

Financial Services and the Return on Assets of Microfinance Banks in Nigeria

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Abstract

This study examined the relationship between financial services and the return on assets of microfinance banks in Nigeria. Data were sourced from financial statement of the microfinance banks. Return on assets was used as dependent variable while microcredit and micro savings were used as independent variables. Panel data ordinary least square was used to examined the relationship between financial services and the return on equity of microfinance banks. The study found that 92.6 percent variations in return on assets of the microfinance banks were accounted for by the independent variables. Micro saving and microcredit have positive relationship while relationship with return on assets of the micro finances banks. From the findings, the study concludes that financial services explained significant variation in return on assets of the microfinance banks. We recommend that management of the microfinance banks should increase the loan rate so that investors see microfinance banks as the number one source of funding, and the Central Bank of Nigeria should reduce the microfinance banks minimum reserve in order to increase micro credit in the economy. Management of the microfinance banks should ensure effective means of deposit mobilization by increasing services to the rural communities and microfinance banks should allocate proper credit to the real sector for productive purposes in order to increase performance. The management of the microfinance banks should ensure well formulated policies to manage micro insurance services to add positive to the performance.

Keywords: *Financial Services, Return on Assets, Microfinance Banks*

INTRODUCTION

Microfinance institutions essentially operate on a combination of financial products (micro-credit, micro-leasing, micro-insurance, micro-savings, and money transfers) targeting specific groups of customers. Recipients of the services generally are micro-businesses and economically active citizens who at the same time may be poor. Financial services is the provision of a broad range of services such as deposits, loans, payment services, money transfers and insurance to the poor and low-income households and their micro enterprises (Agbloyor, Turkson, & Baffour, 2018).

Micro finance refers to the provision of financial services to low income households, including the self-employed (Al-Qudah & Jaradat, 2013). These financial services include savings, credit, payment facilities, remittance and insurance (Ledgerwood 1999; Wright, 1999; Christen and Rosenberg 2000). Micro finance therefore encompasses micro-credit, micro-savings and micro-insurance. (Ruth 2002). With the passage of time, there has been increasing emphasis on the importance of offering a range of quality, flexible financial services in response to a wide variety of needs of the poor (Wright, 1999). Robinson (2001), considers microfinance as small-scale financial services-primarily credits and savings-given to people who are involved in small enterprises or microenterprises where goods are produced, recycled, repaired, or sold; who provide services; who work for wages or commissions; who gain income from renting out small amounts of land, vehicles or machinery and tools; and to other individuals and groups at the local levels of developing countries. Ledgerwood (1999) emphasized that the main activity of cooperative financial institutions is savings.

The deregulation of the financial sector in the last quarter of 1986, macroeconomic reforms such as the internationalization of the capital market can affect positively the performance of the industry as an intermediate financial institution. The recent withdrawal of all public funds from the banks (treasury single account) by the Central Bank of Nigeria (CBN) is expected to affect banks' lending function negatively and the profitability of the industry. Effective macroeconomic policy that increase income increases bank deposit, expand lending capacity which can affect positively the profitability performance of the banking industry (Bengi, & Njenje, 2016). Poor macroeconomic policies have the capacity affecting negatively the banking sector performance and cause panic in the industry. The banking sector crisis of the 1990 was caused by macroeconomic instability and high risk concentration of the period (Toby, 2006). The withdrawal of all public funds from the banking industry in the 1990s led to monetary policy shocks that led to the collapse of some banks (Onoh, 2007).

Microfinance policy targets are to increase access to financial service of the economically active poor by 10% annually, to create a share of micro-credit to ensure the participation of all state and to eliminate gender disparity by ensuring that women access to financial service increase by 15%. The policy has the role of providing innovative ideas to business organization, provision of seed money, business training and social rehabilitation, startup funding and training in business practices, promotion of socio economic conditions and general welfare and business literacy campaign (Nagarajah, 2008). The underlying theory of microfinance bank is that, by making financial services available to a previously excluded section of society, microfinance banking is aimed at providing the poor clients with capital for investments, extra liquidity to allow them to take advantage of economic opportunities as they arise, and the opportunity to accumulate assets and gain access to savings to help protect against shocks in times of need (Akanji, 2011). At the same time, for these microfinance services to be available over the long run, the microfinance banks must be viable and sustainable in the long term.

