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Customer Relationship Management and Adverse Selection: What Experiences for MFIS in Cameroon?

Joseph Nzongang[1], Hervine Mireille Sihomnou Dzukou[2]

Abstract: This article aims to analyze the effect of Customer Relationship Management on reducing adverse selection within microfinance institutions in Cameroon. This analysis is made possible through the implementation of a questionnaire survey. Carried out on a sample of 522 microfinance clients in the cities of Douala Yaoundé and Bafoussam, the resulting descriptive statistics make it possible to measure the different variables. Data processing carried out using SPSS, which, once the variables have been estimated, facilitates the design of an econometric model using bivariate probit multiple regression. The results of the study indicate that a quality welcome and personalized support have effects on reducing adverse selection. Based on these results, we can recommend that marketing managers in MFIs rely on the future value of the customer at each stage of the customer life cycle in the customer acquisition and retention phases, in order to target the right customers, and therefore reduce adverse selection.

Keywords: Customer relationship management; customer acquisition; customer retention; adverse selection

JEL Classification: M11; M21

1. Introduction

The microfinance industry is essential to a nation's economic development. Africa's future depends on its capacity to diversify its economy and financial system. The objective of microfinance to combat poverty, include the marginalized in economic activity, and restore dignity to the impoverished has been demonstrated to be successful (Lapenu et al., 2004). By lending money to underprivileged households,

[1] University of Dschang, Cameroon, Address: B.P. 96 Dschang, Cameroun Colline de Foto, Cameroon, E-mail: jonzongang@gmail.com.
[2] Department of Marketing and Strategy, Faculty of Economics and Management, University of Dschang, Cameroon, Address: B.P. 96 Dschang, Cameroun Colline de Foto, Cameroon, Corresponding author: sdzukou@yahoo.com.

microfinance intends to fight poverty and strengthen the institutional capabilities of financial institutions (Gwasi et al., 2013). It is no longer necessary to show how microfinance has improved the lives of the target people in terms of food, health, education, and particularly women's empowerment. The microfinance industry has facilitated the quick emancipation of women by giving them the ability to manage their finances independently and make contributions to the family's overall well-being. According to Pasha et al. (2016), the banking industry as a whole is the backbone of the economy. In industrialized nations, more than 3,000 MFIs serving more than 10 million people were made public during the microfinance summit in 2006, according to (Gwasi et al., 2013). In terms of reducing poverty, the microfinance sector has made a significant contribution to the accomplishment of the Millennium Development Goals (MDGs) and later the Sustainable Development Goals (SDGs) through the creation of businesses and the empowerment of vulnerable groups (Gwasi et al., 2013; Makani and Wamba, 2018; Nzongang and Djoufouet, 2019). Nevertheless, the majority of MFIs struggle with information asymmetry. As a matter of fact, it has been proven since the work of Stiglitz, Weiss (1981) that the issue of asymmetric information is what causes credit markets to fail through adverse selection, moral hazard, a lack of insurance, and a lack of contract enforcement. Interactions in the market frequently exhibit information asymmetry. Information asymmetry is a common feature of market interactions. And the agency theory developed by (Jensen & Meckling, 2019) is the one that best allows us to understand it. Thus, in recent years, several authors have attempted to analyze the problem of disconfirmation asymmetry in the field of finance and specifically microfinance in recent years. As a result, a number of authors have made an effort to investigate the disconfirmation asymmetry issue in the field of finance, and more specifically, microfinance, in recent years. Thus, the focus of this work is on credit risk and nonpayment risk in MFIs (Asongo, 2014; Kalu et al. 2018; Ndwiga et al. 2010). The impact of information asymmetry on the profitability of MFIs has also been examined in other research (Karlan, 2009; Hermes, 2007). Basically, moral hazard and adverse selection are the two information issues that are frequently seen in the field of microfinance adverse selection and moral hazard. The first is linked to the difficulty for MFIs to distinguish the "good borrower from the bad", while the second concerns the influence of individuals on random events.

