

**DUAL INFORMATION ASYMMETRY,
OPPORTUNISM IN LOANS DISTRIBUTION AND
GOVERNANCE REFORMS IN MICROFINANCE
INSTITUTIONS: A CASE STUDY FROM
CAMEROON.**

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ABSTRACT

This paper deals on governance reforms in MFIs that can help stemming the possible opportunism of their decision-makers in the distribution of loans in order to protect the public savings they collect. A theoretical framework is built and simple least squares regressions with data of an MFI from Cameroon prove its reality. We then suggest two complementary reforms. The first proposes the creation of two comparative ratios reflecting the double concern of repressing opportunism and fostering equity. The second recommends that the Board of Directors of MFIs be opened to some representatives of their external clients.

Keywords: MFIs, loans market, information asymmetry, governance.
JEL : G21, G28, D82

INTRODUCTION

The main activity of microfinance institutions (MFIs) is the collection of savings from economic agents in excess funding capacity and their provision in the form of loans to other agents in deficit funding capacity against the payment of interests. In Cameroon and the CEMAC zone as a whole, whether these surplus or deficit agents are members of the MFIs or not determines the classification of these

companies into three possible categories, namely: category 1, for MFIs that collect the savings of their shareholders and use them for loans offer exclusively to those shareholders ; category 2, for MFIs that collect savings from any economic agent and also grant loans to any of them; and category 3, for MFIs that grant loans to economic agents without carrying out public savings collection activities.

By definition, loans is based on trust. This trust reflects the gift of something to someone, in this case funding, with the firm conviction that the beneficiary will behave as expected. However, different loans stakeholders are still confronted with incomplete information. Hence, most transactions are characterized by asymmetric information between the co-contractors. Consequently, the criteria considered in the loan granting decision process take into account several risks that are mainly of two types: the risk of illiquidity and the risk of insolvency. But whatever its nature, loans risk is essentially the risk that the borrower does not pay back the debt on the due date. The realization of this risk is delicate and fraught with consequences, insofar as any non-reimbursed debt translates economically a loss that the loansor bears.

This delicacy justifies the multiplicity of scholars' work on loans risk. However, the vast majority of this work deals, at least implicitly, with applicants and recipients of loans who are not related to the loans supply institutions.

Yet, from the above-mentioned nomenclature of the MFIs, it is clear that some of these institutions, particularly the MFIs of Category 2, are likely to collect public savings to be used for loans whose set of beneficiaries includes persons who are related to them as shareholders or staff members. As a result, the loans risk is also affected by the existence of a dual information asymmetry: one between the external loans-seeking clients (external clients) and the supplying MFIs, the other between the decision-makers in these MFIs, who are also potential loans applicants (internal

client), and external clients who are also savings providers. The risk inherent in this last variant of information asymmetry will be all the more important as decision-makers adopt the opportunistic behavior of discriminating in the granting of loans, to the detriment of external clients. Obviously, the realization of such a risk supposes the existence in the MFIs of a "governance fault" which allows this opportunism¹. Hence the question at the heart of this paper: what reforms of governance in the MFIs can be suggested to help stem the possible opportunism of their decision-makers in the distribution of loans in order to protect the public savings they collect?

To answer this question, after having highlighted the specificity of MFIs as regards information asymmetry, we build a theoretical model of loans distribution between internal and external applicants, under the constraint of a limited available amount of funds to lend. This model underlies our global hypothesis that dual information asymmetry facilitates the emergence of opportunistic behaviors among loans decision-makers in MFIs to the detriment of external applicants.

Using data collected in one agency of a MFI in Cameroon, a couple of simple least squares linear regressions make it possible to confirm the existence of such opportunism both in terms of the amounts of loans granted and of the conditions of their granting. This confirmatory empirical analysis supports the two suggested governance reforms; which concern: 1-the formulation of new comparative ratios and 2-the opening of the MFIs' Board of Directors to their external clients who are at the same time their "depositors-creditors".

¹ Governance is here broadly understood as the set of organizational mechanisms that delimit the power and influence the managers' decisions, in other words, that govern their conduct and define their discretionary scope of decision (Charreaux, 1997).

The rest of the paper is organized into five sections. Section 2 presents the theoretical framework of the analysis based on a review of the literature that highlights the existence of information asymmetries common to financial institutions and a dual information asymmetry specific to MFIs. In Section 3, this theoretical framework is used as a basis for modeling possible opportunism in the lending behavior of MFIs' decision-makers, modeling from which are drawn four testable hypotheses relating to the manifestations of this opportunism. Given these hypotheses, in section 4, we proceed to their test. From the previous theoretical and empirical analyzes, section 5 draws some lessons for MFIs' governance reforms. Section 6 concludes.

