INFLUENCE OF MICRO-FINANCE BANK ON THE NIGERIAN ECONOMY

IREJEH, Enaikpobomene Mina
Department of Marine Economics and Finance,
Nigeria Maritime University, Okerenkoko,
Delta State, Nigeria.
E-MAIL: irejehmina@gmail.com

OKORO, Longlife Owei
Department of Marine Economics and Finance,
Nigeria Maritime University, Okerenkoko,
Delta state, Nigeria.
Email: longlifeokro@gmail.com

MARKWE, Henry Somayina
Department of Banking and Finance,
Delta State Polytechnic, Ogwashi-Uku,
Delta State, Nigeria.
Email: henrysomayina@gmail.com

ABSTRACT

This study examined the influence of microfinance bank (MBs) on the Nigerian economy from 2000 to 2022. Specifically, the study examined the influence of MLOA, MDEP, MINV and MAST on RGDP. Data for the study was sourced from CBN statistical bulletin and annual report of MBs, and analyzed using descriptive statistics, unit root test, cointegration test, and granger causality test. Result emanating from the study revealed that MLOA, MINV, and MDEP have positive and insignificant effect on RGDP while MAST has direct yet significant influence on RGDP. Hence, while, improving investment and other forms of wealth accumulation should be the long-term objective, we advise microfinance firms to provide loans in the short term to boost consumption.

*Keywords***:** Micro-Finance, Micro-finance Deposits, Micro-finance Assets, Micro-finance Investment, Human Capital Development, Real Gross Domestic Product.

INTRODUCTION

It is impossible to overstate the contribution microfinance bank (MB)s provide to economic expansion. Scholars, decision-makers, and organizations in both developed and developing nations are interested in the relationship between microfinance and economic growth. Apere (2016) asserts that microfinance can be viewed as an economic growth strategy meant to benefit Nigeria's low-income population, including the impoverished in the country's cities and rural areas. The definition of microfinance is a development instrument that helps the exceptionally

poor to grow their enterprises by granting or providing financial services and products such as modest loans, savings, micro-leasing, micro-insurance, and money transfer. Any economy's potential to thrive depends on how easily small and medium-sized businesses can access funds.

The CBN (2018) defines microfinance as giving financial services to the poor, who make up the majority of the population and are primarily 65% of those who are not able to obtain financial services from traditional banks. In most developing nations, including Nigeria, the primary cause of the rising rate of poverty has been determined to be lack of access to credit facilities. MBs are crucial to a nation's economic development, particularly in the services they offer to the underserved and economically engaged individuals in rural & urban areas. These services aid in achieving the goals of economic growth, which include reducing poverty, generating jobs for entrepreneurs, assisting small and medium-sized businesses in expanding, and promoting establishment of new businesses (Adegbola 2022). Credit from MBs raises the living standards and production of small and medium-sized businesses.

Microfinance is not a recent development in Nigeria. Before the establishment of official microfinance institutions, small-scale retailers and farmers in rural areas dominated informal microfinance practices such "esusu," "adashi," "otataje," and "ajo." However, the Nigerian central bank developed a new framework of policies in 2005 to improve the availability of financial services to low-income households and micro-entrepreneurs who need such loans to raise their standard of living and increase productivity, both of which will contribute to the country's economic growth. MB establishment contributed to the accomplishment of Millennium Development Goal of reducing poverty. MBs can be found in both rural & urban settings, supporting young entrepreneurs in achieving their aspirations and helping commercial farmers by providing financing. According to Chakra et al. (2022), MBs are crucial in combating poverty at both individual and institutional levels, in addition to lending capital to the underprivileged. This is a result of funding given to business owners and commercial farmers, who are then engaged in profitable endeavors, raising production levels, and spurring economic growth. Microfinance is a driving force behind the nation's economic expansion.