Numerous works have made an effort to investigate the role in minimizing the issue of information asymmetry within MFIs from this point of view. Recent work is fragmented and does not clearly provide the possibility of identifying real managerial knowledge around the issue. Other works, however, have attempted to analyze the factors for reducing information asymmetry under the prism of banking marketing and have shown the importance of Customer Relationship Management, its different dimensions and its close relationship. with relationship marketing on the reduction of adverse selection (Cao and Gruca, 2005, Kim et al., 2018). However, although

this approach to bank marketing offers a better perspective in terms of reducing information asymmetry, work is rare in the context of African countries and particularly in the Cameroonian context.

By asking the following question: What is the impact of CRM on adverse selection within MFIs in Cameroon?, this research aims to contribute to the body of knowledge on the effects of bank marketing on the decrease of information asymmetry inside MFIs. Our study's goal is to examine how CRM affects adverse selection, with a focus on the importance of customer acquisition and retention strategies. On a theoretical level, we follow Cao and Gruca's (2005) methodology. In fact, Cao and Gruca's (2005) strategy is built on a two-step process. Launching a marketing offer is the first phase (for instance, a new guaranteed loan, a new insurance product, etc.). In the second step, potential customers are chosen from a group of persons who have expressed interest in the marketing offer, have a suitable profile, or have a high solvency risk. In reality, according to Cao and Gruca's (2005) analysis, adverse selection occurs because prospects who reply are frequently not accepted whereas prospects who are likely to be approved are less likely to respond to a particular marketing offer. The study makes use of survey data from 522 microloan customers in the cities of Douala, Yaoundé, and Bafoussam. We employ simultaneous equation models. The first model assesses a customer's or prospect's likelihood of responding to a financial institution's marketing offer based on their solvency and other lifestyle criteria (age, gender, marriage status, family size, income, etc.).

The second model is founded on choosing appropriate profiles. This decision is made in light of the prospect's various traits. The second model really presupposes that consumer demand, or their interest in a marketing offer, has been authorized by the business based on a number of criteria. Following the introduction, the article is divided into four sections: section 2, which discusses the literature review; section 3, which discusses the methodology; section 4, which presents the results and their interpretations; and section 5, which concludes.

2. Literature Review

Due to the competition of the microfinance industry in Cameroon and the crises that impede its development, it is challenging for MFIs to develop in a climate that is always changing with technological breakthroughs and the emergence of new requirements. In Cameroon, where the microfinance industry is still developing, new microfinance businesses must contend with fierce competition from both established and emerging firms (Leininkumar, 2017). MFIs must therefore continue to offer high-quality services because what is good today might not be so good tomorrow.

This literature review's emphasis on services marketing and banking marketing results from the need to develop new client acquisition and retention techniques.

2.1. Informational Asymmetries

Following Stiglitz and Weiss (1981), who extensively developed on the role of information asymetry in credit markets with a theoretical and practical impact, Dean and Karlan (2005) conceptualize market failures. They highlight the difficulty of distinguishing adverse selection from moral hazard. In the case of insurance contracts, it can produce independent and combined selection and incentive effects; a randomly assigned interest rate could be due to ex-ante adverse selection or ex-post moral hazard because those who receive high rates have a greater incentive to default. These authors view adverse selection as the presence of bad customers and moral failings.

2.2. Customer Acquisition Strategies that Influence Adverse Selection

Information economics theorists have conducted numerous academic studies on information asymmetries. In the insurance sector, when the insured is aware of the deterioration of his health, he takes out health or health insurance to cover the necessary operation costs. This is a transaction in which the insured has more relevant information than the other party who accepts the risk. Due to the fact that part of salesperson compensation is tied to sales performance (i.e., number of sales), Kim et al. (2018) demonstrated that customer acquisition metrics influence adverse customer selection through acquisition incentives.

According to Honlonkou (2005), there is a situation where debtors with higher risk and lower performance are more likely to be chosen than debtors with lower risk and higher performance, and the latter withdraw from the market. This situation leads MFIs to raise interest rates and entice more low-value, bad-risk clients. Voukeng (2016) expands on this notion of unfavorable selection. Consequently, the following theory is put forth.

