Microfinance Banks' Operations and Rural Development in Nigeria: An Empirical Discourse

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Abstract: The study examined the effects of Microfinance banks' operations (MBOs) on rural development in Nigeria for period of (20) years spanning through 2002 to 2022. The regressor employed are microfinance banks' investments (MBIV), microfinance banks' deposits (MBDP), and microfinance banks' loans (MBLA) while the regressed is rural development. Again, inflation rate (INFR) served as the control variables. Data were collected from CBN Statistical bulletin, 2021. The study adopts the Fully Modified OLS (FMLS) Methodology. Data set was described using descriptive statistics, correlation analysis, and inferential analysis (FMLS). The finding shows microfinance banks' investments (MBIV), microfinance banks' deposits (MBDP) improved rural development significantly. However, both microfinance banks' loans (MBLA) and lending rate (INFR) discouraged rural development significantly. Hence, the paper concludes that, microfinance banks' operations improved rural development of Nigeria provided that, microfinance banks' loans (MBLA) and inflation rate (INFR) are reduced to a great extent. As such, the Nigerian government should support and foster the development of new microfinance institutions in rural areas since doing so will give residents of those areas who lack easy access to banking services the opportunity to deposit money and develop a saving habit. Rural residents require financial education. The (CBN) should launch programs that focus on business investment opportunities made available by the services of MOBs in partnership with other organizations.

Keywords: Microfinance banks' Operations (MBOs), Microfinance Banks' Investments (MBIV), Microfinance Banks' Deposits (MBDP), and Microfinance Banks' Loans (MBLA).

1.0 INTORDUCTION

The major reason why microfinance banks are solely established is to meet the financial needs of those financially excluded. As such, microfinance institutions are expected to increase financial intermediation, mobilize more deposits, and instill a habit of banking among rural residents. The rationalization is that, in Nigeria and other developing nations where the majority of population lacks access to formal financial services, either for credit or for savings, inadequate credit supply has over time been a significant production constraint, preventing economic growth and development. According to CBN's 2005 Microfinance Policy Framework, the goals of MOBs are to give the underprivileged and private sector access to necessary financial services. This primary bank activity will give them the ability to engage in or broaden the range of economic activities they now engage in and create jobs. According to Ojiegbe, Nwaru and Duruechi (2019), present microfinance institutions neglect a sizable portion of poor who are active in rural areas.

Additionally, eradicating poverty has proven to be a very difficult undertaking for many emerging nations, but especially so in Nigeria. This knowledge led the Obasanjo administration to state that the N470 billion budget for year 2000 was intended "to relieve poverty" in November 1999 (CBN 2005). Despite numerous government initiatives to combat poverty, including those using MBing, poverty is increasing in Nigeria rather than decreasing. As was mentioned previously, a banking concept called MOBs was created with the express purpose of reducing poverty. Although this idea has challenges in Nigeria, it has succeeded in many other developing and developed nations of world, and its prospects are high if the Application of notion is done correctly, and compliance is monitored. These noble goals of these specialized banks are thought to be failing as result of ineffective policy implementation and insufficient funding, as their actual influence on welfare of poor is minimal. According to investigations, there are an increasing number of MOBs that are failing to satisfy their depositors' demands, and more banks are closing their doors as result.

Furthermore, microfinance banks are owned and run by the community itself, in contrast to people's bank; this fosters a feeling of community and commitment to success of such financial projects. Additionally, as previously mentioned, the difficulties faced by company owners in raising capital for their ventures led to creation of microfinance banks (Okere, Okere, & Adioha, 2021). Given that the majority of Nigerians live in rural areas and the significance of rural development to both the quality of life for rural residents and the expansion of national economy, it is impossible to overstate the importance of rural development in Nigeria. Rural development is therefore essential to national growth. Thus, by virtue of its statutory purpose, microfinance has power to significantly improve the quality of life in rural communities.

The Nigerian government created the microfinance banks as specialized development bank to encourage community banking to achieve rapid integrated rural development and entrepreneurship growth (Udeh, Eneje & Ani 2018). The introduction of using program coincided with the rural branches of commercial banks being unable to fulfill the aim of rural development due to operational losses that could not be sustained. The microfinance banks were formed to address the gap in loan delivery left by the

traditional banks, community banks, and People's Banks of time (Okafor, 2016). Further, when the microfinance policy, regulatory, and supervisory framework was introduced on December 15, 2005, the activities of mmicrofiannce banks grew more evident, more secure, and covered a greater area. MOBs act as bridge between the excess and deficit parts of economy, much like any other financial organization. They strive to fulfill their two stated goals of financial and social sustainability. They vigorously pursue their financial mission to make sure they can continue operating (Udeh, Eneje, & Ani, 2018). By providing financial services to underprivileged, they further their social mission while advancing the idea for which they were founded. This bank is business with a license that authorizes the business that delivers financing services to economically deprived poor, micro companies, and small and medium-size enterprises whom need financial services to operate or expand their businesses. These services include savings, loans, domestic funds transfer, and other financial services.

