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GROUP LENDING AS AN INSTRUMENT OF CREDIT RISK MANAGEMENT IN CAMEROONIAN MFIS

CLAUDE ESSOMBA AMBASSA
VICE DEAN
FACULTY OF ECONOMICS & APPLIED MANAGEMENT
UNIVERSITY OF DOUALA
CAMEROON

ABSTRACT

Micro-entrepreneurs in developing countries are often excluded from bank credit because they can not provide sufficient material collaterals and also because the costs of screening and monitoring are very high. Following this point of view, we can say that micro-financial intermediation complements bank financing of micro-entrepreneurs. Based on the analysis of 70 group loans of 5 Cameroonian, we show that group loans granted by MFIs in Cameroon has an aspect a non-tangible collateral due to variables underlying their constitution and their functioning.

KEYWORDS

Microfinance, group lending, repayment performance, credit risk, information asymmetry.

RESUME

Les micro-entrepreneurs dans les pays en développement sont souvent exclus du crédit bancaire parce qu'ils ne peuvent fournir des garanties matérielles suffisantes et aussi parce que les coûts de sélection et de surveillance sont très importants. Dans cette perspective, l'intermédiation microfinancière est à même d'apporter une contribution complémentaire à celle des banques dans le financement des micro-entrepreneurs. Nous montrons à cet effet en nous basant sur l'analyse de 70 groupes de prêts appartenant à 5 IMF camerounaises que les prêts de groupe octroyés par le IMF revêtent un caractère de garanties immatérielles du fait des variables qui sous-tendent leur constitution et leur fonctionnement.

MOTS CLES

Microfinance, prêts de groupe, performance de remboursement, risque de crédit, asymétrie d'information.

INTRODUCTION

If banks function following a financial logic of returns, microfinance institutions (MFIs) defined as suppliers of a set of financial products to all those who are excluded from the formal financial system have a double mission which is both social and financial. The proclamation of the year 2005 as the international year of microcredit by the United Nations contributed to the development of the MFI sector in Africa from the geographical point of view as well as the products offered. The MFI sector thus appeared as a vector of development in African countries. However this accelerated growth today results in the closing of several MFIs that unfortunately could not control this evolution. Meeting both social and financial objectives in the activity of microfinance requires a good mastery of credit risk.

The microfinance sector in Cameroon really took-off in the 90's with laws N° 90/053of the 15th of December 1990 on the freedom of association and n° 92/006 of the 14 of August 1992 on cooperatives and common initiative groups. This regulation considers three classes of MFIs, with none having the status of bank or financial institution. We can distinguish category 1 MFIs who collect savings from their members and use it to grant loans exclusively to these same members. It is therefore a form of Mutual Insurance Company. The second category consists of MFIs registered as limited companies and is similar to banks. They collect savings from the public and grant loans to everybody. The third and last category is made up of companies who grant loans to the public but don't collect savings. This last category mainly consists of project financing lines.

Cameroon is the leading country in the Central African region with more than 400 MFIs. With the increase in number of these institutions, many difficulties emerged both at the macroeconomic (the effect on fiscal and monetary policy) and microeconomic level (ensuring the security of savings and loans, transparency, the execution of contracts). As concerns loan reimbursement performance in Cameroon, from December 2006 to September 2007, outstanding loans represented 13% of total credit while bad loans stood at more than 25% of total credit between September 2007 and December 2008[1]. This high level of outstanding debts in the microfinance sector is one of the causes of the problems witnessed by the sector. This problem was addressed by the Ministerial Committee of the Central African Monetary Union who after witnessing the growing importance of the sector in the economies of the region adopted a regulation fixing the conditions of exercise and control of this activity in the Economic and Monetary Community of Central African States (ECCAS) signed on the 13th of April, 2002. Through the signing of this regulation, many prudential regulations were adopted and implemented by the Banking Commission of the sub-region (COBAC). This prudential regulation innovated credit risk management and control in the microfinance sector through the adoption of many regulations which include:

- COBAC regulation number COBAC EMF 2002/07 on risk coverage which restricts the granting of loans to cases where outstanding payments are less than or equal to 10% of the total credit;
- COBAC regulation number COBAC EMF 2002/08 relating to the sharing of risk which requires the respect of a given ratio between the amount of shareholders equity or net assets and the total risk incurred by the MFI in its operations with a single partner. The ceiling is fixed at 15% for category 1 MFIs and 25% for category 2 MFIs.
- COBAC regulation number COBAC EMF 2002/18 relating to the management and writing off of bad loans.

However, despite this regulatory framework (relating to risk management, coverage and sharing), MFI performance in terms of loan reimbursement hasn't improved with time as shown by the quality of the loans portfolio of the private sector cited above and Taken from different statistical reports of COBAC.

This issue of risk of default or non-repayment, with which the MFIs are confronted, is all the more alarming as the microfinance has a double mission:

- a social objective according to which the microfinance is considered as a set of financial and/or non-financial tools at the service of those that are poor, excluded from the traditional financial system, or deprived of material collaterals. Generally, the majority of this population draws her income from the informal sector and have difficulties to finance income generating activities or their development.
- an objective oriented towards financial viability as basis of the continuity of the activities of saving and microcredit of the MFI and pledge of its financial autonomy in the long run. The reimbursement performance appears here as a major element capable of increasing the amount of loans since an improvement of the rates of reimbursement leads to wider access to microcredit. The dilemma between solidarity and continuity thus constitute the central question faced by the operators of microfinance today. Concerning this dilemma, the MFI will have to arbitrate between the two preceding objectives within the framework of their activity of granting loans. Group lending appears to be an alternative making it possible to connect these two objectives.

