EMPIRICS OF INDUSTRIALIZATION AND POVERTY REDUCTION IN NIGERIA: IS THERE A CAUSATIVE RELATIONSHIP?

[1]Mgbemena, Onyinye O.; [2]Ejelonu, Onyebuchi Henry & [3]Okereke, Sunday Obinna

[1,2,3]Department of Economics, Michael Okpara University of Agriculture, Umudike

Abstract

Nigeria is second only to India as the world's poverty capital. Despite having a wealth of natural and human resources at their disposal, economic actors in the country have been unable to generate significant growth. In the first quarter of 2023, 41% of Nigeria's youth were unemployed, and 84% of Nigerians lived in extreme poverty, with less than $1.9 per day to spend. Sixty-three percent of Nigerians, or 133 million people, live in multidimensional poverty (WDI, 2023) due to the country's economic situation. This overwhelming evidence makes it imperative that we thoroughly investigate the link between industrialization and poverty reduction in the country. Using annual time series data from 1981 to 2019, the study used a pairwise granger causality test and multiple regression analysis to objectively examine the correlation between industrialization and poverty reduction in Nigeria. The findings point to a negative relationship between industrial sector productivity and multidimensional poverty, and the granger causality test indicates that raising productivity in the manufacturing sector will have a positive impact on Nigeria's GDP per capita. The study concluded that a sustained industrial improvement in productivity and growth, which would generate job opportunities and reduce poverty, could be achieved by improving Nigeria's industrial sector in more strategic ways. The report finds that industrialization is essential for growth in the twenty-first century.

Keywords: *Multidimensional poverty, industrial productivity, exchange rate, per capita income, national poverty line.*

INTRODUCTION

The return of civilian rule in Nigeria in 1999 heralded a new wave of optimism that Africa's most populous country had finally put behind it the frequent instabilities caused by military intervention in politics and could now focus its attention on addressing the core development challenges, namely poverty and unemployment eradication, inequality reduction, and transformation of its production and export structure to reduce reliance on oil. Nigeria's economic performance over the last two decades implies that this confidence was justified to some extent. GDP growth rates have fluctuated widely from year to year: in 2013, they were at 5.394 percent, in 2014 at 6.31 percent, in 2015 at 2.653 percent, in 2016 at -1.61 percent, in 2017 at 0.806 percent, in 2018 at 1.937 percent, and in 2019 at 2.147 percent. The available data shows a rising tendency in the country's GDP over time (National Bureau of Statistics, 2020).

While the global financial and economic crisis of 2008-2009 had a severe negative impact on Nigeria, the country has grown at a reasonable rate of around 6% since the crisis, which is significantly better than its growth performance in the 1980s. As a result, real per capita income climbed from $1,447 in 1980-1989 to $2,344 from 2008 to 2014. Foreign capital inflows into Nigeria have also increased. Foreign direct investment (FDI) inflows climbed from 1.7% of GDP in 1980-1989 to 2.3% in 2008-2014, while personal remittances received jumped from 0.3% of GDP to 6.1% during the same time. Significant improvement has also been made in macroeconomic stability, with average consumer inflation falling from 21% in 1980-1989 to 11% in 2008-2014 (National Bureau of Statistics, 2020).

