Flexibility and Payment Discipline in Microfinance

Carolina Laureti
Research Fellow
Centre for European Research in Microfinance (CERMi)

Warocqué Research Centre, Université de Mons
17, Place Warocque 7000 Mons - Belgium
carolina.laureti@umons.ac.be
0032-(0)496-254995
www.cermi.org
Abstract

Product flexibility is meant to adapt financial transactions to poor clients’ cash-flows, and so enhance their ability to smooth consumption and cope with shocks. However, flexibility exacerbates the payment incentive problem. This is a major obstacle to designing flexible financial products in microfinance. The paper aims at finding ways to combine flexible product features with clients’ payment discipline in microfinance. At this purpose, the paper critically reviews the literature regarding both the theoretical and empirical contributions on product flexibility, including randomized control trials. The literature review goes beyond microfinance as the flexibility-versus-commitment debate has emerged in both banking theory and behavioural economics. In particular, I explore the payment incentive problem stemming from asymmetric information and clients’ behavioural anomalies, such as time-inconsistency. I propose to classify the pro-poor flexible product terms into three categories: ex-ante, ex-post, and full flexibility. With ex-ante flexibility, financial transactions are adapted to client’s cash-flow before uncertainty is resolved; with ex-post flexibility, deviation from a pre-established transaction plan is allowed after uncertainty is resolved; finally, full flexibility does not envisage a predetermined transaction plan and allows any transaction value at any time. The paper shows that flexible financial products and payment discipline are compatible. I propose two practical designs to do so. First, flexible products may include sanctioning mechanisms, such as financial or alternative collateral, reputational incentives, psychological sanctions, etc.. Because flexibility exacerbates the incentive problem, payment discipline needs harsher punishments or higher rewards. Second, institutions may process to client assessment deeper than usual to reduce the incentive problem; this includes closer monitoring and real-time verification of the client’s situation. However, both proposed designs have limitations. On the one hand, too harsh punishments can provoke quantity- or risk-rationing, especially of the poorest clients. On the other hand, costs involved in collecting information on clients could be prohibitive for institutions.

Keywords: microfinance, flexible products, commitment, payment incentive.
1. Introduction

The success of the microfinance industry is largely attributable to product simplicity, standardization, and the capacity to stimulate clients’ payment discipline (Armendariz and Morduch, 2010). The most widespread product, microcredit, has standardized features: short-term duration, small weekly instalments starting right after loan disbursement, compulsory savings, progressive lending, and zero tolerance policy toward default. These features are indeed efficient for enhancing clients’ discipline. However, microcredit lacks flexibility. Flexibility would ease money management, helping the poor to smooth consumption and cope with shocks, such as drought, flood, loss of assets, loss of job, health emergency, etc. (Collins et al., 2009). Evidence shows that flexible products remain the exception in microfinance (Meyer, 2002; Guirkinger, 2008). Partly, this is due to the conception that flexibility and discipline cannot coexist. This paper challenges the common wisdom that flexibility and discipline are not reconcilable in single financial products. Therefore, this paper addresses the design of financial services combining flexible features with discipline devices.

Flexible contract terms as well as discipline devices influence clients’ payment performance. Clients make payments for loan repayment and savings deposits. In theory, payment performance depends on the willingness and ability to pay (Boucher and Guirkinger, 2007). Discipline devices provide incentives to clients for paying on time; this enhances the clients’ willingness to pay (e.g., Jain and Mansuri, 2003; Fisher and Ghatak, 2010). On the opposite, flexibility ease money management and this enhances the clients’ ability to pay. However, flexible features exacerbate the willingness to pay and discipline devices worsen the ability to pay. This paper wants to show how flexible features can be combined with discipline devices in order to enhance both the ability and the willingness to pay.