Commercial banks when granting loans generally evaluate level of risk posed by their customers by investing in screening or project selection techniques and requesting important material collaterals. However, given the information context that generally characterises Sub-Saharan African countries and Cameroon in

[1] COBAC 2007 and 2008 annual reports

particular, the micro-entrepreneurs are unable to provide the collaterals required by commercial banks seeking to reduce information asymmetries. They are thus directed towards MFIs which can resort to immaterial collaterals (group lending, individual loans) to grant credit.

This study examines the mechanisms of formation and operation of groups as basis of the efficiency of group loans as regards loan reimbursement in Cameroonian MFIs. The first part of the study is devoted to the presentation of the theoretical analyses of group lending as a factor of reduction of the default risk. In the second part, we try to highlight the variables which significantly affect reimbursement of loans granted to groups by MFIs.

I) THE PRACTICE OF GROUP LENDING AS A FACTOR THAT REDUCES THE RISK OF DEFAULT: A THEORETICAL ANALYSIS

I-1) GROUP LENDING: A FINANCIAL TECHNIQUE THAT REDUCES AGENCY COSTS

Group lending is based on the granting of a loan to a group of people, each one being the surety of the other. If a problem arises, the responsibility of all the members is at stake. When a customer does not reimburse, social pressure makes sure that in one way or the other, the loan is reimbursed. However, the reputation of this bad debtor suffers and leaves him little chances for another loan. Group lending is based on joint responsibility and joint collaterals.

The first form of group lending was developed by the Grameen Bank in Bangladesh in 1976. Small loans were granted to groups of poor women at the rate of 20% for them to develop income generating activities. These loans start to be reimbursed from the second week following their granting. The borrowers hardly have personal collaterals to offer to reduce the risk in case of default. The financial institution basis itself on the group's self monitoring. In this aspect, we can say that it applies to bank lending a mechanism that has been in practice for long in informal finance, particularly tontines (Lelart M, 2002).

Imperfections on the credit market are the reference framework that justifies the recourse to microcredit, particularly group lending. According to Gandré P. (2012), credit relationships are modelled by agency relations. These relations can be defined as involving a principal and an agent, the first (the bank) employing the second (the borrower) to carry out a task determined within the framework of a contract (the reimbursement of a loan). The behaviour of the agent is not observable by the principal. The fact that the bank has a negative perception or is not perfectly informed on the behaviour of the borrower and the quality of his projects, can lead the bank to increase the interest rate and/or to require greater collaterals, which gives birth to a problem of adverse selection and moral hazard. Stiglitz J. and Weiss A. (1981) show that credit rationing is an efficient response to the problem of adverse selection. They show that an increase in the interest rates or the collaterals required beyond a certain threshold systematically has an effect of adverse selection which is against the interests of banks. In fact, the increase in the interest rates or the collaterals required attracts the most risky borrowers and this has a negative screening effect because good borrowers leave the market because they refuse to pay these rates or provide these collaterals considering given that it is an unjustified allowance for risk.

Moral hazard is analyzed by Williamson S. (1986) who shows that when the results of the projects of potential borrowers are not directly observable, a bank cannot know without cost, the output of the projects which it finances. Rather than to bearing these costs, it will prefer to ration credit. Concerning moral hazard, asymmetry of information is related only to the will of reimbursement of the borrower since the capacity of reimbursement of this borrower is considered to be known by the bank at the beginning of the negotiation of the contract. Moral hazard originates from the incapacity to control and evaluate the future behaviour of the borrower. This problem of moral hazard will lead the bank to encourage the borrower to reveal the true result of his investment in view of reducing the costs of control. An increase in the interest rates and/or collaterals will encourage the borrowers wishing to maximize profits to choose a project which presents greater prospects of profitability for him but also a higher probability of default for the lender.

Information asymmetry and its consequences explain the exclusion from the formal banking sector from which many micro-entrepreneurs and low income earners in the developing countries suffer. New innovative mechanisms by the MFIs can reduce the risks of adverse selection and moral hazard in a context dominated by informal projects Fall Seck F.(2011). This is especially true in context of information asymmetry where there seems to exist a positive correlation between the amount of collateral required by the commercial banks for microcredit and the rate of outstanding payments according to Nsabimana A. (2004). This positive correlation owes its existence to the fact that collaterals accentuate adverse selection within the borrowers and that once the loan is granted, the commercial banks exercise less monitoring since they count on the collaterals in the event of non reimbursement. However in microfinance, the collateral plays a minor role compared to the proximity between the MFI and their customers which makes it possible to reduce the cost of information retrieval and treatment of credit operations simultaneously. This is why Churchill and Coster (2001) hold that the absence of collaterals is one of the reasons why MFIs were born. The MFIs are targeted towards a category of the population described as "poor" and does not have the material collateral necessary in order to be financed by commercial banks. The Grameen Bank made a success of the revolution in microcredit by obtaining excellent rates of refunding while lending to poor customers who are unable to provide material collaterals. This success shows that MFIs in the absence of material collaterals can develop various mechanisms to address credit default risk and improve the quality of the credit portfolio. Among these mechanisms, Armendàriz and Morduch (2000), Lelart M. (2002) cite group lending as a means of reducing the default risk among borrowers. Group lending is governed by simple mechanisms. The MFI lends to a group of agents, a loan that is not based on individual or collective material collaterals but on the social capital of the individuals i.e. their honour or their reputation. The clause of collective responsibility between the individuals and the MFI implies that in the event of default of one or more members, the other members commit themselves to reimburse the entire loan. According to Wassini Arrasen (2013), microcredit rests on the following incentives to ensure the refunding of the loan:

- a threat exerted by the MFI not to grant any more loan to the customer if the conditions are not respected;
-the granting of greater amounts (for the development of the activity) is conditioned by former reimbursement performance (ready progressive).