THEORETICAL FRAMEWORK

According to Gurley and Shaw (1960), there are two ways of financing the economy: on the one hand the "self-finance" which, for a given economic agent, implies financing its expenditures by its own resources; on the other hand, the "external finance" which requires a call for capital from outside². External finance can; in turn; take two forms. Under the first form, the economic agents in deficit of funding borrow directly from the economic agents in surplus of funding; it is the "direct-finance". This direct transfer of savings resources from surplus agents to deficit agents is not always easy. These two categories of agents have indeed contradictory preferences for liquidity: the willingness to lend for a short term for the first, and the willingness to borrow for a medium or long term for the latter. In addition to these difficulties, the functioning of the market is usually a source of transaction costs. Indeed, the costs related to the search for information (to set the right prices), to the signing of contracts and to uncertainty (to rightly pass on of price

² The exposé here is inspired by Dirat (1999).

variations and protects oneself against the possible failure of a supplier) are the main drawbacks associated with the market coordination of economic activities. As firms, and following the Coasian logic, the financial institutions (FIs) internalize these costs (Coase, 1937, Williamson, 1987) and permit the emergence of the second form. In this second form, FIs playing the role of financial intermediaries such as banks and certain MFIs, especially those of our category 2, are those agents who intervene between excess spending agents and deficit spending agents. However, these FIs are constantly facing a thorny problem of information asymmetry.

Fis' Common Problems of Information Asymmetries in The Granting of Loans

Information asymmetry issues are consubstantial with the activities of financial institutions. On a day-to-day basis, the questions that these institutions face are, among others: how can the quality of a borrower and his future behavior be assessed? How can the borrower be encouraged to reveal all the information he has and not to adopt opportunistic behavior? These questions refer to the problem of information asymmetry between the lender and the borrower. The borrower is the only one to hold certain data, which puts the lender in a position of relative weakness.

This information asymmetry can be *ex ante*: the borrower has private information before the debt is contracted. This form of asymmetry leads to the problem of "adverse selection" according to which it is difficult to distinguish the "good" Borrowers from the "bad" ones. The information asymmetry can also be post-contractual: the lender runs the risk of partial execution of the contract or of its non-execution due to an opportunistic behavior of the borrower. This asymmetry leads to "moral hazard": the borrower is tempted to maximize his personal utility at the expense of the lender because of the incompleteness of the

loan contract. In principle, the lender should only agree to engage in the debt relationship if he has the means to limit these information asymmetries and the uncertainty associated with them: search for information, monitoring and various incentives to contract enforcement are all means that are generally used for the purpose. Applying this reasoning to banking firms, Stiglitz and Weiss (1981) explain the lack of a first order equilibrium on the bank loans market by the rationing of the applicants by the offering banks as a strategy to limit their exposure to the negative consequences of pre- and post-contractual information asymmetries.

This analysis, whose relevance has been widely recognized, falls obviously in the traditional conception which considers that in the loans market, the information advantage mainly benefits external loans applicants. In doing so, it lays on an implicit assumption of widespread benevolence in FIs whose formulation might be: an opportunistic behavior of decision-makers in financial institutions prejudicial to external loans applicants is not possible.

Yet, while this assumption may seem likely when the FIs considered are banks, it is much less so when they are MFIs. In fact, thanks to a relatively loose regulation, the fact that decision-makers in the MFIs that collect public savings are also eligible for loans in their own company may give wider room for opportunistic behaviors in those firms. Consequently, it should be admitted that there may be problems of information asymmetry in the granting of loans that are specific to MFIs.

Mfis' Specific Problems of Information Asymmetries in The Granting of Loans

Most traditional analysis of the loans market generally ignores the possible existence of a demand for loans emanating from within the FIs responsible of the

decision to grant them. Meanwhile, some regulations authorize MFIs to directly or indirectly grant loans to their own shareholders and staff³. Commonly referred to as “MFIs’ related parties”, these internal applicants or clients thus find themselves in competition with the depositors (who must then be classified as external applicants or clients) on the local loans market of each MFI. From then on emerges the duality of information asymmetry specific to the loans markets of each MFI authorized to collect public savings. This dual information asymmetry requires a particular attention because of the loose regulations of the MFIs’, relatively to the banks ones which are almost worldly normalized thanks to the work done by the Basel Committee on Banking Supervision.

