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CREDIT MANAGEMENT TECHNIQUES AND EFFECT ON AGRICULTURAL LOAN REPAYMENT PERFORMANCE: THE CASE OF PROSPECT MICROFINANCE BANK, AKWA- IBOM STATE, NIGERIA

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ABSTRACT
The study assessed the effect of credit management techniques on agricultural loan repayment in Akwa Ibom State Nigeria using the Prospect Microfinance Bank (PMB) as a case study. The specific objectives were to examine the socio-economic characteristic of the farmer borrowers; examine the credit management techniques as used by the bank; the extent to which the customers divert loans and their loan repayment performance in terms of default and ascertain the determinants of loan repayment performance of the bank. Descriptive statistics, loan diversion and repayment indices as well as the ordinary least squares (OLS) regression techniques were used in the data analysis. The results of the analysis showed that; the mean age of the PMB customers was 43.5 years, about 51% of the loan beneficiaries were females while 49 were males. Again, 57% of them had a household size of 5 persons, with an average of 5 years in their businesses. The average amount of loan collected was N246, 750, out of which N53, 736.73 was used for unintended purpose representing about 22% approximately as loan diversion index. Rate of repayment and default were34% and 64% respectively while level of education and loan duration has positive significant effects on the loan rate of repayment. The result of OLS indicated that age, and interest rate had significant negative effect on the loan repayment at 5% probability level. The study recommended that, PMB should ensure that loan recipients should provide adequate sureties and guarantors to minimize default rate and the recipients should use the facility for the intended economic purposes to ensure repayment.

Keywords: Credit management techniques, and repayment performance

Introduction

Credit refers to the faith placed by a lender (creditor) in a borrower (debtor) by extending loan, usually in form of money, goods or securities to debtors. Essentially, when a loan is made, the lender is said to have extended credit to the borrower, and he automatically accepts the credit of the borrower (Onyeagocha, 2001). Among other activities, credit extension is the main product which banks provide to businessmen and entrepreneurs, and this serves as the main source of income for the institution. Credit management is at the hub of banking operations as it ensures the survival and safety of the bank. It is the process of collecting and controlling payments from bank customers. This is the function within a bank or company to control credit policies that will lead to increased revenues and reduce financial risks (Howard, 2013). Good credit policy ensures effective lending. Lending is considered effective if it successfully reconciles the banker's obligation of maximum profitability to the shareholders and maximum liquidity to the depositors. This is done by ensuring that non-performing exposures are reduced and properly managed. Despite the introduction of the prudential guidelines in banking industry, the volume and value of loan advances classified into non-performing accounts has continued to increase. The increase has remained even at a faster rate than the increase in lending. However, the Commonwealth Secretariat (2001) identified late repayments and loan default as serious threat to the sustainability of the functioning of credit institutions. The high rate of default associated with loans is a clear indication or index that something is wrong with loan management (Saliu and Inelo, 2005). Repayment performance, according to Silwal (2003), is important because it is a necessary condition used to assess the sustainability of credit programmes and institutions. Appropriate credit management policy defines the rules of operation at each stage of the sales process and clarifies the responsibilities in line with the business strategy (Anthony, 2008).

Methodology

This case study was conducted on Prospect Microfinance Bank. The Bank is licensed by the Central Bank of Nigeria for the provision and administration of microfinance services, loans, advisory services, poverty alleviation partners with the government or its agencies, as well as other financial services. It was incorporated by 31st March, 2008. The bank operates at her headquarters at 119 Oron Road Uyo, Akwa Ibom State. The sampling frame comprised the list of all customers who requested and received loan facility from the bank. The study employed random sampling in the selection of 50 customers who engage in agricultural enterprises. Survey data for the study were obtained with the aid of structured questionnaire. The loan repayment performance and loan default indices used were adopted from Udoh (2008) and stated thus;

$$\text{Loan repayment} = \frac{\pi}{\varepsilon + \rho} \quad X\ 100 \qquad (1)$$

Where

$\boldsymbol{\varepsilon}$ = amount of loan collected , $\boldsymbol{\pi}$ = amount of loan repaid, $\boldsymbol{\rho}$ = interest paid. All units of measurement here is the Naira

