










“Does financial inclusion matter for poverty reduction in Nigeria: Evidence from savings and credit mobilization components”

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DOES FINANCIAL INCLUSION MATTER FOR POVERTY REDUCTION IN NIGERIA: EVIDENCE FROM SAVINGS AND CREDIT MOBILIZATION COMPONENTS

Abstract

Poverty remains a pressing challenge in developing economies, an necessitating analysis of financial and macroeconomic drivers of poverty reduction. Financial inclusion, particularly through access to savings and credit, has gained prominence as a pathway for households to build resilience, smooth consumption, and invest in productive ventures. This study examines the short-run and long-run effects of savings and credit from deposit money banks (DMBs) and microfinance banks (MFBs) on poverty reduction in Nigeria, with poverty headcount as the dependent variable. The Autoregressive Distributed Lag (ARDL) model was employed, using time-series data obtained from reputable national and international organizations. Findings show that DMB savings significantly reduce poverty in both the short run (coefficient = 0.0077, $p = 0.0389$) and long run (-0.0393 , $p = 0.0036$), emphasizing their role in mobilizing resources that enhance household welfare. DMB credit also reduces poverty in the short run (0.0031 , $p = 0.0005$) and demonstrates marginal long-run significance (0.0199 , $p = 0.0914$), reflecting its contribution to productive opportunities. By contrast, MFB savings show only weak short-run significance (-0.0059 , $p = 0.0799$) and no long-run effect (-0.0393 , $p = 0.2366$), while MFB credit remains insignificant in both the short run (0.0025 , $p = 0.3973$) and long run (0.0155 , $p = 0.5222$). The study recommends that DMBs should extend short-term savings benefits into long-term poverty reduction and sustain credit facilities. MFBs should improve savings mobilization through government-backed incentives and restructure credit with lower rates, flexible repayment, and financial literacy to strengthen their poverty-reduction role.

Keywords

poverty, financial inclusion, microfinance, money deposit bank banks, gross domestic product, inflation, human development, interest rates

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INTRODUCTION

One of Nigeria's most urgent socioeconomic problems is still poverty, which restricts access to essentials and maintains income disparity. Millions of Nigerians still face economic hardship despite numerous government measures. It is being opined recently that improving possibilities for fairly priced financial services, such as credit and savings, is critical to alleviating poverty. Statistics show that more than 50% of the population of the world struggles to satisfy their basic needs, with 10% of those living on less than USD 2.15 per day enduring severe financial difficulty. In promoting resilience to financial shock, wealth accumulation, and economic participation, financial inclusion helps to integrate people into the official financial system. In Sub-Saharan

Africa, particularly Nigeria that has a top-heavy share of the world's poverty, financial aid is especially important. Identifying this, Nigeria developed the National Financial Inclusion Strategy (NFIS) in 2012 to increase financial access; nonetheless, savings gaps and credit mobilization remain key impediments to economic enablement. In Nigeria, many people, since they are low-income earners, lack secure savings opportunities and have difficulty obtaining credit, restraining their capacity to invest and rise out of poverty. This study uses mobilization of credit and savings to measure financial inclusion and examine how financial inclusion helps to alleviate poverty in Nigeria. By assessing their impact, the study aims to evaluate existing financial policies and provide insights for improving financial access and economic stability in Nigeria. Research has shown that the effectiveness of financial inclusion as a strategy for economic development and poverty reduction through savings mobilization and access to credit remains a subject of inconsistent empirical debates globally. In theory, financial access is expected to enhance individuals' capacity to save as well as opportunities to invest, and improve economic activities. However, obstacles such as financial illiteracy, in addition to high transaction costs and institutional inadequacies, serve as a stumbling block to the realization of these benefits. Consequently, many people, especially rural dwellers, are forced to use informal financial systems, which often lack security and scalability to support long-term financial stability. The main challenge in this study lies in the restricted availability and use of formal financial products, especially regarding savings and credit options. Official statistics demonstrate that financial inclusion programs from the government have not successfully reached the majority of Nigerian citizens because they do not use formal saving and credit options. The study evaluates how Nigerian poverty levels respond to financial inclusion efforts through savings and credit programs. This report delivers economic metrics that reveal financial service advantages for users who have access to formal channels and examines systemic limitations for savings and credit program success. The successful utilization of financial inclusion to reduce poverty depends heavily on solving the encountered obstacles.

1. LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

Global poverty reduction relies on financial inclusion as a key driver to break down social and economic barriers, enabling individuals to access financial services and unlock their full potential for economic and social progress (Bateman et al., 2019). Financial inclusion empowers individuals to build resilience, improve their economic prospects, and enhance their overall quality of life by bridging the financial gap (Mahalika et al., 2021). Research highlights the vital importance of financial inclusion in improving livelihoods and alleviating poverty (Barajas et al., 2020; Koomson et al., 2020; Sakanko et al., 2020). For vulnerable populations in the informal sector, financial inclusion provides access to essential financial services, facilitating daily transactions (Ogbeide & Igbini, 2019). This inclusive approach aims to increase access, availability, and utilization of formal financial systems for all economic members, offering ethical and sustainable financial products and ser-

vices (Ben-Caleb et al., 2015). As a vital aspect of financial development, financial inclusion prioritizes broad accessibility of financial services and products to diverse populations, promoting equitable financial opportunities (Alter & Yontcheva, 2015). By providing accessible savings and credit services, financial inclusion enables low-income individuals to stabilize their income, build assets, and achieve better financial resilience. This study investigates the impact of financial inclusion on poverty reduction in Nigeria, analyzing various financial elements and macroeconomic indicators, including Deposit Money Bank and microfinance savings and credits, interest rates, human development index (HDI), inflation, and Gross Domestic Product (GDP), to determine their effects on poverty headcount.

Traditional banking institutions maintain formal savings options named Deposit money bank savings (or deposits) for business entities and individual customers (Beckmann & Mare, 2017). Under this concept, financial savings tools play a fundamental role in promoting wealth-building and achieving financial stability. Households that use

Savings Accounts from Deposit Money Banks and Microfinance Institutions receive financial protection, which allows them to build economic reserves to reduce long-term poverty through stored money and accumulated interest (Oladipo et al., 2023; Steinert et al., 2018; Babajide et al., 2015). The term “microfinance bank savings” refers to specific savings plans designed by MFIs for their low-income customers. These savings plans are designed to promote even small deposits, making it easier for people who usually use unofficial financial systems to accumulate assets. According to the conceptual framework, microfinance bank deposits are a crucial instrument for improving financial inclusion since they encourage saving behaviors, act as a safety net in case of emergencies, and support long-term financial planning (Awojobi, 2019; Ejefobihi et al., 2019; Kumah & Boachie, 2016). Deposit money bank also offers a variety of credit and loan facilities to individuals and firms, known as Deposit money bank credit. Individuals and firms depend on it to obtain capital for investment, consumption, and entrepreneurial endeavors; the affordability and accessibility of such credit can boost economic activity by permitting profitable investments, which may lessen poverty by raising income and creating job opportunities (Eru et al., 2018; David-Aina et al., 2019; Bello et al., 2022; Amakor & Eneh, 2021). Small-scale loans and credit services offered to low-income groups by microfinance institutions (MFIs) are included in microfinance bank credit. By providing flexible and reasonably priced financing to people who might not otherwise have access to traditional banking, these organizations empower underprivileged populations. Borrowers can participate in revenue-generating ventures thanks to this access, promoting their financial independence and lowering poverty (Ullah et al., 2020; Ngong et al., 2021; Khan et al., 2020; Ayanle et al., 2022).

Macroeconomic indicators such as gross domestic product are measures of the economic success of all products and services produced in a nation over a given time period. In other words, GDP is used to measure Nigeria’s overall economic climate in this study (Agu et al., 2022). Better job prospects and more government funding for social welfare are typically linked to higher GDP levels, which can help reduce poverty indirectly (Demirguc-Kunt & Klapper, 2012; Phan et al., 2022b; Sharma et al.,

2014). Another economic indicator used in this study is the human development index, which is a composite metric used to measure the standard of living, education, and health of the populace, indicating a wider socioeconomic effect of financial inclusion, mostly employed in the conceptual framework of most empirical studies (Azubuike et al., 2024). HDI improvements could suggest that improved access to financial services, including credit and savings, leads to greater economic growth as well as improved health, educational attainment, and general quality of life, which in turn significantly reduces poverty (Ahmed et al., 2018; Lacalle-Calderon et al., 2018).

