



THE EFFECT OF ECONOMIC GROWTH ON POVERTY REDUCTION IN NIGERIA

Ihenetu Hyginus Iheanyi. PhD and Iwo Sotonye

Department of Banking and Finance, Captain Elechi Amadi Polytechnic Rumuola, Port Harcourt
Department of Accountancy, Captain Elechi Amadi Polytechnic Rumuola, Port Harcourt

Abstract: The paper evaluated the effect of economic growth on poverty reduction in Nigeria. Data were collected from CBN statistical bulletin and World Bank for twenty five (25) years. Ordinary least square regression was used to analyze the data after stationarizing it through Augmented Dicky Fuller (ADF) unit root test. The findings showed that gross domestic product (GDP), gross national product (GNP) and percapita income (PCI) has no significant effect on poverty reduction in Nigeria. Based on the findings, we therefore recommend that there should be creation of jobs for unemployed, some amount of money paid to the unemployed on monthly basis, free health facilities for the infants and the aged, free education to the disabled and poor people in Nigeria to better the life, wealthy people should invest in our country to avoid capital flight, all the abandon manufacturing and productive industries should be fixed, investment in agriculture should be given priority to ensure mass employment etc.

Key words: Poverty index, Gross domestic product, Gross national product, Percapita income etc

1. INTRODUCTION

Economic growth is the increase in goods and services such as output, income etc of a nation as a result of economic activities that take place over a period of time (Sanusi 2011). It is measured by gross national product, per capital income, gross domestic product etc.

These variables give signal to the government to know whether the economy is making progress or not. While the gross domestic product record the value of final goods and services produced in a country within a given period usually one year, gross national product is the money value of all the goods and services produced in a country in a year in addition to receipts from abroad made as factors payment, domestically owned factors of production by national abroad whereas percapita income gives income perhead or income percapitaie average income perhead of the population of a given country within a period of time (Oruwari 2017).

When the economy grows, its concomitant effect should be translated to the citizens of the country. The effect include high standard of living; high life expectancy; increase in human development; high rate of entrepreneurial growth; decrease in mortality rate; reduced sickness and diseases; low level of illiteracy; decrease in unemployment rate; decrease in social vices such as kidnapping, hostage taking, militancy, banditry; poverty reduction etc (Ihenetu and Worlu 2020).

Poverty reduction is the act of reducing poverty in the country. It is a strategy adopted by the responsible and responsive government of a country to eradicate or reduce poverty. Poverty itself is a state of being poor (Ihenetu and Sotonye 2019). It is living below 2 dollars in a day (IMF 2009). It is a state whereby one cannot meet his material, social, financial, educational needs (IMF 2010). Poverty reduction strategy adopted in Nigeria are: Operation Feed the Nation (OFN), Free and Compulsory

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Primary Education (FCPE), Green Revolution, Low Cost Housing, River Basin Development Authorities (RBDA), National Agricultural Land Development Authority (NALDA), Agricultural Development Program (ADP), Agricultural Credit Guarantee Scheme Strategic Grains Reserves Program (SGRP), Rural Electrification Scheme (RES) and Rural Banking Program (RBP), Directorate for Food, Roads and Rural Infrastructure (DFRRI), National Directorate of Employment (NDE), Better Life Program (BLP), People's Bank of Nigeria (PBN), Community Banks Program, Family Support programs (FSP), Family Economic Advancement Program (FEAP) etc (Ihenetu and Worlu2019).

A lot of researches have been conducted on economic growth and poverty reduction. Almost all used unemployment rate, life expectancy, misery index to proxy poverty reduction. To the best of my knowledge, none use poverty index for poverty reduction. This therefore constitutes the central problem of the study.

2. PURPOSE OF THE STUDY

The general purpose of the study is to evaluate the effect of economic growth on poverty reduction in Nigeria, the specific objectives are:

- i. To determine the effect of gross domestic product on poverty index in Nigeria.
- ii. To investigate the effect of gross national product on poverty index in Nigeria.
- iii. To evaluate the effect of per capital income on poverty index in Nigeria.