The borrowers' default index is measured as

Loan default = 100 - % loan repayment (2)

The OLS was used to ascertain the determinants of loan repayment performance of the bank customers. The model is as stated below:

$$Y = f(X_1, X_2, X_3, X_4, X_5, X6, X_7,) + e$$

Where

Y = Loan repayment index as measured in eqn (1)
X_1 = Length of time account is operated (months)
X_2 = Age of customer (years)
X_3 = Interest charged on loan (naira)
X_4 = Educational level of the customer (years spent in school)
X_5 = Loan duration (months)
X_6 = Business experience (years)
X_7 = Amount used for intended purpose (naira)
e = error term

Results and Discussion

The results in Table 1 show the socioeconomic characteristics of the respondents. Table 1 indicated that 30.61% of the Prospect Microfinance Bank Customers are between the ages of 30 and 39 years, and the mean age was 43.5 years. Age is one of the criteria considered in credit worthiness of an applicant as it is a crucial factor in determining "borrowers' attitude". It is believed that older persons are less innovative and productive (Ololade and Olagunju, 2013). This low productivity could influence their use of bank loan. A mean age of 43.5 years implied that the beneficiaries were middle-aged and ajudged in good position to efficiently utilize the bank loans. With over 42% of the bank loan beneficiaries who attained the tertiary level of education, it is an indication that most of the beneficiaries are literate. This implies that education has positive impact on managerial ability of loan facility and acquisition of modern agricultural business management skills. Fifty-seven percent of the bank customers had between 1 and 5 persons in a household. This is in line with the nationally recommended household size of six in a household (Eze and Ibekwe, 2009). Large household size could become financial and economic burden to the household head (Ololade and Olagunju, 2013). It increases the amount of credit diverted to unproductive activities.

The indices of loan diversion, repayment performance and default among the loan recipients are important determinants of the profitability and productivity of the farmers. It as well gives overview of the overall performance of the financial institution (Table 2). Loan diversion is the use of the loan disbursed for unintended purposes, which in most cases were not budgeted for before the loan application. Such expenses are inimical to loan repayment because they are not usually put into productive use. The average amount of loan collected was N246,750.00 while N193,013.30 was repaid.

Results in Table 3 showed that interest rate, age of customer, level of education, loan duration and years of business existence were the major factors that determine loan repayment. Interest rate was highly significant (at 1%) but with an inverse relationship with the repayment index. This means that as the interest level gets higher, loan repayments are low and there are increased chances of default. At low interest rate, the proceeds from the productive activities easily take care of the loan and the interest charges due to it. Age is significant at 5% and negatively related to repayment index. This showed that younger persons repaid better than older ones. This corroborates with the finding of Shrader *et al.* (2006) that youths consistently repay loans better than older people. Education and length of loan have positive relationship with repayment, and are significant. While better education helps the borrower understand fully the content of the loan agreement as well as the financial and social consequences of default, increase in the loan period spreads the monthly repayments into easily, manageable parts. Hence, repayments were easier.

Techniques of Credit Management in Agricultural Lending

The results in Table 4 show the rating scale analyses of credit management techniques in agricultural lending among the respondents in the study area.

All the credit management techniques were evaluated with the likert scale. Based on the mean score, a benchmark of 2.5 was established (<2.5 means strategy was not used, otherwise used). Credit policy ensures that loans are given to the customers who are qualified (by the bank's standards) to receive their, and are judged to have the ability to make the scheduled repayments. Table 4 showed the Credit Officers of Prospect Microfinance Bank show due commitment to the use of the bank's credit policy in giving facilities to their customers. Over 75% of the loans granted followed strict adherence to the bank's credit policy. Also, 71.43% of loan applications were reviewed by the independent credit officer before disbursement. This was to ensure that every loan granted by the bank has credit officer keeping an eye on it. Prior to the advancement of these loans, 77.55% of the applicants were visited to verify that information supplied on the loan application forms were correct and true. Such information include (but not restricted to) the personality of the borrower, his/ her social and financial status, assets to be used, location of business, business records and accounts, etc. Similarly, 75.51% of the loans were monitored through visitations. This measure gives the bank the opportunity to know how the funds are managed/ applied by the beneficiaries. It ensures that loans taken are applied to intended uses. Ninety-two percent of the beneficiaries were often offered additional credit as recovery strategy. This strategy is usually employed for beneficiaries with good credit history. However, in many cases, there are defaults on repayment. Hence, 42.86% of prompt repayment was enforced.