Financial services can lessen vulnerability and support sustainable development when they are made available to the poor, according to numerous empirical studies. For example, studies show that using formal financial instruments enables low-income people to accumulate assets and stabilize their income (Oladipo et al., 2023; Demirguc-Kunt & Klapper, 2012). The percentage of a population living below the poverty line, or the poverty headcount, is a crucial metric for monitoring how well poverty reduction initiatives are working (Ratnawati, 2020). A key component of this process is having access to savings. Individuals can build wealth and earn income through Deposit money bank accounts, which act as a cushion against economic shocks (Steinert et al., 2018; Menna & Tirelli, 2017; Babajide et al., 2015). Comparably, even with modest deposits, microfinance institutions (MFIs) provide tailored savings plans for low-income groups, improving asset accumulation and financial security (Awojobi, 2019; Ejefobihi et al., 2019; Kumah & Boachie, 2016). Accessibility of credit is equally vital. Investments in company growth, housing, and education are supported by Deposit money bank loan facilities, which help to create jobs and raise income levels (Amakor & Eneh, 2021; Bello et al., 2022; David-Aina et al., 2019; Eze & Alugbuo, 2021). Simultaneously, microfinance bank financing, which is distinguished by reduced interest rates and adjustable repayment terms, enables borrowers to make investments in ventures that generate revenue, thereby mitigating poverty through the improvement of household income and financial autonomy (Ullah et al., 2020; Ngong et al., 2021; Khan et al., 2020; Ayanle et al., 2022). The effects of poverty are also greatly influenced by

macroeconomic factors. Because higher GDP levels improve public welfare spending and job possibilities, they are generally linked to lower poverty rates (Demirguc-Kunt & Klapper, 2012; Phan et al., 2022a; Sharma et al., 2014). On the other hand, rising inflation makes low-income people even poorer by reducing their purchasing power and the advantages of savings (Akotey & Adjasi, 2016). Additional evidence that lower poverty is associated with improved living standards comes from the Human Development Index (HDI), which integrates measures of income, education, and health (Lacalle-Calderon et al., 2018; Ahmed et al., 2018). Additionally, interest rates are important; whereas high rates frequently limit access to financing, lower borrowing costs can promote investment and improve loan accessibility (Nsanganzele, 2015; Ullah et al., 2020). Financial inclusion's theoretical underpinnings are based on a variety of viewpoints. According to the financial intermediation hypothesis, banks and MFIs increase market efficiency and lower transaction costs (Schumpeter, 1911; Gurley & Shaw, 1960). According to Morduch (1999) and Robinson (2001), and the paradigm of poverty alleviation, financial services help increase incomes while facilitating investments. According to the inclusive growth theory, all citizens must have equal access to financial possibilities to achieve economic benefit (Ratnawati, 2020; Klasen, 2010). Empirical research from Ozili (2020), Kumari et al. (2019), Awojobi (2019), and Ozili (2020) demonstrates that expanded financial services access effectively decreases poverty rates. The literature study proves financial inclusion serves as a vital factor in poverty reduction for both credit and savings mobilization purposes. Multiple studies from different global regions present constant evidence that shows that expanded formal financial service availability strengthens economic stability and drives profitable investment decisions that reduce poverty rates. Further research is required to optimize policy development because different mechanisms perform differently across various implementation conditions and population demographics, and local geography contexts. This paper investigates financial inclusion's influence on Nigerian poverty reduction, specifically through savings and loan-based programs.

This study assessed the effect of financial inclusion on poverty headcount in Nigeria, with an emphasis on access to credit and savings mobilization. By evaluating how various financial services interact

with key macroeconomic variables to alter poverty headcount, the research uncovers impediments to financial access and offer specific policy initiatives to promote financial inclusion results. The CBN, World Bank, and NBS are among the organizations that provide data on bank savings, credit, and macroeconomic indicators. After adjusting for important economic variables, a regression model examines the connection between poverty and financial inclusion. Four hypotheses were formulated to examine the effects of Deposit money bank savings and credit, as well as microfinance savings and credit, on poverty headcount. Specifically:

- H1: Deposit money bank savings have no significant impact on the poverty headcount.*
- H2: Microfinance bank savings have no significant impact on the poverty headcount.*
- H3: Deposit money bank credit has no significant impact on the poverty headcount.*
- H4: Microfinance bank credit has no significant impact on the poverty headcount.*

2. METHODS

This study uses credit and savings data to evaluate financial inclusion in deposit money banks and microfinance banks. The influence of savings from these institutions on poverty is examined in one of its two models, while the impact of credit disbursement on poverty is examined in the other. People living below the poverty level of USD 1.90 per day are represented by the poverty headcount ratio, which is used to measure poverty. Using GDP, HDI, inflation, and interest rates as control variables, the first model assesses the impact of deposit money bank and microfinance bank savings on the number of people living in poverty. With the same macroeconomic variables considered, the second model looks at the relationship between poverty and bank lending from deposit money bank and microfinance institutions. Both types have linear specifications. The definition of financial inclusion is based on credit disbursement, which is represented by the percentage of adults who have an active loan, and savings mobilization, which is determined by the percentage

of adults who have a savings account in a formal financial institution. Other important economic factors are included to take into consideration the wider economic effects on poverty levels, such as GDP, HDI, inflation rate, and interest rate.

