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MODELING THE IMPACT OF FINANCIAL INCLUSION ON POVERTY REDUCTION IN NIGERIA

EKPENYONG, GODHAS U; & AGBO, LAWRENCE E.

Department of Economics, School of Arts & Social Sciences, Federal College of Education Kontagora, Niger State
Corresponding Author: *pacci42013@gmail.com*

Abstract

Financial inclusion is a critical driver of economic development, particularly useful in tackling poverty by providing basic financial services to marginalized segments of the population. Thus, the objective of the study is to empirically investigate the impact of financial inclusion on poverty reduction in Nigeria for the period 1987 to 2022. To achieve the study objective, time series data were collected from the publications of Central Bank of Nigeria, National Bureau of Statistics and World Development Indicators of the World Bank data. The Ordinary Least Squares regression technique was used to estimate the variables coefficient. The findings revealed that the various financial inclusion measures notably Bank branches, Bank loan and advances, and Micro, Small and Medium Enterprise Development Fund exert positive impact on poverty reduction in the study period. Our study also shows that number of Point of Sale and Demand Deposits in the rural areas produce statistically significant negative effect on poverty reduction. The study therefore concludes that Bank branches, Bank loan and advances, and Micro, Small and Medium Enterprises Development Fund contribute to poverty reduction, while Point of Sale and Deposit from rural areas did not. Hence, we suggest income policies that drive savings in the economy such as equitable distribution of income that made financial inclusion pro-poor in Nigeria. The study recommends moderation in the application of monetary policies so that individuals and businesses can have access to affordable credit for poverty reduction purposes.

Key Words: Financial Inclusion, Poverty Reduction, Financial Services, Policy, Nigeria

Introduction

The issue of financial inclusion is fundamental to sustainable development, particularly useful in combating poverty globally. Financial inclusion connotes all initiatives that make formal financial services available, accessible and affordable by households and businesses, their income level, geographical location or social status notwithstanding. In recent years, financial inclusion as a strategy or policy has been seen as a powerful means for attaining multidimensional macro-economic goals, and job creation, income generation and poverty reduction for developed and developing countries. Furthermore, the emergence of financial inclusion promotes social inclusion through favorable access, availability and usage of rules based formal financial service by all who opened a bank account for the first time, that is, the newly banked. These are generally underprivileged population segments, rural dwellers and low-income families who benefit enormously from basic financial services like saving, borrowing and payments (World Bank, 2014).

Low-income earning in the developing countries has led millions of households unwillingly excluded from the financial system which lessen domestic saving, loss of several deposit and investible funds needed to be channeled into credit creation for economic growth and development. According to Qmar and Inaba (2020,

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financial inclusion helps to fill the gap created by financial exclusion and provide households and businesses greater access to resources needed for finance consumption and investment. More so, financial inclusion makes growth inclusive, access to finance can enable economic agents to take part in long-term participatory investment activities, facilitate efficient allocation of productive resources and thus reduce the cost of capital and reduce usually exploitative informal sources of credit (Demirguc-Kunt et al, 2015&2018).

Despite successive government efforts and policies towards reducing poverty in Nigeria, a large portion of the county's population still struggles to attain a minimum standard of living across the country. A large portion of Nigeria's population is reported to be poor with 86.9 million in extreme poverty (World Poverty Clock Report, 2018). The Nigerian economy has experienced economic growth in recent times, after coming out of recession in 2015, but it has not translated to a better standard of living or reduction in poverty levels. The World Bank (2018), reports that Nigeria has overtaken India as the poverty capital of the world. However, Nigeria is among the wealthiest nations in African; we paradoxically experience poverty in the midst of abundant human and natural resources.

Poverty reduction has continued to be a global priority in achieving economic development. That is why the Millennium Development Goals (MDGs) 23 years ago aimed to reduce poverty by half in 2015, World Bank set goals to end extreme poverty in 2030 and raise the shared prosperity of the bottom 40% of people in each country through reducing poverty, and Sustainable Development Goals (SDGs) is on course to end extreme poverty. Part of the strategies adopted to curb poverty at both national and global is financial inclusion as research has established that higher poverty rate are commonly experienced in countries that have 26 to 48 % financial exclusion rate which growth is considered high. (Abdulkarem, Olohunlana &Akande, 2019). Corroborating their view is the Nigerian government who attributed lack of access to finance as hindrance to economic development (Thisday, 2012).

To this end, financial inclusion has moved up and gained grounds globally for its potential to reduced poverty. As Omar and Inaba (2020) have noted, the real-world financial systems are far from inclusive, so, more emphasis is been placed on financial inclusion which reflects its potentially transformative power to accelerate inclusive development. Also give its multifaceted implications, financial inclusion has been given a formal target and a key objective in United Nations member countries in their development agenda (Sahay et al, 2015).

The above introduction provides the basis for this study, which attempts to investigate the impact of financial inclusion on poverty reduction in Nigeria. Given this introductory section, the rest of the study is organized as follows; section 2 is the literature review in terms of the conceptual and empirical literature; section 3 focuses on the method of study; section 4 presents the empirical results and discussion and last section gives the conclusion and recommendations.