H1: MFIs' customer acquisition tactics have an impact on adverse selection

2.3. Techniques for Maintaining or Retaining Customers that Affect Adverse Selection

Kim et al.'s (2018) investigation into the presence of adverse selection in the maintenance or retention phase of customers leads them to the conclusion that multifaceted incentives offered by sellers to keep customers can not only lessen adverse selection but also completely reverse it, resulting in an advantageous

selection. Numerous studies in the banking industry concentrate on the potential for customer retention, taking into account that it makes more financial sense to concentrate revenue on existing customers rather than investing money on acquiring new ones. Therefore, the following hypothesis is put forth:

H2: Every customer retention measure used by MFIs affects adverse selection

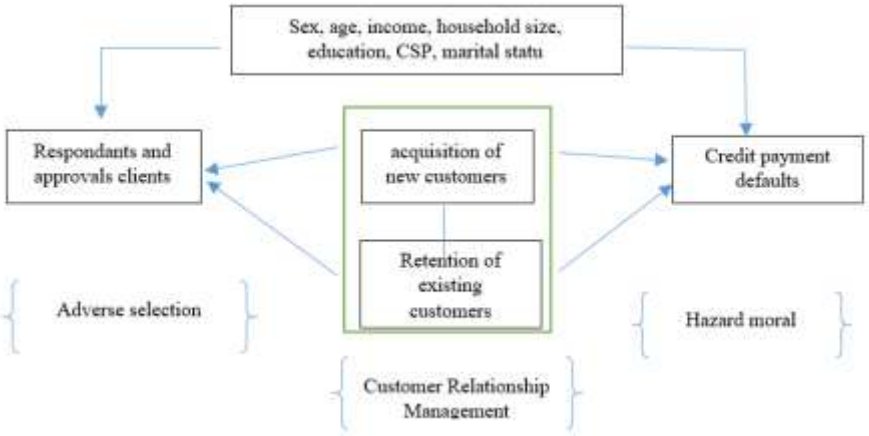

Figure 1. Impact Diagram

This diagram globally presents the effects of CRM on information asymmetries in general by integrating moral hazard, which, the latter, will be developed in the following article. In the present case, the part of the model concerned by this article is that of adverse selection.

3. Methodology

This study is guided by a positivist positioning and develops a quantitative analysis method with simple random sampling. A sample of 522 questionnaires intended for customers of electromagnetic networks is used. According to Neelankavil (2015), collecting data through questionnaires allows for an organized presentation of questions, with open and closed questions. Before starting the interview, the administration of the questionnaire requires the authorization of the interviewer and a polite form and a personal introduction. The empirical analysis in the previous section provides clear evidence of the presence of adverse selection due to customer relationship management.

This study uses basic random sampling to construct a quantitative analysis method using a hypothetico-deductive methodology and is informed by a positivist viewpoint. It makes use of a sample of 522 questionnaires sent to MFIs' clients. Neelankavil (2015) asserts that the questionnaire's data collection method enables

the orderly display of questions with both open- and closed-ended options. Before beginning the interview and after a courteous statement and personal introduction, the respondent must give their consent to administer the questionnaire. The empirical study in the section before offers convincing proof of the existence of moral hazard and adverse selection as a result of CRM. The relationships between information asymmetries and CRM techniques in the retention phase are examined in this section. Our questionnaire's arbitrary measuring scales, which were developed in accordance with the research's goals and the topic at hand, make it easier to collect data.

3.1. Conceptualization of Empirical Research

3.1.1. Data Collection

To study the relationship between CRM and information asymmetry, primary data is collected from MFI clients in the cities of Yaoundé, Douala and Bafoussam. The questionnaire was created using the literature on information asymmetries, CRM and microfinance to answer the central research question and specific questions. Therefore, the questionnaire is composed of open questions and closed questions. Multiple choice questions (MCQ) and dichotomous questions are present in the closed questions.