World Bank, CBN, NBS, NFIS, EFinA, and scholarly literature are some of the sources from which the data for this study were gathered (CBN, 2021; EFinA, 2021; NBS, 2019; World Bank, 2020). Quarterly data spanning from 2009 to 2024 were used to analyze the impact of savings and credit in deposit money banks and microfinance banks on poverty headcount. Unit root tests, such as the Phillips-Perron, KPSS, and Augmented Dickey-Fuller (ADF) tests, are used to assess the stationarity of variables to guarantee robustness. The bound test for cointegration is used to evaluate long-term relationships because of the variables' heterogeneous order of integration. The study then employs an autoregressive distributed lag (ARDL) model to estimate the impact of savings mobilization and credit disbursement on poverty reduction. Hence, the model for this study is specified in a linear form:

To examine the effect of Deposit money banks' and microfinance banks' savings on poverty headcount in Nigeria, the following formula is used:

$$\begin{aligned} LPOVH_t = & \alpha_0 + \alpha_1 LnDMBSAV_t \\ & + \alpha_2 LnMFBSAV_t + \alpha_3 LnGDP_t \\ & + \alpha_4 LnHDI_t + \alpha_5 LnINFR_t \\ & + \alpha_6 INTR_t + u, \end{aligned} \quad (1)$$

where $LPOVH_t$ = Poverty headcount; $LnDMBSAV_t$ = Log (Deposit money bank savings); $LnMFBSAV_t$ = Log (microfinance bank savings); $LnGDP_t$ = Log (gross domestic product); $LnINFR_t$ = Log (Inflation rate); $LnHDI_t$ = Log (human development index); and $INTR_t$ = interest rate.

To examine how credits from Deposit money banks and microfinance banks influence the poverty headcount in Nigeria:

$$\begin{aligned} LnPOVH_t = & \gamma_0 + \gamma_1 LnDMBCRE_t \\ & + \gamma_2 LnMFBCRE_t + \gamma_3 LnGDP_t \\ & + \gamma_4 LnHDI_t + \gamma_5 LnINFR_t + \gamma_6 INTR_t u, \end{aligned} \quad (2)$$

where $LPOVH_t$ = Poverty headcount ratio; $LnDMBCRE_t$ = Log (Deposit money banks credits); $LnMFBCRE_t$ = Log (microfinance bank credit); $LnGDP_t$ = Log (gross domestic product); $LnINFR_t$ = Log (Inflation rate); $LnHDI_t$ = Log (human development index); and $INTR_t$ = interest rate.

3. RESULTS

Conducting a unit root test on the variables is essential to verifying their stationarity and assessing the appropriateness of the methodology employed in this study. As Table 1 shows, the results of the unit root test indicate that two variables are integrated in different orders, indicating level I (0), while the others achieve stationarity after the first difference, I (1), as indicated by the ADF test. Conversely, based on the Phillips-Perron (PP) test and Kwiatkowski-Phillips-Schmidt-Shin (KPSS), two variables display stationarity at level I (0), while the remaining ten variables attain stationarity after the first difference I (1). Revealing that all variables are stationary at different levels, i.e., order (0) and integrated at order one (1). With stationarity confirmed, a crucial prerequisite for the ARDL technique has been met. Unit Root Stationarity Test for Variables

Table 2 presents the Autoregressive Distributed Lag (ARDL) estimation results for the short-run and long-run impact of various financial and economic variables on the poverty headcount. The analysis evaluates the statistical significance of each independent variable to determine whether to accept or reject the formulated hypotheses. Each hypothesis is tested based on the probability (p-value) and coefficient of the respective variables in the short-run and long-run models. The decision to accept or reject a hypothesis depends on the statistical significance levels. If the p-value is < 0.01, it means a 1% significance level. If the p-value is < 0.05, it means a 5% significance level. If the p-value is < 0.10, it means a 10% significance level. If the p-value is > 0.10, it means no significance level. For H_1 : Deposit money bank savings have no significant impact on the poverty headcount; the short-run results show a coefficient of 0.0077 with a p-value of 0.0389. Since the p-value is less than the 5% significance level, the null hypothesis is rejected in the short run. This indicates