Group loans are thus granted to groups of agents gathered in more or less homogeneous groups with each agent having privileged information on the others. This collective approach helps to reinforce the group abilities and optimize reimbursement according to Guerin I. (2011). The group approach is also instrumental in reducing monitoring costs through the delegation of various responsibilities to group members and enables an easier collection of funds by their credit agents, a form of "soft[2]" information that reduces agency costs. Group lending is thus one of the non-material collaterals on which MFIs base themselves in the process of granting loans, it is based on the joint surety and monitoring by the agents which replace material collaterals. Group lending makes it possible to reduce ex-ante and ex-post asymmetry, minimize transaction costs and to better manage the risk of default. Given the crises faced by MFIs as concerns outstanding payments which often result in bankruptcy, the practice of group lending seems a factor which can limit these crises. It is based on the reciprocal knowledge of the members and the sharing of standards and values which creates confidence (Lapenu C (2004)). This enables it the MFI to reduce monitoring costs and minimize transaction costs. Theoretical studies highlight the role of joint collaterals in the reduction of credit market imperfections. Thus, Stiglitz J(1990), Banerjee A. V. Besley T, Guinnane T W (1994), Armendàriz B (1999) and Chowdhury H (2005), show that joint collaterals reduce moral hazard and problems of monitoring. .

I-2) GROUP LENDING AND THE REDUCTION OF DEFAULT RISK: AN EMPIRICAL REVIEW

Two main approaches are identified in the many empirical studies carried out; a first approach based on surveys includes the studies of Zeller M (1998), Wenner M (1995) and Hermes et al., (2006) on the one hand and those of Wydick B (1999), Paxton et al., (2000), Hermes et al., (2005) on the other. A second empirical approach based on theoretical models include the works of Ahlin C. and Townsend R. M (2007), Karlan D.S (2007), Cassar et al., (2007), Fisher G. (2008), Giné X, and Karlan D.S(2010).

Zeller M. (1998), Wenner M. (1995) and Hermes et al., (2006) show that social links improve reimbursement performance while those who establish rules of operation within the group have better results in terms of reimbursement. For Wydick B. (1999), the geographical distance between the members of a group has a negative effect on the reimbursement performances while information on the weekly turnover of the members is positively correlated with reimbursement performance. For Paxton J, Graham D., and Thraen C (2000), homogeneity within the group (ethnicity, profession, social class, etc) reduces the reimbursement performance because the proximity between the members of a group would accentuate the risk of collusion. This proximity increases information asymmetry and moral hazard by weakening infiltration, control and *enforcement.* Lastly, Hermes et al., (2005) show that the leader of the group plays a major role in the reduction of moral hazard. Wassini Arrasen (2013) notes that although these studies describe certain dominating factors in the operation of group loans (reduction of asymmetries of information and the moral hazard), they also have drawbacks; the indicators of measurement of the social relationships are rudimentary or uni-

[2] Soft information is considered as qualitative information on the customer that is collected all through the loan duration

dimensional, these empirical studies are carried out in very different geographical areas (culture, level of development, etc) and this makes it difficult to draw some the general conclusions.

Empirical studies that primarily seek to test the predictions of theoretical models try to remedy the disadvantages of the preceding models.

Ahlin C. and Townsend R.M (2007) empirically test four theoretical models of group lending; those of Stiglitz J. (1990) and Banerjee A. V., Besley T., Guinnane T. (1994) where the joint collaterals and control by group members attenuate the problems of moral hazard; that of Besley T. and Coate S. (1995) and that of Ghatak M. (1999), where group lending improves infiltration of risk. They show that the social relationship and particularly the degree of parenthood between members of the group do not necessarily improve the rate of reimbursement of the loans. On the other hand, Karlan D.S. (2007) shows that the members of the group having strong social links are more inclined to reimburse and save than others because they are ready to exercise monitoring and control on one another. They therefore improve the reimbursement performances of the group. Also, members having strong social connections are able to make the difference between the strategic default and default related to an exogenous shock. They can consequently take suitable decisions relating to the person to be penalized for a given behaviour. Thus, more efficient control "*enforcement*" is positively related to the reimbursement performance of the group. Social connections thus play a significant role in reimbursement.

Cassar A., Crowley L., Wydick B. (2007) deepen the analysis of the role of social links by using the concept of "*social capital* ". According to them, social capital is based on the confidence of the members of the group in the company and between the members of the group, as well as the reciprocal knowledge each member has on the others. It is also related to the confidence based on positive past experiences of loan reimbursement. Thus, reimbursement by a member of the group is influenced by the conviction that the other members will act in the same way, because that conditions the availability of credit for the following cycle. This conviction is related to the existence of social capital inside the group.

