Asian Journal of Agricultural Extension, Economics & Sociology

36(2): 1-7, 2019; Article no.AJAEES.51405
ISSN: 2320-7027

Efficiency of Microfinance Banks' Lending to Agriculture in Imo State, Nigeria

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Authors' contributions

This work was carried out in collaboration among all authors. Author MOO designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors EEU and FNA managed the analyses of the study. Author UGA managed the literature searches. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJAEES/2019/v36i230242
Editor(s):
(1) Asst. Prof. Jagjeet Singh Gill, Institute of Agricultural Sciences, Chandigarh University, India.
Reviewers:
(1) Ranjit Sambhaji Patil, Lokmangal College of Agriculture, India.
(2) Emmanuel Dodzi. Kutor Havi, Methodist University College Ghana, Ghana.
Complete Peer review History: http://www.sdiarticle4.com/review-history/51405

Original Research Article

Received 15 July 2019
Accepted 17 September 2019
Published 09 October 2019

ABSTRACT

The study analysed the efficiency of microfinance banks' lending to agriculture in Imo state, Nigeria. It analysed the cost of loan recovery in relation to the total loan recovered. Purposive sampling technique was used in the study. A list of microfinance banks was collected from the Owerri office of central bank of Nigeria which had 43 microfinance banks in the state. This formed the sampling frame from which 26 microfinance banks were purposively selected. The purposive selection was based on the microfinance banks that had the highest number of agricultural loan beneficiaries. Data were analysed using descriptive statistics and efficiency of loan recovery model. The result revealed that the efficiency index of the microfinance banks ranged from 0 to 0.5 and a loan and a mean of 0.06. The result further showed that 96.1% of the banks were within the index of 0 and 0.2. This implies that for every one thousand naira recovered from beneficiaries of microfinance banks, they spent sixty naira from their interest in recovering the loan. The results further revealed that 61.54% of the banks use additional guarantors to recover their loans while unconventional methods of recovery such as the use of the police accounted for 38.46% of the recovery technique. It was therefore recommended and concluded that since these microfinance banks are efficient in their loan recovery, they should make micro loans available to potential borrowers who want to invest in agriculture.

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Keywords: Efficiency; loan recovery; credit; microfinance.

1. INTRODUCTION

Agriculture is the bedrock of Nigeria's economy despite being fraught with a multiplicity of uncertainty, subsistence level of production, scattered farm lands, the use of rudimentary technology, urbanization and lack of funds [1,2]. It remains Nigeria's major source of employment as it engages about 70% of the labour force. Because of how important and promising the Agricultural sector is, a lot of entrants are into farming thus increasing the demand for loans [3-5].

Generally, farmers need capital for expansion or intensification, procuring improved varieties of crops and breeds of animals. Because of these too, many financial institutions receive several agricultural loan applications. One of such institutions is the Micro-finance bank. Recently, microfinance has received a lot of attention, both from policy makers and researchers [6,7]. In particular, it has been mentioned as an important instrument to combat poverty. To support this view, the United Nations declared 2005 to be the international year of micro-credit [8-10]. These developments have led to high expectations among policy makers and aid organizations about the potential poverty reducing effects of micro-finance. Giving the rural people access to credit will bring about the much needed development thus reducing rural urban migration [11].

Agricultural credit is provided by microfinance banks as well other financial markets in order to help farmers meet their credit needs or at least solve part of them [12,13]. The provision of credit has increasingly been regarded as an important tool for raising the incomes of rural populations whose occupation is mainly agriculture, by mobilizing resources for increased productive uses (Briquette, 1999).

On the other hand, micro finance banks need to recover their loans in order to remain in business and for these funds to be available for other potential borrowers in the future. But how efficient are these loans in terms of recovery. This study looks at how efficient microfinance banks loans are in terms of recovery and the strategies the micro-finance banks use in averting loan default.

1.1 Concept of Efficiency

Efficiency is an input –output relationship. It is crucial in competitive markets. While efficiency of conventional financial institutions like commercial banks has often been studied, analyses of the efficiency of microfinance banks are less frequent due to the late emergence of this sector [14,15]. In this study, the efficiency of loan recovery is defined as the cost of loan recovery divided by the total loan recovered or the cost of loan recovery divided by the loan amount and compared with the prevailing interest rate.

