

ANALYSIS OF AGE DIMENSION OF INCOME DISTRIBUTION AND BENEFITS INCIDENCE IN NIGERIA.

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Abstract

The paper is on age wise analysis of income distribution, and its interaction with benefits incidence in Nigeria. It particularly examines how benefits incidence has impacted age-wise distribution of income in Nigeria. Government expenditure policies were analyzed so as to figure out their income re-distributive value. The study notes that, distribution is originally skewed against the youths of age below 45 and above 60 in Nigeria. It is noted that Nigeria with a gin-coefficient index of 0.447 in 2010 is one of the worst in the world. Though Nigeria have a history of poor income distribution, it has recently been showing signs of improvement; her gini-coefficient index improved in 2016 to 0.387. This improvement resulted from the many pro-youths' employment/income generating programmes of the government; particularly the N-power, SURE-P, and rural agricultural programmes. In conclusion it is recommended that government should intensify her rural youths farming programmes by subsidising seedlings, fertilizer and improving extension services to the rural areas. Government can also be ready to guaranty and extend credit facilities to them.

1.0 Introduction

Nigeria's total income is a function of her potential manpower, which consists of all persons who could produce goods & services if there were demand for their labour and a willingness on their part to offer their services. Labour force could be

classified according to age composition into four main age-groups such as the lower age group; middle age group, upper age group and the elderly. Classification could also be, by gender - males and females. Olaloku et al (1979, pp.106) states:

“The characteristics of labour force determines to some extent level of productivity. The Nigerian population is growing rapidly due to a high fertility rate and a declining mortality rate. Therefore, an increasing proportion of the population is under 20 years of age and is for the most part economically inactive. The declining mortality rate also accounts for a large population of the elderly group, those above 60 years who also, are relatively economically inactive. This leaves only the middle and upper age groups to produce for all groups”

World Bank Development Report (2012), puts the percentages of these groups at;

Low income class	–	44.8%
Middle & upper income class	–	53.0%
Elderly	-	<u>2.2%</u>
Total	–	<u>100%</u>

Many Scholars agree that a well tailored taxation system and government spending policy can redistribute income. And so, government should figure out appropriate expenditure policies that will effectively redistribute income age-wise to suit the country's economic plan.

Benefits incidence x-rays individuals/sectors of the economy that benefits from government expenditure programmes and how such benefits affect incomes.

Objective of the Paper

This paper examines benefits incidence, its nature and its redistributive impact on income, age-wise, in Nigeria. Also, impact of government expenditure on youth empowerment programmes, using instances of the SURE-P program, Subsidized Education program such as the universal basic education (UBE), Health care and Agricultural programs subsidies, N-power program and Fuel subsidy will be studied.

The paper will archive the above objective by providing answers to the questions as stated below:

- How could benefit incidence of government expenditure on programs such as the SURE-P contribute to income distribution by age?
- Could benefit incidence of government educational program, the Universal Basic Education (UBE), bring about re-distribution of income age-wise?
- How can Government Health subsidies contribute to the distribution of income, age wise?
- How can the government N-Power program contribute to age dimensions of income distribution?
- Could the Fuel subsidy program of government influence the age dimensions of income distribution?

2.0 Review of related literature

Age-wise income distribution, means distribution of employment and other income generating opportunities amongst the age groups. In order to characterize it and according to Nigerian living standard survey, the country's population is characterised by the following age groups:

0 – 15 years

16 – 44 years

45 – 60years

61years and above

Nigeria has a wide gap in their income distribution age-wise. And the trend in the inter-personal income has since 1986 indicated increasing skewness and a widening gap between formal and informal incomes (UNDP, 2009). The report states that in Nigeria, a one third of income belongs to the 10% at upper class while about 3% are attributed to the 10% at the lowest income class. The report blamed the all pervading corruption in the country for it; most especially, corruption in the oil industry which contributes very significantly to government revenue. The corruption in the oil industry is amplified by its weak tax system and the unregulated method of allocation of oil blocks. Poor tax administration in the oil industry accounted for the huge resources which otherwise belong to government, but end up in private foreign bank accounts. Also, government officials corruptly allocate oil blocks, seen as very lucrative sources of fantastic wealth to friends, relatives and cronies without paying fair price; which in itself represents unfair transfer of government resources to individuals who are already rich and thereby worsening the distribution skewness. An analysis of a list of 40 oil blocks owners in Nigeria would reveal that only the very established citizens, army generals and members of the political class own oil blocks in Nigeria. It will also reveal that none of the oil block owners is below 30 years old in age. In other words, none of the oil block owners is a youth.