If according to Karlan D.S (2007) and Cassar A., Crowley L, and Wydick B (2007), social links play a significant role in reimbursement performance, they also affect risk taking. Fischer (2008) for example reveals an ambiguous effect of joint collaterals on risk taking. For him, joint collaterals create an insurance which results in an incentive to risk taking. Fischer G., (2008) shows that the joint collaterals lead to free riding behaviour. The role of joint and collaterals depends on the informational context: under incomplete information, the agents having a low aversion to risk make risky investments without rewarding (through transfers) their partners for the insurance which they got. Under complete information, joint collaterals do not increase risk taking. The control that the agents exert in the investment decisions of their partners (group contract of credit with the agreement of the members) reduces the moral hazard ex-ante by discouraging the risky projects.

Empirical studies testing the theoretical models on the question of the impact of group lending in the reduction of the risk of default thus appears unclear.

Few studies have been done on the mechanisms which affect the effectiveness of group lending in sub-Saharan Africa in a general and in Cameroon in particular.

II) FACTORS THAT ENCOURAGE THE REIMBURSEMENT OF GROUP LOANS OF MFIS IN CAMEROON

The principle of solidarity group consists in granting a loan to a group of people who mutually surety each other. In this type of contract, no material collateral is required. In the face of imperfect information in this type of credit relationship, the risk of default is very significant. It is therefore interesting to investigate the set of mechanisms which would guarantee a better reimbursement performance of the group loan.

II-1) THE PROCESS OF STRUCTURING OF LENDING GROUPS AND THE RESPECT OF THE REIMBURSEMENT SCHEDULE

A lending group refers to a group of people having in common the desire to have access to financial services. These groups exist in the majority of the developing countries under various names with the most common being tontines. The difficulties that arise at the time of the constitution of these groups are generally related to the selection of the members, the pooling of risk and the optimal size of the group (Lanha M, 2004).

According to these authors, groups are made up of people who know each other more or less well, owing to the fact that they have commercial relationships or that they belong to the same ethnic or social group, etc. Because of this, information to which the lender cannot gain access becomes available through the proximity of each member. Thus, the limitation of information asymmetry is made possible through the proximity between group members and the collateral responsibility of the members of the group. Ghatak M. (1999) shows that group lending programmes use the collective responsibility to obtain information on the borrowers during the formation of the group. The formation of a group requires the borrowers to constitute themselves in groups and to specify the responsibilities of each individual member of the group (the amount of loan that each one must reimburse) and the shared responsibility (the sum which each member must pay in the event of failure of the project of his partner). The obligation to pay for the other in the event of failure of his project will push each member to pay attention to the reputation of his future partner for he will not want to join somebody who presents a reputation lower than his.

This is why the basis for the structuring of groups remains an important variable in group lending given that the risks of adverse selection are real. Some individuals can decide to put themselves together knowing that they will fail the others once the loan is obtained. This gives rise to the need for MFIs to really study before validating the lending groups which are proposed to them. Pooling is a diversification technique that can reduce the risk for the lender. It consists in the MFI retaining in its portfolio only groups made up of the members having different activities. Lanha M. (2001) suggests the rejection of groups whose members belong to the same family and those whose members are not residing in distant places nor have distant business places. This reasoning is in line with those of Varian H.R (1990) and Ghatak M (1999) for who the validation of homogeneous groups must result from the existence of perfect information between the members of the group unlike in the contrary case where information is imperfect i.e. where the members do not have good information on the projects of the other members of the group and it is important to retain very mixed groups. This last approach is in line with the logic of the theory of portfolio diversification in finance.

From what precedes, we can make the following hypotheses:

H.1: The mode of formation of the lending group determines the respect of reimbursement schedule by the group.

The validation of the lending group is done at the constitution of the group. Another important variable is the operation of the group.

II-2) MECHANISMS OF CONTROL OF LENDING GROUPS AS A STIMULANT TO REIMBURSEMENT

Besides the approach based on the constitution of the group is another that is based on the collateral responsibility of the borrowers or members of the group which makes it possible to resolve the problem of moral hazard.

In his group lending model in microfinance known as the "peer monitoring[3]" model, Stiglitz J. (1990) lays emphasis on the auto-formation of the group and shows that financial intermediation can draw local information by implementing a structure that incites the villagers to do the monitoring on behalf of the institution. In this manner, the cost of monitoring which the MFI would have supported is partially internalised by the group of borrowers. Thus, once the loan is granted, each member pays attention to the behaviour of the others and supervises them, which limits the risk of default. According to Wamba H. (2008), the group members have a comparative advantage as regards monitoring on the MFI. Putting this comparative advantage at the service of the group creates a form of social collateral that enables the improvement of social welfare.

Furthermore, peer monitoring makes it possible to transfer advice to the members of the group whose projects did not succeed. In fact, the common responsibility of the peers in the event of failure of one of the members encourages them to help each other. This mutual aid is frequent in the sequential model (Varian H.R 1990) where future access to credit depends on the good results of the other members of the group.

Lapenu C (1999) notes that peer pressure plays a significant role in the respect of the loan reimbursement schedule. This pressure is of two types; the "passive" social pressure and the "active" social pressure. "Passive" social pressure results in a guilty feeling from the members having been faulty. "Active" social pressure results in measures taken by the entourage such as: verbal or even physical aggressions, confiscation of belongings, denunciations in public and in front of the local authorities.