Given the rapid development of financial markets, microfinance banks in Nigeria are facing intense competition. Managers in the industry ought to know and understand financial services that add value to shareholders and formulate strategies to the needed public. This is crucial considering the fact that performance plays a crucial role in the banks' sustainability and the development of the economy in general. 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 200 million people of Nigeria's active population (CBN, 2018).

Furthermore, not more than five years after the establishment of the policy, record shows that there was already great distress in the system as microfinance banks had failed to achieve their set obligations. The examinations carried out by the Central Bank of Nigeria (CBN) between March to June 2010 revealed that they failed to target their market the active poor (Akanji, 2011). Consequently, Central Bank of Nigeria closed down majority of the micro finance banks due to various shortcomings and challenges experienced by the banks at the period. This led to the review of the existing Regulatory and Supervisory Guidelines policy in 2011. In 2013 NDIC in collaboration with the Central Bank of Nigeria conducted routine examination of 731 microfinance banks in Nigeria. The examination findings still revealed that some of the institutions were incapable of honoring their obligations to their customers as at when due. A total of 106 microfinance banks were subject of serious regulatory concern.

There are many studies on the factors that determine the performance of microfinance banks. Anaman and Pobbi (2019) carried out a report on analyzing the financial performance and sustainability of MFI's in Ghana, Ahmed (2014) analyzing the performance of microfinance institutions in Nigeria, Kweyu (2022) assessed the effect of firm characteristics on financial stability of microfinance banks in Kenya. Asimwe (2019) focused on m-banking and financial performance among commercial banks and established a positive nexus. Bogan (2022) investigated the influence of microfinance banks' financial intermediation activities on the performance of small-scale manufacturing businesses in Nigeria. This study examined the relationship between financial service and return on assets of microfinance banks in Nigeria.

REVIEW OF RELATED LITERATURE

Micro Financing

Micro financing is a type of banking service that is provided to unemployed or low-income individuals, or groups who otherwise have no other access to financial services. Ultimately, the goal of microfinance is to give low-income people an opportunity to become self-sufficient by providing a way to save money, borrow money and get insurance. Micro financing provides options to customers with limited resources to promote participation in productive activities or to support a small business. Micro financing is a source of financial services for entrepreneurs and small businesses lacking access to banking and related services (Wairimu & Mwilaria, 2017). The two main mechanisms for the delivery of financial services to such clients are: (1) relationship-based banking for individual entrepreneurs and small businesses; and (2) group-based models, where several entrepreneurs come together to apply for loans and other services as a group.

Financial Services

Financial services are the broad range of services accessed and delivered through digital channels, including payments, credit, savings, remittances, insurance, and financial information. Financial

services have significant potential to expand the delivery of basic services via affordable, convenient, and secure environment to the public at large (particularly the poor) through innovative technologies like mobile-phone-enabled solutions, electronic money models, and digital payment platforms. Financial Institutions (Banks, Microfinance institutions) and non-financial firms (mobile network operators) and third-party providers (agent network managers, payment aggregators, and others) are leveraging digital channels to offer basic financial services at greater convenience, scale and lower cost than traditional banking allow.

Measures of Financial Service of Microfinance banks

Microcredit

Credit is one of the most significant bases of capital accumulation and may be viewed as a device for facilitating the temporary transfer of purchasing power from one individual or organization to another. Credit provides the basis for increased production efficiency through a specialization function (Kimemia, 2004). Access to credit is regarded as one of the key elements in raising agricultural productivity (DBSA, 2005). According to Ozowa (2007), microcredit to farmers encompasses all loans and advances granted to borrowers to finance and service production activities relating to agriculture, fisheries and forestry and also for processing, marketing, storage and distribution of products resulting from these activities.