Nigeria's vast resources are so biasely distributed that few citizens are top income class while the vast majority are at the low income class; hence many are grossly underemployed and below poverty line. This situation, is "partly accounted for by differential access to basic infrastructure, education, training and job opportunities", (Fapohunda, 2013, pp212)

Table 1: Age distribution of population/unemployment rates.

Age groups	percentage distribution	unemployment rate
0 – 15 years	41.3	
16 – 44 years	41.7	60.1%
45 – 60 years	12.8	18.1%
61 years and above	4.1	21.8%

Source: NBS/CBN 2011

The above indicates that most of the youth within the age bracket of 16 to 44 are unemployed; about 60.1% of them have no regular income. But if it is considered that this group has 41.7% of the population, it means that 25.1% of the labour force is unemployed. The unemployment amongst members of this group is high because of increased number of school graduates with no matching job opportunities. It is also attributed to the freeze on employment that exists in many public sector institutions.

45 – 60 years, group has the least unemployment rates, at 18.1%, while the over 60 years group has 21.8% unemployment rate. The 0 – 15years group consists of

members who are largely in primary and junior secondary schools and are yet to enter the labour force.

2.2 Benefits incidence

Benefit incidence concerns the use of government expenditure to influence incomedistribution of individual households.

Government expenditure is the day to day spending of government in running the country. Government expenditure could be capital or recurrent. It is generally called capital expenditure if it is incurred in order to increase social infrastructures of the government and recurrent if it is to provide services and consumable goods as well as pay wages and salaries. The objective of government at a given period, determines how much is to be spent in a sector, and this objective changes periodically as social and national priorities change. There are times when public expenditure is made to achieve desired result. Spending can be made to improve the spreading of resources of government to keep all parts of the country satisfied. For instance, if government plans to prevent scarcity of food products during stringencies, she can decide to open low price shops and subsidize food for the working classes. The government can even fix lower prices for essential commodities to help workers. Public expenditures can be made in such a way that can help to narrow income gaps amongst the different classes of income groups and genders. Government spending to subsidise sectors such as education and health can achieve this.

Nigeria, for many years has used various government expenditure programs to influence income distributions amongst the age groups. Examples are:

2.2.1 SURE-P

The Subsidy Reinvestment and Empowerment Program (SURE-P) is a program introduced in 2012 the Government. This scheme was established to manage Government share of savings from the ‘reduction’ in fuel subsidy. SURE-P has many areas of interventions, amongst which are;

- Public works
- Youths and human capital development
- Graduate internship and entrepreneurship scheme.

But the primary aim of the youth and human capital development and graduate internship and entrepreneurship schemes is to train and create employment opportunities for youths. The internship scheme’s operation is quite simple; organize skills acquisition (apprenticeship) training programs for youths without skills, and when they are done with their training, they are helped with whatever is necessary to be on their own; own their vocations by providing necessary funds to purchase tools and machines and still have adequate floats to run the business. It is an on-going program, and the Federal Ministry of Finance in 2015 reported, that between 2012 and 2015, SURE-P had taken about 84.1 billion naira, representing 5.66% of total amount budgeted for social and community services. This has empowered lots of youths especially, young women in vocations like fashion designing, hair dressing, computer operation, bags making and other crafts. Thus far, the SURE-P apprenticeship program has trained over 125,245 youths since its inception. And out of this, 76,399 representing 61% of those trained have been successfully established in their various trades, (NBS, 2015). Additionally, as at December 31st 2017, the director in charge of the youth and women employment component of the SURE-P stated that cumulative jobs created so far by this program had reached 11,414.

As part of efforts to improve on skills development amongst the youth, create employment and accelerate economic productivity, the government introduced the

Youth Entrepreneurship Development Program (YEDP) in 2016. This scheme was aimed at encouraging youth entrepreneurship and also to deepen credit delivery to youth Entrepreneurs, including serving and ex-National Youth Service Corps (NYSC) members. This program, so far has recorded some success with a total disbursement of ₦=308.99 million for 125 projects since inception.

