

CREDIT ADMINISTRATION AND PERFORMANCE OF SOME SELECTED MICROFINANCE BANKS IN CROSS RIVER STATE

Mboto, Helen Walter., Atseye Fidelis Anake., Doris Jane Matthew & Nkamare, Stephen Ekpo
Department of Banking and Finance, University of Calabar- Calabar

Abstract

The study empirically investigated Credit Administration and performance of selected microfinance banks in Cross River State. Expo-facto research design was adopted with historical data extracted from annual reports and accounts of these selected banks for the period 2015 – 2019. A population of 5 microfinance banks operates in Cross River State and the same was selected for study because of data quality and availability. Data were analyzed using descriptive statistics and multiple regression technique. Panel regression was used to examine the impact of the ratios of loan loss provision to non-performing loans (LLP/NPL), performing loans to total deposit (PL/TD) and ratio of non-performing loans to loans & advances (NPL/LA) on Return on asset (ROA). The findings revealed that loan loss provisioning and non-performing loan ratios had a significant negative impact on the profitability of MFBs in Cross River State, implying a significant decrease in the performance of MFB banks in Cross River State. However, performing loans ratio had a significant positive impact on MFBs profitability. Conclusively, credit administration had a significant impact on performance of selected microfinance banks in Cross River State. So, it is recommended among other things that proper loan appraisal and follow-up, including very careful loan screening procedure and timely disbursement of approved loan should be undertaken by credit officers to reduce delinquencies and default.

Keywords: Credit Administration, performance, microfinance banks, ratios of loan loss provision, performing loans, total deposit, ratio of non-performing loans, loans & advances, Return on asset.

Introduction

Banks thus serve as agents in channeling economic resources to tackle fundamental economic challenges. As a result, banks play an important role in developing economies such as Nigeria, Ghana, Egypt, and Algeria in financing the country's agricultural, industrial, and commercial activities (Uwuigbe, Olubukunola, & Babajide, 2015; Collins, Johnny, M-epbari & Barikui, 2017).

Because banks may simultaneously satisfy the wants and preferences of both surplus and deficit units, they contribute to the economy's actual productivity (Owojori, Akintoye, & Adidu, 2011). They must therefore carry out

their primary function as custodian of the money they lend with circumspect. Banks are required to pay interest to the depositors and dividend to the investors, and these payments are made from the profits through credit facilities advanced to borrowers (Ibrahim, Babatunde, & Lukuman, 2021).

Uwalomwa, Uwuigbe and Oyewo (2015) reiterate that the failure or success of these banks will to a large extent depend on the amount of credits they disbursed as loan. This implies that banks' lending is crucial for a bank financial performance, stability and sustainability (Epure & Lafuene, 2012). Performance has a connotation of profitability.

Profitability is significant in many respects provision of income in terms of wages and salaries, dividends and tax revenue to employees, investors and governments respectively (Noami, & Kargi, 2011).

Risks increase disproportionately when financial organizations develop in terms of volume, diversity, and complexity, making it increasingly difficult to monitor and manage credit portfolios (Mike, 2016). Credit management can thus be viewed as an essential component of lending, and in its absence, excellent loans and other credits can become bad. Good credit management necessitates the formation of, and adherence to, solid and efficient banking industry policies. According to Agu and Okoli (2013), one of the most effective ways for a larger institution to address its new reality as it grows in terms of the number and size of loans where proactive risk management is critical is to create a dedicated credit administration and management unit tasked with managing and organizing credit processes.

Credit administration, according to Myers and Brealey (2003), is the approach and strategy used by a corporation to maintain an ideal amount of credit and its effective management. As a result, banks must give credit to persons who are capable of properly utilizing it and repaying the loan when it matures. In order to stay in business, credit administration officers must employ a variety of tactics for monitoring, administering, and managing credit disbursed (Uwuigbe, 2013).

This is so because the banking industry in Nigeria has lost large amount of money as a result loan delinquency, lack of proper loan monitoring and supervision, and increased level of bad debt (Iwedi & Onuegbu, 2014). To abate these worrisome trends that have encapsulated the banking industry. The federal government of Nigeria, through apex regulatory authorities, has initiated policies and reforms to supervise the sector's actions, so that its positive contributions to the Nigerian economy can be felt. The 2005 recapitalization exercise, which requires banks

to increase their capital base (share) to a minimum level of ten billion naira (N10b) for regional banking, twenty-five billion naira (N25b) for national banking, and fifty billion naira (N50b) for international banking, is a notable reform created to strengthen the sector and cushion against the risk of bank failure (CBN, 2005; Soludo, 2005; Lawrence, 2013, Lalon, 2015). Despite these reforms, regulations, and programs, Nigerian banks have experienced multiple bank failures. This could be due to bad credit management.

Poor credit management, according to Osuka and Amako (2013), affects bank profitability and leads to bank difficulty and failure. To back up this claim, Uwalomwa, Uwuigbe, and Oyewo (2015) indicate that poor credit portfolio management leads to an issue of bad loans in Nigerian banks, causing them to perform below expectations. As a result, this threat not only contradicts the basic goal of banks, but it also has the potential to erode depositors', shareholders', and foreign investors' confidence in the banking system (Kagoyire & Shukla, 2016).