3. LITERATURE REVIEW

We shall consider conceptual framework, theoretical framework and empirical review.

a) Conceptual Framework

The concepts used for the work are thoroughly examined for the purpose of clarity.

i. Economic Growth

This is the increase in income, output, goods and services in the economy as a result of the economic activities that take place in the economy within a period of time.

Economic growth is measurable in quantitative terms. It could be in the growth of gross domestic product, gross national product, per capital income etc. The growth in the economic, all things being equal should translate it to the welfare of the citizen such as reduction in unemployment rate, poverty reduction etc.

ii. Poverty Reduction

This is act of eradicating poverty or bringing poverty to the bearest minimum. It is a strategy adopted by the responsible and responsive government of a country to reduce poverty rate. In Nigeria for example, a lot of strategy have been adopted to reduce poverty which are too numerous to mention.

iii. Gross Domestic Product (GDP)

This is the value of final goods and services produced in a country within a given period of time usually one year. The goods and services are valued at their market prices and these are added together to get the GDP.

iv. National Income (NI)

This is the aggregate money values of all the goods and services produced in a country computed without duplication over a given period of time usually one year.

v. Gross National Product (GNP)

This is the money value of all the goods and services produced in a country in a year in addition to receipts from abroad made as factors payment.

vi. Per Capital Income (PCI)

Per capital income is the average income per head of a population of a given country within a period of time. It is given as

$$PCI = \frac{\text{Total National Income}}{\text{Total Population}}$$

A higher per capital income is suggestive of higher level of welfare while lower per capital income suggests a lower level of welfare.

vii. Poverty Index

This refers to the percentage of the poor people in the country over a given period of time. Poverty index gives



us the proportion of the poor people in Nigeria on a daily, monthly, quarterly or yearly basis.

b. Theoretical Framework

The researchers adopted three theories for the work.

i. Classical/Neoclassical theory of poverty

The classicals see poverty as individually created. According to them, people are poor as a result of their laziness, ineffectiveness, inefficiency and unable to think, plan, strategize and factor out some things that can liberate them from the shackle of poverty. With this theory, whether the economy grows or not, the people will still be poor because of their laziness, while neoclassicals see poverty as institutional problem. According to them, the institutions in the country are very weak and render the citizen incapacitated. The theory entails that citizens found themselves in a pigeonhole that the society throw them which they cannot deliver themselves. From this theory, the weak institution is the major cause of the poverty.

ii. Growth Theory

This theory was propounded by Adam Smith in 1776 in his book the wealth of the nation. He posited that increase in the wealth of the nation increases the growth of the economy. If the economy's wealth is dwindled or retarded, then the economy will have low growth rate. He therefore advocated that every nation should strive to increase their wealth so as to increase their growth.

iii. The Harrod Domar growth Model

Harrod (1939) came up with the theory of investment and also Domar (1946). They are of the view that investment leads to growth. If the economy invest or give themselves to investments, then, there will be expansion in the economy. According to them, investment will encourage aggregate demand and aggregate supply. Aggregate demand will help in economic expansion and aggregate supply will enhance capital formation and more production. All these will bring growth in the economy.

c. Empirical Review

Gafaretal. (2011) conducted research on economic growth and poverty reduction in Nigeria. They used multiple regression as a tool and the focus was difference-in-difference estimation. They discovered that positive change in economic growth is prone to poverty reduction where as initial level of economic growth is not prone to poverty reduction.

Ebongetal. (2013) investigated economic growth and poverty reduction in Nigeria. Vector autoregressive model was used as the statistical tool. The variables are non agricultural gross domestic product, agricultural gross domestic product, credit to agricultural sector, economic expenditure, social expenditure and urban population as the percentage of total population and find out that medium to long term agriculture increases poverty where as other sectors reduce it.

Faloyeetal. (2015) conducted research on economic growth and poverty reduction in Nigeria using GDP growth rate, gross income growth rate, agricultural value growth rate, export of goods and services growth rate, real interest rate and unemployment rate as the index for poverty reduction. Ordinary least square multiple regression was adopted as the statistical tool. The result showed that economic growth has positive effect on poverty reduction.