The major challenge which the current study seeks to address is that, the most depressing issue is that the poor, whom these institutions are designed to rescue from the grasp of poverty, continue to fall into deeper poverty even with the rise in the loans, deposits and investments made. Justifiably, the impoverished that placed their little incomes in these banks with the express intention of receiving small loans lost everything when the institutions failed. Again, despite having admirable goals and ideals, thorough analyses and suggestions, and a variety of policies and programs put forth by successive governments to combat poverty in Nigeria, microfinance institutions still have failed to make a dent because the rate of poverty is continually rising. Another issue of great concern is that, it is commonly known that the majority of microfinance institutions (85%) are found in cities, keeping them far from people who live in rural areas. The question then is: have MOBs actually aided in country's rural development in light of these issues? Once more, have MOBs offered prompt and reasonably priced financial services to country's economically active poor in rural areas? Therefore, this paper seeks to ascertain how Nigerian microfinance banks' operations (MBOs) affect rural development of Nigeria from 2002 to 2021.

2.0   Review of Literature

2.1   Conceptual Review.

According to CBN's "Regulatory and supervisory Guidelines for MFBs", are organizations that have been granted a license to engage in business of offering microfinance services, such as loans, savings, domestic loans, transfers, and other financial services, to economically active poor and entrepreneurs to help them start & grow their businesses. Microfinance is described by Kingsley, Josephine, and Monanu (2023) as small-scale financial services that primarily provide lending and savings services to poor. Twenty years ago, the term "microfinance" referred to practice of giving poor people extremely tiny loans (microcredit) to encourage them to start new, profitable businesses or to expand already existing ones.

In Nigeria, microfinance institutions have sped up the implementation of government initiatives to combat poverty and assisted deserving businesspeople while also fostering the emergence of new ones. The following are some ways that MOBs have influenced rural development and the reduce poverty

- **Loans & Advances**

  It was created with the goal of improving the lives of engaged poor in communities under its previous moniker, "community bank." The main reason why MOBs were founded was to give the rural population access to funding for small companies. According to Wachiukwu, Onyiema, and Amaidi (2019), the economies of rural communities in Nigeria are agro-based and comprise a large number of informal microeconomic units.

- **Investment Opportunities**

  Majority of Nigeria's population relies on informal sector for their livelihoods, making its development essential for growth of whole economy (Kamara, & Kamara, 2023) The growth of informal economy and, by extension, development of national economy, can both be significantly aided by MOBs. However, majority of micro finance institutions only offer the standard banking service of mediating between surplus and deficit economic agents. Proximity of microfinance institutions to rural residents provides them a better chance to take use of possibilities in unofficial sector.

- **Deposit Mobilization**

  The MOBs have mobilizes and harness deposits from rural communities as result of DMOBs incapacity to reach out to rural residents. Due to large number of people who are unable to access banking services and lack of nearby financial institutions, their marginal propensity to consume is relatively high when 5% is assumed to be their marginal inclination to save (Ihegboro & Ifeoma, 2023). However, since modern microfinance institutions have risen in these communities, the majority of rural residents have formed the saving habit; as result, microfinance institutions now condition any credit advance on required saving. However, the followings are some of difficulties that MOBs in Nigeria face:

  One of main issues that have to be resolved is ineffective management; senior management personnel mismanage finances.

- **Risk associated with loans**; some borrowers fail to repay them after being collected, which is bad for MFB's expansion.
- **Unusual government regulations;** The government does not uphold its regulations, and frequently, these regulations do not confirm standards that will aid in operation of microfinance.

- **Ineffective financial management;** The majority of these banks don't have enough money to reach the growing number of active borrowers who require loans. This is frequently brought on by insufficient resources, capital, and landing.
- **Misappropriation of funds;** One difficulties that arises when the government sponsors funding programs intended to improve lives of citizens is when certain funds intended for loans are diverted to other uses.

Furthermore, rural development can be viewed as process of extensive societal change in which rural societies diversify their economies and lessen their reliance on agriculture; become reliant on distant locations for trade and the acquisition of goods, services, and ideas; relocate from scattered communities to towns to small and medium cities, and culturally converge more with sprawling metropolitan slums. (Nwude & Anyalechi 2018). Despite these widespread patterns, the consequences of rural development in various nations vary in terms of economic expansion, social participation, and environmental sustainability.