Based on the foregoing, credit administration is a critical job of banks that must not be disregarded, and bank management must always endeavor to meet the legitimate credit needs of the community it serves. According to Kagoyire and Shukla (2016), one of the most important requirements for good credit management is the ability to handle customer credit lines sensibly and efficiently. Credit administration is thus the monitoring of all activities related to a bank's credit process, safeguarding the value of the bank's greatest balance sheet asset, the loan portfolio (Drigă, 2012).

According to Psillaki, Tsolas, and Margaritis (2010), solid credit management is a requirement for a financial institution's stability and long-term profitability, whereas declining credit quality is the most common cause of bad financial performance and condition. Similarly, Fatima (2013) stated that in order for banks to reap the full benefits of their role as growth

engines, they must maintain an appropriate level of credit and its proper management, which will reduce the risk of loan default and monitor the usage of bank credit. Credit management entails applying four management principles to the credit concept: planning, organizing, directing, and controlling (Onyeagocha, 2001 & Obalemo, 2004). Credit experts and loan officers should therefore apply basic managerial functions to lending in order to make decisions in order to investigate inescapable credit risk that yields more profit (Osuka & Amako, 2013).

Furthermore, because the amount of credit administered is often charged at interest by a bank to a borrower, usually on collateral security, for a set period of time. Banks are encouraged to lend utilizing lending canons by examining borrowers' worthiness (Olokoyo 2011). Furthermore, banks have a commitment to accommodate the legal credit needs of their depositors and the community, as well as the shareholders' desire for profit. These objective needs must also consider loans demand. Every bank both commercial and microfinance is under simultaneous pressure to meet their customer request for credit, thus careful consideration and assessment must be made by the credit administration manager to oversee action plans and compliance to credit policies; monitors the loan portfolio and conducts regular reviews of credit (Adejare, 2016; Dressen; Kithinji, 2010 & Odele, 2020).

Hence, it is therefore pertinent to carefully examine the impact of credit administration on the performance of microfinance banks. Since credit is crucial in increasing bank performance (see, Kiiru, 2004; Nawaz & Munir, 2012) and credit risks is a cankerworm that has eaten deep into the profit of banks (Hosna, Manzura & Juanjuan, 2009). Conducting a study of this nature is therefore expedient to analyze the significance of credit administration variables (ratios of loan loss provision, performing loan and nonperforming loan) on the profitability (return on asset) of some selected microfinance banks in Cross River State.

Statement of the Problem

The incidence of bad debts and other credit risks is increasing the issues that banks face. It is concerning that the magnitudes of non-performing credit are increasing, causing banks to lose large quantities of money and, as a result, reducing their profit margins and customers' trust in them. In bank annual reports, the provision for bad and doubtful debts climbs rapidly, sending negative signals to the public about the economy. In addition, inadequate credit management has been blamed for the banking sector's ongoing financial crisis and panic. According to studies, the increase in nonperforming loan ratios and provision for loan losses in bank annual reports suggest that the credit component of the bank's portfolio is poorly managed. The quantity of non-performing credits in the banking system concerns several stakeholders, including bank management, depositors, and regulatory bodies. There has been few research that look into the loan administration and performance of microfinance banks. To the best of the researcher's knowledge, no empirical work hitherto has been conducted in Cross River State to ascertain the impact of credit administration on performance among microfinance banks, thereby leaving a knowledge gap. To fill the existing knowledge gap couple with the height spate of non-performing loans among microfinance banks necessitate this study.

Objectives of the study

This study seeks to achieve the following specific objectives:

- i. To determine the impact of loan loss provisions ratio on the performance of selected microfinance banks in Cross River State
- ii. To investigate the relationship between the ratio of performing loan on the performance of selected microfinance banks in Cross River State.
- iii. To determine the extent to which non-performing loans ratio affects the performance of selected microfinance banks in Cross River State.

Theoretical framework

Information Asymmetry Theory

Binks and Ennew proposed the theory of information asymmetry (1992). The information asymmetry hypothesis elucidates on basic facts that both lenders and business owners should be aware of in terms of prospective risks and rewards associated with investment projects for which funds have been set aside. According to Binks and Ennew (1992), perceived knowledge asymmetry causes two challenges for banks: moral hazard (monitoring entrepreneurial conduct) and adverse selection (making errors in lending decisions). This suggests that the "5cs" (character, capacity, capital, collateral, and circumstances) must be adequately reviewed before credit is issued. This is because banks do not have free access to the data required to approve credit applications and monitor debtors. When evaluating lending applications, bankers encounter a position of information asymmetry. According to Edwards and Turnbull (1994), information asymmetry occurs when a borrower takes out a loan and has greater information about the potential risks and rewards associated with the investment projects for which the funds are intended. The lender, on the other hand, lacks sufficient information on the entrepreneurs. Similarly, Olalere and Ahmad (2015) state that information asymmetry refers to the extent to which bank managers know more about the firm than investors as a whole. This study anchors on information asymmetry theory, because the theory is very relevant to this study.