Within the framework of group lending, failure to reimbursement can affect the portfolio only if all the members decide not to reimburse or to break the solidarity underlying the contract. Peer pressure can therefore play a very important role in group lending contracts and this role is only efficient when there is social cohesion between the members of the group. This social cohesion depends on the existence of strong social links between members. These social links will for

[3]Peer monitoring

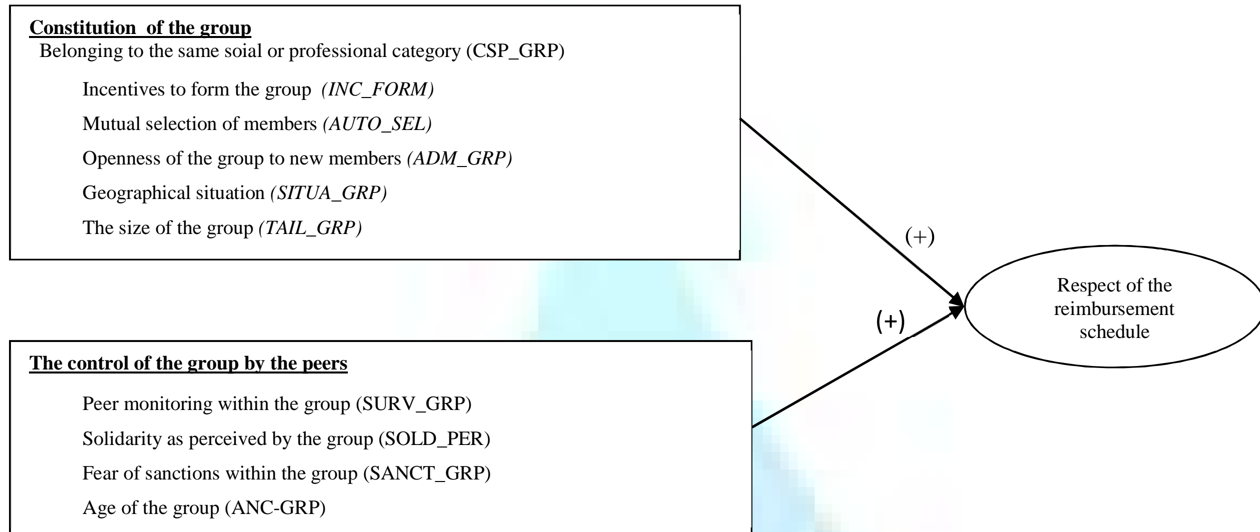
example permit members whose projects succeeded to support those who are in the difficulty because of the failure of their projects. According to the opinions of certain members of the group, the sanctions inflicted to the members of the group arise in various forms such as the loss of the residual social capital and exclusion from the group. Kamalan E. (2007), rather evokes the humiliation which consists making known to the general public the image of the faulty member and the recourse to a third person considered to be influential in the immediate environment of this faulty member, thus creating exclusion and the rupture of the social links. From what precedes, we can formulate our second hypothesis as follows:

H.2: The mode of operation of the group has a positive impact on the respect of the reimbursement schedule

In the theoretical analysis developed above, we see clearly that the process of formation of the group and its control by the peers determine the respect of the reimbursement schedule by the group. We therefore test the validity of these hypotheses.

The theoretical model is as follows:

FIGURE 1: THE THEORETICAL MODEL



III) METHODOLOGY OF THE STUDY

The objective of this study is to identify the variables on which the formation of the lending group and its control are based and which determine the reimbursement performance of loans by these groups. To achieve this objective, we use a two stage methodology. The first stage consists in carrying out directed and semi-directed interviewa with some credit agents and groups having benefitted from a loan from these MFIs. The second stage consists in going from the information collected to formulate a questionnaire which is administered on 70 lending groups that benefitted from loans from 5 MFIs made up of 3 independent and 2 networked MFIs.

The explanatory variable is the respect of the reimbursement schedule by the independent lending groups which is measured here according to whether the group the credit or defaulted.

The main aim is to show that certain variables which are at the base of group lending enable a reduction in the risk of default, making them a fundamental instrument of management of the risk of non reimbursement. All our variables are binary and our theoretical model of analysis is as follows:

$$P(\emptyset = \emptyset_i) = logit(Y) = \frac{e^Y}{1 + e^Y}$$

With

$$Y = c + \sum_{i=1}^{n} \beta_i X_i + \varepsilon$$

Y: The explained variable or reimbursement performance;

X_i: The vector of independent variables of the model related to the process of formation of the lending group and peer control (operation of the lending group);

β_i: The vector of the coefficients representing the set of parameters of the model;

c : The constant term of the model:

ε: The residual or error term.

Inspiring ourselves from the literature, we retained many variables for our model. These variables are presented in two groups. The first relates to the elements related to the formation of the group and the second to the mechanisms of peer control of the group.

The variables related on the process of formation and the procedure of validation of the group by the MFI is presented in the table below:

TABLE 1: PRESENTATION OF THE VARIABLES RELATED TO THE FORMATION OF THE LENDING GROUP

Variable	Description
Incentives to form the group (INC_FORM)	Motivations of the initiative to form the group, which makes enables us to know if the group was formed in order to gain access to credit (INC_FORM=1) or if it existed before (tontines, friendship clubs, socio-professional grouping, etc) and the issue of access to the credit arrived only later. (INC_FORM=0)
Admission of new members in group (ADM_GRP)	This shows the openness of the lending group and the possibility that this group admits new members (ADM_GRP=1) or not (ADM_GRP=0)
The auto-selection of members (AUTO_SEL)	This materialises the system of choice of members of the group; it is thus a question of knowing if the MFI imposes the members of the lending group (= 0) or if the members of the lending group choose themselves mutually (AUTO_SEL=1)
Size of group (TAIL_GRP)	This variable enables us to appreciate the size of the lending and know its number compared to the regulations or procedures of the MFI (if > 5personnes then TAIL_GRP=0, if not TAIL_GRP=1)
Belonging to the same socio-professional category (CSP_GRP)	Enables us to appreciate the belonging of the members of the lending group to the same socio-professional category (CSP_GRP=1) (CSP_GRP=0)
The geographical situation of the members of group (SITUA_GRP):	Allows us to appreciate geographical proximity (same quarter, village…) of the members of group (SITUA_GRP=1) (SITUA_GRP=0)