Both Federal and State governments have realized that financial empowerment of rural areas, which house most of the disadvantaged in the society, especially, small, and medium-sized businesses, is essential for sustained growth and development. The Federal government has implemented numerous programs over the years that are aimed toward the nation's impoverished and vulnerable populations (Ifionu & Olieh 2016). While some of these programs concentrated on creating jobs for self-employment, others offered microfinance to the underprivileged. The following initiatives failed: the Community Banking Scheme; the Nigerian Agricultural and Cooperative Bank Ltd (NACB); the Peoples Bank of Nigeria; the Directorate of Food, Roads and Rural Infrastructure (DIFRRI); the National Directorate of Employment (NDE); the National Agricultural and Land Development Agency (NALDA); the (NAIC); the Better Life Programme; the Family Support Programme (FSP); the (FEAP); the NPEP; and the Nigerian Agricultural Insurance Corporation (NAIC); these initiatives are among others. These difficulties provided the rationale behind the establishment of MBs in 2005. In the light of the aforementioned, this study looks at how MBs affect Nigeria's economic expansion. Researchers, institutions, and monetary authorities continue to discuss whether MBs benefit Nigeria's economic growth, despite the

significant roles they have played in the country's economies. While several studies have focused on the relationship between MBs and economic growth, the emerging results from these studies are inconsistent. While several studies have confirmed the beneficial effects of microfinance operations on real economic variables, there are studies whose findings finding seem to undermine the role of MBs in economic growth process. There is therefore good reason to investigate the impact of MBs on economic growth using an up-to-date data. To provide answers to the above questions, the following research hypothesis was formulated:

$H0_1$: MB loans and advances do not have statistically significant influence on the Nigerian economy.
$H0_2$: MB investment does not have statistically significant influence on the Nigerian economy.
$H0_3$: MB deposit does not have statistically significant influence on the Nigerian economy.
$H0_4$: MB fund transfer does not have statistically significant influence on the Nigerian economy.

LITERATURE REVIEW

Concept of Microfinance

Microcredit and microfinance are two terms that have been used synonymously. According to the World Bank. (2021), microfinance includes loans, savings accounts, insurance, transfer savings, microcredit loans, and other financial services aimed at people with low incomes. Similarly, Oluwatobi, (2018) defined microfinance as a group of financial services that impoverished industrialists and small business owners who lack security and are unable to meet the requirements for a typical bank loan can access, such as credit, advances, money, and insurance coverage. According to the Consultative Group to Assist the Poor (CGAP), the word "microfinance" refers to a broad range of products (such as investments, spending, payments, and insurance coverage) that are tailored to the unique requirements of low-income individuals.
According to World Bank (2021), the CBN defines microfinance bank as financial services offered to the underprivileged that are typically ignored by traditional financial and monetary institutions. According to this definition, microfinance differs from other official financial and monetary products in three ways. These include the simplicity of use of the processes, the lack of asset-based securities, and the compactness of highly developed loans and funds collected.
According to Ogaboh, and Nkpoyen (2019), microfinance is the practice of making modest loans to people who lack the assets necessary to be guaranteed by a regular bank but are too impoverished to be eligible for such loans. It is evident from the different meanings of the term "microfinance" that there isn't one that is recognized by everyone.

Categories of microfinance Banks

MBs have been categorized to satisfy the needs of having sufficient capital, being technically sound, and considering the characteristics of their clientele.
Unit microfinance bank (MB): This category of MBs is allowed to conduct business in a single area. It is not allowed to establish branches or cash centers, and it must have a minimum paid-up capital of ₦20 million (twenty million naira) (Ochonogor, 2020).

State Microfinance Bank (MB): This category of MBs is permitted to conduct business and operate branches within the same state or the FCT (Abuja). State MBs must have a minimum paid-up capital of ₦100 million (one hundred million naira), while each new branch must first receive written clearance from the CBN) (Mengesha & Tanase 2021).

National microfinance Bank (MB): The category is permitted to conduct business in the FCT(Abuja) as well as in multiple states. It can open branches in all states of the federation and the FCT(Abuja), provided CBN has given its prior written clearance. Its minimum paid-up capital must be ₦2 billion (Two Billion Naira) (Khan & Malik, 2020).