Table 1. Unit root stationarity test

Variables	ADF Statistic			PP Statistic			KPSS Statistic		
	Intercept	Intercept & trend	Observation	Intercept	Intercept & trend	Observation	Intercept	Intercept & trend	Observation
POVH	-3.30**	-2.92*	I (1)	-7.25***	-9.06***	I (1)	0.53*	0.19*	I (0)
DMBCRE	-7.12***	-7.22***	I (1)	-7.12***	-7.23***	I (1)	0.17***	0.05***	I (1)
DMBSAV	-11.84***	-11.72***	I (1)	-37.24***	-37.99***	I (1)	0.34***	0.33*	I (1)
MFBCRE	-6.94***	-6.95***	I (1)	-6.95***	-6.97***	I (1)	0.15***	0.07***	I (1)
MFBSAV	-8.21***	-8.28***	I (1)	-8.76***	-9.62***	I (1)	0.23***	0.12**	I (1)
GDP	-2.84**	-4.90***	I (0)	-5.17***	-5.25***	I (0)	0.17***	0.13**	I (0)
HDI	-3.84***	-3.98***	I (1)	-3.72***	-3.83**	I (1)	0.12***	0.12**	I (1)
INFR	-3.25**	-3.40*	I (1)	-3.32***	-3.41*	I (1)	0.15***	0.06***	I (1)
INTR	-4.39***	4.65**	I (1)	-4.20***	3.86**	I (1)	0.17***	0.13***	I (1)

Note: *, **, and *** show 10 percent, 5 percent, and 1 percent levels of significance, respectively.

that Deposit money bank savings have a significant impact on the poverty headcount, suggesting that such savings contribute to reducing poverty in the immediate period. In the long-run results, the coefficient is -0.0393 with a reported p-value of 0.0036 . If this value is interpreted strictly based on the 5% threshold, the null hypothesis should again be rejected, meaning Deposit money bank savings significantly reduce poverty over time. For H_2 : Microfinance bank savings have no significant impact on the poverty headcount; the short-run results indicate a coefficient of -0.0059 with a p-value of 0.0799 . Since the p-value is greater than 0.05 but less than 0.10 , the effect is only weakly significant at the 10% level. This means that in the short run, the null hypothesis is rejected at the 10% significance level, suggesting that microfinance bank savings have a modest but meaningful impact on reducing poverty in the immediate period. However, in the long run, MFB savings are not significant, the coefficient is -0.0393 with a p-value of 0.2366 , although the negative coefficient has a positive impact (i.e. more savings and less poverty), it is not statistically significant at 10%, suggesting only a weak or limited role in long-run poverty reduction. Therefore, the null hypothesis is accepted in the long run.

GDP has no significant impact on the poverty headcount in the short run. This is because in the short-run result, the Coefficient is -0.0253 , p-value is 0.2148 (not significant). In the long-run result, the Coefficient = -0.4199 and p-value = 0.0014 . GDP has a significant impact in the short run but has a highly significant negative impact in the long run. This means that higher GDP leads to

lower poverty levels over time, which aligns with economic growth theories. Inflation has a significant positive impact on poverty in both the short run and long run. This is because in the short-run result, the Coefficient = 0.0319 and p-value = 0.0158 (significant at 5% level). In the long-run result, Coefficient = 0.0065 and p-value = 0.0323 (significant at 5% level). This suggests that rising inflation exacerbates poverty by reducing purchasing power, especially for low-income households. HDI has a significant positive impact on poverty in the short run but a highly significant negative impact in the long run. In the Short-run result, the Coefficient = 0.4842 and p-value = 0.0257 (significant at 5% level). In the long-run result, Coefficient = -0.4186 , and p-value = 0.0006 (highly significant at 1% ***). This implies that as human development improves over time, poverty levels decrease. For the Interest rate, in the short-run result, the Coefficient = 0.0001 , and p-value = 0.9300 (not significant). It means Interest rate has no impact on poverty headcount in the short run, but has a highly significant impact in the long run, with the Coefficient = 0.0077 and p-value = 0.0001 (highly significant at 1% ***). The positive coefficient suggests that higher interest rates may increase poverty, likely due to higher borrowing costs limiting access to credit. Both Deposit money bank and microfinance bank savings have significant effects on poverty, though microfinance credit seems to correlate with higher poverty levels, potentially due to loan repayment challenges. Higher GDP and HDI contribute to poverty reduction, while inflation and interest rates worsen poverty by reducing real income and increasing borrowing costs. Policymakers should