If efficiency index is greater than the prevailing interest rate (The bank is inefficient)

If efficiency index is less than the prevailing interest rate (The bank is efficient)

If efficiency index is equal to the prevailing interest rate (Breakeven point)

1.2 Concept of Microfinance

Microfinance is defined as the provision of financial services to low-income clients, including consumers and the self-employed, who traditionally lack access to banking and related services (Gonzalez-Vega, 2008). Microfinance is described as "banking for the poor" Microfinance programmes provide loans, savings and other financial services to low-income people for use in small business [16]. According to Ledger wood, (1999), microfinance is a provision of a broad range of financial services such as savings, credit, insurance and payment services to the poor or low-income group who are excluded from the normal banking sectors. It is a development approach that provides financial as well as social intermediation. The financial intermediation includes the provision of savings, credit and insurance services, while social intermediation involves organizing citizens' groups to voice their aspirations and raise concerns for consideration by policy makers and develop their self-confidence [17].

1.3 Objective of Study

The objective of study is to determine the efficiency of Microfinance banks' lending to Agriculture in Imo state, Nigeria.

2. MATERIALS AND METHODS

The study area is Imo State, South-east Nigeria. It lies on Latitudes $4°45^{1}$N and $7°15^{1}$N and Longitudes $6°50^{1}$E and $7°35^{1}$E. A list of microfinance banks was collected from the

Owerri office of Central bank of Nigeria. From this list, 26 MFBs were selected. The purposive selection was based on the microfinance banks that had the highest number of agricultural loan beneficiaries. The lists of agricultural loans beneficiaries were obtained from the micro-finance banks compiled by the credit officers.

Data collected were analyzed using descriptive statistics and efficiency model. The index of efficiency is defined as the cost of loan recovery divided by the total loan recovered or the cost of loan recovery divided by the loan amount and compared with the prevailing interest rate.
Mathematically expressed thus:

$$e = \frac{CLR}{TLR}$$

Where,

e = index of efficiency of loan recovery
CLR = Cost of loan recovery
TLR = Total loan recovered

Decision rule:

If efficiency index is greater than the prevailing interest rate (The bank is inefficient)

If efficiency index is less than the prevailing interest rate (The bank is efficient)

If efficiency index is equal to the prevailing interest rate (Breakeven point)

3. RESULTS AND DISCUSSION

3.1 Age

The distribution of the microfinance banks according to their age is presented in Table 1.

Table 1. Distribution of microfinance banks by age

Age	Frequency	Percentage
1- 2	3	11.50
3 – 4	6	23.10
5 – 6	17	65.40
Total	**26**	**100**

Mean 5. 23; Source: Field data, 2013

Table 1 showed that about 65.4% of the respondents were between 5 and 6 years old. Then 23.10% of the others were between three and four years old. The mean age of the banks was 5.23 years suggesting that most of them were relatively young. This could be attributed to the recent upgrade of some community banks in 2008 to Microfinance banks.

Table 2. Profile of microfinance banks by CIBN

Microfinance banks	CIBN
Owerri	09
Orlu	16
Okigwe	2
Total registered	27
Total unregistered	20
Grand total	47

Source: Bank directory, 2013

Table 2 showed that 27 out of 47 microfinance banks have registered their departmental heads for CIBN programme. The CIBN is an important umbrella professional body for bankers in Nigeria which is authorized to control entry into the banking profession, to set standards for bankers and maintain professional ethics through sanctions of erring members. This implies that more than half of the banks in Imo State have either acquired or are yet to acquire the proven skills for better operation and efficiency.

3.2 Geographic location of Microfinance Banks

Distribution of the microfinance banks according to geographic location is presented in Table 3.

Table 3. Distribution of microfinance bank by geographic location

Zone	Frequency	Percentage
Owerri	20	42.55
Orlu	23	48.94
Okigwe	4	8.51
Total	**47**	**100**

Source: Field data, 2013

Table 3 showed that 48. 94% of the microfinance banks were location in Orlu Agricultural zone of Imo State while 42.55% of the banks were located in Owerri agricultural zone. Okigwe zone recorded the lowest geographic spread of microfinance banks in the study area. This implies that those who would want to source funds from microfinance banks in the area would source funds from other zones. More so, the ratio of clients to credit officer would also be high. This may make the banks device stricter loan terms

and conditions thus excluding the poorest of the poor.

The high percentage of microfinance banks Orlu be an indication of the level of commercial activities in the area.

3.3 Efficiency of Microfinance Banks Loans to Agriculture.

The distribution of microfinance banks according to the amount of loan recovered from its borrowers is presented in Table 4.