Microfinance Bank (MB) Loan & Advances

One of the most significant roles played by (MB)s is credit distribution, since the loans they provide are utilized to launch new ventures as well as to expand already established ones (Ihegboro et al., 2023). Economic growth is positively and significantly impacted by loans and advances. Because MB loans are directed at small and medium-sized businesses and agricultural projects, they contribute to raising the standard of life for individuals in developing nations. Customers of microfinance banks are given credit based on deposits that are mobilized. The main source of revenue for banks is interest-bearing loans and advances. A large proportion of a bank's total assets comprises loans and advances.

Microfinance Bank (MB) Deposit

Customers' savings are the source of microfinance bank (MB) deposits, which are used as a source of loans for microfinance clients. Local depositors' savings are the main source of funding for microfinance. To generate deposits, the public is urged to save. Typically, MBs give interest on the money that is saved. According to Babarinde (2022), the provision of microfinance services boosted the saving habits of consumers, and the granting of loan facilities raised their monthly income. According to Banto and Atokê, (2020), low-income level and low public confidence in microfinance institutions are the main causes of their low deposit levels.

Economic Growth

According to Khan and Malik (2020), economic growth is defined as a rise in the net national product over a specific period. A quantitative shift in economic variables that continues over time is referred to be economic growth. According to Kumar, Seth and Sethi (2018), economic growth is a gradual process that raises an economy's potential for production over time, resulting in higher levels of GDP and output at the national level. An increase in production output over a specific period is known as economic growth. High rates of growth, per capita production or income, rapid structural change, and cross-border movements of capital, labor, and goods are the main characteristics of economic expansion (Ochejele, 2007). The GDP is a useful metric for measuring economic growth. The consistent rise in the real output of goods & services per person is known as economic growth. It is a substantial increase in the capacity of an economy to produce goods and services when compared across time periods.

Theoretical Underpinning

Financial Frontier Theory

The financial frontier theory states that there exists a collection of optimum portfolios that yield the highest expected return and the lowest volatility for a given amount of expected return. The portfolio's investments should be chosen with the goal of minimizing risk and maximizing profit. The link between the formal and informal sectors is discussed by the market-based Efficient Frontier theory (Ogaboh & Nkpoyen, 2019). The activities of formal financial institutions are restricted to the frontier. Most financial transactions are individualized and done without middlemen outside of the frontier. Majority of elements outside the frontier are frequently centered in rural areas and prioritize subsistence. Increasing the frontier requires integrating the participants and the frontier's activities. Markowitz uses the terms "risk" and "volatility" interchangeably while explaining the Efficient Frontier hypothesis.

Empirical Framework

Ihegboro et al. (2023) investigated microfinance organizations on Nigeria's economic expansion. ARDL was used. Their findings demonstrate that microloans have a significant impact on Nigeria's short-term financial picture. Adegbola (2022), Using VAR analysis, found that microfinance bank operations have a small but beneficial short-term influence on Nigeria's economic development between 1999 and 2019. Babarinde, (2022) utilized ARDL model to find that, in the short term, a microfinance banks investment portfolio has a statistically significant and positive correlation with standard of living in Nigeria. Khan, & Malik' (2020) results from a study comparing the economic growth of Bangladesh and Pakistan utilizing diagnostic tests show that microfinance has a greater impact on economic growth and the reduction of poverty in Bangladesh than in Pakistan. Ochonogor (2020) claims that there is a positive association between microloans and the Human Development Index (HDI) using the OLS model. The study finds that microfinance organizations in Nigeria foster the development of social capital and economic expansion. Ofeimun et al. (2018) used the ordinary least square regression method to evaluate the impact of microloans on small and medium-sized enterprises' growth. The findings showed a strong positive correlation between microloan disbursed and microloan distributed and the expansion of small businesses in Nigeria.