While global influences are what propel this evolution, they are tempered by specialized social arrangements and institutional frameworks since local societies at any one time have a variety of opportunities to do and view things. (Okere, Okere, & Adioha, 2021). There is no question about microfinance's potential to promote rural development. it is anticipated that rural development in Nigeria will receive the significant attention required by the microfinance institutions due to its existence, mandate, and regulation (Orjinta & Ighosewe, 2022).

2.2   Theoretical Underpinning

The bank capital channel theory was used to underpin the study. According to this hypothesis, how banks (microfinance banks to be specific) treat small-business borrowers when they borrow money is key determinant of capital requirements' sufficiency. According to Obamuyi (2007), changes in interest rates may have an impact on banks' ability to lend money to small firms. Thus, rising interest rates raise cost of banks' external financing while lowering their profitability and capital. If the capital limit's enforced, banks have a tendency to reduce the amount of loans they offer. Furthermore, banks might be more eager to extend credit when interest rate is advantageous.

2.3   Empirical Literature

Omorose, Igbinovia, and Amenze (2022) explored MOBs on Economic Development (ED) in Nigeria from 1992 to 2020. (ARDL, ECM Model were adopted). Result revealed that MOBs operations significantly spur economic development in Nigeria.

Ihegboro & Ifeoma.(2023) examined microfinance institutions on economic growth from 1992 to 2019. The study adopts the OLS. Result show that microfinance credits emphatically affect the short-run monetary presentation in Nigeria.

Wachukwu, Onyema and Amadi (2019) investigated on the contributions of microfinance institutions on economic growth of Nigeria from 1992-2016. The study employed both descriptive & inferential statistic. The results indicated strong but negative relationship was also found between MB credit growth and per capita income.

Kingsley, Oluka, and Ivoma (2023) studied MOBs as key entrepreneurship development in Enugu North Nigeria. Chi-square statistical tool was adopted. Findings shows MB saving services had significant positive effect on productivity of entrepreneurs in Enugu North LGA.

Ojiegbe, Nwaru and Duruechi (2019) examined MB's operations on poverty alleviation in Nigeria. We tested for and corrected Autocorrelation and Muiticoliinearity. Our findings were as follows: the operations of MFBs have played significant role in poverty reduction in Nigeria, loans & advances of MFBs have significant negative impact on poverty alleviation.

Okere, Okere, and Adioha, (2021) studied MOBs in rural development in Nigeria. This study concludes that MOBs have reasonably contributed to rural development & poverty alleviation in Nigeria.

Nwude and Anyalechi (2018) examined microfinance activities on rural economic growth and savings in Nigeria for period 2000–2015. The OLS regression was used. The findings revealed that the introduction of micro finance banking in Nigeria have not contributed to agricultural productivity but had assisted in increasing rural savings habits in Nigeria.

Udeh, Eneje and Ani (2018) investigated the microfinance contribution to Nigeria's gross domestic product. Time series data for 12-years period 1999-2010 were collated from CBN. The least squares (LS) regression was used. Result revealed that microfinance activities have negative and non-significant contribution to gross domestic product in Nigeria.

Yahaya, Oni, Ishola, Gbadamosi and Odeseye (2018) examined microfinance institutions' policies on Rural Development in Kwara State, Nigeria. The study employed primary data obtained through questionnaire. Multiple regression analysis was used. Results revealed positive relationship between adoption of MOBs and its policy objectives of savings culture, provision of investment loans, and employment opportunities in rural areas of Kwara state.

Okafor (2016) examined the effects of microfinance institution activities on standard of living in Nigeria from (1993-2012). The result showed that microfinance institution activities do not have significant positive impact on standard of living in Nigeria.

METHODOLOGY

The study adopted the ex-post facto research design. The study covered all quoted Microfinance Banks quoted in the Nigerian exchange Group as at December 31st, 2021. Given that the study involved the whole industry, there would be no need for sample size since the sample size equals the population. This means that the sample give a fair view of entire population. This study made use of secondary data as the main source of information and was sourced from the CBN Statistical Bulletin from 2002 to 2021. Again, the (OLS) was adopted.