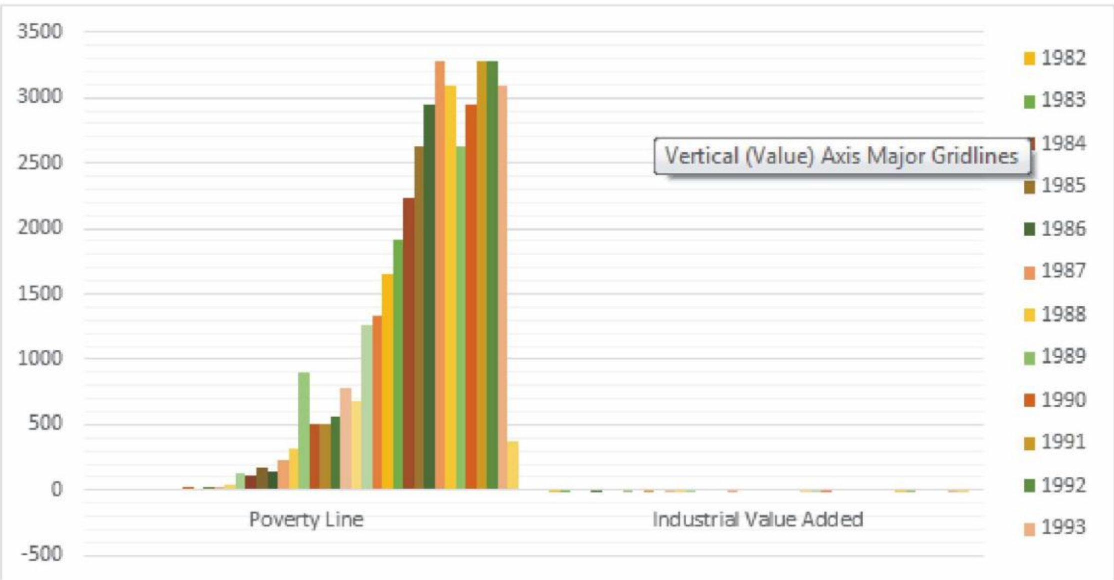
Notwithstanding the progress that has been made over the past few decades, poverty and inequality are still high in Nigeria. The poverty headcount ratio increased from 45 percent in 1980-1989 to 53 percent in 2008-2014, While 2018 to 2020 witnessed a significant increase in poverty level in the country averaging 70 percent for the periods respectively (World Development Index 2021). At the dawn of the new Millennium efforts were made by the government to revive the industrialization agenda within the framework of the National Economic Empowerment and Development Strategy (NEEDS) unveiled by President Olusegun Obasanjo in 2004 and the Transformation Agenda launched by President Goodluck Jonathan for the period 2011-2015 (NPC 2004). Building on these initiatives, in the first quarter of 2017, President Muhammadu Buhari launched the Economic Recovery and Growth Plan (ERGP) for the period 2017-2020 (Federal Republic of Nigeria, 2017). The evidence indicates that these renewed efforts have led to some gains in industrial development, augmenting this development is the focal point of this study.

Poor Industrial Induce Problem

Poor access to affordable finance is another key factor impeding Nigerian industrial development. According to a 2014-15 enterprise study, 33 percent of enterprises indicated access to capital as the key barrier for the private sector, while 48 and 45 percent reported electricity and corruption as major barriers, respectively. According to the survey, small businesses are more affected by low access to finance than large businesses (World Bank 2016). Domestic credit to the private sector as a proportion of GDP is one indicator of domestic firms' access to finance. There is also the issue of excessive financing costs. In the period 2008-14, the average domestic loan rate was over 17%, with a risk premium of around 8%. The high domestic borrowing rates experienced by domestic firms discourage investment and do not promote industrial activity in the country.

Poverty incidence in Nigeria climbed from 28.1 percent in 1980 to 88.0 percent in 2002. In absolute terms, this percentage rate represents 86 million persons out of an estimated population of 116.4 million. Nigeria's poverty situation reflects regional variance as well. For example, during these time periods, the northern agro-climatic zone had a higher poverty rate of 40%, compared to the middle and southern zones, which had rates of 38% and 24%, respectively (Francis, 2015).

Fig 1: Trend Elucidating Industrialization and Poverty line in Nigeria 1982 to 2021



Source: *Researchers Compilation from CBN bulletin 2020*

It is deeply pitiful that the African giant that has set the pace in the African emancipation agenda has suddenly fallen behind major macroeconomic conditions that justify economic prosperity and growth in the twenty-first century, with the economy now being the world's poverty capital after overtaking India Alamba and Ejelonu, (2022). This is shocking in light of the country's vast untapped natural resource deposits, while the transition away from agriculture and recent politicking over oil revenue has resulted in more poverty than ever before. The growth in poverty is a direct result of the failure of the 1986 structural adjustment program, which attempted to shift the country's economic focus to enhanced industrial operations championed by the private sector. This failure is further reflected in the preceding diagram, which clearly shows an unfavorable negative association between industrialization and the trajectory of poverty Ejelonu and Okafor, (2022). It is obvious that, although poverty was increasing geometrically, industrial value added, which was used to proxy industrialization for the period, was increasing arithmetically, resulting in the pitiable condition of poverty in the country.