Murad, and Idewele, (2017) investigated the role of microfinance institutions in Nigeria's economic expansion. Multiple regression analysis was used. The study's conclusions demonstrate that MB loans have a positive but insignificant influence on long-term economic performance, although its impact on short-term performance is substantial. Okafor et al. (2016) investigated the empirical association between poverty reduction and microcredit in Nigeria using the ECM or error correction model. The results demonstrated that microcredit had a unfavorable but negligible effect on poverty reduction in Nigeria. Ifionu and Olieh (2016) explored the economic growth and operations of Nigeria's microfinance banks during a ten-year period from 2005 to 2014. Granger causality test, multiple regression analysis, and OLS were used to analyze the empirical data. The findings indicated that while bank loans has a negative and negligible effect on economic development, the effect of bank deposits is positive and

considerable. Apere, (2016) examined microfinance banks on Nigeria's economic expansion. The ADF, parsimonious test, and (ECM) were adopted. The study demonstrated how the operations of microfinance banks have impacted the whole economy.

METHODOLOGY

The study adopted the expo facto research design. The study population includes all microfinance MBs that are registered with the CBN. Since the study's population was fully utilized, no sample was taken, and as a result, no sampling strategy was used for the investigation. The secondary data used in this study, which covers the years 2000–2022, were gathered from a variety of CBN statistical bulletin publications and MBs annual reports.

Model Specification

The model for this study follows that of Ifionu and Olieh (2016) but was modified to reflect the objectives of the study. Ifionu and Olieh's (2016) model is stated below:

$HDI = \beta_0 + \beta_1 Loan + \beta_2 Dep + \mu$

Where:
HDI = Human Development Index (HDI)
Loan = Microfinance loans and advances
Dep = Total deposit liabilities of MBs
β_0 = intercept
β_1- β_2 = Coefficient of independent variables
μ = error term.
Our model is different from that of Ifionu and Olieh (2016) as four independent variables - MB loans and advances, MB deposit, MB investment and MB assets - were used as follows:

$GDP = \beta_0 + \beta_1 MLOA + \beta_2 MDEP + \beta_3 MINV + \beta_4 MAST + \mu$

Where:

GDP	=	Gross domestic product at Constant Basic Price
MLOA	=	MB Loan and advances
MDEP	=	MB Deposit
MINV	=	MB investment
MAST	=	MB asset
β_0	=	Intercept
$\beta_1 - \beta_4$	=	Coefficient of the independent variables.
μ	=	Error term or stochastic term

A prior Expectation

It is expected that there should be a positive relationship between the dependent variable and independent variable. Thus, it is mathematically expressed as:

$\beta 1 > 0$; $\beta 2 > 0$; $\beta 3 > 0$; $\beta 4 > 0$.

RESULTS

Data for the study were analyzed using descriptive statistics, unit root test, cointegration test and granger causality test.

DESCRIPTIVE STATISTICS

Table 1: Descriptive Statistics for all Variables

	RGDP	MAST	MINV	MDEP	MLOA
Mean	48108.76	143767.0	4182.071	71096.35	65296.36
Median	47934.31	120312.9	3654.900	60472.00	46840.68
Maximum	69023.93	393546.7	8959.800	182100.7	196195.0
Minimum	22449.41	8903.600	436.8000	4140.320	2958.300
Std. Dev.	16055.50	120800.1	2636.631	55245.06	66494.74
Observations	22	22	22	22	22

Source: Computed from E-Views 9.0 (2024)

Standard deviation displays the rate at which each variable deviates from the mean value. From the Table 1 above, MAST is the most volatile at 120800.1 while MINV is the less volatile at 2636.6. The level of volatility in other variables are RGDP 16055.50 (approximately), MAST 120800.1 (approximately), MINV 2636.631, MDEP 55245.06 and MOSP 610.3968.