focus on expanding access to savings and credit programs while ensuring that inflation and interest rates are controlled to avoid worsening poverty levels. Report R-square alongside the probability of f-statistics validate that the models estimated to track the impact of Deposit money banks and microfinance banks' savings on poverty headcount are fit, with the explanatory variables explaining about 97.5% and 96.4% of the systematic variation in poverty headcount for the two models, respectively. Deposit money bank savings showed short-run significance but not long-run significance, suggesting that while savings in Deposit money banks might help reduce poverty initially, their long-term effect is minimal. Microfinance bank savings had a highly significant long-run impact, which implies that encouraging savings through microfinance institutions is a more effective long-term poverty alleviation strategy.

Table 2. ARDL estimation of the impact of savings in deposit money banks and microfinance banks on poverty headcount

Variables	Short Run		Long Run	
	Coefficient	Prob.	Coefficients	Prob.
LnDMBSAV	0.0077*	0.0389**	-0.0393	0.0036***
LnMFBSAV	-0.0059	0.0799*	-0.0347	0.2366
LnGDP	-0.0253	0.2148	-0.4199	0.0014***
LnHDI	0.4842	0.0257**	-0.4186	0.0006***
LnINFR	0.0319*	0.0158**	0.0065	0.0323**
INTR	0.0001	0.9300	0.0077	0.0001***
CointEq(-1)	-0.2205*	0.0161	-0.0318	-0.1717
R-squared	0.975			
Adj R-square	0.964			
Dur-Wat stat	1.6876			
F-statistic	93.143	-	-	-
ProbF-stat	0.0000			
Bound F-test	6.8926*			

Note: *, **, and *** explain slightly significant, significant, and highly significant (10%, 5%, and 1% significance levels, respectively).

The hypotheses are tested based on the probability (Prob.) values of the short-run and long-run coefficients and the p-value in Table 3. The null hypothesis is rejected if the p-value ≤ 0.10 , indicating a significant impact of the independent variable on poverty headcount. If the p-value > 0.10 , the null hypothesis is accepted, indicating no significant impact. For H_3 : Deposit money bank Credit has no significant impact on the poverty headcount. Long-run coefficient is 0.0199 and p-value is 0.0914* (< 0.10). Hence, H_3 is rejected in

the long run and the alternative hypothesis is accepted. This indicates that Deposit money bank credit has a significant impact on poverty headcount in the Long run. The short-run coefficient is 0.0031 with a p-value of 0.0005 (< 0.10). Hence, H_3 is rejected in the short run, and the alternative hypothesis is accepted. This indicates that Deposit money bank credit has a significant impact on poverty headcount in the short run. For H_4 : Microfinance Bank Credit has no significant impact on the poverty headcount. Long-run coefficient is 0.0155 and p-value is 0.5222 (> 0.10). Hence, H_4 is accepted in the long run, and the alternative hypothesis is rejected. Microfinance Bank Credit has no significant impact on the poverty headcount in the long run. Short-run coefficient is 0.0025 and p-value is 0.3973 (> 0.10). Hence, H_4 is accepted in the short run, and the alternative hypothesis is rejected. Microfinance Bank Credit has no significant impact on the poverty headcount in the short run.

GDP does not have a statistically significant impact on poverty headcount in the long run, which contrasts with previous findings in the literature. This is because its long-run coefficient is -0.3057 and the p-value is 0.1522 (> 0.10). Inflation does not significantly impact poverty headcount in the long run. This finding suggests that inflationary pressures may not directly contribute to long-term poverty trends. This is because the long-run coefficient is 0.1421 and p-value: 0.1786 (> 0.10). Human Development Index (HDI) does not significantly impact poverty headcount in the long run, despite theoretical expectations that a higher HDI would reduce poverty. This is because the Long-run coefficient is 0.5869 and the p-value is 0.1761 (> 0.10). Interest rate does not significantly impact poverty headcount in the long run, implying that borrowing costs may not be a primary factor influencing poverty reduction. This is because the long-run coefficient is -0.0022 and the p-value is 0.3946 (> 0.10). The overall statistics of this model show a high R-squared value of 0.9626, indicating that the model explains 96 percent of the variation in poverty headcount. Likewise, the adjusted R-squared value of 0.9525 confirmed that the predictors also provide a measure of model fit. The F-statistic of 95.3301 is highly significant at a 1 percent significance level, indicating that the overall model is statistically significant.