Literature review

A profusion of studies on the relationship between loan management and financial performance of banks in established and emerging nations have been conducted; yet, their findings are contradictory and ambiguous. For example, Nwant to and Oguezue (2017) investigate the relationship between credit management and the profitability of Deposit Money Banks (DMBs) in Nigeria from 2006 to 2015. Secondary data were obtained from the Central Bank of Nigeria's Statistical Bulletins as well as the Annual Reports of all existing DMBs

investigated. The study used the multiple regression methodology to analyze the data collected; the analysis was done using the ordinary least square method. According to the study, loans and advances have a positive and insignificant effect on profitability, whereas non-performing loans have a negative and insignificant effect on profitability.

Kagoyire and Shukla (2016) investigate the impact of credit management on the financial performance of Rwandan commercial banks. The total population was used as the sample in the study's target population, yielding a sample size of 57 employees. In the credit department of Equity Bank, a Purposive sampling technique was applied. Data was collected using structured questionnaires, and data was analyzed using descriptive and inferential statistics. The findings demonstrated that client appraisal, credit risk management, and collection policies all had an impact on Equity Bank's financial performance.

Uwalomwa, Uwuigbe, and Oyewo (2015) examined the impact of credit management on bank performance in Nigeria. In order to achieve the study's aims, the audited corporate annual financial statements of listed banks from 2007 to 2011 were examined. Furthermore, ten (10) listed banks were chosen and studied for the study utilizing the purposive sample method. However, in evaluating the research hypotheses, the study used both descriptive statistics and econometric analysis, employing panel linear regression methodology with periodic and cross-sectional data in the estimate of the regression equation. The study's findings found that, while the ratio of non-performing loans and bad debt has a substantial negative influence on bank performance in Nigeria, the association between secured and unsecured loan ratio and bank performance was not significant.

Uwuigbe, Uwuigbe, and Oyewo (2015) investigate the effects of credit management on the performance of Nigerian banks. Secondary data derived from annual financial statements of ten (10) chosen listed banks from 2007 to 2011.

The data was analyzed using both descriptive statistics and econometric analysis. The results showed that the ratio of nonperforming loans and bad debt had a significant negative influence on the performance of Nigerian banks; however, the association between secured and unsecured loan ratio and bank performance was not significant.

Lawrence (2013) examines the impact of loan management on Nigerian bank performance. Relevant information was gathered from a financial report. The information was gathered through a survey of a few selected Nigerian banks. The collected data was examined using regression. The performance of the selected banks was measured using performance metrics such as profit after tax, profits per share, and dividend. The analyses show that loans are the most common source of revenue, and that good management of the loan portfolio and credit function is critical to a bank's safety and soundness. Although these actions remain important components of loan portfolio management, an examination of prior credit issues, such as those related with the banking sector, has revealed that portfolio managers should do more. In addition, bank management has failed to establish good lending rules and proper credit administration procedures. As stewards of depositors' funds, banks must exhibit proper care and caution in their lending operations. While the test finds no substantial association between successful loan management and bank profitability. According to the findings, loan management has had little impact on the performance of Nigerian banks.

Between 2000 and 2010, Victor and Eze (2013) investigated the impact of bank lending rates on the performance of Nigerian deposit money banks. It examined how bank lending rate policy influences the performance of Nigerian deposit money banks. The study used secondary data econometrics in a regression, combining and estimating time series and quantitative design. The findings indicated that the lending and monetary policy rates have a considerable and

favorable impact on the performance of Nigerian deposit money banks.

Chen and Shuping (2012) also investigate the credit management of commercial banks in Lianyungang City for small and medium-sized firms (SMEs). The findings revealed that the risk management plan and operating method that is truly suitable for credit demand for SMEs is still in its infancy, resulting in an overstock of bad debts and dead loans at Lianyungang Commercial Bank. The findings also found that credit management had a detrimental impact on commercial bank performance. Olokoyo (2011) employed regression analysis to analyze the factors of commercial bank lending behavior in Nigeria in a similar study. According to the study, commercial banks' deposits have the biggest influence on their lending behavior.

Hagos (2010) investigates how credit management affects Wogagen Banks. The findings revealed that issues impeding loan growth and rising loan client complaints on the bank regarding the valuing of properties offered as collateral, the length of loan processing, the amount of loan processed and approved, the loan period, and discretionary limits were negatively affecting credit management performance.

Methodology

The research design adopted in this study is ex-post facto and descriptive research design. The data used in the estimation of the model were obtained from secondary sources. The relevant data for this study were sourced from the selected microfinance bank annual reports using a data sheet that contain the following variables: Return on Assets (profitability) (ROA), Loan Loss Provisions (LLP), Performing Loans (PL) and Non-performing Loans (NPL). The sample size for the study was five (5) selected microfinance banks in Cross River State based on data quality and availability. The banks include: Unical Microfinance Bank, CRUTECH Community Microfinance Bank, Calabar Microfinance Bank, Ekondo Microfinance Bank and First Royal Microfinance Bank.