3.1.2. Description of Variables

3.1.2.1. Explanatory Variables

We have identified two main variables in the field of relationship marketing (Berry, 1981): customer acquisition strategies and customer retention strategies.

a) Customer acquisition activities

All operations carried out by the company to gain new customers are covered by customer acquisition activities. Simonet (2011) noted these elements as customer acquisition factors: quality welcome, support in difficult times, support in good times and end-of-year gifts, to operationalize this variable.

b) Customer retention activities

Client retention in MFIs is around 28%, which is a major problem for microfinance managers. Sustaining activities, also called sustaining activities, include all operations and of the system put in place by the MIF to retain and build loyalty among its existing customers. The scales created by Dean Karlan (2011) need to be adjusted to make this variable operational. This variable is operationalized as follows: Collection of savings at the workplace, creation of a credit file, maturation of the project, recovery of income, technical assistance for the project financed by credit.

3.1.2.2 Variables to Explain

a) Adverse selection

Cao and Gruca (2005) describe adverse selection as the presence of bad clients in the portfolio. They conceptualized using two variables empirically: clients who responded to the microcredit offer and clients who approved it. Customers who responded to the offer receive a value of 1 and customers who did not respond receive a value of 0. Similarly, approved or retained customers take the value 1 if they are approved and the value 0 if they are not.

b) The propensity to respond to the offer

The binary formulation (YES/NO) makes it possible to obtain customers likely to respond to the offer. This involves identifying the CRM and control variables that influence the likelihood of customer response to the MIF offer. In the presence of the CRM variables mentioned above and the characteristics of the demand, the study data will make it possible to assess the proportion of customers likely to respond to the offer.

c) The probability of approval of the offer

According to the Cao and Gruca (2005) model, only customers who responded to the offer are approved. Modeling approval based on CRM and lifestyle variables will show that approved customers are those who are less likely to respond (presence of adverse selection) because good customers receive many offers, including including those of competing companies trying to acquire them as new customers, their probability of responding is therefore quite low.

3.1.2.3. Control Variables

We used the variables sex, age (age of the client expressed in number of years, Honlonkou, 2006), CSP, education level (represents the education level of the borrower, Honlonkou, 2005), household size , marital status to control the impact of acquisition strategies on the reduction of adverse selection on the one hand and moral hazard on the other hand. Many authors have concluded that age, gender and type of activity are important factors for credit repayment.

Summary of variables

Synthèse des Variables

Variables		Types of variables	Measurements	Authors
To be explained)	Customers who responded to the offer	Binary	Takes the value 1 if the customer responds to the offer and 0 otherwise	Cao and Gruca (2005)
	Customers who has bees approved	BInary	Takes the value 1 if the customer is approuved to the offer and 0 otherwise	
Explanatory	Customer acquisition activities	Nominal	akes the value: 1= quality welcome, 2= Support in difficult times, 3= Support in good times, 4= End of year gifts	Simonet (2011)
	Contact entry mode	Nominal	Takes the value: 1= Word of mouth 2= Prospectus 3=TV/radio advertising 4= Internet 5= other	Alhawari (2012)
	Customer retention activities	Nominal	Takes the value: 1= Collection of savings at the workplace, 2= preparation of the credit file, 3= Maturation of the project 4= revenue collection, 5= Technical assistance in the project covered by the credit	Dean Karlan (2011)
Control	Seniority	Nominal	Number of years in the MIF portfolio	Makani and Wamba (2018)
	Sex (SEX)	Nominal	Takes the value 1 if it is a man and 0 if it is a woman	Honlonkou (2006)
	Age	Nominal		

	Socio-Professional Category	Nominal	Takes the value 1= senior manager 2= middle manager 3= worker 4= other (specify)	Mensah et al. (2018)
	Income	Nominal		
	Marital status	Nominal	Takes the value: 1= married 2= single 3= widowed 4= divorced 5 = common-law union	
	Family size	Nominal	Number of people in the household	
	Level of education		Takes the value 1= without diploma, 2 = CEP, 3= BEPC /CAP, 4= BAC, 5 = Licence 5= Master/Doctorate	Honlonkou (2006)

As a reminder, the data in the table above is collected from the sample and the processing and analysis was carried out using binary logit logistic regression under SPSS software.