In fact, in addition to the traditional information asymmetries between external loans applicants and the FIs, asymmetries that are to the advantage of the former, we see here information asymmetries dawning between depositors-creditors⁴ and the decision makers in MFIs, asymmetries which are, this time, to the advantage of the latter. These asymmetries are also of two types: the ex-ante asymmetry between the depositors-creditors and the decision-makers in the MFIs which can lead to the adverse selection (financing of bad projects of related parties) and the ex-post asymmetry between depositors-creditors and related parties of the MFIs

³ It is the case with the Central African Banking Commission (COBAC) in the Economic and Monetary Community of Central African States (CEMAC). Cameroun is member country of this Community.

⁴ As Dirat (1999) points out, in indirect financing, by entrusting them with their deposits, economic agents in excess of funding acquire claims on financial institutions whose main function is, according to Gurley and Shaw (1960), to buy primary securities from ultimate borrowers and to issue indirect debt for ultimate lenders. This means that, like their shareholders and other lenders, economic theory allows depositors to rank among the loansors of financial institutions, which are thus specific firms by the fact that their clients can at the same time and generally be their suppliers.

that can lead to moral hazard (priority funding of all related parties' projects and less strict monitoring of related parties beneficiaries).

In this respect, Dewatripont and Tirole (1993) carry out a similar analysis, applied to the classical banking firm, which distinguishes two forms of information asymmetry in the activity of loans distribution: on the one hand an asymmetry between managers and shareholders, on the other hand an asymmetry between managers and depositors. There is therefore, as in our construction, a double asymmetry of information in the completion of this activity.

Coupey and Madès (1997) also highlight the possible existence of an asymmetry for the benefit of the bank and an asymmetry to the detriment of the bank. However, unlike ours, duality here is not synonymous with reciprocity. Indeed, insofar as MFIs are generally not managerial companies, separating the shareholders from the managers would appear to be artificial. With the staff, the shareholders and managers form the same party to the contract, the party of those related to the MFIs; the other party being constituted of depositors-creditors who are potential external applicants for loans.

MODELING AND HYPOTHESES

Admitting that an MFI's related parties can compete with external applicants on its "local loans market" implies that, while sharing the same ultimate objective of preserving their job position with the biggest possible benefits, the instrumental objective function of decision-makers in MFIs would likely be different from that of banks executives. For banks executives, the obvious instrumental objective function will always be, in fine, to maximize the yield of the loans granted. But, on the other hand, for the decision-makers in the MFIs, their collusion, or even confusion, with the related parties neutralizes this objective of maximum

loans yield and tends to replace it with the objective of maximizing the volume of loans granted to related parties. In loans granting decisions, this instrumental objective favors opportunistic behavior among the MFIs' decision-makers, some of whom inevitably find themselves in the position of judge and party, justifying the intervention of a third party which is unfortunately not always better informed: the regulator. The simplified modeling below helps to highlight this incentive for opportunism among the decision-makers of the MFIs.

The Theoretical Model

Consider that at the beginning of the period:

- The MFI has a total amount of available funds ($TAFL$) to be distributed as loans to two categories of applicants: internal or related applicants/clients and external applicants/clients.
 - These funds to be distributed come from 03 exogenously determined sources, namely: the MFI's capital (CF), savings mainly composed of external clients' deposits (DE) and financing lines obtained from other lenders (LF)). We thus have: $TAFL = CF + DE + LF$.
 - The loans volumes demanded by internal clients and external clients are respectively DCI^d and DCE^d .

Let DCI^s and DCE^s be the loans volumes finally distributed, respectively to internal clients and external clients.

Assuming that all applicants meet the minimum loans conditions specific to the category to which they belong,

If $DCI^d + DCE^d \leq TAFL$, as a result of the distribution, we will have:

$$\begin{cases} DCI^s = DCI^d \\ DCE^s = DCE^d \end{cases}$$

All loans demands are satisfied without rationing.

If $DCI^d + DCE^d > TAFL$, two distribution scenarios may arise depending on whether or not there is a regulator imposing a binding regulation.

Where there is no regulator (or even if there are non-binding de jure or de facto regulations), the result of the distribution will be:

$$\begin{cases} DCI^s = DCI^d \\ DCE^s = TAFL - DCI^s, \text{ with } DCE^s < DCE^d \end{cases}$$

External applicants are therefore rationed by the decision makers of the MFI for the benefit of the internal applicants.