LITERATURE REVIEW

Industrialization

Adofu, (2015) defined industrial sector as that sector of the economy that base on the production of merchandise for use or sale using labour, machines, tools, chemical and biological processing or formulation. Clunies- Ross (2019) opines that the term industrial growth or more simply industrialization has two distinct meanings. It can be conceived as a shift in a country's pattern of output and work force towards manufacturing or secondary industry. It can also be defined in terms of income levels reaching a certain threshold. It is on the basis of this that countries are classified into, low income; lower middle income, higher middle income, lower upper income, higher upper income and high-income countries. This is a broader dimension of industrialization.

According to Adejugbe (2020), industrialization is concerned with the expansion of a country's manufacturing activities, including the generation of electricity and the growth of its communications network. It is also a process of reducing the relative importance of extractive industries and of increasing that of secondary and the tertiary sectors. In the views of Eric Hobsbawm: (1962) "Industrialization is the process by which an economy is transformed from primarily agrarian to one based on the manufacturing of goods using advanced machinery."

Kenneth Pomeranz (2001) "Industrialization denotes the process through which an economy experiences sustained growth in manufacturing and industrial output, accompanied by a rise in living standards, urbanization, and changes in social structure."

Peter Temin (1997) Asserted that industrialization involves the integration of capital, labor, and technological advancements to transform a predominantly agricultural society into one focused on industrial production and economic development.

Drive towards Industrial Growth in Nigeria

Government has since independence in 1968 made conscious effort to reduce dependence on foreign manufacturers through supportive program aimed at making the local manufacturers meet local demand along the line of import substitution. In order to achieve the above objective, the Nigerian government has drafted for the country an industrial policy document to guide its achievement. According to the Bureau of Public Enterprise (2018), Industrial policy can be defined as a systematic government involvement through specifically designed policies in industrial affairs, arising from the adequacy of macroeconomic policies in regulating the growth of the industry. It went further to say that the instrument of industrial policy includes; subsidies, tax incentives, export promotion, government procurement and import restrictions. Others include direct investment which formed the pivot of industrial policy from 1970s to 1980s. Foreign exchange rate policy, monetary policy and trade policy also help to shape investment decision. The industrial policies of Nigeria intend to achieve the following objectives:

- To generate and raise the production
- Increase export of locally manufactured goods.
- Create a wider geographical dispersal of industries.
- To improve the technological skill and capabilities available in the country.
- To increase local contest of industrial output by looking inwards for the basic and intermediate input.

To achieve the above, the Nigerian government has put in place some policy measures or policies, these policy measures are looked at from three perspectives. Funding industrial development, incentives to industry and institutional frame work. Funding Industrial Development Improving industrial production in Nigeria requires high financial resources. The private sector is expected to play the leading role while the government focuses on the facilitators‟ role. To help the industrialist to obtain a cheap inventible fund, government adopted two major strategies:

A. The provision of credit facilities on concessionary economic development banks.
B. Provision of equity funds and long term loans by the banking sector for the promotion of small and medium enterprises.

Based on the above, government has allocated substantial resources for funding industrial growth through the Bank of Industry (BOI). The bank was created from the merge of National Economic Reconstruction Fund (NERFUND). The bank is expected to facilitate the production of primary industrial inputs by providing medium and long term loan for Agriculture and agro-allied industries. The banks emerge from the merge of people bank, Nigerian Agricultural and Corporation Bank and Family Economic Advancement Programme (FEAP). To make funds available to small and medium scale enterprises (SMES) which help Nigeria government to achieve its objectives of self-reliance enhances poverty reduction etc. Government through the Central Bank has encouraged banks to set aside 10% of their annual profit as equity funds and long term loans for the promotion of SMES.

Drivers of Industrial Growth in Nigeria

In other to achieve the industrial development of the nation and promote a dynamic efficient and sustainable manufacturing sector, government has set up a package of incentives. The incentives geared towards encouraging the private sector to play a leading role, promote geographical dispersal of industries and increase industrial output and domestic resources utilization and industrial linkages. (Todaro and Smith, 2017)

- ✓ **Tariff Protection:** This is imposition of a heavy import duty on foreign goods so as to protect local industries from international competition.
- ✓ **Import Duty Relief**: This is the granting of import duty relief to the importation of capital equipment by the government. This helps the newly established firm to be able to procure capital equipment cheaply, thereby increasing their productivity.