2.2.2 Fuel subsidy

The federal government has been spending billions of naira every year to subsidize the retail price of petrol consumed in Nigeria. This is targeted at keeping the prices of consumer items down. Though, this is benefiting the general public, across income brackets, its benefits are believed to accrue more to the low income earners as kerosene price, a major cooking fuel for low income earners is affected. Also the prices of common food stuff in the market are equally affected through transportation. Subsidized petrol lowers cost of transporting goods and food stuff from rural places to markets in the urban areas.

Apart from the cheaper food stuff which the lower income group benefits from, they also enjoy lower transportation costs which result from cheap petrol.

2.2.3 N-Power program

This is a program that is established to help the youths, mainly the un-employed graduates to get jobs. Though, low paying and for short period of two years, the jobs help the unemployed graduate to settle down until he finds something to do. It is hoped that beneficiaries will gain useful skills during the currency of the job and use such skills to get gainful employment thereafter.

Presently the scheme has employed over 500,000 participants with monthly stipends of ₦30,000.00 each. This gives the government an annual wage bill of 15 billion naira, which completely represents transfers. It benefits the youths and helps to redistribute income age-wise.

2.2.4 Education

Education is a tool for human capital development. According to Ganguli et al (2011), education is a tool for everybody's empowerment, whether men or women. As for young women who have all along had limited access, access to education should be the first step to their empowerment and providing adequate access to it is good for the economy as it enhances the pool of skills available, (Morrison, Raju and Sinhu, 2007). This has been spelt out in the MDG; a program created to enhance empowerment of youths, particularly girls, in Nigeria. This program makes provisions to close all gender disparity in education from primary schools to secondary schools and in-fact up to tertiary institutions by 2015.

In Nigeria, education is provided mainly by government, though the private sector provides some support. However, private educational institutions charge high level fees which the average citizen cannot afford, so generality of citizens attend government institutions.

To underscore the importance the Nigerian government attaches to education, free education program was introduced for all citizens of school age for the first nine years, up to junior secondary school, which is code named 'Universal Basic Education'(UBE) in 2005. Though this program is not limited in any way by age, a closer observation will indicate that it benefits the youths, particularly young women more. The program removed the financial constraints that made parents to prefer keeping out of schools particularly the girls and preparing them for other less fanciful vocations or giving them away in marriage at tender age. It also encouraged the youths of age below 15, to access education as a way of developing skills to enhance earning power. Additionally, in 2009, under the "strategy for acceleration of girls' education in Nigeria" program, the "Girls education project

was lunched” and it focused on an accelerated way to achieve gender parity in education.

In funding education, government consistently budgets adequately for it. For instance, between 2009 and 2015, the federal government budgeted a total of ₦1.94 trillion to fund education; including funding the special women education program as shown in table 5 below.

Table 2: Expenditures on social and communities services (Education and Health) and Agriculture in ₦ billions

2009	2010	2011	2012	2013	2014	2015				
Social & Comm. Services	354.25	50.97	85.4	790.18	44.17	24.88	807.6			
-Education	137.1	170.83	85.8	348.43	390.4	343.83	25.2			
-Health	90.29	99.12	31.8	197.91	80.01	96.02	57.7			
-Other social & community services	126.92	81.02	17.8	243.82	73.72	35.02	24.7			
Agriculture	22.4	28.2	41.2	33.3	39.4	36.7	41.3			

Source: Nigerian federal budgets 2009-2015

Looking at the table above, educational budget over the seven years consistently had a mean of 3.5% of the annual budget. And knowing that government institutions all over the country were mainly patronized by the grass-root people, therefore, education spending could be recognized as funds spent to subsidize the low income class. Also, government increased spending, in attempt to invest in the development of women to enhance their skills and increase their participation in the labour force and thereby promote redistribution of income. The over-all educational spending has impacted on the gender gaps in education which has narrowed, and has thereby increased the population of employable

youths. Therefore, this should be seen as an expenditure that has a re-distributive effect on income, particularly as it concerns the youths.