Where there is a binding regulation, and in the current state of this regulation in many countries, which is based on the MFI's capital, the result of the distribution will rather be of the form:

$$\begin{cases} DCI^s = kCF, & \text{with } 0 \leq k \leq 1 \\ DCE^s = h(TAFL - DCI^s), & \text{with } 0 \leq h \leq 1 \end{cases}$$

The MFI's decision-makers are thus forced to limit the volume of loans distributed to related parties to a certain proportion, less than or equal to one, of their companies' capital. This is usually a prudential standard designed to protect the public savings collected by the MFIs against possible opportunistic behavior of their related internal clients. But for this prudential standard to be truly binding and therefore effective, the authorized proportion k must be observable by the regulator. Unfortunately, there is a post-contractual information asymmetry between the regulator

and the decision-makers in the MFIs that compromises any direct observation of k by the former. In the current state of the legal framework of MFIs governance in the CEMAC zone, the regulator still has to rely on the decision makers of the MFIs to obtain an estimated value of k .

Hypotheses

Conscious of the information asymmetry existing between the regulators and them, the decision-makers in MFIs will tend to favor the achievement of their instrumental objective. In the absence of alternative possibilities of control of their actions by the depositors-creditors⁵, this tendency which is a mere natural orientation of any homo oeconomicus will result in the adoption of opportunistic behaviors leading to $k > I$.

Therefore, it can then be assumed that these opportunistic behaviors are expressed in the form of discriminatory measures relating to the amounts of loans granted and to the conditions for granting these loans, which are particularly severe for external clients and rather flexible for internal clients. Insofar as these loans conditions generally relate to the composition of the loans application file, the loans duration and the debtor interest rate, the following secondary assumptions can be stated:

H1: the strict compliance with the composition of the loans application file is less required for internal clients than for external clients.

H2: the amount of loans granted to internal clients is on average higher than the loans granted to external clients.

H3: the duration of loans granted to internal clients is on average higher than that of those granted to external clients.

⁵ This is still the case in all countries like Cameroon where the regulations do not provide depositors with any statutory opportunity to participate in controlling the actions of decision-makers in the MFIs, even if such actions could jeopardize their deposits.

H4: Interest rates granted to internal clients are on average more advantageous than those granted to external clients.

The test of these hypotheses makes it possible to appreciate the relevance of the theoretical construction carried out above, an MFI from Cameroon being considered as the case for application.

EMPIRICAL MODEL, DATA, RESULTS AND DISCUSSIONS

The Empirical Model and Data

The empirical model and methodology. The empirical analysis here aims to test the above hypotheses concerning the opportunistic behavior of decision-makers in the granting of loans in MFIs.

Each of the four hypotheses suggests a particular explained variable namely: the degree of compliance with the internal procedure as regards the loans application file composition for hypothesis 1, the amount of the loans granted for hypothesis 2, the duration of the loans for hypothesis 3 and the interest rates applied for hypothesis 4. For our estimates, the chosen indicators are simple: the number of documents missing in the loans application file (*ndmd*) for the dependent variable in hypothesis 1; the amount of the loans granted in monetary units (*alg*) for the dependent variable in hypothesis 2, the duration in months of the loans granted (*dl*) for the dependent variable in hypothesis 3 and the average annual interest rate charged in percentage (*ird*) for the dependent variable in hypothesis 4. All four hypotheses suggest the same explanatory variable: the type of clients demanding loans (*tdc*).

At first glance, our theoretical construction distinguishes between two main types of loans applying clients: internal clients and external clients.

But, while the group of external applicants is homogeneous in the sense that it consists of all applicants who, apart from being both savers and loans applicants, are in no other way related to the MFI, the group of internal applicants is rather heterogeneous. Indeed, it should be remembered that these internal applicants include shareholders and staff. To avoid losing the information inherent in this heterogeneity while safeguarding the spirit of the initial typology which aims to highlight the possibility and the risk of collusion between the applicants for loans and decision makers in the MFIs because of their more or less close proximity, we assign to each applicant a value indicative of the distance reflecting this proximity. Thus, for our estimates, we consider that:

- the distance between the shareholders of the MFIs and their decision-makers in terms of granting loans is low, which leads us to evaluate it at 1;
- the distance between the MFI's staff who are not shareholders and their loan decision-makers is relatively higher than that of the previous ones, which leads us to evaluate it at 2;
- the distance between MFIs' external clients with their loans decision makers is relatively higher than that of the two previous ones, which leads us to evaluate it at 3.