In the view of Waterfield and Duval (1996) credit is borrowed funds with specified terms of repayment. In instances of insufficient accumulated savings to finance a business and when the return on borrowed funds exceeds the interest rate charged on the loan. It makes sense to borrow rather than postpone the business activity until sufficient savings can be accumulated. Assuming the capacity to service the debt exists. Loans are generally made for productive purpose that is, to generate revenue within a business. Some microfinance banks also make loans for consumption, housing, or special occasions. While many microfinance banks insist that only productive loans made, any loan that increase the liquidity of the household frees up enterprise revenue, which can be put back into the business.

Methods of credit delivery can generally be divided into the two broad categories of individual and group approaches. First, individual's loans are delivered to individuals based on their ability to provide the microfinance loans with assurances of repayment and some level of security. Second, group-based approaches make loans to groups that is, either to individuals who are members of a group and guarantee each other's loans or to group that then sub-loan to their members.

Micro-credit is the extension of very small loans (micro-loans) to the unemployed, to poor entrepreneurs and to others living in poverty that is not considered bankable. These individuals lack collateral, steady employment and a verifiable credit history and therefore cannot meet even the most minimal qualifications to gain access to traditional credit. Micro-credit is a part of microfinance, which is the provision of a wider range of financial services to the very poor. Micro-credit has successfully enabled extremely impoverished people to engage in self-employment projects that allow them to generate an income and, in many cases, begins to build wealth and exit poverty. Due to the success of micro-credit, many in the traditional banking industry have begun to realize that these micro-credit borrowers should more correctly be categorized as pre- bankable;

thus, micro-credit is increasingly gaining credibility in the mainstream finance industry and many traditional large finance organizations are contemplating.

Micro Savings

Savings is a common word used by individuals on daily basis. It simply means putting something aside for future use or what will be considered as deferred expenditure (Amu and Amu, 2012). Savings is the portion of income not spent on current expenditures. Saving is defined as that part of disposable income which is not spent on consumption (Bime & Mbanasor, 2011). According to Virani (2012) saving is sacrificing the current consumption in order to increase the living standard and fulfilling the daily requirements in future. Saving is an amount of something such as time or money that you do not need to use or spend. It could be used for investment to earn interest (profit) or be used to purchase assets such as buildings. Saving is related to deferring consumption, which is done by the households (individuals), the firms and, the governments. When the interest rate is high, the household will save more money in the bank where entrepreneurs can borrow (Kanjapon, 2004).

Uppal (2001) opined that micro-savings is an important part of micro-finance. It enables poor people (especially in developing countries) a small cash cushion them. Micro-savings can either be voluntary or it may be a forced savings requested to secure loans from the lender. This is particularly interesting in risky investments but usual. Voluntary savings usually serves as security against unpredictable risks, such as infectious disease or epidemic, natural disasters in general; small business uses the option of micro-savings.

Return on Asset

Return on asset represents the number of earnings a company achieves for each naira of the asset it controls and is a good indicator of a firm's profitability. Return on asset is a financial ratio that shows the percentage of profit a firm makes relative to its overall resources (investments). According to Osioma (1996), ratios are aimed at bringing to light the profitability of a firm's operation, the management efficiency as measured by the returns on capital employed and the intensity of capital usage, that is, the rapidity with which invested capital is turned over. Hagel et al. (2010) opined that return on asset explicitly considers the assets used to support business activities and determines whether the company can generate an adequate return on these assets rather than just showing robust Return on Sales.

Return on asset is measured as the proportion of net profit after tax to the total asset of the firm. The core objective of every business entity is to maximize profit. As much economic benefit is key to an organization's survival, it must not be pursued at the expense of society and the environment (people and planet). While organizations are directed to be more transparent on how they treat their economic, social and environmental activities as they affect their stakeholders, managers of firms should also be mindful of the fact that any firm that is not involved in environmental accounting disclosure could be seen as striving towards unsustainable development. Thus, it would be unclear to ascertain the level of impact environmental accounting disclosures had on organization's strategies, practices and outcomes. It is on this premise that this study seeks to investigate the effect of environmental accounting disclosures on the return on assets of selected manufacturing firms in Nigeria.