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Table 1: Socioeconomic Characteristics of Respondents

Variable	Frequency (Percentage)	Mean	Std Deviation
Age (years)			
20 – 29	6 (12.24)		
30 – 39	15 (30.61)		
40 – 49	12 (24.50)		
50 – 59	11 (22.45)		
60 – 69	5 (10.20)	43.5	12.3
Sex			
Male	25 (51.02)		
Female	24 (48.98)		
Education Attainment (years spent in school)			
0	1 (2.04)		
1 – 6	7 (14.29)		
7 – 12	20 (40.82)		
13 – 18	21 (42.86)	12.5	5.1
Household size (number of persons)			
1 – 5	28 (57.14)		
6 – 10	17 (34.69)		
11 – 15	4 (8.16)	9	7
Farming experience			
2 – 8	28 (57.14)		
9 – 15	15 (30.61)		
16 – 22	3 (6.12)		
23 – 29	1 (2.04)		
30 – 36	2 (4.08)		
Primary occupation			
Artisan	8 (16.33)		
NGOs	2 (4.08)		
Civil servant	5 (10.20)		
Driver	2 (4.08)		
Teaching	2 (4.08)		
Farming	22 (44.90)		
Banking	2 (4.08)		
Trading	6 (12.24)		
	49 (100.00)		

Source: Field data: 2016

Table 2: Loan repayment and diversion indices of Prospect Microfinance Bank customers

	Amount (N)
Average amount of loan collected	N246,750.00
Average amount used for intended purpose	N193,013.30
Average amount used for unintended purposes	N53,736.73
Interest charged (5% flat)	N246,750.00
Average amount of loan collected + interest	N258,224.13
Loan repaid	N88.173.47
Loan repayment	34.00%
Loan diversion index	21.78%
Loan default	66.00%

Source: Survey data, 2016

Table 3: Regression Results of Factors that Determine Loan Repayment of Prospect Microfinance Bank Loans

Variables	**Linear**	**Exponential**	**Semi-log +**	**Double log**
Length of account operation	-0.1927	0.0366	-0.4727	0.0680
	(-0.0843)	(0.4536)	(-0.0613)	(0.2313)
Age	-1.3260	0.0426	-35.3625	1.1237
	(-3.9278)***	(3.5774)**	(-2.4517)**	(2.0441)**
Interest rate	-0.0018	-0.0001	-9.7222	-0.3239
	(-3.9018)***	(-4.9889)***	(-4.4319)***	(-3.8743)***
Level of education	0.7327	0.0146	11.5451	0.3162
	(1.9911)**	(1.1247)	(2.2348)**	(1.6057)
Loan duration	2.3784	0.0658	12.4366	0.4118
	(2.1060)**	(1.6516)*	(2.1018)**	(1.8259)*
Years of existence of business	0.1807	0.0021	6.3513	0.1308
	(1.6478)	(0.5516)	(1.7977)*	(0.9715)
Amount used for intended purpose	1.510E-05	0.0000	0.8978	0.0348
	(0.3189)	(1.1567)	(1.3769)	(1.4006)
Intercept	-15.3763	1.6469	-63.6401	0.1207
	(-1776)	(3.5735)	(-1.3487)	(0.0671)
R^2	0.6624	0.6285	0.6502	0.5512
Adjusted R^2	0.6061	0.5666	0.5919	0.4764
F-value	11.7718	10.1526	11.1512	7.3688

*** = significant @ 1%, ** = significant @ 5%, * = significant @ 10%
t-values are figures in parentheses
+ = lead equation
Source: Computed from survey data, 2016