3.2. Development of the Econometric Model (Recursive Model)

In economics, we consider that phenomena are by nature interdependent. Thus, economists propose the establishment of a system of simultaneous equations

3.2.1. Model Specification

The two-variable system can be described as follows:

$$\begin{cases} y_{1i}^{*} = \beta_1 X_1' + e_1 & (1) \\ y_{2i}^{*} = \beta_2 X_2' + e_2 & (2) \end{cases}$$

Where $y_{1i}^{*}$and $y_{2i}^{*}$are unobservable latent variables observed through a set of dichotomous variables $y_{1i}$and y_{2i}according to the following rules.

$$\begin{cases} y_{1i} = 1, \text{si } y_{1i}^{*} > 0 & (3) \\ y_{2i} = 1, \text{si } y_{2i}^{*} > 0 & (4) \end{cases}$$

X_1' and X_2' are vectors of exogenous variables and β_1 and $\beta_2$represent the conformal vectors of the relevant coefficients. Following Greene (1998, 2003), e_1 and e_2 are the error terms which follow a bivariate normal distribution (BVN) with a mean of zero, a variance of one and a covariance (ρ). The underlying algorithm for estimating bivariate probits is full information maximum likelihood.

3.2.2. Empirical Model

The two dependent variables used lead to a binary result (0;1). The development of this model is particularly important for the subsequent interpretations and analyzes that result from it.

3.2.2.1. Selection Model

Logistic regression makes it possible to explain the probability p that a client responds and is approved by the microfinance offer at the time of the survey by all of the dependent variables explained below.

$$\begin{aligned}\text{Advertising offer Response}_i &= \alpha + \beta_1 \text{Contact entry method}_i + \beta_2 \text{Stratégy for pursuit}_i \\ &+ \beta_3 \text{Purchase Motivation}_i + \beta_4 Seniority \\ &+ \beta_5 \text{Frequency of operation}_i + \beta_6 \text{Special Support}_i \\ &+ \beta_7 \text{Message/notification}_i + \beta_8 Household\ size \\ &+ \beta_9 \text{Education}_i + \beta_{10} \text{Gender}_{-i} + \beta_{11} \text{Married}_i \\ &+ \beta_{12} \text{Socioprofesional category}_i + \varepsilon_i\end{aligned}$$

α represents the other variables not taken into account by the model, i represents any individual, Ɛ represents the error term.

The contact mode represents the techniques used by MIFs to contact their prospects; this could be word of mouth, distribution of flyers, radio/TV advertisements. The conquest strategy represents the actions of MIFs to attract new customers and sell in a cross-selling situation. Purchasing motivation indicates the reason that pushes the customer to subscribe to a redit. So, you can take out credit to increase your income, belong to a certain social class, do like everyone else. According to Ajzen (1991), motivations precede intentions, which predict behavior. The seniority of the client in the portfolio designates the number of years already spent as a client of the MIF. Its influence on information asymmetries is revealed by the study of Emile (2022) who according to him, the more the client develops contractual relationships with the MIF, the higher the probability of becoming defaulter due to the trust that is created. is installed and which leads to a reduction in the rigor of the MIF towards the client in the analysis of the credit application file.

The frequency of operations refers to the regularity, the number of times the customer carries out operations in his account over a given period. Frequency, recency and amount are traditional measures of customer value in the portfolio. Special support refers to the support services that are offered to clients with the aim of facilitating their operations and transactions. Lakdalli (2022) emphasizes that MIF implement a set of actions in order to contribute to the success of the project and therefore to facilitate the monitoring and repayment of the loan. That said, MIF can therefore provide support to entrepreneurs in terms of training, advice, and technical assistance. Notifications/messages refer to SMS alerts concerning new credit offers which are sent to EMF customers. Household size indicates the number of people

existing in the household at the time of the survey. Education refers to the respondent's level of study: without diploma, CEP, BEPC/CAP, BAC, license, Master/doctorate. Gender indicates the sex of the respondent, whether male or female. Marital status indicates the respondent's civil status: married, divorced, widowed, common-law, single. The CSP indicates the socio-professional category of the respondent whether they are senior manager, middle manager, worker, or others.