Theoretical Review

Microfinance Theory

Fisher and Maitreesh (2010) were the early theorists who formulated the first wave of microfinance theory which is basically based on joint liability. By joint liability, if a member of the group defaults in the repayment of the loan, the group members are contractually required to repay in her stead. Such repayment can be enforced through the threat of common punishment, typically of the denial of future credit to all the members of the group. Ghatak and Guinnane (1999) cited in Adewusi (2015), reviewed the critical mechanisms proposed by the various theories which joint liabilities could improve repayment rates and the welfare of the credit constrained borrowers. They all have the perception that joint liability can help alleviate the major problems facing lenders, among which are screening, monitoring, auditing and enforcement by utilizing the local information and social capital that exist among borrowers. Joint liability can do better than conventional banks for two reasons:

- i. Members of a close-knit community have more information about one another than an outsider.
- ii. A bank has limited scope for financial sanctions against the poor people who default on a loan since, by definition, they are poor.

However, their neighbour may be able to impose powerful non-financial sanctions at a low cost. Other microfinance theories have gone off in other directions aside from the joint liability among which are: frequent repayments and sequential lending. Infrequent repayment approach, borrowers are allowed to repay their loans in regular instalments beginning soon after the loan is given out. This aspect of the repayment schedule is usually explained as inducing fiscal discipline among borrowers. Jain and Manuri (2003) also cited in Adeusi (2015) argue that an alternative rationale for this loan repayment structure lies in difficulty in monitoring borrower's action.

The potential for moral hazard leads microfinance institution to use innovative mechanisms such as regular scheduled repayment which indirectly co-opt the better informed informal lenders. Conversely, this instalment repayment structure allows informal lenders to survive. Another mechanism of microfinance is the sequential lending; loans are not given out to all borrowers simultaneously until a particular borrower repays them before it can be extended to another. This creates an additional stake for the member who comes in later to monitor the previous one.

Clark's Theory of Profitability

One of the theories of profitability is postulated by Clark with an analysis of an economy ran without profit with clear future considerations. The underlying assumptions for such economy being perfect market conditions, static state, constant factors of production, absence of monopoly, not susceptible to change and rewards are according to management wage level. There is free flow of economic activities, perfect mobility and flow of all economic units in a frictionless environment; with all impediments to perfect competition dissolved.

Changes in any factor caused a tumor and subsequent adjustments that result in new equilibrium levels. Population changes and capital will lead to commensurate changes in wages and interest rate while the economy will absorb the changes and revert to status quo ante of its static state. Also changes in production methods will cause disequilibrium in output and prices and if other producers adopt same technique will cause adjustment and new equilibrium level In contrast, an

economy driven by profit possess reverse characteristics, the ability of the economy to endure such changes is due to the competitive equilibrium dynamics of the free market. Competition, remarks Knight, has the tendency to eliminate profit or loss and bring the value of economic goods to equality with their cost (Knight, 1921).

A comparison of an economy driven by profit motive was made with that of a profitless economy with differences highlighted to identify the cause of profit. This approach was adopted by Schumber and Knight. In comparison, Clark highlighted that economies driven by profit will not buffer such changes instantaneously as there will necessarily be a time lag. It is this frictional delay that the entrepreneur takes advantage of and makes his profit before equilibrium returns and consumes his profit. Profit is hence a transitional phenomenon: “untransformed increments of wages and interest” (Siddiqi, 1971) its temporary nature demands from the entrepreneur a dynamic endeavor to seek out or generate opportunities on which he can capitalize. This process is summed up in Clark’s statement that “dynamic forces, then, account today for the existence of an income that static forces will begin to dispose of tomorrow (Siddiqi, 1971).

Schumpeter Theory of Profitability

Schumpeter developed a circular model patterned after Clark’s profitless economy but differs in detail from the static state model proposed by Clark .He postulated that departures from an ideally competitive environment and actual environment yields profit. Schumpeter selectively identifies the single notion of innovation as paramount, so that changes based upon innovation are the cause of profit. Gradual changes in population and capital would easily be anticipated by the market and hence present no opportunity for the entrepreneur. The specific areas highlighted by Schumpeter are innovations in commodity either by introducing new products or modifications to existing products, changes in new production methods, new sources of raw materials and changes in industrial organization.

