</tr>
<tr>
<td>South East</td>
<td>0.39866</td>
<td>0.18152</td>
<td>0.05746</td>
</tr>
<tr>
<td>South West</td>
<td>0.49273</td>
<td>0.21456</td>
<td>0.09663</td>
</tr>
<tr>
<td>North Central</td>
<td>0.76225</td>
<td>0.39568</td>
<td>0.23412</td>
</tr>
<tr>
<td>North East</td>
<td>0.82738</td>
<td>0.42763</td>
<td>0.24918</td>
</tr>
<tr>
<td>North West</td>
<td>0.86252</td>
<td>0.49410</td>
<td>0.28422</td>
</tr>
</tbody>
</table>

Subgroup poverty 'share', \(S_k = v_k.FGT_k(b)/FGT(b)\)

<table>
<thead>
<tr>
<th>zone</th>
<th>b = 0</th>
<th>b = 1</th>
<th>b = 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>South South</td>
<td>0.11918</td>
<td>0.15737</td>
<td>0.17648</td>
</tr>
<tr>
<td>South East</td>
<td>0.09402</td>
<td>0.11646</td>
<td>0.14972</td>
</tr>
<tr>
<td>South West</td>
<td>0.13122</td>
<td>0.17432</td>
<td>0.18945</td>
</tr>
<tr>
<td>North Central</td>
<td>0.26259</td>
<td>0.27943</td>
<td>0.29814</td>
</tr>
<tr>
<td>North East</td>
<td>0.24471</td>
<td>0.26520</td>
<td>0.28323</td>
</tr>
<tr>
<td>North West</td>
<td>0.28587</td>
<td>0.29756</td>
<td>0.33071</td>
</tr>
</tbody>
</table>

Subgroup poverty 'risk' = \(FGT_k(b)/FGT(b) = S_k/v_k\)

<table>
<thead>
<tr>
<th>Zone</th>
<th>b = 0</th>
<th>b = 1</th>
<th>b = 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>South South</td>
<td>0.69581</td>
<td>0.57842</td>
<td>0.48836</td>
</tr>
<tr>
<td>South East</td>
<td>0.58985</td>
<td>0.49738</td>
<td>0.39867</td>
</tr>
<tr>
<td>South West</td>
<td>0.80127</td>
<td>0.75195</td>
<td>0.67535</td>
</tr>
<tr>
<td>North Central</td>
<td>1.29585</td>
<td>1.41839</td>
<td>1.60198</td>
</tr>
<tr>
<td>North East</td>
<td>1.30213</td>
<td>1.42549</td>
<td>1.62311</td>
</tr>
</tbody>
</table>

\(FGT(0)\): headcount ratio (proportion poor)

\(FGT(1)\): average normalised poverty gap

\(FGT(2)\): average squared normalised poverty gap

Table 4.1 reveals that the inequality/poverty decomposition for the overall headcount or poverty incidence for Nigeria is 63.818%, overall poverty gap or poverty intensity for the country is 28.797%, while the overall poverty severity is 17.126%. The implication of this result is that poverty is very high in Nigeria even with its enormous material, mineral, human, and natural resources. No wonder Nigeria has been referred to as the poverty capital of the world due to the continuous widening of poverty and inequality in the country. This study’s finding agrees with the finding by Oxfam (2019).