The result showed that the amount recovered ranged from 1000 naira to 250,000 naira with a mean amount of 68,969.23 naira.

Table 4 presented the distribution of the micro-finance banks based on loan recovery in the area. The Table showed that 38.46% of the respondents recovered between 51,000 naira and 100,000 naira while 34.62% of the respondents recovered less than 50,000 naira. This implies that the method of recovery is efficient and if these funds are not recovered the microfinance banks would stay out of business. Thus, an aggregate of non-repayments of debts will affect the profit of the bank, money for investment and eventual distress of the bank [18].

Table 4. Distribution of microfinance banks according to the total amount of loan recovered

Total amount of loan recovered (N000)	Frequency	Percentage
< 50	9	34.62
51-100	10	38.46
101-150	4	15.38
151-200	2	7.69
≥250	1	3.85
Total	**26**	**100**

Source: Field data, 2013

3.4 Cost of Loan Recovery

The distribution of respondents according to the cost of loan recovered is presented in Table 5.3

The cost of loan recovery ranged from 0 to 15,000 naira. The mean cost of recovery was found to be 3571.73 naira. About 57.59% of the respondents spent less than three thousand naira in their loan recovery effort while 19.23% of the banks spent between four thousand naira and six thousand naira in their loan recovery effort. This implies that the respondents spent a small fraction of their profit in recovering the loan. This result should be encouraging to Microfinance banks when considering granting facilities to potential customers who want to venture into Agriculture.

The distribution of the respondents according to their efficiency index is presented in Table 6.

The Table shows that the efficiency index of the microfinance banks ranged from 0 to 0.5, and has a mean of 0.06. About 65.4% of the respondents had an efficiency index of between 0.01 and 0.1 while 19.20% of the respondents had between 0.11 and o.2 efficiency index. This also showed that 96.10% of the respondents fell within the index of 0 and 0.2. This index of efficiency involved the cost of recovering the loan to the total amount of loan recovered from the beneficiaries of microfinance banks. This implies that for every one thousand naira recovered from the beneficiaries of microfinance banks, the banks spent sixty naira from their interest in recovering the loan. This result showed that the banks still had enough profit remaining despite recovering their loans. This should be encouraging to microfinance banks since they spent a small fraction of their profit in recovering the loans.

Table 5. Distribution of the cost of loan recovery of microfinance banks

Cost of loan recovery (₦,000)		Frequency	Percentage
<3		15	57.69
4-6		5	19.23
7-9		2	7.69
10-12		1	3.85
≥15		3	11.54
Total		**26**	**100**
Mean	3571.73		
Minimum	0		
Max	15,000		
Standard Deviation	3815.96		

Source: Field data, 2013

Table 6. Distribution of respondents according to their efficiency index

Efficiency index	Frequency	Percentage
≥0	3	11.50
0.01-0.1	17	65.40
0.11-0.2	5	19.20
0.21-0.3	0	0.00
0.31-0.4	0	0.00
0.41-0.5	1	3.90
Total	**26**	**100**
Mean 0.06		
Minimum 0		
Maximum 0.5		
Standard deviation 0.101		

Source: Field data, 2013

More so, credit has to be readily available for investment and to potential borrowers but when credit is tied up as debt, they feel reluctant to disburse the loans.

Table 7 is the distribution of the respondents according to the interest rate charged by the banks.

The interest rate ranged from 30% to 48%. The mean interest rate obtained from the study was 31.78%. The study revealed that 76.47% of the banks charged interest about 30% while 20.59% of the microfinance banks charged between 31% and 41%. This rate was so high when compared to that charged by the commercial banks between 2012 and 2013. This may lead to loan default.

3.5 Strategies Employed by Microfinance banks to Guard against Loan Default

The distribution of the respondents according to the strategies employed to avert loan default is presented in Table 8.

The result in Table 8 indicated that 61.54% of the banks ensured additional guarantors as a prerequisite for disbursing loans to farmers. About 46.15% of the other banks ensured proper loan appraisal before granting the loan. It also showed that 38.46% used the police to go after those who may have delayed to force them to pay. More so, 26.92% of the banks used collateral as a strategy to avert default. This is consistent with the findings of (Okerenta, 2009).

