



The Impact of Microfinance on Rural Economic Growth: The Nigerian Experience

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ABSTRACT

The paper examines the impact of microfinance activities on rural economic growth and savings in Nigeria for the period 2000–2015. The ordinary least square regression was used as the technique of analysis. The findings show 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. As a means of improving rural economic growth in Nigeria the recommendations are that government should make conscious efforts to provide basic infrastructures in the rural areas to motivate micro finance institutions to locate their offices there; micro finance institutions should be encouraged to lend to rural dwellers based on relationship lending; some farm productive resources should be diversified to reduce farming risk, especially risk related to unpredictable extreme weather that may be due to climate change to increase productivity.

Keywords: Microfinance, Economic Growth, Gross Domestic Product, Rural Savings, Nigeria

JEL Classifications: A10, A22, C32

1. INTRODUCTION

There has been growing interest in accelerating processes of rural community transformation by various governments in Nigeria especially in the areas of poverty alleviation, provision of rural infrastructure such as health and medical facilities, electricity, pipe borne water, schools, agricultural extension and in the development of micro finance establishments that will affect positively the lives of the rural investors and community organizations. Based on this concept the Central Bank of Nigeria (CBN) in 1990 established an economic policy that would encourage the extension of banking business to the rural area of the country in order to mobilize rural savings. Thus, microfinance emerged as a noble substitute for informal credit system in operation in the rural areas and to serve as an effective and powerful instrument for poverty reduction among people, who are economically active but financially constrained and vulnerable in various countries. Despite its increasing roles, microfinance institutions are faced with a lot of challenges which include diversion of loan to non-productive uses, high rate of default in loan repayment, lack of infrastructure and problem of illiteracy

among the rural populace. The Nigeria's estimate of unreachable client of microfinance reaches 40 million and Microfinance institutions in Nigeria have not been able to adequately address the gap in terms of credit, savings and other financial services required by the micro entrepreneurs and over 80 million people of Nigeria's active population (CBN, 2004). The dominant microfinance institutions are concentrated in the southern Nigeria to the detriment of poor majority in the predominantly Muslim north. The incidence of poverty in the Northern region is high compared to southern region. It was estimated to be 71% in North West, 72% in North East and 67% in North central while the corresponding figure in the south is 43% in south west, 23% in south East and 35% in south-south. These numbers are what led to the conclusion that high level of poverty is essentially a Northern phenomenon (Soludo, 2007). As a result the questions have been to what extent do microfinance activities impacts on the targeted section of the population. The chief occupation in the rural areas is agriculture and agro-allied industries. Therefore the major objective of the study is to investigate the impact of microfinance on rural economic growth in Nigeria. The specific objectives are to determine the impact of microfinance activities on

agricultural sector contribution to Nigerian gross domestic product (GDP) and on rural savings.

The remainder of the paper is structured in the following order. Section 2 presents the literature review and section 3 discusses the methodology. Section 4 presents the discussion of the results while the summary of findings is presented in the penultimate section as the last section conclusions the study.

2. LITERATURE REVIEW

2.1. Conceptual Review

According to the Asian Development Bank (ADB) (2000. p. 2), microfinance is the provision of a broad range of financial services such as deposits, loans, payment services, money transfers and insurance to poor and low-income households and it comprises micro-savings, micro-credit and micro-insurance. Micro-credit is the processes of lending capital in small amounts to poor people who are traditionally considered unbankable to enable them to invest in self-employment (Kasim and Jayasooria, 2001). The World Bank (2006. p. 12) describes micro-credit as a process in which poor families borrow large amounts of money at one time and repay the amount in a stream of small, manageable payment over a realistic time period using social collateral in the short run and institutional credit history in the long run.

Majority of Nigerian population reside in the rural areas and the poverty level in the economy is about 80% (Eze, 2011). This compelled the Federal Government of Nigeria to initiate series of publicly micro-financed programmes targeted at the rural and urban poor. Such programmes involved Rural Banking Programme, the Nigerian Agricultural and Cooperative Bank, Peoples Bank of Nigeria, Community Banks, Nigerian Agricultural Insurance Corporation, the Family Economic Advancement Programme, National Poverty Eradication Programme (CBN, 2005).