The results of poverty decomposition by regions is indicated by the general FGT index’s share or contribution of each of the regions to overall poverty and the risk of getting poor/poorer. Hence, the results indicates that FGT index estimates for the North West is the greatest thereby, suggesting that North West region is the poorest region with respect to the proportion of the people that are poor (that is; poverty incidence), poverty gap (poverty intensity), and poverty severity. In this regard, North West has a poverty head count ratio of 0.86252, hence, revealing that North West geopolitical zone has a poverty incidence (population that are poor or poverty head count ratio) of about 86.252%. That of the poverty gap or poverty intensity in the North West is 0.49410 (49.410%), while that of poverty severity in the North West is 0.28422 (28.422%). When compared with other geopolitical regions of the country, the values/percentages remained higher. The next region that takes after the North West is the North East which has a poverty head count ratio (poverty incidence), of 0.82738, signifying a population of about 82.738% that are poor. In the North East, poverty gap (poverty intensity) is about 42.763%, while poverty severity is about 24.918%. Further, the region taking after North East is the North Central with a poverty incidence (proportion of poor individuals) of about 76.225%. Poverty gap or poverty intensity in the North Central is about 39.568%, while poverty severity is about 23.412%. This by implication suggests that people in the Northern part of Nigeria are poorer compared to their southern counterpart.

Irrespective of the fact that those in the Southern part of Nigeria are a bit richer than their Northern counterpart, the poorest geopolitical region among the three southern regions as shown by the results of the study is the South West with a poverty incidence (proportion of poor individuals) of about 49.273%, poverty gap or poverty intensity of about 21.456%, and poverty severity of about 9.663%. The next region following the South West in terms of poor individuals is the South South region which has poverty incidence (proportion of poor individuals) of about 46.404%, poverty gap or poverty intensity of about 20.142%, and poverty severity of about 7.469%. A look at the results in Table 4.1 also revealed that the least poverty ridden geopolitical region in Nigeria is the South East with a head count poverty or poverty incidence of about 39.866%, poverty gap or poverty intensity of about 18.152%, and poverty severity of about 7.469%. Noteworthy here is that even the least poor region, which is the South East region, possesses a considerably high number of its population that are poor. Hence, there is
urgent need for national policies geared towards reduction of poverty incidence in all the geopolitical regions of the country. This could come through employment creation, increased investment in infrastructure, increased development and support of informal sector businesses, among other social investments that could increase incomes through increased employment.

Poverty share for the geopolitical regions of Nigeria portends the contribution/share of each geopolitical region to the overall poverty regarding poverty head count ratio or poverty incidence, poverty gap or poverty intensity, and poverty severity. The results indicated further that North West contributes more to poverty compared to other regions of the country. This is because, North West has a poverty head count ratio or contributes about 28.587% to poverty incidence in Nigeria, has a poverty gap or contributes about 29.756% to poverty intensity, and has a poverty severity of about 33.071%. North Central is the second highest region that contributes to overall poverty in Nigeria with poverty head count ratio or poverty incidence of about 26.259%, poverty gap or poverty intensity of about 27.943%, and poverty severity of about 29.814%. Another geopolitical region that contributes to poverty the more after North Central is North East with poverty incidence of about 24.471%, poverty gap or poverty intensity of about 26.520%, and poverty severity of about 28.323%. It can also be observed from the geopolitical regional share or contributions to poverty that the Northern region of Nigeria has greater poverty share when compared with their Southern counterpart.

Considering Southern part of Nigeria, the study’s results indicate that the poorest among the three geopolitical regions in the Southern Nigeria is the South West region with 13.122% poverty incidence, poverty gap or poverty intensity of about 17.432%, and poverty severity of about 18.945%. This geopolitical region if followed by South South with about 11.918% poverty incidence or poverty head count ratio, poverty gap or poverty intensity of about 15.737%, and poverty severity of about 17.648%. The least geopolitical region that contributes to poverty in the Southern part of Nigeria is the South East with of about 9.402% poverty head count or poverty incidence, poverty gap or poverty intensity of about 11.646%, and poverty severity of about 14.972%. A striking empirical finding of this study here is that the regional share/contribution to poverty in Nigeria is similar to the poverty estimates of the FGT index results.