This study adopted a panel data regression model of some selected microfinance banks in Cross River State using the Ordinary Least Squares (OLS) method where data included time series and cross-sectional data that was pooled into a panel data set and estimated using panel data regression. The study was modeled according to the works of Osuka and Jonathan (2015); Ibrahim, Babatunde and Lukuman (2021) in their study which measured profitability with Return on Asset (ROA) as a function of the ratios of Loan Loss Provision to Nonperforming Loans (LLP/NPL), Performing Loans to Total Deposit (PL/TD) and ratio of Non-Performing Loans to Loans & Advances (NPL/LA). Given the above explanation, our function on this study is taken as:

$ROA = f(\text{LLP/NPL, PL/TD, NPL/LA})$
profitability] – meaning crediting achieving and performance

Therefore, the functional relationship is linearized into ordinary least square (OLS) model.

$ROA = b_0 + b_1LLP + b_2PL + b_3NPL + e.$,
Where, Dependent Variable=Returns on Assets (ROA), Independent Variable= Loans loss provisioning (LLP), Performing loan (PL), and Nonperforming loan (NPL), Regression Constant = b_0 Regression intercepts = $a_0 - a_4$ Stochastic error term = e . The *a priori* expectations of the coefficients are stated below: $\beta_2 > 0 < \beta_1$ and β_3 . This means that increase in the value of performing loan (PL) is expected to significantly and positively improve MFBs performance while LLP and NPL tend negatively affect MFBs performance in Nigeria measured by ROA. For the purpose of this research work, the technique for the data analysis is the panel data regression analysis.

The study also employed the use of Hausman test to determine which model was appropriate. Annual data covering the entire study period were collected and analyzed using the E-Views 11 statistical package. Also, a correlation analysis was conducted to check for highly correlated variables and avoid the problem of

multi-collinearity and serial correlation. Further, to avoid inappropriate model specification and increase the confidence of the results, time series properties of the data were investigated using the panel unit root tests and post estimation analysis (where the model diagnostics are presented and discussed).

Data analysis

The study employed annual data variables for 5 years period ranging from 2015 to 2019 with a total of five microfinance banks selected randomly in Cross River State. Return on asset

(ROA) was the proxy for bank performance (dependent variable) and the ratios of Loan Loss Provision to Nonperforming Loans (LLP/NPL), Performing Loans to Total Deposit (PL/TD) and ratio of Non-Performing Loans to Loans & Advances (NPL/LA) (independent variables). The data set were analyzed and presented in absolute values for further analysis.

Descriptive statistics

The results below depicted that microfinance bank performance stood at an average mean of 1.36791, for the period 2015 to 2019. This positive value of ROA explicitly indicates that the performance of the selected MFBs were positive during the period. The maximum value of ROA was observed at 0.80900 while minimum value was observed at 0.09100. The difference between the maximum and the minimum values, informed the range of data. The standard deviation for ROA was 0.18091. This demonstrated that the ROA was stable and did not deviate too much from the mean.

Further analysis of the descriptive statistics revealed that the mean value of the ratio of loan loss provision to nonperforming loan (LLP/NPL) was 0.34091 for the same period with its standard deviation of 0.191608. The maximum and minimum values for loan loss provision were 0.250000 and 0.5350000 respectively. The range value of 0.285000 depicts that MFBs used about 28.5 percent of their profits to cushion against credit risks. Also, the total value of performing loan to total deposit ratio (PL/TD) shows its minimum value as 1.000000 and

maximum of 2.50000; with a mean value and standard deviation of 1.086364 and 0.9164305 respectively. Finally, the total value of nonperforming loan to loan and advances ratio (NPL/LA) revealed its mean value as 0.045304 with a standard deviation of 0.072850 having its minimum value as 0.042500 and its maximum value of 2.24027. This showed that nonperforming loan to loan and advances ratio have high volatilities in the period of study as it deviates too much from the mean. Further analysis of the variables revealed that the measurement of skewness for loan loss provision and performing loan ratios were negatively skewed while every other variable is positively skewed. This implied that loan loss provision and performing loan ratios were asymmetrically distributed to the left (left tailed) while other variables were asymmetrically distributed to the right (right-tailed).

Table 2: Correlation

Result

ROA	LLP/NPL	PL/TD	NPL/L	ROA	LLP/NPL	PL/TD	NPL/L
				1.0000			
				1.0000	-0.0394		
				0.1488	0.0487	1.0000	
				0.0789	-0.0032	-0.0382	1.0000

Source: E-views 11 0 statistical software

The correlation coefficient of LLP/NPL was -0.0394. This signified a weak negative correlation between loan loss provisions and bank performance. Similarly, nonperforming loan ratio with -0.0032 also had a weak negative correlation with bank performance. While, performing loan ratio was 0.0487 signaling a strong and positive correlation with MFBs performance.