According to Schumpeter every business man is an innovator and breaking from competition to acquire monopoly which accrues profit until competitors catch up but before that is achieved he moves on to innovate more in other fields. Schumpeter did not see the entrepreneur’s reward as a surplus value but rather as a functional reward linked to his innovative ability (Siddiqi, 1971). The impact of innovation was huge, leading to gales of creative destruction as innovations caused old inventories, ideas, technologies, skills, and equipment to become obsolete. Schumpeter saw the model of perfect competition in which different companies sold similar goods at similar prices produced through similar techniques as immaterial to progress (Owolabi; 2004)

Empirical Review

Bogan (2022) investigated the influence of microfinance banks’ financial intermediation activities on the performance of small-scale manufacturing businesses in Nigeria. The study was limited to two states in Nigeria, Lagos and Oyo states. The study adopted a correlative descriptive survey design and employed a purposive sampling method which was used in selecting seven hundred and forty-seven small-scale food manufacturing businesses in Lagos and Oyo states. After testing and data analysis, the finding and results show that microfinance banks’ financial intermediation activity has no significant influence on the performance of small-scale food manufacturing businesses in Lagos and Oyo states. The study however recommends that microfinance banks ought to focus more on ethical and professional conduct by ensuring that loans and credits are

given to credible and promising entrepreneurs; also reducing the strict policies in credit supply to small and medium enterprises (SMEs); monetary authorities need to encourage MFBs to create more branches that can enable investor in rural areas to have access to credit facilities as well as to save. The central bank and other monetary policy regulators ought to have a common opinion to create a specialized banking financial intermediation role that is responsible for supporting and financing small-scale manufacturing investments in the economy. Lastly, there is a need for both private organizations/individuals and the government to assist microfinance banks in improving the performance and growth of small-scale businesses. This study focused on microfinance and performance of small and medium scale enterprises, the present study focused on the effect of financial services on the return on equity of microfinance banks.

Kweyu (2022) assessed the effect of firm characteristics on financial stability of microfinance banks in Kenya. Specifically, the study evaluated the effect of bank size, capital adequacy, management efficiency and earnings ability effect on financial stability of Microfinance banks in Kenya and also examined the moderating effect of interest rate on the relationship between firm characteristics and financial stability of Microfinance Banks in Kenya, Market Power Theory, Buffer Capital Theory, Efficiency Structure Theory and Financial Intermediation Theory. The study adopted explanatory research design and positivism research philosophy. The target population comprised of thirteen licensed microfinance banks in Kenya hence a census. Secondary data was utilized: MFIs audited financial statements and Kenya's Central Bank were the sources of the data used; a document review guide was the data collection instrument. Data analysis was done via descriptive statistics, correlation analysis and panel regression analysis. The study adhered to ethical standards accordingly. In view of the correlation analysis, all the firm characteristics had positive relationships with Kenya's Microfinance Banks financial stability. With respect to the panel regression, the study found that: bank size had insignificant effect ($\beta=167.712$, $p=0.084$) on financial stability while capital adequacy had significant effect ($\beta=146.387$, $p=0.006$); management efficiency had significant effect ($\beta=9.704$, $p=0.000$) while earnings ability had insignificant effect ($\beta=132.604$, $p=0.308$) on financial stability of Microfinance Banks in Kenya. Furthermore, the study further discovered that interest rates had significant moderating effect ($\beta=35.2692$, $p=0.000$) on the relationship between firm characteristics and financial stability of Microfinance Banks in Kenya. The investigation advocates that: Microfinance Banks should strive towards holding additional capital levels which will serve as buffers, thereby, reducing the likelihood of breaching the minimum capital requirements; management should strive towards the improvement of scale efficiency and technical efficiency. This will in turn further strengthen the ability of banks to withstand shocks. The management should ensure maximum use of resources, while ensuring the maximization of income and reduction of costs of operation. This in turn will improve the financial stability of Microfinance Banks in Kenya. Given that this study was based on unbalanced data, additional study can be done using balanced data based on different time scope.