For the variables related to the peer control of the group, we can distinguish:

TABLE 2: PRESENTATION OF THE VARIABLES RELATED TO THE PEER CONTROL OF THE GROUP

Variables	*Description*
Perceived mutual assistance (solidarity) (SOLD_PER)	Solidarity as perceived by the MFI: (SOLD_PER=1, if the members have strongly commit themselves to cooperation, if not, SOLD_PER=0)
Peer monitoring (SURV_GRP):	Capacity of the various members of the group to monitor the use of the credit (SURV_GRP=1 it represents the mutual monitoring by all the group, in the reverse case, SURV_GRP=0)
The system of constraints/ sanction (SANC_GRP)	The fear that the members of the group have to be sanctioned by the group and fear not to have anymore access to credit in future (SANC_GRP=1 if the sanction were considered to be effective, if not SANC_GRP=0)
Age of the group of credit (ANC_GRP)	Shows the age character of the lending group, (ANC_GRP=1 if the group had existed for at least a year, if not ANC_GRP=0)

The vector of independent variables is: (INCI_FORM, ADM_GRP, AUTO_SEL, TAIL_GRP, CSP_GRP, SITUA_GRP, SOLD_PER, SURV_GRP, CONT_GRP, ANC_GRP)
The success of the operation supposes that the group refunds the entire loan. Thus, the reimbursement performance is a binary variable taking the value 1, if the group reimbursed i.e. respected its schedule and 0 if not.
We therefore seek to identify through our model, the variables related to the formation of lending groups and those related on the control or operation of the group which guarantee, even if it is in a theoretical way, the respect of the reimbursement schedule.
As concerns the data analysis, the description of the variables was done using simple tabulation and we used logistic regression (model LOGIT) to test our model.
According to the simple tabulation carried out, the independent variables are as follows: 79,2% of the groups were created at the beginning in an informal way. 77,4% were made of more than five people, 89,6% of the members of the different groups belonged to the same socio-professional category. Concerning the geographical proximity of the members, 89,6% were close. In 67% of cases, the acceptance of a new member was made by the group and 33% imposed by the credit agent. 71,7% of the members had found effective the sanctions within the group. 78,3% of the lending groups were aged at least a year. 73,6% of the members found there was solidarity within the group. The monitoring of the members of the lending group was ensured by the whole of the group for 88,7% of the cases and only 44,3% of groups were open to the recruitment of new members. The reimbursement schedule of the loans was respected in 72,6% of cases.
Before presenting the characteristics of our model and validating its components, it is necessary to validate our hypotheses. To do this, we used the cross tabulation. This approach is used in order to describe the common evolution of certain variables and identify possible links between them. Our variables being qualitative and nominal, the main technique to use is the test of association (exact test of Fisher).

III-1) THE RESPECT OF THE REIMBURSEMENT SCHEDULE IS A FUNCTION OF THE PROFILE OF FORMATION OF THE LENDING GROUP

This hypothesis aims at showing that the respect of the reimbursement schedule of loans within the lending groups is a function of the formation of the group. This led us in this study to identify the variables related to the profile of the lending group which can affect the reimbursement performance. We identify several variables related to the incentives for the formation of the group, the admission of a new member into the group (whether the group is open or closed), the mechanism of selection of members (mutual selection or not), the size of the group (group of less than 5 people or more), the membership to the same socio-professional category and the geographical situation of the members (far away or near).
After having presented the simple tabulation, we crossed these variables with the reimbursement performance of the groups of our sample. The results obtained enable us to say that apart from the size of the groups of our sample, all the other variables have an effect on the respect of the reimbursement schedule by the group (see table n° 01).

TABLE 3: TEST OF ASSOCIATION BETWEEN THE VARIABLES RELATED TO THE CONSTITUTION OF THE LENDING GROUPS AND REIMBURSEMENT PERFORMANCE

	Exact test of Fisher	
	Exact significance (bilateral)	Exact significance (unilateral)
PERF_REMB*INC_FORM	,057	, 034 *
PERF_REMB*ADM_GRP	,000	, 000 *
PERF_REMB*AUTO_GRP	,000	, 000 *
PERF_REMB*TAIL_GRP	,073	,051
PERF_REMB*CSP_GRP	,033	, 033 *
PERF_REMB*SITUA_GRP	,061	, 035 *

* Significant at the 5% level

At the end of the statistical analysis presented in the table above, we find that the variables are significant. We can globally say that the process of constitution of lending groups and its validation by the MFI determines the respect of the reimbursement schedule refunding by the group. This enables us to validate our first hypothesis.