Furthermore, the correlation results reveals that both performing and nonperforming loan ratio with correlation values of 0.1488 and 0.0789 respectively has positive correlation with loan loss provision ratio. Also, nonperforming loan ratio with -0.0382 has a negative and inverse

The coefficient of the kurtosis of LLP/NPL indicated that the variables were found to be peaked (3.00 and above) (Leptokurtic) relative to the normal distribution while ROA, PL/TD and NPL/LA were found to be below 3.00. The Jarque-Bera (JB) test measures the difference of skewness and kurtosis of the series with those from the normal distribution. The JB value of 57.88534 and 11.29515 respectively for LLP/NPL and PL/TD with its corresponding probability of less than or equals to 0.05 percent confirms the normality of the series and suitability for generalization.

Correlation of the study variables

The correlation coefficient results were summarized in Table 2. The data subjected to correlation analysis is to test for highly correlated variables so as to avoid the problem of multicollinearity in the model and to give a spurious regression result.

relationship with performing loan ratio. Conclusively, the correlation results indicate no multicollinearity problems, as the absolute correlation coefficients for all the observed variables are less than 0.80. As according to Gujarati (2005) and Ngunjiri (2019), multicollinearity problems exist when the correlations value exceeded 0.80.

Residual Diagnostic Test

Diagnostic test results were established to examine that the appropriateness of the model is equally germane. It is important to validate the robustness of the estimated model. This is done via Jarque-Bera Normality Test and stability test.

The table below is the results of the residual diagnostic tests.

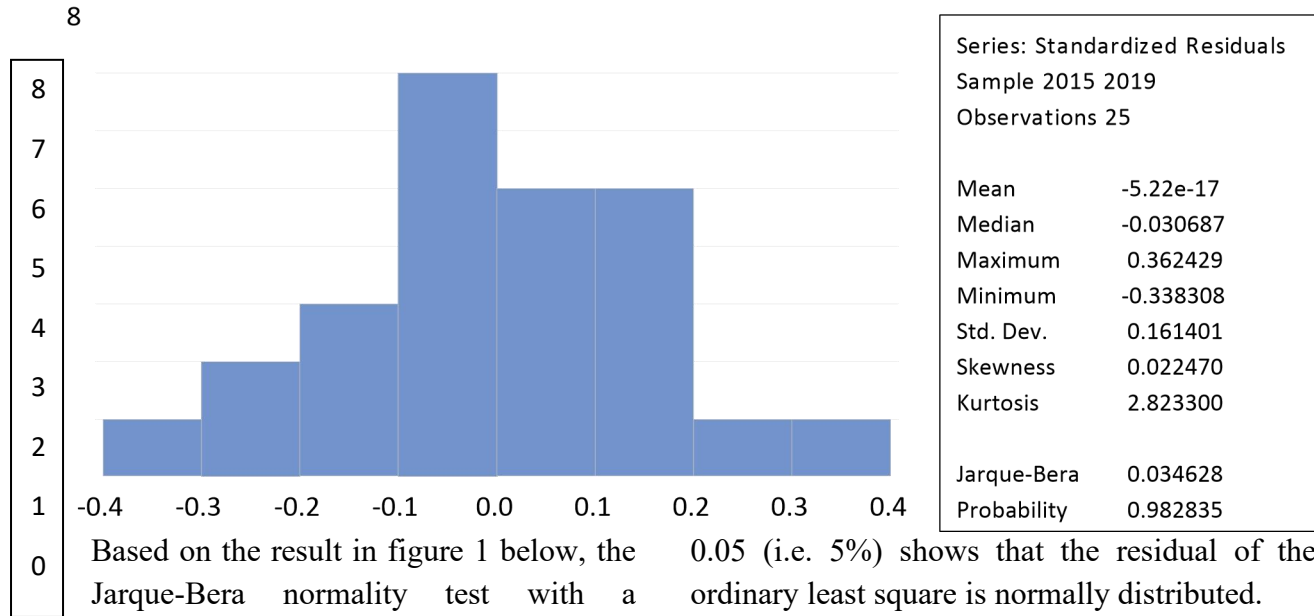
Normality Test

The Jarque-Bera Normality test was conducted to identify whether the data set is well modelled

Figure 1: Jarque-Bera Normality test

by a normal distribution or to figure out how likely a related random variable is to be normally distributed.