Anaman and Pobbi (2019) carried out a report on analyzing the financial performance and sustainability of MFI's in Ghana. Their report adopted quantitative design in analyzing the substantial issues influencing the performance of MFI's. Study adopted regression analysis model to measure profitability, liquidity and creation of credit also it analyzed the hypothesis of loan default, size of MFI and interest expenses. In the study, researchers applied correlation analysis

that measured the multicollinearity to assess the situation of linear relationship between variables. Measured variables including ROA, non-performing loans, operational expenses, interest expenses, liquidity, size of MFI and tax paid by MFIs. Results analyzed basing on data from 42-selected MFI in Ghana found that, there was significant discrepancy on the maximum and minimum rate between profitability and credit creation. The profit found to be 0.1531 that implies low rate of profit to some of MFIs. Also, it is observed that, credit advanced to customers was very low which signifies that there is low credit allocation to customers. For interest expenses the value was 0.3669, which signifies that MFIs have set aside enough capital to resolve the interests' issues. They further calculated on the interest expenses and found to be relatively higher compared to operating costs. Its implication is that, MFI management spent enough money on serving the interests payments rather than operations.

Adeyinka, Odi, Ebenehi, Ademola and James (2018) examined the relationship between Financial Intermediation and the performance of Microfinance banks in Nigeria. The main objective of this study is to examine the effect of financial intermediation on the performance of Microfinance banks in Nigeria. Data were sourced from the Central Bank of Nigeria Statistical Bulletin. The method adopted for data analysis to the stated objective was regression analysis. It was discovered in the Credit Supply Equation 1 that there was a significant relationship between Total loans of Microfinance banks and deposit mobilized by Microfinance banks in Nigeria. It was revealed in MFBS Performance Equation 2 that there was a significant relationship between total asset and Capital employed by Microfinance banks in Nigeria. It was also revealed in MFBS Performance Equation that there is a significant relationship between Loans to deposit ratio of Microfinance Banks and Liquidity ratio of Microfinance banks in Nigeria.

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Gap in Literature

There are many variables that are variables studies that affect performance of microfinance banks. Most of the findings of previous studies are based in the financial market of the developed countries (Zipporoah & Simba, 2015). The empirical studies examined in this study did not examine microfinance banks but focused on commercial banks (Ngerebo-a & Lucky (2016; Simiyu & Ngile, 2015;). The variables examined in the studies did not include financial services variables such as deposits and credits. This study therefore seeks to fill this gap by establishing the link between financial services variables and performance of deposit money banks in Nigeria.

METHODOLOGY

Quasi experimental research design was employed in obtaining, analyzing and interpreting the relevant data for hypotheses testing. The rationale for the variety is that quasi experimental research design allows the researcher the opportunity to observe one or more variables over a period of time (Uzoagulu, 1998). Specifically, cross sectional panel data was adopted in data analysis. The secondary data that was used in this study which were sourced from the financial statement of the quoted microfinance banks, Stock Exchange Facts Book and Central Bank of Nigeria Statistical Bulletin. The population of this study was made up of 15 microfinance banks. However, due to availability of required data ten microfinance banks were used.

The method of data analysis to be used in this study will be the panel data multiple linear regressions using Ordinary Least Square (OLS) method. This approach, which is a quantitative technique, includes tables and the test of the hypotheses formulated by using ordinary least square regression analysis at 5% level of significance. To arrive at a result that was not lead to spurious regressions, the study tested for stationarity at different levels in the variables making up the model. Other tests that were carried out on the model include test of Durbin Watson Test and test of model specification so as to achieve the objectives of our study as well as answer the research question and hypotheses.

Moreover, in order to undertake a statistical evaluation of our analytical model, so as to determine the reliability of the results obtained the coefficient of correlation (r) of the regression, the coefficient of determination (r^2), the student T-test and F-test was employed.