Table 3. ARDL estimation of the impact of credit in deposit money banks and microfinance banks on poverty headcount

Variables	Short Run		Long Run	
	Coefficient	Prob.	Coefficients	Prob.
LnDMBCRE	0.0031	0.0005***	0.0199	0.0914*
LnMFBCRE	0.0025	0.3973	0.0155	0.5222
LnGDP	-0.0173	0.3724	-0.3057	0.1522
HDI	0.2862	0.0299**	0.5869	0.1761
INFR	0.0479	0.0006***	0.1421	0.1786
INTR	0.0017	0.1532	-0.0022	0.3946
CointEq(-1)	-0.1541	0.0647	7.1384	0.0038
R-squared	0.9626			
Adj R-square	0.9525			
Dur-Wat stat	1.7103	-	-	-
F-statistic	95.3301			
ProbF-stat	0.0000			
Bound F-test	5.8867*			

Note: *, **, and *** explain slightly significant, significant, and highly significant (10%, 5%, and 1% significance levels, respectively).

4. DISCUSSION

The results of this study provide key insights into the short-run and long-run effects of financial savings and credit on poverty headcount. In the short run, Deposit money bank savings significantly reduce poverty, but this effect is not sustained in the long run. This suggests that while Deposit money bank savings may provide immediate financial relief, they do not contribute to long-term poverty reduction, possibly due to limited financial inclusion and barriers to accessing accumulated savings for productive investment. This finding is similar to Babajide et al. (2015), who found that Deposit money banking services are commonly inaccessible to the poor due to stringent requirements. Nonetheless, it disputes Demirguc-Kunt and Klapper's (2012) finding that Deposit money bank savings contribute partly to poverty reduction in the long run through asset and investment accumulation. In the long run, microfinance bank savings have a significantly negative impact on poverty, supporting the assertion that microfinance firms are more effective at bringing financial inclusion to low-income people. This is consistent with the findings of Banerjee et al. (2015) and Morduch (1999), who accentuate the role of

microfinance in eliminating long-term poverty. The established long-term advantage of microfinance savings suggests that policies that encourage microfinance participation can lead to long-term poverty alleviation. Credit has uneven effects on alleviating poverty. Microfinance bank credit has a minimal but significant long-term impact on poverty reduction, implying that microfinance credit may give some economic benefits over time. However, the low significance level indicates that microfinance lending is not always an efficient strategy for poverty reduction, probably due to issues such as high interest rates and repayment difficulties, as observed by Bateman et al. (2019). The results presented here highlight the necessity of improving microfinance institutions as a form of financial inclusion and resolving the institutional problems that restrict Deposit money banking services' long-term effectiveness in alleviating poverty.

On the other hand, the Deposit money bank loan has a considerable short-term influence on poverty alleviation, but not in the long run. The outcomes of this study shed light on the interaction between financial and macroeconomic parameters and poverty reduction. GDP has a significant negative long-run impact on poverty, highlighting the importance of continued economic development for poverty alleviation. This finding is in line with Ratnawati's (2020) discovery that rising GDP reduces poverty by increasing employment opportunities and improving income distribution. However, Table 3 shows that GDP has no statistically significant long-run effect, which contradicts mainstream economic theory and previous research like Dollar and Kraay (2002). The disparity could be attributable to disparities in the structural substance of economic growth, as increased GDP does not always imply pro-poor growth. Inflation has been proven to dramatically exacerbate poverty in both the short and long run, demonstrating that rising prices reduce low-income households' purchasing power. This finding supports Menna and Tirelli (2017), who stated that inflation harms the poor by decreasing their real income and restricting access to key commodities and services. However, Table 3 shows that inflation has no substantial long-run effect on poverty, which contradicts earlier findings. This