probability value of 0.9828 which is greater than

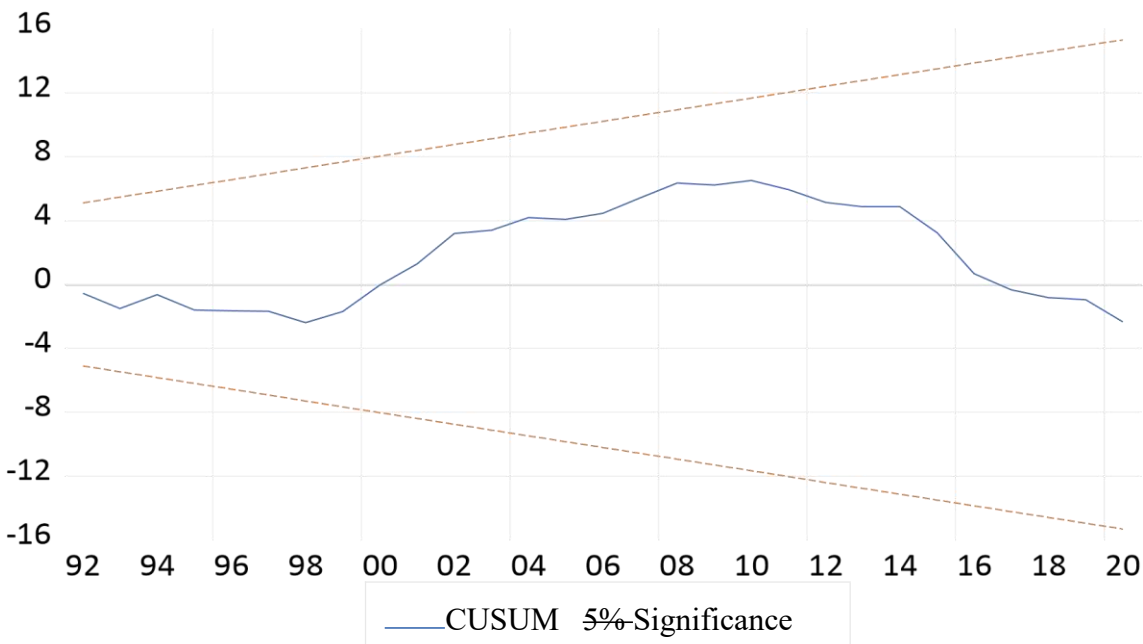


Based on the result in figure 1 below, the Jarque-Bera normality test with a 0.05 (i.e. 5%) shows that the residual of the ordinary least square is normally distributed.

Source: E-Views 11 statistical software

Stability diagnostic test

The result of the stability test prove that the estimated models and parameters were stable because the recursive error falls between the two critical lines.



Source: E-Views 11 statistical software

Unit Root Test

Unit root test were conducted to ensure that the series were stationary and check the problem of

having a spurious regression. A variable can only be said to be stationary when it has no unit root which is denoted in literature as 1(0). A

non-stationary variable can have one or more-unit root and it is denoted by $I(d)$, d is the number of unit root that the variable possesses and by implication, the number of unit roots that

the variable must be differenced to make it stationary

(Olawale & Ifedayo, 2015).

Table 3 Panel Unit Root Test – Return on Asset - Level I (0)

Method	Statistic	Prob.**	Cross sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t^*	-4.85546	0.0000	5	25
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-2.39372	0.0083	5	25
ADF - Fisher Chi-square	29.0929	0.0038	5	25
PP - Fisher Chi-square	47.6450	0.0000	5	28

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

Source: E-views 11.0 statistical software

The unit root result for the dependent variable (ROA) was found to be stationary at intercept and level I (0) because the Levin, Lin & Chu t^* statistic had a probability value of 0.0000 which is significant at 5% level of significance. Therefore, we reject the null hypothesis that ROA has a unit root.

Analysis and discussion of regression results

As mentioned previously, there are three approaches to Panel data: Pooled, Fixed and Table 4. Hausman Test

Random effects model. This study employed the use of the Hausman test to determine the most suitable model.

The Hausman Test to Identify the Suitable Model

Table 4 shows the results from the Hausman test. The alternative hypothesis of this test was rejected, so the estimation of the panel model through fixed-effects was inconsistent.

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	25.3173	3	1.0000

Source: E-views 11.0 statistical software

Furthermore, the Chi-square test statistic was 25.3173 with an insignificant probability value of 1.0000. This therefore meant that the null hypothesis was rejected in favor of the Random

effects model. Therefore, we accepted the Random effects model as suitable for this study.

Panel Regression Results

The panel least squares (random effect) model result is presented in table 4 below. The value of the intercept 4.394850, revealed that the performance of microfinance banks in Cross River State will experience a 4.394850 increase when all other variables (loan loss provision, performing loan and nonperforming loan) are held constant. The estimate coefficient which is -4.0993 for the ratio of loan loss provision to nonperforming loan {LLP/NPL} shows that a 4.0993 percentage change in LLP/NPL will cause a corresponding percent decrease in performance of microfinance banks in Cross River State. Further, the coefficient of 0.9335 for the ratio of performing loan to total deposit {PL/TD} shows that a percentage change in PL/TD will cause a corresponding percentage increase in the performance of MFBs and was found to be statistically significant. The implication is that, all things being equal, performing loan will lead to a 0.9335 percent increase in bank performance in Cross River State. Lastly, the estimated coefficient for

nonperforming loan to loan and advances ratio (NPL/LA) {-0.5580} shows that a percentage change in NPL/LA will cause a corresponding percent decrease in bank performance in Nigeria. The implication is that, a percentage increase in NPL/LA will lead to a corresponding percent decrease of about 0.5580 in the profitability of microfinance banks in Cross River State.