The paper is a critical literature review regarding both the theoretical and empirical contributions on product flexibility, including randomized control trials. This review goes beyond microfinance as the flexibility-versus-commitment debate has emerged in both banking theory and behavioural economics. In particular, I explore the payment incentive problem stemming from asymmetric information and behavioural anomalies, such as time-inconsistency, inattention and failure to plan. I propose a typology of flexible contract terms valuable for the poor, ex-ante, ex-post, and full flexibility. I also illustrate how flexibility and commitment can be combined in microfinance by providing real-life examples of innovative products offered by the industry.¹

This paper argues that flexible products and client discipline are compatible. I propose two practical designs to do so. First, flexible financial products may include sanctioning mechanisms, such as financial or alternative collateral, reputational incentives, psychological sanctions, etc. Because flexibility exacerbates the incentive problem, payment discipline needs harsher punishments or higher rewards. Second, acquiring information on clients soften the incentive problem (Boucher and Guirkinger, 2007). Institutions may process to client assessment deeper than usual to reduce the incentive problem. This could also include closer monitoring, and real-time verification of the client’s situation. However, both proposed designs have limitations. On the one hand, too harsh punishment can provoke quantity- or risk-rationing, especially of the poorest clients. Improving the information available on clients can help since informational advantage requires a lower punishment (Boucher and Guirkinger, 2007). On the other hand, the acquisition of information could have prohibitive costs for the institutions.

The output of this research can improve the design of financial products supplied by microfinance institutions. Flexible products with commitments bring client satisfaction and enhance the institution’s

¹ The Author conducted with Michael Hamp (IFAD) a similar study, investigating ways to match flexibility and discipline in microfinance. Hamp and Laureti (2011) focus on reviewing existing best practices in microfinance mixing flexibility feature and discipline devices.
financial performances. From a scientific standpoint, this research is a valuable contribution to the flexibility-versus-commitment debate, by extending this debate to the microfinance industry. I unify various literature streams and consolidate the theoretical grounds of product design in microfinance. This framework could constitute a challenging starting point for future research in the field.

The paper continues as follow. Section 2 clarifies the concept of flexibility and why it is important in microfinance. Section 3 explains the payment incentive problem and why discipline devices are important. Section 4 explores the trade-off between flexibility and payment discipline. Section 5 presents the ways flexibility and discipline can match. Section 5 concludes.

2. Type of Flexible Financial Products Valuable for the Poor

The general definition of product flexibility proposed by Collins et al. (2009, p. 181) refers to the “ease with which transactions can be reconciled with cash-flows”. Based on this definition, this section distinguishes among three main types of flexibility contract features valuable for the poor: ex-ante, ex-post, and full flexibility. The section continues by showing why flexible financial products are important for poor people.

Standard microcredit contracts lack flexibility. Repayments typically start right after loan disbursement and are made in equal regular instalments. The non-refinancing threat excludes contingent contract renegotiation. Moreover, loan refinancing happens at the end of each round solely. On the opposite, flexibility would permit grace periods in loan repayment and adaptable instalment schedules. For example, to avoid the burden of high repayments in lean seasons, loans to poor farmers could be designed as a sequence of disbursements and payments adapted to the crop cycle (Meyer, 2002; Hudon et al., 2009). Similarly, the lenders could offer loan rescheduling in case of an unexpected event and easy-to-access emergency loan, such as the hand-loan designed for field research by Financial Access Initiative (FAI, 2011). They could also offer loan top-up facilities, as the P9 product designed by SafeSave for Bangladesh (Rutherford, 2011; Hamp and Laureti, 2011).

Savings services in microfinance are in most cases linked to loans (Armendariz and Morduch, 2010). Deposits are compulsory and clients cannot access the funds in time of liquidity needs. On the opposite, flexibility gives the possibility to clients to make deposits and withdrawals of any amounts at any time, through for example personal savings accounts, without minimum balance requirement or limits on the amount transacted. Flexible savings might even pre-determine a deposit schedule. Adaptation could be done by customizing deposits to clients’ income fluctuation, pushing savings accumulation during peak seasons and freezing it when income is barely enough to cover basic needs. Moreover, allowing clients to exit the plan in case of an unexpected need of cash could add flexibility in a fixed savings plan.

In this context, I distinguish among three main forms of flexible contract features: ex-ante, ex-post, and full flexibility.

Ex-ante flexibility adapts transactions to each client’s expected future cash-flows. For example, Confianza in Peru and Banco Los Andes ProCredit in Bolivia offer seasonal loans to farmers (Hamp

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2 Matching loan disbursements and payments with the borrower’s income fluctuation works de facto as a commitment, permitting to smooth consumption meanwhile also facilitating loan repayment: in time of peak income, the surplus liquidity is designated to loan repayment; and in lean seasons, when income is barely enough for basic needs, loan repayment slow down (Ravi, 2006).