III-2) THE MODE OF OPERATION OF THE GROUP (PEER CONTROL OF THE GROUP) POSITIVELY INFLUENCES THE RESPECT OF THE REIMBURSEMENT SCHEDULE

From literature, it emerges that the functioning (operation) of the lending group affects the respect of the reimbursement schedule by the group. It should be noted that our second hypothesis is based on this general idea, and shows the importance of peer control within the group. In order to test this hypothesis, we identified variables related to the operation and peer control of the group which influence its members and incite them to reimburse the loan. The variables selected are as follows: the perceived solidarity by the members, peer monitoring of the members of the group, the fear of the sanctions inflicted by the group (generally financial and social), the age of the group (which testifies a priori the effectiveness of the social structures in the group).
As done previously, we crossed these variables with the reimbursement performance and find that all the variables are significant except for the variable age of the group. This shows that the age of the group does not impact positively on the respect of the reimbursement schedules of the group. On the other hand, perceived solidarity, peer monitoring and the fear of the sanctions significantly influence the respect of the reimbursement schedules by the group (see Tableau n°04 below).

TABLE 4: TEST OF ASSOCIATION BETWEEN THE VARIABLES RELATED TO THE STRUCTURE OF THE GROUP AND THE LOAN REIMBURSEMENT PERFORMANCE

	Exact test of Fisher	
	Exact significance (bilateral)	Exact significance (unilateral)
PERF_REMB*SOLD_PER	, 000	, 000 *
PERF_REMB*SURV_GRP	, 003	, 003 *
PERF_REMB*SANC_GRP	, 008	, 006 *
PERF_REMB*ANC_GRP	, 188	,123

* Significant at the 5% level

Of the various variables related to the structure of the group, only one (the age of the group) is insignificant. Although this appears paradoxical, it is justified by the fact that the age of the group induces free rider behaviour or carelessness among certain members. In a general manner, we can affirm that the peer monitoring of the group determines the respect of the reimbursement schedule by the group.

III-3) MOST SIGNIFICANT VARIABLES THAT ARE INCENTIVES TO REIMBURSEMENT OF GROUP LOANS

We previously identified variables related to the formation of the group and those related to its operation which we separately crossed with the reimbursement performance of the groups. These tests made enabled us to confirm the relevance of the majority of the variables selected. However these tests do not explain the specific contribution of each of these variables in the reimbursement performance of group loans. The tests on the parameters of estimated equation

reimbursement performance below comes to supplement the previous results by making it possible to explain the weight and relative importance of each variable on the reimbursement performance.

Looking at table n°03 below, we see that the variables auto-selection, mutual solidarity, peer monitoring and perceived sanction seem the most significant in explaining the reimbursement performance of group loans.

TABLE 5: ESTIMATES OF THE PARAMETERS OF THE EQUATION OF REIMBURSEMENT PERFORMANCE N = 70; Iteration count: 6

	β i	Signif	Exp(B)	IC for Exp(B) 95,0%	
				Inferior	Superior
PERF_REMB*ADM_GRP	-2,732	, 000 **	,065	,015	,284
PERF_REMB*AUTO_GRP	1,512	, 033 *	4,538	1,128	18,250
PERF_REMB*TAIL_GRP	-2,948	, 004 **	,052	,007	,389
PERF_REMB*SOLD_PER	1,467	, 049 *	4,337	1,003	18,749
PERF_REMB*SURV_GRP	2,636	, 018 *	13,951	1,575	123,578
PERF_REMB*SANC_GRP	1,461	, 035 *	4,310	1,111	16,726
Constancy (?)	-, 126	,917	,881		

* Significant at the 5% level, ** Significant with the 1% level

CONCLUSION

Group lending makes it possible to manage the risk of default by reducing the risks of adverse selection and moral hazard. However certain lessons emerge from our analysis; it appears judicious for the members of lending groups to choose themselves mutually accepting the consequent division of risks. In addition, open groups and groups having a relatively large size are exposed to risks since as these elements tend to reduce solidarity between the members of the group, finally, peer monitoring and the perception of a strong sanction in the event of strategic default (voluntary) must be permanent. It is only in these conditions that the IMF will be able to grant loans to micro-entrepreneurs in a context of absence of collaterals while remaining profitable and ensuring their survival.