Model Specifications

From review of literature, financial service can be affected by several generic factors. So, it is necessary to investigate the effect on financial performance of microfinance banks. Following the hypotheses earlier stated in chapter one, regression models was formulated to capture the effect of independent variables on the dependent variables.

$$Y = \beta_0 + \beta_{1x_{it}} + \mu \quad (1)$$

Where Y = Dependent Variable

$\beta_{1x_{it}}$ = Independent variable

β_0 = Regression Intercept

μ = Error Term

Disaggregating Equation 3.1 to form the multiple regression models

Linear Regression Models

The linear regression model is formulated as follows:

$$ROA = f(MC, MS) \quad (2)$$

Transforming equation 3.2 to testable form:

$$ROE = \alpha + \alpha_1 MC + \alpha_2 MS + \mu_i \quad (3)$$

Where

ROA = Return on Assets

MC = Microcredit

MS = micro savings

μ = Error Term

$\beta_1 - \beta_4 =$ Coefficient of Independent Variables to the Dependent Variables

$\beta_0 =$ Regression Intercept

A-priori Expectation of the Result

The explanatory variables are expected to have positive and direct effects on the dependent variables. That is a unit increase in any of the variables is expected to increase microfinance banks return on equity. This can be express mathematically as $a_1, a_2, a_3 > 0$.

ANALYSIS AND DISCUSSION OF FINDINGS

Table 1: Regression Results on Financial Service and Return on Assets of Microfinance Banks in Nigeria

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Pooled Regression Results				
MS	0.925166	0.400367	2.310794	0.0234
MC	0.820713	0.419550	1.956173	0.0538
C	-0.613338	2.718117	-0.225648	0.8220
ECM(-1)	0.952825	0.039611	24.05441	0.0000
R-squared	0.881145	Mean dependent var		5.700698
Adjusted R-squared	0.876796	S.D. dependent var		4.791288
S.E. of regression	1.681759	Akaike info criterion		3.922953
Sum squared resid	231.9218	Schwarz criterion		4.037109
Log likelihood	-164.6870	Hannan-Quinn criter.		3.968896
F-statistic	202.6384	Durbin-Watson stat		2.017189
Prob(F-statistic)	0.000000			
Fixed Regression Results				
MS	0.536178	0.341624	1.569498	0.0209
MC	0.053144	0.403061	0.131850	0.8955
C	4.764650	2.664659	1.788090	0.0779
ECM(-1)	0.266807	0.093235	2.861650	0.0055
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.937088	Mean dependent var		5.700698
Adjusted R-squared	0.926747	S.D. dependent var		4.791288
S.E. of regression	1.296780	Akaike info criterion		3.496083
Sum squared resid	122.7595	Schwarz criterion		3.867089
Log likelihood	-137.3316	Hannan-Quinn criter.		3.645395
F-statistic	90.61297	Durbin-Watson stat		1.633426
Prob(F-statistic)	0.000000			
Random Regression Results				
MS	0.925166	0.308717	2.996808	0.0036
MC	0.820713	0.323509	2.536910	0.0131
C	-0.613338	2.095899	-0.292637	0.7705
ECM(-1)	0.952825	0.030544	31.19554	0.0000

Effects Specification			
		S.D.	Rho
Cross-section random		0.000000	0.0000
Idiosyncratic random		1.296780	1.0000
Weighted Statistics			
R-squared	0.881145	Mean dependent var	5.700698
Adjusted R-squared	0.876796	S.D. dependent var	4.791288
S.E. of regression	1.681759	Sum squared resid	231.9218
F-statistic	202.6384	Durbin-Watson stat	2.017189
Prob(F-statistic)	0.000000		
Unweighted Statistics			
R-squared	0.881145	Mean dependent var	5.700698
Sum squared resid	231.9218	Durbin-Watson stat	2.017189
Correlated Random Effects - Hausman Test			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	64.305694	3	0.0000

Analysis of Results

Source: E-Views output

Following the various methods of panel data analysis, the question of which is the most appropriate or suitable methods arises. Therefore, some means of selecting the most suitable method among the different approaches especially between the fixed effect model (FEM) and random effect model (REM) is needed. But when such a correlation exists, the Fixed Effects Model would be more suitable because the random effect model would be inconsistently estimated. From the table above the probability of the Hausman test is less than 0.05, therefore, the study adopt the fixed effect model.