The rural bank scheme started in 1977 under the supervision of the CBN. The mechanics of the scheme mandated commercial banks to extend their branch network to various rural areas in order to provide adequate financial services in the areas. The numerical target of at least one branch in every local government area was met by the year 1991 and prior to the termination of the programme; over 7000 rural branches were opened nationwide (Aligu, 2003). However, the mainstream commercial banks failed to meet the credit needs of the people, by mobilizing their deposits without granting credit facilities to most depositors. Most of the funds generated from the rural branches were channeled to meet the needs of the customers of branches located in the urban commercial cities. Thus, little or no impact was made in the levels of the rural residents. In 1986, the CBN deregulated the banking industry following the Structural Adjustment Programme, some of the loss-making branches in the rural areas were shut down while others remained cash centres. The failure of the rural banking led to the establishment of the Peoples Bank of Nigeria, by the Federal Government in 1988. The Peoples Bank of Nigeria was established to encourage savings and provide loans to the small and medium scale enterprises and households all over the country. However, the bank's loan approval process were inefficient, thus the level of non-performing loan soared and

the bank's asset quality deteriorated, charges on bad and classified loans were high, and profitability was further impaired by rising overhead cost. With all these problems, the financial condition of the banks deteriorated and consequently resulted to insolvency (Oyeyomi, 2003, Anyanwu, 2004). Other banks failed because they had the philosophy that they were agents for the disbursement of government funds. The beneficiaries were not keen to service their loans because not servicing their loans is their own share of national cake. Again, they turned into ideal media for corrupt self-enrichment and battle ground for ethnic and boardroom politics.

2.2. Theoretical Framework

The theoretical frameworks for this study are economic and psychological theories developed by Kahenman and Tversky (1979); Camerer (1999); Hands (2009) Andrew (2010). The economic theory argued that the success of any business venture, including microfinance is determined by the entrepreneurs' ability to deliver appropriate services and profitability. The psychological theory on the other hand argued that a species of profit making private venture that cares about the welfare of its customers can be conceived.

2.3. Empirical Review

Abafita (2003) claimed that several studies have been conducted in different developing countries regarding micro-credit performance in terms of loan repayment and impact. Ajayi (1992) employed correlation and multiple regression analysis in his study on factors affecting default in residential mortgages of the federal mortgage bank of Nigeria. The results revealed that cost of construction, monthly repayment, loan to value ratio, market value of property, age of borrower and annual income of borrower enhance loan defaults while expected rental income from property reduces loan default. Vigano (1993) in his study about the case of development bank of Burkina Faso employed a credit-scoring model. He found out that business experience, value of assets, timeliness of loan release, small periodical repayments, project diversification and being a pre-existing depositor are positively related to loan repayment performance. On the other hand, loan in kind, smaller loan than required, long waiting period from application to loan release and availability of other source of credit were found to have negative relation with loan repayment performance.

Another important study is that by Arene (1992). He evaluated the credit delivery system of supervised agricultural credit schemes among smallholder maize farmers in Nigeria employing multiple regression analysis. The analysis indicated that loan size, farm size, income, age, number of years of farming experience, level of formal education and adoption of innovation are significantly and positively related to repayment rate. Distance between home and source of loan, household size and credit needs were found to be negatively related to repayment rate. Adeyemo (1984) used descriptive analysis on loan delinquency in multi-purpose co-operative union in Kwara State, Nigeria. The result showed that natural calamities, crop failure due to pest, poor storage facilities, lack of adequate transport facilities, sales income, farm size, education and tenure status of borrowers are factors associated with loan delinquency.

Chirwa (1997) used a pro-bit model to estimate the probability of agricultural credit repayment in Malawi. The result indicated that

crop sales, income transfers, degree of diversification and quality of information are positively related while size of club is negatively related to the probability of repayment. Other factors like amount of loan, sex, household size and club experience were found to be insignificant. Kashuliza (1993) used a linear regression model to analyze determinants of loan repayment in small holder agriculture in the southern highlands of Tanzania. His study showed that level of education, attitude towards repayment; farm income and off-farm income positively affect loan repayment with farm income being significant while age, household expenditure and household size have negative influence on loan repayment performance.