Model Specification

This study intends to model after the works of Ahmed and Amina (2019). Econometrically, the model for study is specified below:

RUDV = f (MBIV, MBDP, MBLA, INFR) --1

Econometrically, the model stated above will be re-modified by as adding lending rates as control variable:

$$RUDV_{i,t} = \beta_0 + \beta_1 MBIV_{it} + \beta_2 MBDP + \beta_3 MBLA + \beta_4 INFR + U_{it} \text{ --------------2}$$

Where:

RUDV   =   Capital Expenditure to Rural local governments
$MBIV_{it}$ =   Microfinance investment i in Year t
$MBDP_{it}$ =   Microfinance Deposit i in Year t
$MBLA_{it}$ =   Microfinance Loan and Advances i in Year t
$INFR_{it}$ =   Inflation Rate i in Year t
β_0 =   Intercept
$\beta_1 - \beta_4$ =   Co-efficient of Regressors
U_{it} =   Error Term

Table 1: Operationalization of Targeted Variables

Code	Study Variable	Measurement	Aprioiri Expectation
		Dependent Variable	
RUDV	Rural Development	Capital expenditure to rural area	NIL
		Independent Variables	
MBIV	Microfinance Banks' Investments	Aggregate sum of MBIV	+
MBDP	Microfinance Banks' Deposits	Aggregate sum of MBDP	+
MBLA	Microfinance Banks' Loans	Aggregate sum of MBLA	+
INFR	Inflation Rate	Consumer Price Index (annual %)	-

Source: Researcher's Compilation (2023)

4.0 Presentation, Analysis of Data and Discussion of Results

4.1 Descriptive Statistics

The statistics include mean, median and standard deviation values for individual variables.

Table 2: Descriptive Statistics

	Mean	Maximum	Minimum	Std. Dev.	Observations
RUDV	48108.76	69023.93	22449.41	16055.50	20
MINV	4182.071	8959.800	436.8000	2636.631	20
MDEP	71096.35	182100.7	4140.320	55245.06	20
MLOA	65296.36	196195.0	2958.300	66494.74	20
INFR	11.36528	17.86300	5.382000	3.671624	20

Source: E-Views 9.0 (2023)

Table 2 disclosed that, RUDV, MBIV, MBLA and INFR, have mean values of ₦48108.76, ₦4182.071 billion, ₦71096.35 billion, ₦65296.36 billion, and 11.37% respectively but they deviated by ₦16055.50, ₦2636.631, ₦55245.06, ₦ 66494.74 billion, 3.67%. By implication, RUDV, MBIV, MBLA and INFR clustered around their average values. Out of the three (3) MBOs, MDEP recorded the highest value while MINV recorded the least value. More so, the highest INFR recorded is 17.86% while the least is 5.38%. This is a clear indication that, the rising INFR need to be addressed otherwise the value of the loans which Microfinance banks gives would be worthless. To check for normality, the p-value of the Jarque-Bera was considered as stated in table 3. It proved that, all the variables are normally distributed.

Table 3: Normality Test

Variables	Jarque-Bera	Probability	Observations	Decisions
RUDV	1.386812	0.499871	20	Normally Distributed
MINV	0.976787	0.613611	20	Normally Distributed
MDEP	1.484815	0.475967	20	Normally Distributed
MLOA	3.098805	0.212375	20	Normally Distributed
INFR	0.901251	0.637229	20	Normally Distributed

Source: E-Views 9.0 (2023)

4.2. Correlation Matrix and Multicolinearity Test

The Correlation matrix which accounts for the degree (extent) of linearity (association) between the regressor and the regressed and among the study variables is presented in table 3:

Table 4: Correlation Matrix and Multicolinearity Test

	RUDV	MBIV	MBDP	MBLA	INFR	VIF
RUDV	1.0000					
MBIV	0.6897	1.0000				3.0306
MBDP	0.5655	-0.1678	1.0000			1.4334
MBLA	-0.8977	0.2904	-0.1867	1.0000		2.0655
INFR	-0.3904	0.2459	-0.2241	0.1057	1.0000	2.4342

Source: Econometric Views Version 9.0 Output (2023)

From Table 4, all the variables MBIV and MBDP with coefficient values of 0.6897, and 0.5655 have linear (direct) moderate relationship with RUDV. By implication, the more the MBIV and MBDP, the more the RUDV. Meanwhile, MBLA and INFR with coefficient values of -0.8977 and -0.3904 have non-linear (indirect) strong and moderate relationship with RUDV. By implication, the higher the MBLA and INFR, the lower the RUDV. However, when the relationship among the regressors was considered, low correlation was reported since their coefficients were below 80% (Chucks, Felix, & Temile, 2021). To authenticate the absence of Multicolinearity, the Variance Inflation Factors (VIF) was considered. The result proved that, the model is not Multicolinearity bias.