3.2.2.2. Approval Template

Approval is used as the dependent variable of the CRM variables related to customer acquisition and retention in this model. Therefore, any change in the sample results in a change in the dependent variable. Only data from the sample that responded to the offer can be used to model the probability of approval. This means limiting comments on data for which the results of the approval decision are accessible.

$$\begin{aligned}\text{Approval}_i = \alpha &+ \beta_1 \text{Contact entry method}_i + \beta_2 \text{Stratégy for pursuit}_i \\ &+ \beta_3 \text{Purchase Motivation}_i + \beta_4 Seniority \\ &+ \beta_5 \text{Frequency of operation}_i + \beta_6 \text{Special Support}_i \\ &+ \beta_7 \text{Message/notification}_i + \beta_8 Household\ size \\ &+ \beta_9 \text{Education}_i + \beta_{10} \text{Gender}_{\_i} + \beta_{11} \text{Married}_{\ i} \\ &+ \beta_{12} \text{Socioprofesional category}_i + \varepsilon_i\end{aligned}$$

In most qualitative models, maximum likelihood is the most appropriate method of parameter estimation. Subsequently, it is necessary to model the two variables: "response" and "approval", in order to identify prospects who are both likely to respond and be approved. Therefore, we have the following system of equations:

$$R = \beta_1 X_1 \ + \mu \quad (1)$$
$$A = \beta_2 X_2 \ + v \quad (2)$$

4. Results and Discussion

4.1. Profile of Respondents

The descriptive analysis of the respondents showed 519 respondents, i.e. 62.20% who are men and 37.6% who are women. In terms of age, the distribution of respondents shows that 48% are aged between 26 and 35 years old and 6% between 46 and 55 years old, those over 55% represent 2.30% and between 16 and 25 years old they represent 15 .20%. In terms of marital status, there is a distribution of 47.40% single and 35.50% married. The level of education shows a population having the Baccalaureate level, i.e. 37%, 23.7% the license and 5.6% are without a diploma. We observe that in the population surveyed, more than 60% have at least the Baccalaureate (including bachelor's and master's degrees). It is therefore a fairly

educated population. We observe that 36.6% are workers and only 14.4% are middle managers, 2.7% are senior managers and 40.3% did not wish to answer this question.

In accordance with the work of Mensah et al., (2013), we retain the variables gender and marital status in this article to see the influence on information asymmetries.

4.2. Univariate Analysis

Table 1. Estimated effects of CRM on reducing adverse selection Bivariate probit model

VARIABLES	**Bivariate probit**		
	Offre_ad	Approval	/
Contact mode	0.535	-0.333	
	(0.539)	(0.731)	
Conquest strategy	-1.520**	0.187	
	(0.665)	(1.398)	
Purchase motivation	-0.542	6.759***	
	(0.884)	(1.685)	
Seniority	0.292	0.233	
	(0.693)	(0.906)	
Operation Frequency	-0.622**	-1.058**	
	(0.400)	(0.718)	
Special Support	-2.211***	-1.563	
	(0.754)	(1.392)	
Message/notification	1.046	-0.0282	
	(1.067)	(1.455)	
Household sixe	-1.013**	-0.0134	
	(0.412)	(0.377)	
Education	1.023*	0.182*	
	(0.686)	(0.968)	
Gender_	-2.452**	-0.584*	
	(1.203)	(0.890)	
Married	1.784*	-1.898	
	(0.917)	(2.338)	
Socioprofessional category_	2.525**	2.910*	
	(1.194)	(1.539)	
athrho			15.01***
			(0.452)
Constant	4.654**	3.243	
	(2.113)	(3.987)	
Observations	59	59	59