Direvedi (1980) and De Aghion and Morduch (2005) posit that the Microfinance bank which started in the 1970s as a pilot project in Bangladesh has rapidly spread around the globe and established itself as an integral part of financial sector policies of developing countries. These views are supported by Deaton (1991), Feder (1993), Roberts and Hanning (1998) and Ghosh, Mookherjee and Ray (2000). Begashaw (1978), Adedayo (1983), Ariyo (2003), Olawepo (2004) and Olawepo and Ariyo (2011), all described rural development as the improvement and transformation of the rural space in order to enhance the quality of life of the inhabitants. They agreed on the important role of microfinance banks in the economic development of a nation and emphasized the fact that sustainable economic development in any nation cannot be achieved without rural transformation and the empowerment of rural dwellers. They affirmed the urgent need to reposition microfinance banks to optimally play their roles in economic development of nations.

Bencivenga and Smith (1991) developed an endogenous growth model with multiple assets and state that agents who face random future liquidity needs accumulate capital and a liquid, but unproductive

asset and intermediaries generally reduce socially unnecessary capital liquidation in order to promote growth. Braverman and Guasch (1986) submit that the common features of success stories in Microfinance institutions include tougher stands on default, strict auditing, accounting procedures, financial control, some form of joint responsibility or liability by small groups of farmers, whereby default by one member cancels future loans to the whole group.

3. METHODOLOGY

The study relies on data obtained from CBN statistical Bulletin and as such they are secondary data which have been processed, collated and existed in published form. The relevant data are: microfinance deposit, loans and advances, rural savings and GDP. The population and the sample size of the study are the Microfinance banks in Nigeria. The microfinance activity is the independent variable while rural economic growth and rural savings are dependent variables. The ordinary least square regression was used as the technique for analysis. The reason is that it is assumed to be the best linear unbiased estimator.

The hypotheses proposed and tested in the course of this study are that microfinance bank's activities do not have positive and significant impact on (i) agricultural sector contribution to Nigeria GDP (ii) rural savings in Nigeria.

4. DISCUSSION OF RESULTS

The hypotheses formulated for this study were tested at 5% level of significance. The results are as shown in Table 1.

Table 1: E-view regression results

Dependent variable: ACGDP				
Included observations: 12				
Variable	Coefficient	Std. Error	t-statistic	P
MFA	-0.259897	0.292281	-0.889203	0.3948
C	0.520990	0.171505	3.037759	0.0125
R ²	0.773274	Mean dependent var		0.371347
Adjusted R ²	0.619398	S.D. dependent var		0.113417
S.E. of regression	0.114512	Akaike info criterion		-1.345262
Sum squared resid	0.131130	Schwarz criterion		-1.264444
Log likelihood	10.07157	F-statistic		0.790682
Durbin-Watson stat	1.442114	Prob (F-statistic)		0.394781

Source: Appendix. MFA: Micro finance activities

Table 2: E-view regression results

Dependent variable: RS				
Included observations: 12				
Variable	Coefficient	Std. Error	t-statistic	P
MFA	0.153351	0.054895	2.793556	0.0190
C	-0.037003	0.03221	-1.148772	0.2774
R ²	0.438327	Mean dependent var		0.051293
Adjusted R ²	0.382150	S.D. dependent var		0.027362
S.E. of regression	0.021507	Akaike info criterion		-4.689859
Sum squared resid	0.004626	Schwarz criterion		-4.609041
Log likelihood	30.13915	F-statistic		7.803954
Durbin-Watson stat	0.748666	Prob (F-statistic)		0.019003

Source: Appendix. MFA: Micro finance activities

H01: Micro finance activities (MFA) do not have a positive and significant impact on agricultural sector contributions to Nigeria's GDP.

From the Table 1, it indicates that MFA in Nigeria for the period of this study had a negative and insignificant impact on agricultural sector contributions to Nigeria's GDP (coefficient of MFA -0.259 , t -value = -0.889). The coefficient of determination represented by 77.3% indicated that the variation observed in the model was captured appropriately. While the Durbin Watson d test statistic was 1.44, the probability was $0.394 > 0.05$ indicating that the impact of MFA on agricultural sector contribution was insignificant. Based on the results, the null hypothesis which states that MFA do not have a positive and significant impact on agricultural sector contributions to Nigeria's GDP is accepted.

H02: MFA do not have a positive and significant impact on rural savings in Nigeria.

From the Table 2, it indicates that MFA in Nigeria for the period of this study had a positive and significant impact on rural savings (coefficient of MFA 0.153 , $t = 2.793$). The coefficient of determination represented by 43.8% is quite small indicating that there are other factors which might have an impact on the variation observed in the model not captured. While the Durbin Watson (d) test statistic was 0.748, the probability was $0.019 < 0.05$ indicating that the impact of MFA on rural saving is significant. Based on the results, the null hypothesis which states that MFA do not have a positive and significant impact on rural saving is rejected while the alternate hypothesis which states MFA have a positive and significant impact on rural saving is accepted.