Overall, assuming that the relationship between the variables involved in each hypothesis is linear, our empirical model is summed up in 04 equations:

$$\begin{matrix} ndmd_i = f(tdc_i) = \mathbf{Cste1} + \mathbf{a} * \\ tdc_i + \varepsilon_i \\ (-) \end{matrix} \quad (1)$$

$$\begin{matrix} alg_i = f(tdc_i) = \mathbf{Cste2} + \mathbf{b} * \\ tdc_i + \varepsilon_i \\ (-) \end{matrix} \quad (2)$$

$$dl_i = f(tdc_i) = \mathbf{Cste3} + \mathbf{c} * \begin{matrix} tdc_i + \varepsilon_i \\ (-) \end{matrix} \quad (3)$$

$$ird_i = f(tdc_i) = \text{Cste4} + \underset{(+)}{d} * tdc_i + \varepsilon_i$$

(4)

Where: i is the index indicating the applicant for the loans; Cste1, Cste2, Cste3 and Cste4 are the constants; a , b , c and d are the coefficients related to the type of the loans applicant client. When significant with the expected signs, these coefficients show the effectiveness of the opportunistic behavior of the decision-makers in charge of loans distribution in the considered MFI. So, to confirm that this opportunism is discriminatory to the detriment of external clients, the sign of coefficients a , b and c should be negative while that of coefficient d should be positive. Since all these equations are independent, they are each estimated in turn. To do this, we simply use the basic ordinary least squares technique.

The data. Because they are considered highly confidential and sensitive by companies, the data required to estimate our equations were very difficult to obtain. Faced with this difficulty, we are compelled here to use a very limited set of data obtained from a single business office of a category 2 MFI, located in the city of Yaoundé in Cameroon⁶.

Although this data base concerns only 25 files of loans granted in this MFI, in default of being able to provide information on general practices ongoing in MFIs, their use remains relevant, notably if the results that they yield could provide some objective light on opportunistic behavior detrimental to the external clients of this MFI. Indeed, since the ultimate goal of this study is to identify governance reforms to be proposed to help stemming the possible opportunism of loans decision-makers in MFIs in view to protect the public savings they collect, it seems to us that the case of this unique business office could be used here, at

⁶ These data were collected during an internal audit mission in this office by one of our student on internship.

least as a prototype. Table 1 below summarizes the main descriptive statistics on the data series relating to our variables while Figures 1 and 2 show some expressive crossings.

Table 1: Summary of Descriptive Statistics

	Amount of loans (in FCFA)	Loans duration (in months)	Debit interest rate applied	Number of docs. Missing	Client Type (distance)
Mean	18252710	18.76	23.32%	11.42	2.20
Median	9357165	12.00	24.00%	12.00	3.00
Maximum	1.06E+08	48.00	36.00%	13.00	3.00
Minimum	100000.0	4.00	0.10%	8.00	1.00
Standard deviation	25531549	14.28	12.91%	1.57	0.91
Observations	25	25	25	25	25

Figure 1: Mean of applied interest rates (in %) and of durations (in number of months) by type of loan applicants

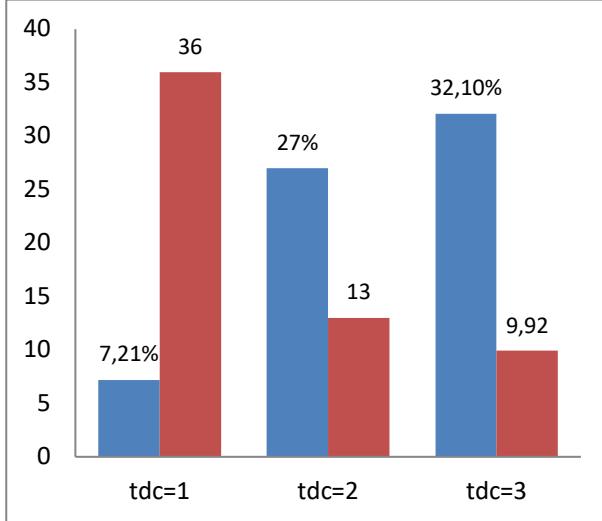


Figure 2 : Average amounts (in Fcfa) of loans granted by type of loan applicants

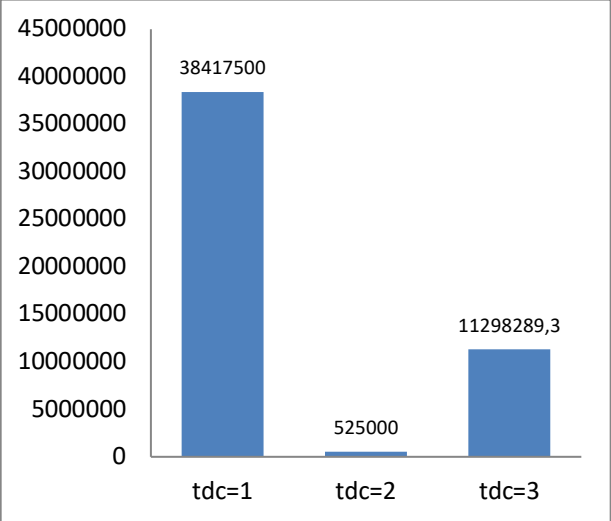


Figure 1 tends to confirm the presumed opportunistic behaviors of decision-makers in charge of granting loans that would discriminate against external applicants; the latter being perceived here as the most distant from these decision-makers ($tdc = 3$). However, by showing that the average amount of loans granted to external clients is higher than that of the loans granted to staff who are deemed internal clients, Figure 2 calls for a refining of the analysis, thus sustaining the importance to proceed with an explanatory analysis.