Dada etal. (2020) investigated economic growth and poverty reduction in Nigeria: the role of institution. The variables used were institutional quality, corruption, per capital income and household income. Autoregressive distributive lag (ARDL) was employed as the statistical tool. They discovered that institutional quality has significant effect in both short and long run period.

Agbasiatal. (2018) carried out research on economic growth and poverty reduction in Nigeria. The variables used are poverty rate, unemployment rate, population, mortality rate, life expectancy rate, corruption, consumption, per capital income, illiteracy rate for poverty and GDP for economic growth. Ordinary least



square multiple regression was employed for the analysis. The result showed that economic growth has significant effect on poverty reduction.

Oyegokeetal. (2018) conducted research on the effect of economic growth on poverty reduction in Nigeria. Government expenditure, unemployment and real GDP and poverty incidence was used for the variables. Vector autoregressive model was applied for the analysis. The result showed that there is negative relationship between economic growth and poverty reduction.

4. METHODOLOGY

According to Ihenetu (2008), “research design is a blue print, framework for collecting and analyzing data”. The researcher employed expost facto design. The fact that the data were original from CBN statistical bulletin and World Bank and adopted for the study necessitated the choice of the design. The data used for this work were purely secondary data. The data collected were gross domestic product, gross national product and percapita

5 DATA PRESENTATION

The data used for the work are presented below:

Table 1 Poverty Index (PI) Gross Domestic Product (GDP), Gross National Product (GNP) and Percapita Income (PCI)

Years	GDP (Naira)	GNP(USD)	PCI		EXR	GNP (Naira)	PCI (Naira)	POI (%)
			(USD)					
1995	2,895,201.00	33.56	3356		84.58	2838.337	283,833.70	57.1
1996	3,779,133.00	42.67	4267		79.60	3396.532	339,653.20	63.5
1997	4,111,640.00	49.68	4968		74.63	3707.37	370,737.00	60.6
1998	4,588,989.00	50.93	5093		84.37	4296.85715	429,685.71	61.9
1999	5,307,361.00	54.39	5439		92.53	5032.61832	503,261.83	63.1
2000	6,897,482.00	57.03	5703		109.55	6247.6365	624,763.65	64.4
2001	8,134,141.00	66.78	6678		113.45	7576.191	757,619.10	65.7
2002	11,332,252.00	81.65	8165		126.90	10361.385	1,036,138.50	66.9
2003	13,301,558.00	93.75	9375		137.00	12843.75	1,284,375.00	53.5
2004	17,321,295.00	118.34	11834		132.85	15721.469	1,572,146.90	53.3
2005	22,269,977.00	143.54	14354		129.00	18516.66	1,851,666.00	53.02
2006	28,662,468.00	192.5	19250		127.00	24447.5	2,444,750.00	53.12
2007	32,995,384.00	235.63	23563		116.80	27521.584	2,752,158.40	52.99

income for independent variables whereas poverty index was used as the dependent variable. The sample size is twenty five years (1995-2019). The researchers applied unit root test to stationarize the data and ordinary least square multiple regression was to analyzed the data. The model specification is given as:

The mathematical model is given as:

$$PI = f(GDP, GNP, PCI)$$

This model can be transmodified to econometric model as:

$$PI = \alpha + \beta_1GDP + \beta_2GNP + \beta_3PCI + \mu$$

Where PI = Poverty Index

GDP = Gross Domestic Product

GNP = Gross National Product

PCI = Percapita Income

Log = Logarithm

$\beta_1 \beta_2 \beta_3$ = Coefficient of independent variables

α = Constant intercept



2008	39,157,884.00	295.08	29508	131.25	38729.25	3,872,925.00	53.6
2009	44,285,560.00	314.42	31442	148.10	46565.602	4,656,560.20	53.5
2010	54,612,264.00	338.51	33851	148.81	50374.5753	5,037,457.53	54.43
2011	62,980,397.00	354.2	35420	156.70	55503.14	5,550,314.00	54.9
2012	71,713,935.00	408.56	147081.6	155.76	63635.9437	22,908,939.74	55.01
2013	80,092,563.00	461.62	166183.2	155.74	71891.5448	25,880,956.11	55.21
2014	89,043,615.00	517.95	186462	168.00	87015.6	31,325,616.00	55.9
2015	94,144,960.00	511.13	184006.8	197.00	100692.61	36,249,339.60	55.8
2016	101,489,492.00	452.68	162964.8	305.00	138067.4	49,704,264.00	57.2
2017	113,711,634.00	398.88	143596.8	306.00	122057.28	43,940,620.80	61.2
2018	127,736,827.00	384.74	138506.4	307.00	118115.18	42,521,464.80	53.5
2019	144,210,492.00	407.59	146732.4	307.00	125130.13	45,046,846.80	55.7

Source: CBN Statistical bulletin and World Bank

In order to ensure the same unit of measurement, the researchers first converted gross national product (GNP) and percapita income (PCI) using the appropriate rate as seen above and thereafter logged GDP, GNP and PCI .

6 DATA ANALYSIS

Table 2 Stationarity (Unit Root) Test Results

Variables	Level	1 st difference	Order of Integration	Remark
DPI	-2.558642	-6.6009985	I(1)	Stationary
DGDP	-1.176178	-3.984394	I(1)	Stationary
DGNP	0.213674	- 4.285035	I(1)	Stationary
DPCI	-2.252541	-4.859715	I(1)	Stationary

Significant at 5% level, ADF test > Critical Value, then the variable is stationary

Source: Extracts from E-Views 9 Output

The table above presents the unit root stationarity test results with the outcomes for the utilized information of maximum of lags 4 with trend and intercept. The summary of the results are that, the ADF test statistic are higher when compared with all their critical values at 5%.

Furthermore, the study variables are integrated of order I(1) and therefore suggests vecto auto-regressive model as the econometric tool for the analysis. As such, they are deemed fit for utilization in subsequent estimations.



Table 3. Ordinary Least Square Multiple Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.438480	2.110256	-0.681661	0.5033
DGDP	10.05333	12.35649	0.813607	0.4255
DGNP	-2.133629	9.086062	-0.234824	0.8167
DPCI	0.377159	3.156893	0.119472	0.9061
R-squared	0.032876	Mean dependent var	-0.058333	
Adjusted R-squared	-0.112192	S.D. dependent var	3.736074	
S.E. of regression	3.940083	Akaike info criterion	5.731292	
Sum squared resid	310.4851	Schwarz criterion	5.927635	
Log likelihood	-64.77551	Hannan-Quinn criter.	5.783382	
F-statistic	0.226627	Durbin-Watson stat	2.056346	
Prob(F-statistic)	0.876748			

Source: Eview version 9

From table 3, GDP, GNP, PCI are the independent variables where as the POI is the dependent variable. The result of the analysis shows that GDP, GNP and PCI have positive and significant effect on POI at 5 percent level of significance during the period of the study. The r^2 0.03 implies that variation in all the explanatory variables account for 3% of the variation in poverty index. F – Statistic measures the overall significance of the model. The F-statistic is 0.2266 and the probability of F-statistic is 0.876748 is far more than 0.05 power of test. This means that economic growth has not yet been translated to poverty reduction in Nigeria. This refutes the findings of Agbasietal (2018), Dada etal, Faloyeetal (2015) but support the findings of Gafaretal. (2011) that economic growth does not have significant effect on poverty reduction at initial level has if there is a positive change. 2.056346 Durbin Watson shows the absence of autocorrelation.

7. CONCLUSION AND RECOMMENDATIONS

From the findings, it is very clear that economic growth has no significant effect on poverty reduction. This

supports the report of Nigeria Bureau of Statistics and World Bank report that the rate of poverty in Nigeria is very high. Therefore, we recommend that there should be creation of jobs for unemployed, some amount of money paid to the unemployed on monthly basis, free health facilities for the infants and the aged, free education to the disabled and poor people in Nigeria to better the life, wealthy people should invest in our country to avoid capital flight, all the abandon manufacturing and productive industries should be fixed, investment in agriculture should be given priority to ensure mass employment etc.

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