Furthermore, the R² {R-Squared} which measures the overall goodness of fit of the entire regression, had a value of 0.7651 which showed that credit administration explained the changes in bank performance by approximately 76%. The adjusted R-Squared was 0.5280 which has a difference of 24% with R-Squared which is within the acceptable range for a stable model. This showed that the model was stable. The test for the existence of autocorrelation was performed using Durbin-Watson statistic. The Durbin Watson result indicates 1.75 and since this value lies between 0 and 2, it can be deduced that there is absent of autocorrelation among the successive values of the variables in the model.

Table 5 Panel Least Square - Random Effect

Dependent Variable: ROA

Method:	Panel	EGLS	(Cross-section	random
effects)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.394850	3.158146	1.391592	0.1690
LLP/NPL	-4.099322	1.617516	-2.534332	0.0138
PL/TD	0.933571	0.387349	2.410155	0.0189
NPL/LA	-0.558066	0.622642	-0.896286	0.0336
Effects Specification				
S.D.				
R				
Cross-section random		0.337134	0.1273	
Idiosyncratic random		0.882738	0.8727	
Weighted Statistics				
R-squared			0.765190	Mean dependent var
0.758001				
Adjusted R-squared			0.528030	S.D. dependent var
0.907008				

S.E. of regression	0.882738	Sum squared resid	48.31198
F-statistic	2.207835	Durbin-Watson stat	1.755324
Prob(F-statistic)	0.096063	Root MSE	0.855570

Unweighted Statistics

R-squared	0.664170	Mean dependent var	-1.223293
Sum squared resid	54.56324	Durbin-Watson stat	1.554219

Source: E-views 11.0 statistical software

Test of hypotheses

In order to test the already stated hypotheses, the following decision rule is stated. Test of hypothesis one

To test this hypothesis, it is restated in the null forms as:

H₀: there is no significant relationship between the ratio of loan loss provisions and bank performance of selected microfinance banks in Cross River State.

Results of Table 5 shows that the coefficient of LLP/NPL was -4.0993 with a significant probability value of 0.0138. This signified that there was a negative relationship between ratio of loan loss provisions and bank performance but the impact was significant. We therefore accepted the alternative hypothesis that there was a significant relationship between the ratio of loan loss provisions and bank performance of selected microfinance banks in Cross River State. This meant that loan loss provisions during the period significantly affect the performance of microfinance banks in Cross River State.

Test of hypothesis two

To test this hypothesis, it is restated in the null forms as:

H₀: there is no significant relationship between the ratio of performing loans and bank performance of selected microfinance banks in Cross River State.

From Table 5 the coefficient of PL/TD was 0.9335 with a significant probability value of 0.0189. This signified that there was a positive relationship between performing loan and bank performance and was found to be statistically significant. We therefore accepted the alternative hypothesis that there was a significant relationship between performing loan ratio significantly affect microfinance bank performance in Cross River State.

Test of hypothesis three

To test this hypothesis, it is restated in the null forms as:

H₀: Non-performing loans ratio do not significantly affect the performance of selected microfinance banks in Cross River State.

From Table 5, the study deduced that non-performing loans ratio (NPL/LA) has a coefficient of -0.5580 with a significant probability value of 0.0336. Implying that there was a negative and significant relationship between non-performing loans and microfinance bank performance in Cross River State. Hence, the study rejected null hypothesis of the study and concluded that: non-performing loans ratio significantly affect the performance of selected microfinance banks in Cross River State.

Discussion of findings

The overall result of the descriptive analysis showed the absence of outliers in the data. The JB value for LLP/NPL and PL/TD and its corresponding probability of less than or equals to 0.05 confirms the normality of the series and

suitability for generalization. From the correlation results test for highly correlated variables and multicollinearity problems. The results revealed that all the observed variables indicate no multicollinearity problems. However, loan loss provision ratio and nonperforming loan ratio signified a weak negative correlation with bank performance, while, performing loan ratio had a strong positive correlation with bank performance. This result was consistent with the findings of Ibrahim, Babatunde and Lukuman (2021) who examined the impact of credit management and performance of deposit money banks in Nigeria.

A unit root test for the dependent variable (return on asset) was also conducted to ensure that the series were stationary and check the problem of having a spurious regression. From the result, it was estimated that ROA was found to be stationary at intercept and level I (0) because the Levin, Lin & Chu t^* statistic had a probability value of 0.0000 which is significant at 5% level of significance. Using the Hausman test to identify the suitable model for the study, the random effect model was adopted. From the panel least square regression results (random effect). The estimated DW-statistic is 1.75, hence it can be deduced therefore, that there is absent of autocorrelation among the successive values of the variables in the model which suggests that the model is good for prediction.

The panel least squares estimation R squared also explains the extent to which changes in the dependent variable can be explained by the change in the independent variable or the percentage of variation in the dependent variable (bank performance) that is explained by independent variables (loan loss provision, performing loan and nonperforming loan). The three independent variables that were studied explain only 77 per cent of the relationship between independent variables (loan loss provision, performing loan and nonperforming loan) and the dependent variable (bank performance). This therefore means that other factors not studied in this research contribute 23 percent of the performance of microfinance

banking institutions in Cross River State. Therefore, further studies should be conducted to investigate the other factors that affect financial performance of MFBs in Cross River State.