- ✓ **Reduction of Excise Duty:** This simply means reduction in the amount paid as taxes for goods and services produced in the country. This helps to reduce business cost of production.
- ✓ **Export Promotion:** Export incentives came on board in the 1980s with the introduction of Structural Adjustment programme (SAP) through the promulgation of the export decree No.17 of 1986. It includes:
- ✓ **Export Expansion Grant**: The scheme provided inducement to exporters who have exported N500, 00. Worth of processed product its 20% grant on the total annual export and on receipt of confirmation of repatriation of export proceeds. It is administered by the Nigeria Export Promotion Council. Other policy measures includes; duty draw scheme, depreciation allowance, currency retention scheme etc

Trends of Poverty in Nigeria

The conventional view of poverty places emphasis on the deprivation of income or consumption. This is a reasonable view because wealth adequately reflects an individual‘s social circumstances and poverty depicts low wealth. Nonetheless, setting thresholds strictly in these terms may not sufficiently address the issue because one‘s relative deprivation may be influenced by other circumstances. For instance, an individual may be paid a salary but have it taken away forcefully week to week and therefore may be unable to buy food. Or an individual might not earn a salary but might possess land on which to grow food. In either case, one‘s deprivation of sustenance may not depend on income. Moreover, poverty strikes hardest when the circumstances of low income earners do not allow them to improve their standard of living (Sen, 2019).

The incidence of poverty in Nigeria increased from 28.1 percent in 1980 to 88.0 percent in the year 2002. This percentage rate represents in absolute term 86 million people out of an estimated population of about 116.4 million people. The poverty situation in Nigeria also depicts regional variation. For example, within these periods the poverty rate was higher in the northern agro-climatic zone at 40 percent compared with the middle and southern zones at 38 percent and 24 percent respectively (Francis, 1996; FOS various issues). Similarly, Nigeria’s rank in the Human Development Index in the year 2008 remained low (0.470), being the 158th among 182 countries (African Development Bank, 2019).

The use of socio-economic indicators like per capita income, life expectancy at birth (years), access to health care services, access to safe water, access to education, access to sanitation facilities, and electricity also depicts the extent of poverty in Nigeria. The rate of poverty in Nigeria have not shown any remarkable reduction when viewed form these indicators and when compared with some countries in Africa. For instance, apart from the early 1980s when the nation’s per capita income witnessed an increase the situations in the 1990s and early 2000 were pathetic. The life expectancy at birth (years) does not provide a better level of well-being in the country (47 years in 2007), more so when compared with those of countries like Mauritius and Tunisia that had 73 and 74 years respectively in 2007 (African Development Bank, 2019).

Industrial Growth and Poverty Reduction Nexus in Nigeria

Industrialization may refer to an increase in the share of manufacturing to the Gross Domestic Product (GDP), and in the occupations of the economically active population. It could also be used to describe the development of economic activity in relatively large units of production, making much use of machinery and other capital assets, with the tasks of labour finely divided and the relationships of employment formalized (Kirk-Greene 2018).

In either case, industrialization is concerned with the expansion of a country‟s manufacturing activities, including the generation of electricity and the growth of its communications network. It is also a process of reducing the relative importance of extractive industries and of increasing that of secondary and the tertiary sectors. There is evidence to suggest that industrialization and in particular manufacturing is the prime mover of economic growth and poverty reduction in Nigeria. This is given that it creates employment, enables wealth creation and facilitates poverty alleviation. Former United Nations Secretary General, Kofi Anan in his message to Africa‟s Industrialization Day 2003, highlighted the relevance of industrialization, especially its varied and valuable contribution to the alleviation of poverty (Adejugbe 2018).