4.3. Other Diagnostic Tests

To further reaffirm that, the model is highly predictive, other diagnostic tests considered. As evidenced in table 4, all the other diagnostic tests shows that, the model spreads equally, well-fitted, and also did not exhibit sign of serial correlation.

Test	Chi-square	P-Value	Decisions
Heteroskedasticity Test	0.578444	0.8556	Homoskedastic
Ramsey Reset Test-RRT	4.804307	0.7904	Well-fitted
Serial Correlation Test	0.390553	0.8033	No Serial Correlation

The Heteroskedasticity Test: Breusch-Pagan-Godfrey reported a Prob. F of 0.8556. This implies that the model is devoid of serial correlation and that it's Homoskedastic.

4.4. Regression Result

Table 5: Fully modified OLS (FMLS) Estimate

Regressed: RUDV

Method: Fully Modified OLS

Date: 07/20/2023 Time: 02:37

Sample: 2002 2021

Included observations: 20

Variable	Coefficient	Std. Error	t-Statistic	Prob.

C	0.856735	0.33523	2.555701	0.0364
MBIV	0.489843	0.28977	1.690453	0.0377
MBDP	0.545244	0.33589	1.623267	0.0043
MBLA	-0.739883	0.25893	-2.857390	0.0332
INFR	-0.690585	0.23733	-2.909763	0.0074

R-squared	0.834674	Mean dependent var	48108.76
Adjusted R-squared	0.737724	S.D. dependent var	16055.50
F-statistic	45.90386	Durbin-Watson stat	2.012378
Prob. (F-statistic)	0.000030		

Source: E-Views 9.0 (2023)

The FMLS revealed that, the R^2 (R-squared) and the Adjusted R-squared (Adj. R^2) denoted at 0.834674 and 0.737724. By implication, the model has a high predictive value (power). Again, the Durbin-Watson stat of 2.012378 proved that, the model is free from serial correlation. Meanwhile, the Prob. (F-statistic) provide that, MBOs has a high effect on RUDV. Similarly, MBIV has direct (positive) significant effect on RUDV. Positive result implies that 1% rise in MBIV will increase RUDV by 0.489843. This result meets the aprioiri expectation of study. Also, it is significant. This result is in tandem with the study of Nwude and Anyalechi (2018) but contradicts the works of Okere, Okere, and Adioha, (2021). More so, MBDP has positive and significant effect on RUDV. The positive result implies that, 1% rise in MBDP will increase the RUDV by 0.545244. This result however meets the aprioiri expectation of study. This result is in tandem with the study of Okafor (2016) but contradicts the works of Yahaya, Oni, Ishola, Gbadamosi and Odeseye (2018)

Conversely, MBLA has negative yet significant effect on RUDV. The positive result implies that 1% rise in MBLA will reduce RUDV by 0.739883. This result is in tandem with the aprioiri expectation of study. However, it is significant. By implication, the more loans are given by microfinance banks, the lower of RUDV. This is due to higher lending rate. This result is in tandem with the study of Wachukwu, Onyema and Amadi (2019) but contradicts the works of Omorose, Igbinovia, and Amenze (2022)

Lastly, INFR has negative significant effect on RUDV. The negative result implies that 1% rise in INFR will decrease the RUDV by 0.690585. This result supports the aprioiri expectation of study. Also, INFR is significant. This result is in tandem with the studies of Omorose, Igbinovia, and Amenze (2022) but contradicts the works of Okafor (2016).

Conclusion and Recommendations

The purpose of this study was to examine how Nigeria's rural development has been impacted by the activities of microfinance banks. Given that rural people in Nigeria make up the majority of the population, are the most depressed, and represent a potential source of food, income, and energy for the country, rural development in Nigeria has become vital. Hence, this study investigated the effects of MBOs on RUDV in Nigeria from 2002-2021. The MBOs proxies (regressors) are MBIV, MBDP and MBLA while, the regressed is RUDV. The study therefore concludes that, microfinance banks' operations improved rural development of Nigeria provided that, microfinance banks' loans (MBLA) and inflation rate (INFR) are reduced to a great extent. Hence, the following submissions were made:

1. The government should support and foster the development of new microfinance institutions in rural areas since doing so will give residents of those areas who lack easy access to banking services the opportunity to deposit money and develop a saving habit.
2. Rural residents require financial education. The CBN should launch programs that focus on business investment opportunities made available by the services of MOBs in partnership with other organizations.
3. The majority of rural communities should have easier access to loans & advances offered by MOBs to provide for their economic empowerment.
4. When compared on an annual basis, the lending rate for loans & advances is rather higher than the rate for deposit money institutions. Financial authorities should work together to keep the rate low so that the rural poor who are engaged can easily access these facilities.

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