REFERENCES

1. Alhin C et Townsend R. M. (2007) “Using repayment data to test across models of joint liability lending” *The Economic Journal, vol. 517*, n° 117, p. 11-51.
2. Armendàriz B et Morduch J(2000), “Microfinance beyong Group lending” *Economics of transaction, vol. 8, n°2 p. 401-420.*
3. Armendàriz B. (2000) “The microfinance schism” *World Development, vol. 28, n° 4, p. 617-629*
4. Armendàriz B. and Morduch J. (2010) *The Economics of Microfinance*, MIT Press, 2nd ED.
5. Banerjee A. V., Besley T., Guinnane T. W. (1994) “The neighbour’s keeper: the design of a credit cooperative with theory and a test” *The Quarterly Journal of Economics, vol. 109, n°2,*
6. Bassolé L. (2003) *Responsabilité conjointe et performance des groupes de crédits,* Publication de CRDI.
7. Besley T et Coate S(1995) “Group lending, repayment incentives and social collateral”, *Journal of Development, vol. 46, n°1, p. 1-18.*
8. Cassar A., Crowley L., Wydick B (2007) “The effect of social capital on group loan repayment: evidence from field experiments” *The Economic journal, vol. 117, n°517, p. 85-106*
9. Chowdhury P. R. (2005) “Group-lending: sequential financing, lender monitoring and joint liability” *Journal of Development Economics, vol. 77, n°2, p. 415-439.*
10. Churchill, C., and Coster, D. (2001) *Manuel de gestion des risques en Microfinance*. ED CARE
11. Fall Seck (2011) “La complémentarité banque/microfinance dans les économies en développement : une perspective théorique” *Revue d’Economie industrielle, vol.1, n° 133, p. 31-56*
12. Fischer G. (2008) “Contract structure, risk sharing, and investment” *Working Paper n°24, Institute for Financial Management and research Centre for Microfinance*
13. Gandré P. (2012) “Le microcrédit : fausse ou vraie solution à la pauvreté ?” *Idées économiques et sociales, vol. 2, n°168, p. 22-31*
14. Ghatak M. (1999) “Group lending, local information and peer selection” *Journal of Development Economics, vol. n° 1, p. 27-50*
15. Giné X., Jakiela P., Karlan D.S., Morduch J. (2010) “Microfinance games” *American Economic Journal: Applied Economics, vol. 2, n° 3 p. 60-95*
16. Giné X., Karlan D.S (2010) “Group versus individual liability: long term evidence from philippine microcredit groups” *Working Paper n° 61, Yale Economics Department.*
17. Giné X., Karlan D.S. (2010) “Group versus individual liability: a field experiment in the Philippines”, *Policy Research Working Paper n° 4008, The World Bank, Washington, D.C.*
18. Guerin I. (2000) “Microfinance dans les pays du Sud : quelle compatibilité entre solidarité et
19. Guerin I. (2000) Microfinance dans les pays du Sud : Quelle compatibilité et pérennité ?” *Revue d’Economie Financière, vol n°1, p. 145-156.*
20. Hermes N., Lensink R., Mehrteab H.T. (2006) “Does the group leader matter? The impact of monitoring activities and social ties of group leaders on the repayment performance of group-based lending in Eritrea”, *African Development Review, vol. 18, n° 1, p. 72-97*
21. Hermes N., Lensink R., Mehrteab H.T. “Peer monitoring, social ties and moral hazard in group lending programs: evidence from Eritrea” *World Development, vol.33, n°1, p. 149-169*
22. Kamalan E. (2007) *La responsabilité des institutions de microfinance, évidences au Bénin*, 7em rencontres du RIUS, l l’EE face à ses responsabilités” Rennes, 24 et 25 mai
23. Karlan D. S (2007), “Social connections and group banking”, *The Economic Journal, vol. 117, n° 517, P. 52-84*
24. Khander S. R. and Pitt M. (1998) “The impact of group-based programs on poor households in Bangladesh: does the gender of participants matter?” *The journal of political Economy, vol. 106, n° 5, p. 958-996*
25. Laffont J.J. and N’guessan T. (2000) “Group lending with adverse selection” European *Economic Review, vol. 44, p. 773-784*
26. Lanha M. (2001) “Le prêt de groupe de caution solidaire : Typologie, efficacité et mesure empirique”, *www.soft-labo.org.*
27. Lanha M. (2005) “Résolution des problèmes d’information en micro-finance ; analyse à partir de la stratégie de Vital-Finance Bénin”, *Mondes en Développement, Tome 30, n°119, p. 47-62*
28. Lapenu C (2004) “Performances sociales : Une raison d’être des institutions de microfinance et pourtant encore peu mesurée. Quelques pistes” *Mondes en Développement, vol. 2, n°126, P. 51-68.*
29. Lapenu C. et al. (1999) “Le système financier rural indonésien : des liens financiers au service du développement rural” in Lelart M. de la finance informelle à la microfinance, *Economica, Paris.*
30. Lelart M. (2002) “L’évolution de la finance informelle et ses conséquences sur l’évolution des systèmes financiers” *Mondes en Développement, vol.3, n° 119, p. 9-20*
31. Ndiouma N. (2011) “Déterminants de remboursement à long terme dans la massification de l’offre de microcrédit des pays en développement : le cas du Sénégal” *La revue des Sciences de Gestion, vol.3, n°249, p. 133-138.*
32. Nsabimana A. (2004) “Articulations entre les activités bancaires et microfinancières : une nouvelle sphère d’intermédiation” *Mondes en Développement, vol. 2, n°126, p. 37-50.*

33. Paxton J., Graham D., Thraen C. (2000) "Modelling group loan repayment behaviour: new insights from Burkina Faso", *Economic Development and cultural change, vol. 48, n°3, p.639-655.*
34. Stiglitz (1990) "Peer monitoring and credits markets" *The World Bank Economic Review, vol. 4, p. 351-366*
35. Stiglitz J. and Weiss A. (1981) "Credit rationing in markets with imperfect information" *American Economic Review, vol. 71, p. 393-410*
36. Varian H. (1990) "Monitoring agents with other agents" *Journal of Institutional and Theoretical Economics, vol. 146, p. 153-174*
37. Wamba H. (2008) "Mécanismes de prêt de groupe et incitation au remboursement : cas des IMF camerounaises", *Gestion 2000, P. 98-121, Oct.-Nov.*
38. Wassini A. (2013) *Quelles leçons tirées des expériences des pays en Développement*, Thèse de Doctorat en Sciences Economiques, Université Paris XI-Dauphine.
39. Wenner M.D. (1995) "Group credit : a means to improve information transfer band loan repayment performance" *Journal of Development Studies, vol. 32, n° 2, p.263-281.*
40. Williamson S. D. (1986) "Costly monitoring, financial intermediation and equilibrium credit rationing" *Journal of Monetary Economics, Vol 104, p. 135-145*
41. Wydick B. (1999) "Can social cohesion be harnessed to repair market failures?Evidence from group lending in Guatemala" *The Economic Journal, vol. 109, n° 457, p. 463-475*
42. Zeller M. (1998) "Determinants of repayment performance in credit groups: the role of program design, intragroup risk pooling, and social cohesion" *Economic Development and Cultural Change, vol.4*

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