Industrialization, he argued, raises productivity, creates employment, reduces exposure to risk, enhances income-generating assets of the poor and helps to diversify exports. It is in fact argued, that the transformation of Southeast Asia within a few years and the unprecedented pace of development of China and India. (Which has lifted millions from poverty), are examples of what sustained industrialization could do to any economy. There is an intrinsic relationship between industrialization and poverty reduction. This is given that there is hardly any country that has developed without industrializing even as rapidly growing economies tend to have rapidly growing manufacturing sectors. (United Nations Industrial Development Organization, 2019)

THEORETICAL FRAMEWORK

This empirical study is anchored on the theoretical postulations of Nurkes; whose vicious circle of poverty was propounded in (1953) and opinions that there is ca ircular relationship known as the vicious circles of poverty that tend to perpetuate the low level of development in less developed countries like Nigeria. In other words, there is a circular constellation of forces tending to act and react upon one another in such a way as to keep a poor country in a state of poverty. For instance, a poor man may not have enough to eat, being hungry, he may have poor health, being physically weak, his working capacity is low, which means that he is poor and may not have enough and so on. A situation of this sort relating to a country can be summed up in the right proposition that a country is poor because it is poor. The basic vicious circle stem from the fact that total productivity in low income countries is low due to deficiency of capital market imperfections, economic backwardness and under development and this circle operates both on demand and supply sides. Clearly, the development of natural resources depends on the development capacity of human resources in a country.

If the people are illiterates, low skilled, lacks entrepreneurial abilities, natural resources will remain untapped, unutilized or underutilized. On the other hand, under developed natural resources will make people to remain economically backward in a country. According to Jhingan (2007), poverty and underdevelopment of an economy are thus synonymous as a country is poor because it is underdeveloped and a country is underdeveloped because it does not have the necessary resources for promoting development.

The basic idea behind the vicious circle of poverty theory is that poverty once started could continue for generation unless there is outside intervention. According to Marge (2008), breaking the vicious circle of poverty is almost impossible since poor people do not have the requisite resources to get out of poverty and this explains why Valentine (1968) noted that it is a pattern of behavior which cannot be easily be reverted.

RESEARCH DESIGN

Forecasting and, more importantly, policy analysis are the typical driving forces behind macroeconomic modeling. Each model should meet four requirements to be considered effective in this quest. To begin, it needs to be explicable theoretically. Second, an appreciation for the conceptual framework within which policies are formed and carried out, as well as an anticipated process of adjustment, must be reflected in the model's specification. Finally, the estimated structural model must adequately employ the rigors and sophistication of econometric methods, and third, it is crucial that the model is constructed on a robust and rich data set. Multiple regression analysis, which expresses a linear relationship between the dependent variable, Y, and K explanatory variables, where 'k' can be any numerical value from 1 to 200 (Egbulonu, 2005), would be used for this investigation.

$$MPI = f(IDOP, GDPGR, PCI, CU, INTR, EXCHR)$$

$$MPI = \beta 0 + \beta_1 IDOP + \beta_2\, GDPGR + \beta_3\, PCI + \beta_4\, CU + \beta_5 INTR + \beta_6 EXCHR + U_t$$

Where: MPI – multi-dimensional poverty index, is an international measure of poverty which includes; health, education and standard of living indicator to determine a population degree of poverty, IDOP – industrial output, GDPGR – gross domestic product growth rate, PCI – per capita income, CU – capacity Utilization, EXCHR- exchange rate and INTR – interest rate, Ut – random walk

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.032442	0.153973	-0.210700	**0.8345**
CU	0.001680	0.002093	0.802528	0.4282
EXCHR	0.001266	0.000210	6.025812	0.0000
GDPGR	0.007712	0.002050	3.761923	0.0007
IDOP	-8.48E-06	2.31E-06	-3.678700	0.0009
INTR	0.001196	0.001968	0.608011	0.5475
PCI	2.64E-05	1.89E-05	1.395038	0.1726
R-squared	0.728937	Mean dependent var	0.239564	
Adjusted R-squared	0.678112	S.D. dependent var	0.082067	
F-statistic	14.34226	Durbin-Watson stat	1.412398	
Prob(F-statistic)	0.000000			