Regressions Results and Discussions

The results. The estimation of our four equations using the basic ordinary least squares method yields the following results:

Table 2
The Regressions Results

	Equation 1	Equation 2	Equation 3	Equation 4
	Dep. variable: <i>ndmd</i>	Dep. variable: <i>alg</i>	Dep. variable: <i>dl</i>	Dep. variable: <i>ird</i>
<i>tdc</i>	-0.9618 (0.3961)**	- 12586290 (5207926)**	- 12.64 (1.921)***	12.1494 (1.507)***
<i>Constant</i>	13.69915 (0.9914)***	45942547 (12368139)***	46.568 (4.564)***	-3.41228 (3.580)
R²	25.74	20.25	65.28	73.84
Observations	25	25	25	25

The signs of all the coefficients related to the types of the clients applying for loans are in line with expectations. In addition, all these coefficients are significant at least at the threshold of 5%. All in all, these results confirm the fact that, in our prototype MFI, the decision-makers in charge of the distribution of loans implement discriminatory opportunistic behaviors against external loans applicants, for the benefit of

internal applicants. This behavior is evident both in the amount of loans granted and in the conditions under which these loans are granted.

The first estimated equation thus shows that, on average, there is a deficit of about 1 document required in the loans application file of an internal client compared to that of an external client. The results of the second equation indicate that the amounts of loans granted to non related parties are generally lower than those of related clients, the negative difference being accentuated as the proximity between decision-makers and the applicant increases. The third equation shows that these related clients have an average repayment duration which is more than 12 months longer than that of external clients; meanwhile, according to equation 4, these external clients are subject to annual interest rates more than 12 times higher. All these discriminations are probative of the existence of opportunistic behaviors detrimental to external clients. Drawing from the above theoretical analysis, one can argue that the incentive to practice them finds its roots, not only in the rational concern of the decision makers in charge of granting loans to preserve their professional advantages, but also in their awareness of the information asymmetry unfavorable to the regulator, and of the lack of control and sanction possibilities by the external clients. Such a reading of the results calls to suggest some governance reforms in MFIs.

Discussions and suggestions for governance Rreforms in MFIs. The incentive factors of decision-makers in charge of the distribution of loans in MFIs who adopt discriminatory opportunistic behaviors against external loans applicants, who are depositors-creditors of these companies, are both endogenous and exogenous. The concern for these decision-makers to "please" their "related", who are the internal loans applicants, in order to preserve and consolidate their

professional advantages, is the endogenous factor. The incentive power of this endogenous factor is reinforced by the presence of two exogenous factors, namely: the information asymmetry existing between the regulator and the MFIs on the one hand and the prevalence, on the MFIs' "local" loans markets, of a dual information asymmetry between decision-makers in charge of loans (potential internal loans applicants) and depositors-creditors (potential external loans applicants). Since the endogenous incentive factor is inherent to the natural economic rationality of these decision-makers, governance reforms will be all the more effective in helping to neutralize the catalytic power of exogenous incentive factors. In this respect, two types of reforms can be envisaged: one indirect relating to the regulation on the internal governance of the MFIs, the other directly related to this governance.

First Suggested Regulatory Reform on MFIs Governance: Enhancing the Regulations on MFIs' Commitments to Related Parties with a Comparative Ratio of Commitments (CRC) and a Comparative Ratio of Interest Rates (CRIR)

To help improve the governance of MFIs relative to the management of commitments to related parties (shareholders and staff), the regulator is generally focused on regulating the volume of commitments with respect to their capital; by indicating a maximum threshold to the ***Ratio of Commitments to Related Parties over the capital (RCRAC)*** defined by :
$$RCRAC = \frac{CRA}{C} * 100$$

Where ***CRA*** is the total amount of commitments to related parties of the MFI and ***C*** the total amount of its capital.