LITERATURE REVIEW

Conceptual Issues

The concept of financial inclusion has been variously explained, it can be viewed as an economic state where all individuals has equal opportunities of accessing primary financial services. According to Voica (2017), when affordable financial services and products are made available to the poor and unbanked, the potentials for sustainable growth are in place. More than that, allowing equal opportunities of accessing a functional financial system to all individuals facilitate a quicker integration of the socially excluded to achieve economic integration (Gunarsh et al, 2018). It is also implied that an inclusive financial systems will improve a degree of efficiency in the distribution of resources which brings about a reduction of the cost of accessing capital. A reduction in the cost of accessing capital leads to higher levels of investment, which in turn enhances overall economic growth and development, Sarma (2012) gave a comprehensive definition of financial inclusion based on several dimension including accessibility, availability, and usage of the formal financial system for all members of an economy.

Therefore, financial inclusion is defined as a process or situation which permits an individual easy access to, or availability of and usage of formal financial system in the economy. It depicts a process where all members

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of the economy do not have difficulty in opening bank account, can afford to access credit and can conveniently and consistently use financial system products and facilities without difficulty, it is the process which ensures that a person in-coming money is maximized, out-going in controlled (Kama & Adigun, 2013; Plymouth City council (PCC), 2019).

On that point, financial exclusion is the inability of individuals, household or group to access the formal financial services and products, including banking services, credit, insurance payment systems and investment opportunities. Mahan (2006) financial exclusion signifies lack of access by certain segments of the society to appreciate low cost, fair and safe financial products and services from mainstream providers.

According to Ogwumike (2011), poverty is a situation where people have low or inadequate income to meet the basic needs of life. Poverty is often linked to, low education and skill, unemployment, economic inequality and political instability and conflict. Reducing the bane of poverty is a function of sound government policies and individual effort in a country. By clarification, poverty reduction is a set measure, which goals are meet to permanently lift people out of poverty (Onaolapo, 2015). Poverty reduction includes improving the living conditions of people who are already poor.

Empirical Review

Financial Inclusion and Poverty Reduction

Several studies have explored the relationship between financial inclusion and poverty reduction across the globe. Omar and Inaba (2020) studied the effect of financial inclusion on poverty and income liquidity in 116 developing countries taking into consideration their determinants and conditional effects from the period 2004-2016. The study used a dynamic panel regression framework and fixed effect estimation method for its analysis. The findings showed that income per capita, internet users ratio, age dependency ratio, inflation and inequality in income have significant impact in financial inclusion level in developing countries and that financial inclusion reduces poverty rate and income inequality in developing countries significantly.

Jabir et al, (2017) investigated the impact of financial inclusion in reducing poverty among the low-income household level for 35 countries in Sub-Saharan Africa. Taking cross- sectional data of 2011, they found that financial inclusion significantly reduced the level of poverty in Sub-saharan Africa through providing net wealth and larger welfare benefits to the poor.

Emmanuel and Jimoh (2022) examined the impact of financial inclusion on poverty alleviation in Nigeria using econometric model for the period 2010 to 2021. Their study employed the ordinary econometric regression technique and found financial inclusion to exert significant impact on per-capita income, reducing poverty and increasing standard of living. The findings also reviewed that number of Automated Teller Machines enhanced financial inclusion, income generation and poverty alleviation, and was statistically significant.

Financial Inclusion Policy in Nigeria

Achieving financial inclusion has remained a global challenge with as much as 54% of adults worldwide being financially excluded and as such government and monetary authorities have introduced different policies aimed at deepening financial inclusion within the economy. For instance, in Nigeria, the presidency reported lacked of access to financial resources as one of the major issues hindering economic growth and development. In the light of this, the federal government launched the National Financial Inclusion Strategy (NFI3.0) with the purpose of setting up structures to increase the adoption and usage of financial services in priority demographics, ensure robust enabling financial services, infrastructure and expand digital financial service (Thisday, 2012). Recently, the federal government launched the Nigerian Payments System Vision (PVS) 2025, aimed at deepening digital payment and financial inclusion. Also, the government has focused more on both interventionists financing arrangements and building institutions that promote financial inclusion, while the CBN designed financial inclusion strategies to improve financial access of a greater Nigerian population as well as to reduce poverty in both the urban and rural areas.

These policies have contributed to significant progress in financial inclusion in Nigeria. A survey conducted by the Enhancing Financial Innovation and Access (EFInA) in 2023 indicated that formal financial inclusion in Nigeria has grown significantly from 56% in 2020 to 64% in 2023. The results show that 26% of Nigerians are financially excluded, down from 32% in 2020.

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METHODOLOGY

Theoretical Framework

The theoretical framework for studying the impact of financial inclusion on poverty reduction is the financial inclusion theory. The financial inclusion theory explains how financial inclusion can lead to increased financial capability, and how financial capability leads to improved financial health, and how improved financial health leads to reduced poverty. Dr. Yunsu was one of the authors who formulated the financial inclusion theory. He posits that financial inclusion provides financial services to the poor and marginalized, especially women at a reasonable cost, and in a transparent and sustainable manner, Dr. Yunus in his book demonstrated that financial services could be delivered to the poor and marginalized, improving their livelihoods and reducing poverty. In this theory the overall effect is to reduce poverty and promote economic development.