Following the outcomes obtained from multiple regression analysis approach, multi-dimensional poverty index in Nigeria was negative at -0.032442 and statistically insignificant at the probability values of 0.8345, which therefore implies that when the economy keeps, capacity utilization (CU), exchange rate (EXCHR), gross domestic product growth rate (GDPGR), interest rate (INTR) and per capita income (PCI) stable for period of this review, the coefficient of multi-dimensional poverty index stood at -0.032442. The negativity of the regressed over time, therefore provides an empirical overview regarding the very contribution of capacity utilization of the industrial sector in the country, in this case, the results shows that the countries industrial sector has not been heavily linked with poverty reduction tendencies over the review duration. The result also justifies the negative attitudes of the government and private sector in the nation over industrialization, hence, the country has remained a gross import dependent country, with vast industrial activities been carried out by multinational corporations in the region. In Nigeria, evidence shows that, local industrialist is often crowed out by the massive inflows of foreign capital, which expert says that, it remains a major area of concern if the country must deal with poverty, then unemployment must first be tackled simultaneously (Shafaeddin, 2018).

Furthermore, the outcome proves that, industrial sector output in the economy reflected a negative but significant association ship with poverty reduction in Nigeria (Multi-dimensional poverty index). Just as the outcome of pairwise granger causality provides a uni-directional causality at 0.00% between industrial and poverty reduction level in the nation. The linkage justifies that increasing industrial output for the duration of this study would invariably lead to increased industrial demand for workers in the short run. These workers' are paid wages, which improves their purchasing power and standard of living, thereby resulting into increased gross poverty reduction in the country. Thus, the gap between poverty and increased standard of living in the country could be bridged by increased and improved industrial activities in the country over time.

Causative Relationship between Industrialization and Poverty Reduction

Pairwise Granger Causality Tests
Date: 05/24/23 Time: 17:13
Sample: 1981 2019
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
MPI does not Granger Cause IDOP	37	0.19877	0.8207
IDOP does not Granger Cause MPI		0.22976	0.7960
PCI does not Granger Cause IDOP	37	1.76821	0.1869
IDOP does not Granger Cause PCI		7.95208	0.0016
CU does not Granger Cause IDOP	37	0.16912	0.8452
IDOP does not Granger Cause CU		5.74840	0.0074
PCI does not Granger Cause MPI	37	0.39574	0.6764
MPI does not Granger Cause PCI		5.22489	0.0109
CU does not Granger Cause MPI	37	1.89451	0.1669
MPI does not Granger Cause CU		0.07975	0.9235
CU does not Granger Cause PCI	37	0.11865	0.8885
PCI does not Granger Cause CU		0.27462	0.7616

The result from pairwise granger causality test provides a lucid empirical validation on the nature of existing relationship between industrialization and poverty reduction in Nigeria, especially in post structural adjustment era. Thus, following the statistical representation above, we observe that; industrial sector productivity engenders per capita income in the country between 1981 and 2019 adjourning from the probability values of 0,0016%, signifying that increasing industrial activities in the country would result to increase per capita income, whose spillover effect in the nearest short run would amount to improved living standard and further emancipation of poverty in the country Ejelonu and Okafor,2022). Furthermore, looking at the relationships between industrial output and industrial capacity utilization, we also notice way one causation, where industrial sector productivity granger causes industrial capacity utilization with a significant probability values of 0.0074%. While Multidimensional poverty (MPI) grangers causes per capita income in Nigeria for the study of this study. Although, we were unable to establish any form of causality flow between industrialization and poverty reduction, but the study is evident that improving industrial productivity in the country for the study scope would liberate per capita income, which would in turn enhance standard of living and ease the hardship enshrined by increased poverty in Nigeria.

CONCLUSION

In the year 2020, Africa's most populous black nation on earth was unanimously crowned the all deserving poverty capital of the globe by Washington D.C post, which citied various indices behind the titles. According to them, half of the population of the country lives below poverty line, with wealth concentration among a few rich. However, this issues has remained unaddressed in the country, despite the abundance of natural resources. It is based on this economic issues the paper investigated the empirics of industrialization and poverty reduction in Nigeria, with relevant findings indicating that, industrialization remains the most causally link route to poverty alleviation in the country which is the focal point of concentration for this study. The study therefore recommended based on the findings that; the government through the bank of industrial and other means should introduce an improved strategic means to attain a sustained industrial increase in productivity and growth, which would create employment opportunities and alleviate poverty among the masse. To this end, import substitution and local content utilization means of industrialization is recommended for poverty alleviation in the country. conclusively, the empiric evidence, proves that, industrialization gives life to employment generation which strangles the implication of increased poverty by gainfully engaging the population. Thus, the lite of gross poverty and underdevelopment in Nigeria can only be a thing of the past, only when the drive for increased industrial activities in the country becomes a thing of present continuous discuss. Following varying empirical results obtained above, the research make the following recommendations to the government, if she must track down on the incidence of poverty in Nigeria, then the need to pay attentions to the following policy recommendations becomes sacrosanct and imperative.