If it is obvious that this ratio - whose threshold is less than 100% - responds to a desire to preserve the public savings collected by the MFIs (insofar as it implicitly prohibits the financing of related-parties projects with these savings), the fact remains that this ratio is conceptually fragile, since apart from the precautionary principle, there is

practically no theoretical basis for prohibiting FIs to use the public savings they have collected to finance profitable projects from their related parties. In addition, if respected, this ratio exerts a strong financial repression on the MFIs' related parties, which can be said to undermine the entrepreneurial spirit: as soon as the threshold is reached, they can no longer legally use the possibilities offered by their companies to seize investment opportunities, how profitable those may be. All these limitations, which explain why the threshold of the **RCRAC** is usually not respected, are rooted in its rigidity. As a result, it seems advisable to find more flexible substitutes that reconcile the objective of preserving public savings and the objective of financing profitable projects, regardless of their holders.

In this vein, our analyses suggest that a reconciliation of these two goals is possible with ratios aiming, primarily, at repressing discriminatory opportunistic behaviors against external loans applicants (i.e. unrelated loans applicants) for the benefit of MFIs related applicants. Two complementary ratios can then be considered: one concerning the volume of commitments to related and unrelated applicants which could be named the **Comparative Ratio of Commitments (CRC)**; the other concerning the interest rates applied to the two groups of applicants which could be named the **Comparative Ratio of Interest Rates (CRIR)**.

So, be:

CRA , the amount of commitments to related applicants⁷;

$CNRA$, the amount of commitments to non related applicants;

Ird_A , the average annual debtor interest rate charged to related parties or applicants;

Ird_{nA} , the average annual debtor interest rate charged to non related parties;

⁷ This means the total amount of loans granted to them.

Irc_{nA} , the average annual loans interest rate applied to non related applicants;

We will have:

$$CRC = \frac{CRA}{CNRA} * 100 \leq s$$

$$CRIR = \frac{Ird_{nA} - Ird_A}{Irc_{nA}} \leq 1$$

The threshold s for the **CRC** will be set by the regulator (for example: 25%, 50% or 75%). It is indicative of the regulator's willingness to stem the opportunistic behavior of MFIs that would consist of using their companies as sorts of "pumps for public savings" collected mainly for the selfish purposes of financing their own projects. This threshold is inversely proportional to the determination to repress this undesirable opportunism: the smaller it will be, the more the repression will be tough.

Since s can also be set to be equal to $\frac{CRA}{c} * 100$, the **CRC** does not conflict with the current **RCRAC**. However, it escapes criticism of the financial repression against related clients because, by requiring that MFIs respect a certain proportion between the financing of their related clients' projects and the financing of those of their unrelated applicants, it is more flexible⁸ and encourages more equity in loans distribution and more inventiveness in attracting profitable projects.

The threshold set to one for the **CRIR** is also part of the double concern for the repression of opportunism in the distribution of loans and the preservation of a minimum of equity. Indeed, the more the **CRIR** is greater than one, the lower the incentive for depositors-creditors to demand loans; and the more unfair the financing terms of their projects are, not only vis-à-vis the MFIs related parties, but also with

⁸ The volume of deposits evolves indeed more rapidly than that of the MFI's capital.

respect to the low remuneration of their savings that still benefit these related parties⁹.

Assuming that these ratios that mitigate the effects of the dual information asymmetry between the loans decision-makers and the external clients are adopted, there remains the problem of information asymmetry between the regulator and the MFIs that further facilitates their non-compliance with. Hence the need for a complementary governance reform now directly at the level of the MFIs.

***Second Suggested Regulatory Reform on MFIs
Governance: Opening of the MFIs Boards to their
External Clients***

The model of Dewatripont and Tirole (1993) shows that the possibility for shareholders and depositors to control and sanction the actions of the Banks' managers regulates the behavior of the latter. Following them, Coupey and Madès (1997) specify that the depositors being too numerous and of small sizes, the regulator should, somehow, take their place to control the behavior of the Heads of the banks. In this respect, it can be argued that the adoption of the above suggested regulatory ratios would be part of this concern for the control of the decision-makers in charge of loans in the MFIs by the regulator.

However, the very high number of MFIs undermines any potential ambition of the regulator to fully substitute depositors for protecting their interests¹⁰. Moreover, considering the developments in the economic theory of property rights and following the taxonomy proposed by Eggertson (1990), we are led to consider as a principle that when clients deposit their savings in FIs, of all the rights

⁹ For our illustrative MFI, using our limited database, we have evaluated: $RCRAC \approx 123.77\%$, $CRC \approx 210.67\%$ and $CRIR \approx 4.467$.