Model Specification

We model our financial inclusion poverty reduction relationship following Abdulkareen, Olahulana and Akande (2019) and Onaolapo (2015) but with some modifications as,

$POV=F(FI_t)$……(1)

Where

POV_t = Poverty reduction proxied by PCI

FI_t = Financial inclusion function = $f(BB_t, + BLOA_t + POS_t + DRA + MSMEDF + \varepsilon_t$……..(2)

The model to be estimated is therefore given as

$PCI = \alpha + \beta_1 BB_t + \beta_2 BLOA_t + \beta_3 POS_t + \beta_4 DRA_t + \beta_5 MSMEDF_t + \varepsilon_t$…….(3)

Where

PCI = Per capita income
BB= Number of Bank branches
BLOA =Bank Loan and Advances
POS = Number of Point of Sale in the rural areas
DRA = Demand Deposit from rural areas
MSMEDP = Micro, Small and Medium Enterprises Development Fund

Estimation Techniques/Data Source

The study adopted Ordinary Least Squares (OLS) estimation techniques of analysis in order to attain robustness in the overall result. The data used in the study were largely secondary data and are time series data covering 1987-2022. Most of the data are extracted from Central Bank of Nigeria (CBN) statistical bulletin, National Bureau of Statistics (NBS) and World Development Indicators of the World Bank data.

Empirical Results and Discussion

The econometric model examining the relationship between financial inclusion and poverty reduction in Nigeria is estimated by the Ordinary Least Squares techniques,

Dependent Variable: PCI
Method: OLS
Table 1: Result of Regression Analysis

Variables	Coefficient	Std Error	t-Statistic	Prob
C	0.003915	0.002318	1.200388	0.018
BB	0.18s7246	0.115044	2.535018	0.1755
BLOA	0.029324	0.008413	2.816606	0.0081
POS	-3.22E-09	0.056587	-0.074826	0.1612
DRA	-0.017547	0.007532	-1.643846	0.1612
MSMEDF	0.003227	4.44E.06	2.612683	0.0638
R^2- Squared	0.754928			
Adjusted R-Squared	0.683419			

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F. Statistics	24.2663			
Durbin-Watson	1.75367			

Authors' computation (2024)

Table 1 above provides the empirical result which shows that within the study period the number of bank branches (BB), bank loan and advances to rural dwellers (BLOA) and the micro, small and medium enterprises development fund (MSMEDF) has positive impacts on the dependent variable, with those of BLOA and MSMEDF being statistically significant. Also the result shows that the number of bank branches (BB) coefficient is O.18 and significant at five percent level. This means that 1 percent increase in (BB) will have positive impact on poverty reduction. However, the result shows that the impact will be fairly small. The estimated coefficient for BLOA and MSMEDF is shown as 0.029 and 0.0033 percentage point respectively. This result is statistically significant at five percentage level of significance. Loans and advances to micro, small and medium enterprise will therefore, impact positively on poverty reduction. The finding is consistent with the finding of Ouiyomlo (2013), Lal (2018); and Umaru and Chibuzo (2018), which reported positive impact of financial inclusion on reduction of poverty index. Overall, financial inclusion has a positive impact on the reduction of poverty index, enhances quality of life, and contributes to employment generation and income. Furthermore, our adjusted R-squared expressing goodness of fit, exhibits a very strong explanatory power. Its coefficient, 0.683419 indicates 68% of variation in poverty reduction is explained jointly by all the independent variables utilized for estimation. Taking into cognizance, the rule of thumb, Durbin Watson statistics (1.756367) shows that our model was well signified as to overcome autocorrelation among the included variable.

Conclusion

This study provides empirical evidence on the impact of financial inclusion on poverty reduction in Nigeria using annual time series data spanning from 1987-2022. The OLS technique utilized for the study revealed that various financial inclusion variables notably bank branches, bank loan and advances, and micro, small and medium development fund have positive impact on poverty reduction in Nigeria in the study period. Specifically , a percent increase in bank branches ,bank loan and advances, and micro, small and medium enterprises development fund produced positive impact on poverty reduction that are statistically significant at various level of significance through the period. Consequently, financial inclusion provides the poor access to financial resources to enable them to be economically active and generate employment and income for investment in other sector of the economy. However, demand deposit, number of point of sale in the rural areas produces statistically significant negative effect on poverty reduction. Thus, the study concludes that financial inclusion has a positive effect on poverty reduction in Nigeria.

Policy Recommendations

Based on the findings of the study, the following recommendations are made,

The study recommends that government should launch special targeted interventions through which the poor in the society can be easily introduced into financial system.

More branches of banks and bank agents should be needed in both rural and urban areas, as this will encourage accessibility of financial services at affordable cost for poverty reduction purposes.

The study recommends moderation in the application of monetary policies for access to affordable loan by households and businesses.

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