2.2.5 Health

Ministry of health in (2012), reported that 47% of Nigerian women are mothers before they reach age 20. This is a big handicap for the 16-44 years age group, as it makes a significant number of females in this group unemployed or employed at the lower end of the labour force.

In trying to address these issues for the femalesto over-come their challenges and address their economic issues, government has been spending to overcome the constraints.

Table 5 indicates how much the federal government is spending per year on health. Some of thepro-poor and children government spending include free women and children vaccinations, free eye treatments for the old, occasional general medical examinations for the old also, free family planning advisory services, subsidized anti and post natal care, etc.Benefits from these spending have put the low earnersin better stead to take advantage of education / trainings to improve on their skills and offer improved services.

The government spending in this regard has potentials to address issues in distribution of income, age wise. This should be looked at from the perspective that beneficiaries of these services have saved income which should have otherwise been spent to pay for the services. Also, these services put them in better positions to develop their human capacities for better job opportunities which guarantee higher income.

2.2.6 Agriculture

Most rural dwellers in Nigeria are of the age brackets of 0-15 and above 60 and are mostly engaged in agriculture. In government social responsibility, agriculture cannot be ignored. Therefore, government has been boosting the earnings of rural dwellers through agriculture.

Table 5 shows government's 2009-2015 budget for agriculture. Her agricultural guarantee scheme channels loans to the farmers at affordable rates. Government also encourages the farmers by providing subsidized fertilizers, improved seedlings and agricultural extension services. In a bid to foster human capital development in the agricultural sector, the government trained 174 retirees in aquaculture and poultry production processing and packaging in 2015. These subsidies provided by government represent some sort of transfer of income from government to low-income earners who are farmers to improve their income. The improvement of income of these groups of farmers will automatically have a positive impact on age distribution of income.

2.4 Empirical review

The works of Meerman(1979) on Malaysia and Selowsky(1979) on Colombia, both based on the work of Aaron and McGuire(1970), brought benefit incidence analysis to the lime light, as a tool for assessment of redistributive and poverty reduction impact of public expenditure. The works of Meerman reported that government subsidies on women education and health have income redistributive effects.

In their study, Okafor and Ichoku(2015), did a benefit incidence analysis of government spending on education in Anambra state of Nigeria. Findings are that

there is a significant relationship between government spending on education and improvement in income distribution.

Stotsky, (2016), in his study reported that a relationship exists between government spending on education, health and open apprenticeship and other such programs, and income distribution. His findings confirm those of Okafor and Ichoku (2015), and Meerman (1979).

Ogbeide and Agu, (2015), examined the causal relationship between poverty and income inequality, using Nigerian data and concludes that the effect of human capital development and social norms are present in gender income inequality.

Fapohunda (2013) used survey method to work on the relationship between human capital development, social norms and the distribution of income age and gender wise. He reports a positive and significant relationship.

This conclusion was also upheld by Makama (2015), while working independently on a survey aimed at finding the connection between age and gender income distribution and social norms in Nigeria.

3.0 Methodology

The data for this study were gathered from the Central Bank statistical bulletins and annual reports, 2019, and Federal Government of Nigeria Budgets for 2009-2019. Descriptive statistics were used to determine the significance of impact of government social spending on age-wise distribution of income. The study relied on 'gini coefficient' and simple percentages techniques to analyze how the incidence of government expenditure has contributed to reduce the skewness in income distribution age-wise. The study considered six different government social spending programs as case studies. They are Subsidy Re-investment Program,

(SURE-P), Universal Basic Education, (UBE), N-Power, Health Care Subsidies, Petroleum Subsidy and Agricultural Subsidies/loans.

The totaleffects of all government social spending is evaluated, using Gini Coefficient. It is well accepted that in measuring and comparing the incidence of benefits of public services require that we value the benefits that accrue to the individual who is receiving the service. For example, what is the monetary value that accrues to an individual that attends public school or receives health care in a public hospital. We also need a rule whichseparates a better distribution from a bad one, i.e. skewness reducing. Gini co-efficient serves this purpose.