¹⁰ According to COBAC, in 2017, there were 840 IMFs in the six countries of the CEMAC zone (Cameroon, Congo, Gabon, Chad, CAR and Equatorial Guinea), with 412 for Cameroon alone.

embedded in these funds, what they concede to these FIs is substantially all of the right to use, a portion of the right to exclude and of the income right, but generally no ounce of the right to transfer¹¹. On this basis, to the extent that they remain residual decision-makers on their deposits, it seems potentially more effective to consider accompanying them in self-protection of their own interests.

To do this, as with Dewatripont and Tirole (1993), it is important to introduce control points for the activity of loans decision-makers in MFIs over time and to open up a regulatory possibility for depositors to participate effectively in these controls. Concretely, the sessions of the Board of Directors obviously constitute these control points. Yet, no provision is currently made by the regulator to oblige MFIs to allow their depositors-creditors, and consequently potential external clients, to participate. The suggested reform is therefore simply that the regulator could instruct a revision of the MFIs' Articles of Association in view to open their Board of Directors to some representatives of their potential external clients who will thus watch more closely for the respect of the first proposed reform which ultimately aim at protecting their interests. Selected randomly among the depositors¹², these representatives should be able to benefit from the assistance of a financial adviser of their choice, at the expense of the MFI. To foster his effectiveness, the hired financial adviser should also be accountable to the regulator to whom he will have to send a special report on the *CRC* and the *CRIR* at the end of each session of the Board of Directors. In so far as it contributes

¹¹ As a matter of facts, the act of depositing funds creates a sort of implicit contract between the depositor and the financial institution, by somehow entitling the latter to manage the property of the former.

¹² The number of these representatives could be determined by a simple rule of law: for instance, 10% of the total number of the other board's members, rounded up to the nearest integer with a maximum of 10.

to ensuring its effective respect, this second suggested reform is complementary to the first one.

CONCLUSION

A peculiarity of MFIs lies in the fact that, thanks to a relatively loose regulation, their related parties - shareholders and staff - are too often directly or indirectly on their own local loans markets, as internal applicants or clients, competing with external applicants. As a result, contrary to the implicit assumption of the traditional loans market analysis, the informational advantage is no longer exclusively on the side of external loans applicants; it is rather shared and quite often to the detriment of the latter. There is then a dual information asymmetry: one between the external loans applicants and the supplying MFIs, the other between the loans decision-makers in the MFIs, also potential loans applicants, and these external clients.

Competition is then fundamentally flawed, with one competitor finding himself in the position of judge and party. As a result, external clients who are also the depositors-creditors of these MFIs are victims of opportunistic discriminatory behaviors of the decision-makers in charge of loans in those companies. The economically rational objective of preserving and consolidating their professional achievements constitutes the endogenous incentive factor for the implementation of these opportunistic behaviors. The analysis of the data collected in a MFI from Cameroon attests that these opportunistic behaviors are actually implemented and concretely result in: the priority financing of the related parties' projects; an average annual interest rate charged to unrelated clients significantly higher than that of those charged to related clients; an average repayment terms for loans granted to unrelated clients well below that of those granted to related clients.

This is the place to recognize that a limitation of this work lies precisely in the use of data relating to a unique business office of a single MFI. Nevertheless, it has hopefully underlined the need for a specific thinking on MFIs regarding asymmetric information on their loans market and its consequences. The thinking here started indicates that a crisis of microfinance resulting in the unexpected closure of many MFIs may find its bases in the opportunism of some economic agents who would use these companies as sorts of "pumps for public savings" collected mainly for the selfish purposes of financing their personal projects and those of their relatives. Reforms affecting the governance of MFIs are therefore needed to stem these behaviors.

To this end, the analysis reveals that the incentive power of the endogenous factor of opportunism is reinforced by the presence of two exogenous ones, namely: the dual information asymmetry on the local loans markets of the MFIs between their decision-makers in charge of loans and their depositors-creditors and also the information asymmetry between the MFIs and the regulator. As a result, the governance reforms envisaged will be all the more relevant as they contribute to neutralizing the catalytic power of these exogenous incentive factors. Our analyses suggest two such governance reforms that are complementary. The first advises the regulator to replace the current *Ratio of Commitments to Related Parties over the capital (RCRAC)* with two comparative ratios that reflect the dual concern of repressing opportunism and fostering equity, namely: a *Comparative Ratio of Commitments (CRC)* and a *Comparative Ratio of Interest Rates (CRIR)*. The second advises the regulator to instruct a revision of the MFIs' Articles of Association in view to open their Board of Directors to some representatives of their potential external clients who will thus watch more closely for the respect of

the first proposed reform which ultimately aim at protecting their interests.

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