Robust standard errors in parentheses
****p<0.01, **p<0.05, *p<0.1*

As a result, the manner of contact lowers the likelihood that the offer will be accepted while raising the likelihood that it will be responded to. The conquest method raises offer approval while decreasing the likelihood of a response to the offer. Purchase motivation boosts offer approval and decreases responsiveness to the offer. Seniority enhances both the likelihood that the offer will be accepted and that a response will be given. The likelihood of responses to the offer and the likelihood that the offer would be accepted both decline with transaction frequency. Special assistance decreases the likelihood of accepting the offer and of responding to it. Notifications of new messages enhance the probability of replying but lower the probability of approval. Household Household size lowers the likelihood of replying and lowers the likelihood of being accepted. Education level raises the probability of replying and the probability of approval. The likelihood of approving and of reacting both decline with gender. The likelihood of responding to the offer increases with marital status but the likelihood of approval lowers. The likelihood of a response and the likelihood of approval both improve with CSP.

These findings allowed us to forecast the response potential for the 38 clients in the unsuccessful sample. We can assess how well the response-driven selection model would have performed if it had been used to score household profiles because we have the actual response (and approval) data for these households. sample was not kept. In comparison to the remaining deciles, the top three deciles have an average response rate of 72% as opposed to 38%. However, compared to a rate of 46% for other prospects, the approval percentage for these identical households was only 26%.

From a methodological perspective, it is typically impossible to interpret the coefficients from a probit regression's output (at least not in a consistent manner). Therefore, it is advised to interpret the regressors' marginal effects. In other words, it's crucial to determine how much the (conditional) probability of the outcome variable varies when a regressor's variable changes while maintaining the values of all the other regressors constant. In contrast to linear regressors, in this scenario the predicted coefficients are immediately interpreted.

As a result, in the case of linear regression, the marginal effects are the regression coefficients. On the other hand, after calculating the probit regression fit, you must perform an additional calculation to determine the marginal effects. The following table provides the significance weight for each identified factor of the marginal effects of the CRM on the decrease of adverse selection understanding that the results of the calculation of the marginal effects will go in the same direction as the biprobit regression.

Table 2. Estimated Marginal Effects of CRM on Reducing Adverse Selection

VARIABLES	Adverse selection
Contact Method	-0.123*
	(0.266)
Conquest strategy	0.0689
	(0.512)
Purchase Motivation	0.181**
	(0.336)
Seniority	0.0856
	(0.336)
Operation Frequency	-0.389**
	(0.270)
Special support	-0.525**
	(0.409)
Message/notification	0.120
	(0.404)
Household sise	-0.00493
	(0.139)
Education	0.0669
	(0.355)
Gender_	-0.284**
	(0.274)
Married	-0.286**
	(0.481)
Socioprofessional category_	0.614***
	(0.198)
Constant	4.654**
	(2.113)
Observations	59

a) Robust standard errors in parentheses
b) *** p<0.01, ** p<0.05, * p<0.1

These findings imply that CRM enhances the likelihood of reducing adverse selection by 0.0689, 0.181, 0.856, 0.120, 0.0669, and 0.614 for each unit increase in conquest tactic, purchase motive, seniority, messages/notifications, education, and socioprofessional category. Likewise, the probability of reducing adverse selection decreases by 0.123 (at the 1% threshold), 0.389 (at the 5% threshold), 0.525 (at the 5% threshold), 0.289 (at the 5% threshold), and 0.286 (at the 5% threshold) for each unit increase in the variables Mode of entry into contact, Frequency of operation, Special support, Gender, and Married.