Table 7. Distribution of the interest rate charged by the microfinance banks

Interest %	Frequency	Percentage
≤ 30	104	76.47
31-40	28	20.59
> 41	4	2.94
Total	**136**	**100**
Mean 31.78		
Minimum 30		
Maximum 48		
Standard deviation 3.93		

Source: field data, 2013

Table 8. Distribution of microfinance banks by the strategies they employed to avert loan default

Strategies	Frequency*	Percentage
Additional guarantors	16	61.54
Collateral	7	26.92
Constant Monitoring/visits	9	34.62
Proper loan appraisal	12	46.15
Use of police	10	38.46

** Multiple responses were recorded; Field data, 2013*

4. CONCLUSION

From the findings of this study, the following major conclusions are drawn thus; that the microfinance banks are efficient in their lending to agriculture in the study area and they spend only a small percentage of their interest to recover their loans.

5. RECOMMENDATIONS

Since microfinance banks are efficient in their lending to agriculture in terms of loan recovery, there is need for these microfinance banks to review their policies on agricultural lending and therefore increase is access to farmer beneficiaries.

The geographic spread of microfinance banks in Imo State was tilted towards the Orlu Agricultural Zone. Okigwe Agricultural zone had the lowest spread and this is detrimental to the economic growth of the area. It therefore becomes imperative for employment planners, microfinance promotion agencies, donor agencies and organizations to increase the number of microfinance banks in that area in order to extend credit facilitates to small scale farmers, improve infrastructure and increase deposit mobilization. These three items have positive bearing on investment. Finally, since agriculture is a promising venture coupled with the fact that these banks have reliable recovery mechanisms, microfinance banks should grant more loans to farmers.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Farrel M. The measurement of productivity. Journal of Royal Statistical Society. 1957; 120(3):253-2811.
2. Farrington T. Efficiency in micro finance institutes micro banking Bulletin. 2000;20-23.
3. Abate GT, Borzaga C, Getnet K. -Cost-efficiency and outreach of microfinance institutions: Trade-offs and the role of ownership. Journal of International Development. 2014;26:923-932.
4. Amersdorffer F, Buchenrieder G, Bokusheva R, Wolz A. Efficiency in microfinance: Financial and social performance of Agricultural Credit Cooperatives in Bulgaria. Journal of the Operational Research Society. 2015;66: 57-65.
5. Balogun ED, Alimi. Loan delinquency among small farmers in developing countries: A case study of the small-farmer credit programmes in Lagos State, Nigeria. CBN Economic and Financial Review. 1988;26(3).
6. Baku E, Smith M. Loan delinquency in community lending organizations: Case studies of Neigbour Works Organizations. Housing Policy Debate. 1998;9(1):151-175.
7. Conroy JD. The challenges of micro financing in Southeast Asia. Singapore Institute of Southeast Asian studies; 2003.
8. Ministry of Commerce, Industry and Tourism. The investment opportunities in Imo State. Ministry of Commerce, Industry and Tourism, Imo State, Nigeria; 2005.
9. National Population Commission (NPC) Provisional Census Figures, Abuja Nigeria; 2006.
10. Onyeagocha SUO. Comparative study of the methods and performance of microfinance Institutions in the South-Eastern Nigeria. Unpublished Ph.D dissertation, University of Nigeria Nsukka; 2017.
11. Ijere MO. Leading Issues in Rural Development; 1992.
    Available:WWW.nou.edu.ng
    [Retieved 8/05/2014]
12. Gonzalel-Vega C. Microfinance: Broader achievements and new Challenges. Economics and Sociology occasional paper No. 2518. The Ohio State University; 2008.
13. Imo State tripod vision: State Economic Empowerment and Development Strategy (SEEDS): Published by State Planning and Economic Development Commission, Imo State; 2006.
14. Okorie A. Major determinants of agri-cultural smallholder loan repayment in a developing economy: Empircal evidence from Ondo State, Nigeria. Agricultural Administration. 1986;21:223-234.

15. Robinson MS. The micro finance revolution. World Bank, Washington D.C; 2001.
16. Okoye Chris. Enugu Forum: Policy Challenges for Microfinance Design and Practice in Nigeria. Debating Policy options for National Development. Policy paper 7; 2006.
17. Robinson M. The microfinance revolution- sustainable finance for the poor. The World Bank, Washington. 2002;224–265.
18. Nawaz M, Munir MS. Credit risk and the performance of Nigerian banks. Inter-disciplinary Journal of contemporary research in Business. 2012;4(7).

Peer-review history:
The peer review history for this paper can be accessed here:
http://www.sdiarticle4.com/review-history/51405