The adjusted R square also called the coefficient of multiple determinations is the percent of variance in the dependent explained uniquely or jointly by the dependent variable. The findings further indicate that adjusted overall R-squared was 0.5280 meaning that the regression line explains 52 per cent of financial performance (dependent variable). The changes are caused by the independent variable included in the regression line. Therefore, error term or the residual account for the other factors is 48 per cent.

Further, the estimated regression analysis results in Table 5 revealed that LLP/NPL coefficient result (-4.0993) showed that a percentage change in loan loss provision will cause a corresponding percent decrease in microfinance bank performance in Cross River State. This conclusion is with consistent with our initially stated a priori expectations of a significant negative relationship between loan loss provision (LLP/NPL) and banks performance (measured as ROA) for the selected microfinance banks. This is evident in the probability and t-statistics values of ($P > |t| = 0.0138$ and -2.5343 , suggesting a rejection of the null hypothesis and the acceptance of the alternate proposition. This outcome implies that there is an inverse relationship between the ratio of loan loss provision and the performance of banks. This finding corroborate the works of (Bouwman, 2009; Uwuigbe, Ranti and Babajide, 2015) where they concluded that higher loan loss provisioning ratios shrink banks' ability to invest in safer assets and pay dividends, which may affect bank performance.

Secondly, consistent with our a priori expectation, findings for the second hypothesis suggest that there is a positive and significant association between performing loans to total deposit ratio (PL/TD) and banks performance

(ROA) for the sampled banks of banks in Nigeria.

As depicted in the probability and t-statistics values with p-value of 0.0189 and t-value of 2.4101 for performing loan. Hence the null hypothesis is rejected with acceptance of the alternative. This result thus corroborates the findings provided in Acquah (2012) as cited in Shafiq and Nasr (2010).

Finally, consistent with the stated a priori expectation, findings provided in table 5 show that there is a significant negative relationship between non-performing loan and the performance of the selected MFBs in Cross River State. This is evident in the probability and statistics values of ($P > |t| = 0.0336$ and -0.8962). This outcome basically suggests that suggests that there is an inverse relationship between banks non-performing loan and the performance of microfinance banks in Cross River State. This indicates that poor asset quality or high nonperforming loans to total loans is related to poor bank performance. The result is in tandem with the correlation result presented in Table 4. This outcome supports the methodological juxtaposition of Kolapo, Ayeni, and Oke (2012) where they opined that an increase in nonperforming loan would eventually lead to a decrease in profitability.

Summary of findings

To achieve the objective of the study, the following findings were made:

1. Loan loss provisions showed a negative impact on MFB performance in Cross River State but the effect was significant during the period, hence, the alternative hypothesis that, there is a significant relationship between loan loss provisions and microfinance bank performance in Cross River State accepted.
2. Performing loan ratio showed a positive impact on MFB performance in Cross River State and was found to be significant; hence, the alternative hypothesis that, there is a significant relationship between performing loan ratio and microfinance bank performance in Cross River State was accepted.

3. Nonperforming loan ratio showed a negative impact on MFB performance in Cross River State and was found to be significant; hence, the alternative hypothesis that, there is a significant relationship between nonperforming loan ratio and microfinance money bank performance in Cross River State was accepted.

Conclusion/Recommendations

The study has examined credit administration and performance of some selected MFBs in Cross River State using loan loss provisions, performing loans and nonperforming loans as the variables for independent on Return on Asset. From the results of the statistical analysis, the study concludes that loan loss provisioning has a significant negative impact on the profitability of MFBs, implying that a portion of a MFB income set aside to protect them against future losses, causes a significant decrease in the profitability of MFB banks in Cross River State. Further, performing loans has a significant positive impact on MFBs profitability which implies that for every increase in loans and advances resulted to an increase in profitability of the selected MFBs in Cross River State. In addition, based on the hypotheses tested, findings from the study further provided evidence to support the arguments that ratio of non-performing loans do have a significant negative effect on the performance of MFB in Cross River State. This outcome corroborates the suggestion that poor asset quality or high nonperforming loans to total loans is related to poor bank performance. Thus, MFBs with good credit administration policies have lower loan loss provisions and non-performing loans and have higher profitability performance on performing loans.

From the results of the analyses and the observations obtained, it is firmly clear that, the variables chosen conforms to the a priori expectation. Conclusively, credit administration has a significant impact on profitability of the selected microfinance banks in Cross River State and this result can be generalized for all MFBs in Cross River State. From the findings,

the study makes the following recommendations for policy and practice:

1. Banks management should establish sound lending policies, adequate credit administration procedure and an effective and efficient machinery to monitor lending function, as this will lead to lower loan loss provisions and nonperforming loans.

2. For microfinance banks to achieve enhanced and sustained profitability from loans granted, appropriate credit management should be instituted. Banks therefore need adequate and accurate information from both internal and external sources in order to access the multiplicity of credit risks they face when presented with loan proposals.

3. Proper loan appraisal and follow-up, including very careful loan screening procedure and timely disbursement of approved loan should be undertaken by credit officers to reduce delinquencies and default.

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