4.0 Analysis of Benefits incidence, its effects on Income distribution.

Table 3: Gini-coefficient index

	2004	2010	2013	2016	2019
NATIONAL	0.4296	0.447	0.362	0.387	0.375
URBAN	0.4154	0.4329	0.346	0.368	0.382
RURAL	0.4239	0.4334	0.349	0.378	0.387

Source: National Bureau of Statistics 2016

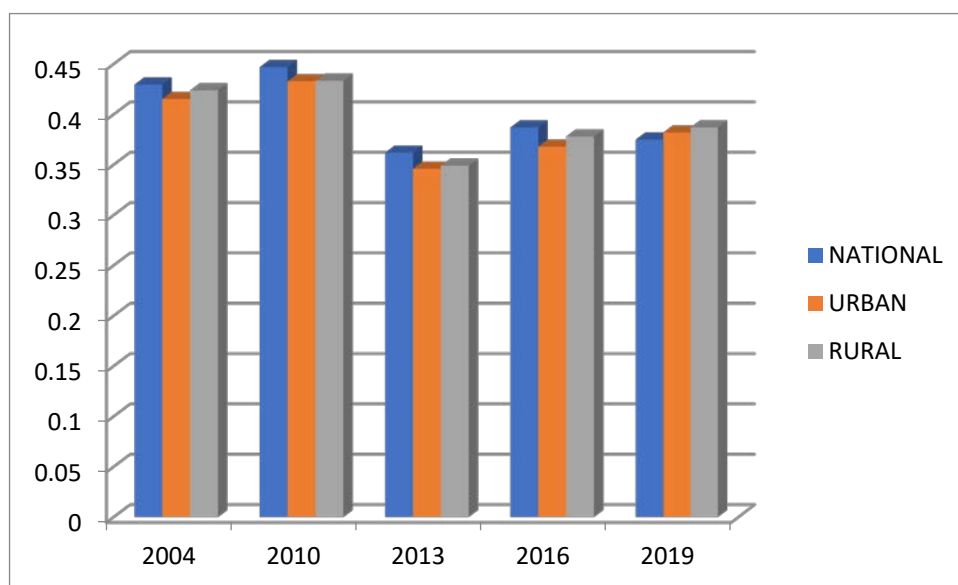


Figure 2: shows Gini Coefficient Index of Nigeri

Looking at Table 3 and also figure 2, it can be observed that the gini-coefficient in 2004 was 0.4296, but decreased to 0.387 in 2016 and 0.375 in 2019; showing about 11% distributional improvement. But when this distribution is compared with rural areas distribution; where a significant proportion of low income earners live, the result seems better, showing improvement of 12% over the same period under consideration. It can therefore be deduced that age-wise distribution of income has improved since the youths particularly those below 15 and the elderly, dominate rural area workforce. P

The Gini coefficient, Figure 2, also depicts this. It shows a graphical representation of improvement in distribution of income in Nigeria. The downward sloping of the 'Gini' graph moves from 0.447 in 2010 to 0.375 in 2019, indicating about 13.4% improvement over the 12-year period under consideration. This rate may be considered low, however, it is an indication that the Federal government income redistribution programmes have yielded some desired results.

5.0 Summary, Conclusion and Recommendations

This paper examines age-wise distribution of income. The aim is to note the redistributional effects of benefits incidence.

Different government expenditure programmes were considered along with their income redistributive efficiency. However, the study indicates a reduction in skewness in the distribution amongst the various age groups. The decreasing "Gini Coefficient index, which improved from 0.447 to 0.387 in 2016 (NBS, 2017) shows it. But, this improvement notwithstanding, Nigeria still ranks amongst the

worst countries in the world. The world's acceptable standard of Gini coefficient index is 2.4.

This paper recommends that government of Nigeria should work towards improving her Gini-coefficient index, by vigorously pursuing programs that emphasize the development of youths and also make retirees more useful and productive. They should not be owed their pensions as is the usual practice. Trainings on how to spend the rest of their lives being productive and happy should be occasionally organized for them.

The country, though graded as a middle income country, its oil wealth is in the hands of few citizens. According to Gender in Nigeria Report (2012), 50% of Nigerians hold just 10% of the country's national income, while 54% live below the poverty line. Following from this, the paper further recommends that rural population who are mainly the poor and elderly be empowered through government agricultural development programs in the rural settings through the supply of subsidized improved seedlings, fertilizers, extension services and grass-root micro loans.

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