Confirmatory Test: Unit Root Analysis

The result of the unit root test in levels is presented in Table 4.3 below:

Table 2: Augmented Dickey – Fuller (ADF)

Variable	ADF T-statistics	Mackinnon Critical Value 1%	5%	10%	Decision
LogRGDP	-3.450617	-3.857386	-3.040391	-2.660551	Stationary
MLOA	3.883148	-3.920350	-3.065585	-2.673459	Stationary
MDEP	-6.042446	-4.004425	-3.098896	-2.690439	Stationary
MINV	-3.496980	-3.886751	-3.052169	-2.666593	Stationary
MAST	-6.296779	-3.886751	-3.052169	-2.666593	Stationary

*MacKinnon (1996) one-sided p-values.

(1) 1% level of significance, 5% level of significance, 10% level of significance.
(2) The tests accepted at 5% level of significance.
(3) Decision rule -The critical value should be larger than the test statistical value for unit root to exist.

Cointegration Test

We proceed to ascertain if the series in the analysis are co-integrated after establishing that they are stationary. The main goal here is to determine whether variables have a long-term

relationship or not. According to Engle and Granger (1987), there may be a linear combination of pt and qt, which is stationary, i.e., the linear combination of the two variables is 1(0), if two times series variables, pt and qt, are both non-stationary in levels but stationary at first difference, i.e., both are 1(1). It is determined that the two times series variables are cointegrated if they meet this condition. The two cointegrated time series variables must be drifting together at about the same pace in order for cointegration to exist (i.e., they are linked in a shared long-run equilibrium). They must be integrated of the same order in order for cointegration to occur (Engle & Granger, 1987). The cointegration test is conducted using the Engle and Granger single equation approach, and the results are compiled in Table 3.

Table 3: Results of Engle-Granger Single Equation Cointegration Test

Dependent	tau-statistic	Prob.*	z-statistic	Prob.*
RGDP	-3.720622	0.5027	-36.94841	0.0000
MLOA	-2.914605	0.8001	-67.04178	0.0000
MAST	-3.456196	0.6023	-30.49271	0.0000
MDEP	-3.601384	0.5476	-32.10167	0.0000
MINV	-3.078876	0.7408	-11.33362	0.8181

Source: E-Views 9.0 output (2024)

The model has at least four cointegration links between them, as shown by the Engle and Granger cointegration process in Table 3. This was predicated on the z-statistic test results showing the significance of at least four variables. We are unable to accept the null hypothesis that there is no cointegration between the variables in the light of this finding. Consequently, there are long-run correlations between the chosen independent factors and the specific dependent variable. For the relationships, an inter-temporal model can thus be estimated.

Granger causality Test

Table 4 Granger causality Test
Pairwise Granger Causality Tests
Date: 01/29/24 Time: 03:12
Sample: 2000 2022

Based on the results, there is a dual causality relationship between MAST and RGDP as the observed f-statistics is 6.89375and 5.64276 while the P-value is 0.0191 and 0 .0313 respectively. Also, while MAST granger cause RGDP, RGDP as well granger cause MAST. This connotes a long-run cause and effect relationship between MAST and RGDP. Also, MDEP and RGDP have dual causality relationship as their observed f-statistics is 3.36494 and 5.51347 and P-value is 0.0896 and 0.0354 respectively. By implication RGDP granger causes MDEP while MDEP granger causes RGDP. Again, RGDP and MLOA have dual causality relationship as their observed f-statistics is 15.8790 and 5.99256 and P-value is 0.0012 and 0.0271 respectively. By implication RGDP granger causes MDEP while MDEP granger causes RGDP.