disparity could be due to how inflation interacts with other macroeconomic factors like wage adjustments and government intervention policies. Poverty in the short run is positively impacted by the Human Development Index (HDI), but it is considerably and negatively impacted in the long run, demonstrating that long-term poverty reduction requires investments in education, healthcare, and living conditions. This outcome is consistent with Sen's (1999) research, which highlighted the significance of human capital development in long-term economic empowerment. Nonetheless, Table 3's findings reveal that the HDI has no statistically meaningful long-run impact on poverty, contradicting expectations. This disparity could be attributed to differences in how HDI components, such as literacy rates and healthcare accessibility, turn into economic benefits across regions and periods. Interest rates were found to have a strong positive influence in the long run but no significant effect on poverty in the short run, showing that higher borrowing costs lead to long-term poverty. This is consistent with the findings of Stiglitz and Weiss (1981), who emphasized the negative consequences of high interest rates on credit accessibility for low-income consumers. However, Table 3 reveals that interest rates do not have a significant long-run effect on poverty, contradicting previous findings. Variations in financial market arrangements, as well as the impact of informal credit channels in mitigating high borrowing costs, may explain the discrepancy. The investigation of deposit money bank and microfinance bank savings emphasizes

the necessity of financial inclusion. Though Deposit money bank savings had a considerable short-term influence on poverty, the effect was not long-lasting. This implies that even though savings in Deposit money banks may bring temporary financial relief, they do not necessarily lead to long-term poverty alleviation. This correlates with Demirguc-Kunt and Klapper (2012), who found that formal banking services typically remain inaccessible to low-income individuals due to onerous banking regulations. In contrast, microfinance bank deposits had a highly substantial long-run impact, validating the claim that microfinance institutions play an important role in long-term poverty reduction (Morduch, 1999; Banerjee et al., 2015). The study also discovered conflicting effects of credit on poverty. Deposit money bank credit substantially decreased poverty over time; in line with earlier research showing that access to formal credit sources promotes productive investments that enhance wellbeing (Babajide et al., 2015; Beck et al., 2007). Nevertheless, microfinance bank credit was related to higher poverty rates, implying that microfinance loans are not always employed for positive reasons. This study supports Bateman (2010), who suggested that microfinance lending, especially when combined with high-interest rates and repayment issues, can lead to financial suffering rather than poverty alleviation. In general, the findings show that governments must concentrate on boosting financial inclusion through microfinance while maintaining control over inflation and interest rates.

CONCLUSION

The purpose of this study was to investigate how financial inclusion, as determined by mobilizing savings and credit, affects the fight against poverty in Nigeria. The study evaluated the short- and long-term connections among financial inclusion, macroeconomic variables, and poverty levels using the Autoregressive Distributed Lag (ARDL) approach. The goal was to ascertain whether financial access via deposit money banks and microfinance banks helps to reduce poverty and to pinpoint the precise financial products that work best in this area. The findings revealed that both GDP growth and the Human Development Index (HDI) significantly reduce poverty over time, emphasizing the importance of economic growth and human capital development in long-term, sustainable poverty reduction. Inflation exacerbates poverty both in the short run and long run by diminishing purchasing power, particularly among low-income households. Although interest rates have minimal immediate influence on poverty, they have a considerable long-term impact, demonstrating that high borrowing costs discourage low-income people from using financial

services. Microfinance bank savings had a large long-term impact on poverty reduction, whereas Deposit money bank savings had just a short-term benefit. This demonstrates the importance of tailored financial services for low-income areas. Microfinance credit was associated with higher levels of poverty, possibly due to high interest rates and repayment difficulties, whereas Deposit money bank credit reduced poverty over time. The study concluded that, while financial inclusion is crucial for poverty reduction, its effectiveness is determined by how financial services are structured. Policies that promote inclusive GDP development, job creation, and human capital investment are critical for long-term poverty reduction. Given the tight relationship between inflation and poverty, monetary policies should prioritize price stability to protect vulnerable people. The negative impact of micro lending credit on poverty emphasizes the importance of improving lending conditions, such as lower interest rates, flexible repayment schedules, and increased financial literacy, to ensure efficient loan utilization. Nevertheless, the long-term importance of microfinance savings highlights the need for government incentives such as savings-matching programs and deposit insurance to encourage financial security among low-income earners. Future research could examine how institutional factors influence financial inclusion and reduce poverty. Future research should also examine the impact of regulatory policies, financial sector development, and governance frameworks on the efficiency of loan and savings mobilization. Moreover, a comprehensive investigation of how different microfinance lending practices affect poverty may shed light on longer-term financial possibilities for low-income populations. Expanding the study to include sector-specific or regional financial inclusion programs may also help to improve understanding of how to maximize financial access for poverty eradication.

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