5. SUMMARY OF FINDINGS

Based on the hypotheses tested the summary of result are:

1. MFA proxied by aggregate loans and advances in Nigeria for the period of this study had a negative and insignificant impact on agricultural sector contributions to Nigeria's GDP. This indicates that the introduction of micro finance banking in Nigeria have not contributed to agricultural productivity in Nigeria.
2. MFA in Nigeria for the period of this study had a positive and significant impact on rural savings. This implies that the introduction of micro finance banks in Nigeria have assisted in increasing rural savings habits in Nigeria.

6. CONCLUSIONS AND RECOMMENDATIONS

In this study, it has been shown that microfinance banks have the potentials to improving rural savings habits in Nigeria especially in increasing level of income and reducing poverty. It can promote the peoples economic capacity and bring sustainable development. Despite its potentials to improve the rural savings, MFB in Nigeria are faced with numerous challenges that need to be addressed. The current bank reforms by CBN are a welcome development to fortify the operations of MFI in order to contribute to economic growth. The following recommendations are made:

1. Rural poverty is often a product of poor infrastructure that hinders development and mobility as the rural areas tend to

lack sufficient roads that would increase access to agricultural inputs and markets. Without roads, the rural poor are cut off from technological development and emerging markets in more urban areas. Poor infrastructure hinders communication, resulting in social isolation among the rural poor, many of whom have limited access to media and news outlets. It is therefore against these problems that most financial institutions would rather locate their offices in urban centres where there are these basic social infrastructure than be located in rural areas. Therefore as a means of improving rural economic growth in Nigeria there should be a conscious effort by government to industrialize the rural areas as this will serve as a motivation for micro finance institutions to locate their offices in the rural areas for those that are permitted to branch out. This will improve rural economic growth.

2. Providing access to credit and financial services provides an entry point to improve rural productivity as well as stimulating small-scale trading and manufacturing. With credit, rural farmers are able to purchase capital that increases their productivity and income. Increased credit helps expand markets to rural areas, thus promoting rural development. The ability to acquire credit also combats systems of bonded or exploitative labour by encouraging self-employment. Credit policy is most effective when provided in conjunction with other services such as technology and marketing training, therefore the study strongly recommend that, micro finance institutions should be encouraged to lend to rural dwellers and lending activities should be based on relationship lending.
3. Agricultural diversification can provide rural families with higher income and greater food security. Diversification, or a reallocation of some of a farm's productive resources, reduces farming risk, especially risk related to unpredictable or extreme weather that may be due to climate change. Policies related to diversification should also be encouraged by government as this will lead to increase productivity.

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APPENDIX

Presentation of data for analysis

Year	ALA	AD	AO	GDP	ELOBS
2000	2958.3	4140.32	114570.7	312183.5	184,456.00
2001	3666.6	7689.4	117945.1	329178.7	274,010.60
2002	1314	3294	122522.3	356994.3	338,671.20
2003	4310.9	9699.2	190133.4	433203.5	386,942.30
2004	9954.8	18075	203409.9	477533	412,155.20
2005	11353.8	21407.9	216208.5	527576	458,586.50
2006	28504.8	47523.7	231463.6	561931.4	563,232.00
2007	16450.2	34017.7	248599	595821.6	650,943.60
2008	22850.2	41217.7	266477.2	634251.1	737,867.20
2009	42753.06	61568.1	283175.4	672202.6	892,675.60
2010	58215.17	76662.04	299996.9	716949.7	927,236.40
2011	51986.15	74055.53	185660.13	773588.7	775,169.63
2012	52986.9	75051.5	185667.12	773687.5	776169.10
2013	54985.10	76056.8	186753.7	785690.1	785120.30
2014	55984.11	76090.10	195600.2	787362.4	923126.50
2015	57473.15	77041.7	196524.6	791577.8	946539.60

Source: CBN Annual Reports, Various CBN Statistical Bulletin, Various UNDP African Regional Report. ALA: Aggregate loans and advances, AD: Aggregate deposit, AO: Agricultural output, GDP: Gross domestic product, PI: Poverty Index, ELOB: Excess liquidity outside the banking sector