a) The industrial sector in Nigeria, should be improved in a more strategic means to attain a sustained industrial increase in productivity and growth, which would create employment opportunities and alleviate poverty among the masse. The researcher therefore recommends an import substitution and local content utilization means of industrialization for poverty alleviation in the country.

b) A positive exchange rate implies a right step in the right direction for the Nigerian government, meaning that the country import would become relatively cheaper than ever before, therefore reducing the pressure it exerts on disposable income of the population in the country. Thus, the central bank should pursue monetary policy stabilization that would include financial sector deepening, lowering monetary policy rate to ease the pressures on interest rate and thereby increase financial access to local investors in the country.

c) It is also advised that, the government pursue a more expansive fiscal to boost the level of gross domestic product in the nation. specifically; taxes should be cut down, with tax concession and holidays given to local industrialist in the country, while expansion of government public financing is advisable, through capital infrastructural provisions, such as good road networks to attain proximity between the place of raw materials and industrial processing zones, health facilities and social development programs that has a direct positive implication on standard of living in the country over time.

References

Adejugbe, M. A. (2018). "Industrialization, distortions & economic development in Nigeria since 1950" in M. O.A. (ed.), Industrialization, urbanization & development in Nigeria 1950-1999, Lagos: *Cocept publications ltd*

Adofu, (2015). “Poverty in the land of plenty” NEBESS Jo*urnal of contemporary issues 1 (2).*

Aiyedogbon J. O. and Ohwofasa, B.O (2020), Poverty and youth unemployment in Nigeria, *international journal of business and social science vol. 3 no. 20.*

Alamba, C. S., & Ejelonu H. O. (2022). Foreign direct investment in Nigeria: Validating the effect of macroeconomic instability. Retrieved from http://kogmanjourn.com.ng/vol8no3nov2022.html

CBN central bank of Nigeria (2020). Statistical bulletin. 50 years special anniversary edition. Abuja: CBN

Clunies- Ross (2019). Poverty eradication, millennium development goal and sustainable development in Nigeria, *Journal of sustainable development 3 (4) 138-144.*

Ejelonu, H. O., & Okafor, S. (2022). Relevance of cross border trade on activity sector employment in Nigeria. Retrieved *fromhttp://dx.doi.org/10.2139/ssrn.4211912*

Hobsbawm, E. J. (1962). The age of revolution, 1789-1848. Abacus.)

National Bureau of Statistics, (2020); The review of Nigerian economy 2010. Abuja: NBS empirical Lesson from Nigeria, *selected paper for 2013 annual conference of the Nigerian economics society.*

Pomeranz, K. (2001). The great divergence: China, Europe, and the making of the modern world economy. Princeton University Press.

Ravallion, M (2018), Poverty comparisons: a guide to concepts and methods, *The World Bank, Washington, D.C.*

Sen, A (2019), 'Poor, relatively speaking', *Oxford economic papers, vol. 35, iss. 2, p. 153-169.*

Shafaeddin, (2018). Does economic growth reduce poverty in Nigeria? *ISSN 2224 607X (Paper) ISSN 2225-0565 (Online) Vol.3, No.9, www.iiste.org.*

Temin, P. (1997). Industrialization in eighteenth-century Massachusetts. The Journal of Economic History, 57(03), 499-535.)

United States Agency for International Development – USAID (2011). Poverty assessment tool accuracy submission. *Retrieved from www.povertytools.org/countries/Nigeria/ USAID_PAT_Nigeria.pdf*

World Bank (2020), World databank world development indicators, *World Bank, viewed 8/12/2014,<http://databank.worldbank.org/data/reports.aspx?source=worlddevelopment-indicators>*