An examination of poverty risk or the risk of being poor in Nigeria (which is very sensitive to policy stimulation) reveals that the risk associated with individuals being poor in each of the six (6) geopolitical regions is still high. The results suggests that North West still has the highest risk of people getting poor with a head count ratio or poverty incidence of about 1.39563, poverty gap or poverty intensity of about 1.65832, and poverty severity of about 1.76265. The region with the highest risky poverty ridden geopolitical region of Nigeria (North West) is followed by the North East with a poverty head count ratio or poverty incidence of about 1.30213, poverty gap or poverty intensity of about 1.42549, and poverty severity of about 1.62311. Further, the third risky region rests on North Central with a head count ratio or poverty incidence of about 1.29585, poverty gap or poverty intensity of about 1.41839, and poverty severity of about 1.60198. The results suggest therefore that the risk of being poor as decomposed by regions of Nigeria is higher in Northern region compared to that of their Southern counterpart.

Poverty risk in Southern part of the country reveals that the riskiest region of getting poor among the three regions of the Southern part is the South West region with a head count ratio or poverty incidence of about 0.80127, poverty gap or poverty intensity of about 0.75195, and poverty severity of about 0.67535. The next geopolitical region in the Southern part with a high risk of being poor is the South South which has about 0.69581 head count ratio or poverty incidence, poverty gap or poverty intensity of about 0.57842, and poverty
severity of about 0.48836. Finally, the least risky geopolitical region where someone can get poor rests on the South East region of Nigeria with about 0.58985 head count ratio or poverty incidence, poverty gap or poverty intensity of about 0.49738, and poverty severity of about 0.39867. Therefore, the empirical finding of this study has revealed that the Northern region of Nigeria has higher FGT estimates, share/contribution to poverty, and poverty severity than its southern counterpart and as such, indicates that the Northern region of the country is poorer or have more poverty ridden individuals. In this regard, inequality and regional poverty is more in the Northern than the Southern Nigeria with North West having the greatest head count ratio or poverty incidence, poverty gap or poverty intensity and poverty severity. This is followed by the North East, and North Central. Going South, it was found by the study that inequality and regional poverty is more in South West, followed by South South, and least in the South East.

5. Conclusion And Policy Recommendations

This study examined inequality and regional poverty in Nigeria using the Nigeria Living Standard Survey – NLSS (2019), and adopted decomposition analysis of the Foster-Greer-Thorbecke Index. It was therefore found by the study that inequality and regional poverty is more in the Northern Nigeria with North West having the greatest head count ratio or poverty incidence, poverty gap or poverty intensity and poverty severity. This is followed by the North East, and North Central. Going southern part of the country, it was found by the study that inequality and regional poverty is more in South West, followed by South South, and least in the South East.

The study therefore recommends that there is urgent need for national policies geared towards reduction of poverty incidence in all the geopolitical regions of the country. This could come through employment creation, increased investment in infrastructure, increased development and support of informal sector businesses, among other social investments that could increase incomes through increased employment.

Government, Non-governmental organizations, wealthy philanthropists, and even private individuals should also join hands in reducing the risk of people/individuals sliding into poverty by taking part in legal income generating businesses, investments in enterprises, and resorting to improved agricultural productions. This would make everybody to be busy and think less of committing social vices and as such, help in the reduction of banditry, kidnapping, herdsman-farmer crises, cattle rustling, armed robbery, and insurgency in the country.

Declarations

- Ethics approval and consent to participate: Not applicable in this research.
- Availability of data and materials: The dataset generated and/or analysed in this study is provided by National Bureau of Statistics (NBS) - Federal Government of Nigeria and World Bank, Available At: https://www.nigerianstat.gov.ng/nada/index.php/catalog/68
- Competing interests: The authors declare that they have no competing interests.
- Funding: The authors did not receive any funding or grant for this research.
- Authors' contributions: ANO conceptualised and gave flesh to the study. NOC analysed and interpreted the data. PCI conducted literature review. All authors read and approved the final manuscript.
- Acknowledgements: Not applicable
• Consent for publication: The authors consent to the publication of this manuscript in your Journal (Journal of Economic Structures).

References


Figures
Figure 1

Top ten African countries with extreme poverty

Source: World Poverty Clock (WPC) Data, 2020