Short Run Results
Table 5: Short run Result

Test Equation:
Dependent Variable: RGDP
Method: Least Squares
Date: 01/29/24 Time: 04:18
Sample: 2000 2022
Included observations: 22

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	92663529	15339849	6.040707	0.0001
MLOA	580.1932	333.4886	1.739769	0.1098
MINV	2859.044	2516.512	1.136114	0.2801
MDEP	192.1652	1131.540	0.169826	0.8682
MAST	-163.9312	561.1066	-0.292157	0.7756
R-squared	0.718996	Mean dependent var		17440573
Adjusted R-squared	0.565721	S.D. dependent var		21602556
S.E. of regression	14236048	Akaike info criterion		36.06575
Sum squared resid	2.23E+15	Schwarz criterion		36.41201
Log likelihood	-317.5918	Hannan-Quinn criter.		36.11350
F-statistic	4.690894	Durbin-Watson stat		1.532930
Prob(F-statistic)	0.013184			

Source: E-Views 9.0 (2024)

From Table 5, The value of $R^2$is 0.719. This implies that about 72% of the variations in RGDP could be explained by MAST, MDEP, MINV, and MLOA while about 18% could be accounted for by other unexplained factors. Further evidence of the goodness of fit of the model could be seen in the value of Durbin-Watson (D.W) statistic which is approximately 2 suggesting that the residual of the model is not serially correlated. The Prob(F-statistics) above is estimated at 0.0131 showing the overall significance of the independent variables. Additionally, according to Table 5, MLOA is positively related to GDP. Although, the estimated beta of 580.2 is high, the p-value of 0.1098 indicates that the impact of MLOA is not significant at the 5% level. However, at the 10% significance level, it almost significant. The use of microloans appears to have no significant in terms of small business development or consumption expenditure, nor does it appear to have a significant impact on improving Nigeria's growth rate in terms of short-term variations. Similarly, the MINV coefficient shows the anticipated positive sign. The p-value of 0.2801 indicates that the MB investment is not a significant factor in explaining Nigeria's short-term growth in GDP. The positive beta indicates that increased investments by microfinance organizations will result in a decrease in poverty, the creation of additional jobs, and a boost to the economy. Apere (2016), Ademola and Arogundede (2014), and Murad & Idewele (2017) found that MINV had a favorable impact on the Nigerian economy.

Also, MDEP is not statistically significant as indicated by the p-value which is estimated at 0.8682. The coefficient of 192.1652 however, indicates that MDEP is positively related with RGDP. This shows that increase in MDEP would be associated with increase in RGDP. Reddy & Malik's (2011) discovery that MDEP having a favorable impact on economic growth serves as

additional support for this. Since local depositor savings will eventually constitute the primary source of financing for microfinance, the favorable outcome is not implausible. To create deposits, the public is urged to save. If the impact evaluation of microfinance in Nigeria is successful over time, it can be evaluated, especially regarding the effects on savings mobilization including raising income, promoting entrepreneurship, advancing loans, engaging in domestic fund transfers, and encouraging savings. Finally, the results showed that MAST does not significantly influence RGDP. The estimated p-value is 0.7756, which is higher than 0.05, hence, the hypothesis of no significant effect is not rejected. However, the negative beta associated with MAST (-163.93) underscores the tendency for increase in MAST to hamper economic growth in the short run. This contradicts Ademola and Arogundade (2014), who discovered that MAST positively impacts Nigeria's economic expansion.

CONCLUSION

Based on the summary of findings, the study concludes that, over the long term, there is a substantial correlation between Nigeria's economic growth (measured using the GDP as a proxy for growth) and microfinance banks (MB). However, on the short run it tends to be the opposite. This therefore implies that; microfinance activities tend to be more beneficial to the Nigerian economy in the long run than in the long run.

RECOMMENDATIONS

The following recommendations are made since the research indicates a positive correlation between microfinance activities and economic growth over the long run:

1. It is important to support MBs in their efforts to lend money to real economic sectors that would boost productivity and generate more revenue.
2. To make sure that credit is used for what it was intended, it must be tracked after it has been approved.
3. Microfinance organizations should prioritize lending to boost consumption in the near term.
4. Encouragement should be given to MBs to keep lending to economic sectors that would boost productivity and generate more revenue. It is necessary to keep an eye on approved credit to make sure it is being used for the intended purpose.
5. Nigeria's microfinance institutions and government bodies should ensure that Lending money to boost consumption temporarily should be the primary goal of microfinance organizations.

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