Pairwise Correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1)Response Offer_advertising	1,000													
(2)Approval	0,700*	1,000												
(3) contact_mode	0,015	-0,088	1,000											
(4) Conquest strategy	0,123*	0,161	0,126*	1,000										
(5) Purchase motivtaion	-0,066	0,054	0,037	0,102*	1,000									
(6) Seniority	0,060	0,202	-0,018	0,072	0,035	1,000								
(7) Operations frequency	-0,118*	-0,259*	0,198*	-0,032	0,138*	-0,064	1,000							
(8) Special support1	0,001	-0,169	0,073	-0,128*	-0,260*	-0,059	-0,323*	1,000						
(9) message_notification	0,010	-0,069	0,012	-0,005	0,040	-0,055	0,106*	-0,135*	1,000					
(10) Household size	0,114*	0,215	0,005	0,021	0,041	0,191*	-0,132*	0,090	-0,185*	1,000				
(11) Education	0,067	0,187	0,165*	-0,010	0,064	-0,001	0,337*	-0,233*	0,151*	-0,200*	1,000			

(12) Sexe_	-0,054	0,140	0,086	0,024	0,073	-0,004	0,130*	-0,050	0,076	-0,073	0,169*	1,000		
(13) Married	0,111*	0,062	-0,055	0,004	0,033	0,266*	-0,123*	0,039	-0,183*	0,410*	-0,190*	-0,026	1,000	
(14)Socio professional category_	-0,010	0,349*	-0,037	0,029	-0,006	0,227*	0,010	-0,217*	-0,108	0,155*	0,189*	0,060	0,223*	1,000

*** p<0.01, ** p<0.05, * p<0.1

Source: from the work of the study

The data in this table show a low correlation between the variables in our regression, which consequently reflects the absence of multicollinearity bias between the different explanatory variables

4.3. Results Discussion

Adverse selection is more likely to be reduced when conquest strategy is increased by one unit, in this case by enhancing reception. Numerous authors who examine quality reception in the marketing and banking literature point to client communication as a crucial component at the reception level (Alenga, 2015; Kouamé, 2014). Alenga (2014) incorporated customer satisfaction into the level of customer service, which may be summed up as follows: professionalism in customer care, accessibility to information about the services provided, customer communication, management of customer complaints, and the supply of customer reports. Seniority increases the chance of debtor defaults, according to Emile (2022). It is significant to note that because the results need to be validated or expanded to various geographic areas, they cannot be utilized immediately. The values we receive come from our empirical study and are implicit values. The Cameroonian microfinance industry is seen as a dynamic industry that is impacted by the nation's general economic position.

5. Conclusion

This article's goal was to examine how CRM tactics can lessen adverse selection in MFIs in Cameroon. We have emphasized the connection between CRM and adverse selection in MFIs generally and in Cameroon in particular in the literature on CRM and microfinance. Indeed, the issue of adverse selection has become increasingly acute in MIF in Cameroon over the past few decades, despite the fact that these systems still face numerous challenges due to both endogenous and exogenous factors and have a significant impact on the economic and social development of African nations (Nzongang et al., 2019). A questionnaire survey was employed as the methodology, and it was conducted on a sample of 522 microloan customers in the cities of Douala, Yaoundé, and Bafoussam. The acquired results demonstrate the primary CRM techniques that have an impact on adverse selection during the acquisition phase, quality reception and support during good times and during the retention phase, collection of savings at work, and credit file assembly. Numerous writers' findings (Simonet, 2011, Alenga, 2014, Kouamé, 2015) are reflected in these findings. This study has some limitations, such as the ability to identify unfavorable selection solely from the perspective of clients and the inability to examine the perspective of EMF managers. Additionally, the data is only collected in Cameroon's major cities; therefore, expanding the analysis to include clients in rural areas will offer a fresh viewpoint. This analysis enables us to suggest customer acquisition and retention tactics to marketing managers in MIF. Therefore, it would be necessary to set up a client acquisition and retention plan that outlines the goals, benchmarks, strategies, and tactics to be used. In response to the question: Which customer should we retain or retain, what means/resources are available? (Eva et al., 2016), they provided an answer. In order to monitor the rise of information asymmetries and, more specifically, adverse selection, it is necessary for organizations to set up customer service in MIF that can foresee efficient acquisition and retention strategies. When a structure integrates processes, people resources, and structures to work effectively in line with the plan, it is viable and efficient (Fersi, et *al.,* 2016).

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