F-Test: The F-calculated value is 90.61297 from the fixed regression results while the P-value of F-statistic are 0.000000 at 5% level of significance, considering the P-value, the chosen level of significance $\alpha = 0.05$ [5%] is less than the P-value of F-statistic. It is concluded that the regression model is statistically significant. This means that the joint influence of the explanatory variables on the dependent variable is statistically significant.

Coefficient of Multiple Determinations (R^2): The computed coefficient of multiple determinations of 0.926747 from the fixed effect shows that 92.6 percent of the total variations in the return on assets of the microfinance banks are accounted for, by the explanatory variables while the remainder is attributed to variable that is influenced by other factors not included in the regression model.

Durbin Watson statistics (DW): The computed DW is 1.633426 from the fixed results; show that at 5% level of significance with two explanatory variables and 100 observations. The value of computed DW is greater than the lower limit. Therefore, there is no evidence of positive first order serial correlation.

Regression Coefficient and T-Statistics: The t-statistics shows that micro saving have positive and significant effect while microcredit have positive but no significant effect on return on assets of the microfinance banks.

Discussion of Findings

The regression results presented in table 1, the fixed effect model found that micro savings of the microfinance banks have positive and significant effect on return on assets while microcredit have positive but no significant effect on return on assets. The estimated mode found that the variables added 0.53 and 0.05 percent to return on assets of the microfinance banks. The positive effect of the variable confirm the a-priori expectations and in line with shareholders wealth maximization. The positive effect of the variable confirm the findings of Anaman and Pobbi (2019) that, credit advanced to customers was very low which signifies that there is low credit allocation to customers. For interest expenses the value was 0.3669, which signifies that MFIs have set aside enough capital to resolve the interests' issues. Kweyu (2022) that: bank size had insignificant effect ($\beta=167.712$, $p=0.084$) on financial stability while capital adequacy had significant effect ($\beta=146.387$, $p=0.006$); management efficiency had significant effect ($\beta=9.704$, $p=0.000$) while earnings ability had insignificant effect ($\beta=132.604$, $p=0.308$) on financial stability of Microfinance Banks in Kenya, Asiimwe (2019), Usman (2020). Chiinze (2017), Bochaberi and Job (2021) Gathu and Njenga (2021), Isabwa (2021), Bogan (2022) that loans and credits are given to credible and promising entrepreneurs; also reducing the strict policies in credit supply to small and medium enterprises (SMEs); monetary authorities need to encourage MFBs to create more branches that can enable investor in rural areas to have access to credit facilities as well as to save and the findings of Taiwo, Yewande, Edwin, and Benson (2016) that by reducing the resource gap for small businesses, micro financing significantly promoted businesses. The following are the outcomes of research that Obokoh, Monday, and Ojiako (2016) conducted on SMEs and microfinance banks: The experience in Nigeria demonstrated that microfinance lending is beneficial to the growth of SMEs.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study focused on the relationship between financial services and the return on assets of microfinance banks in Nigeria. From the regression results, the study found that 92.6 percent variations in return on assets of the microfinance banks can be accounted for by the independent variables. This also indicates that there are other variables that influence the variations in the level of return on equity of the microfinance banks. The F-value shows that the explanatory variables are jointly statistically significant in the model while the Durbin Watson shows the absence of serial autocorrelations; the variables are positively related to return on assets of the microfinance banks. From the findings, the study concludes that there is positive but no significant relationship between microcredits and the return on assets of microfinance banks in Nigeria and also concludes that there is positive and significant relationship between micro savings and the return on assets of microfinance banks in Nigeria within the time scope of the study.

Recommendations

From the findings, the study makes the following recommendations:

- i. Management of the microfinance banks should increase the loan rate so that investors see microfinance banks as the number one source of funding, and the Central Bank of Nigeria should reduce the microfinance banks minimum reserve in order to increase micro credit in the economy.
- ii. Management of the microfinance banks should ensure effective means of deposit mobilization by increasing services to the rural communities and microfinance banks should allocate proper credit to the real sector for productive purposes in order to increase performance.

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