3 Karlan and Mullainathan (2006) name it “rigid flexibility”.

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and Laureti, 2011). Loans pre-set a series of disbursements and payments fitting with the (expected) crop cycle of each borrower. Ex-\textit{ante} flexibility could characterize also savings plans, in which the deposit schedule, maturity and/or target savings balance is customized to each client. Contracts with \textit{ex-ante} flexibility determine transactions to be executed in the future. Those contracts are not contingent to the actual future state of the world. For example, transactions do not adapt to future information, such as unexpected loss of income or health emergency. Whichever state of the world occurs, clients should stick to one unique transaction path.

Differently, contracts with \textit{ex-post} flexibility define transactions contingent to the states of the world. This allows adapting transactions \textit{ex-post} to the actual client cash-flow, in response to shocks, emergencies, or any unexpected events. For example, the Bank for Agriculture and Agricultural Cooperative (BAAC) in Thailand offers agricultural loans with various maturities (Hamp and Laureti, 2011). For events due to \textit{cause majeur}, BAAC allows to reschedule loans \textit{ex-post} according to the new repayment capability of farmers (Townsend and Yaron, 2002). Another example is Vivekananda Sevakendra Sishu Uddyon (VSSU) in India. VSSU offers a variety of fixed savings plans to poor households. Deposits could be daily, weekly, or monthly. Maturity varies from one up to six years (Hamp and Laureti, 2011). This is a sort of \textit{ex-ante} flexibility, because clients can choose the savings plan that better suits them. Moreover, VSSU savings plans have also \textit{ex-post} flexibility features. Clients can withdraw money from the savings account before maturity. They can also decide to exit definitely the savings plan prematurely. However, VSSU charges a fee for early withdrawals and premature account closure.

Both \textit{ex-ante} and \textit{ex-post} flexible contracts predetermine transactions: transactions are, in the former case, fixed and, in the latter case, contingent to the future state of the world. Opposite to this, full flexible contracts do not determine transactions. Full flexible loan contracts might, for example, fix a maximum credit amount without determining the payment schedule, maturity, etc.. Each time, client decides discretionarily the transaction to realize, for example whether to reimburse the loan or to top-up the loan. In full flexibility, as also in \textit{ex-post} flexibility, clients can match transactions with their actual cash flow. However, this is not possible with \textit{ex-ante} flexibility.

Two examples of full flexible product is the loan-and-savings accounts offered by SafeSave in Bangladesh and the non-binding savings plan for pregnant women called Mamakiba, in Kenya (see section 5 for a description).

The poor people income is mostly irregular and unpredictable. Poor people often lack tool for smoothing consumption. In this context, flexibility is particularly important to help the poor people smoothing consumption and coping with shocks. Collins \textit{et al.} (2009) employed a technique called “financial diaries”. This consists on keeping records of financial flows and balances of hundreds of low-income households in India, Bangladesh and South Africa, over a one-year period. Based on this technique, these authors identify three broad types of needs: day-to-day money management, coping with risk, and the need for raising large lump sum. Collins \textit{et al.} (2009) show that flexible product features help responding to the first two needs. However, as Collins \textit{et al.} (2009) show, diaries’ households have imperfect devices to cope with risks like health problem, loss of assets, loss of job, etc.. They mostly use easy-to access loans from family and friends or postpone repayment of an existing loan.

Flexibility brings further benefits for microfinance. For example, the clients’ payment ability improves (Karlan and Mullainathan, 2006). Indeed, excessively rigid financial services can cause over-indebtedness and loan delinquency (Chaudhury and Matin, 2002; Schicks, 2010). Moreover, higher clients’ satisfaction reduces clients’ turn-over, with noticeable advantage for the microfinance institutions (Wright, 2001).
3. The Importance of Discipline in Microfinance

Beside flexibility, the poor people also need payment discipline. Discipline devices serve for mitigating the payment incentive problem, which emerges when clients should make loan reimbursement or savings deposits. This section explains what causes the payment incentive problem and shows the important role of discipline devices.

There are two situations in which the payment incentive problem emerges.

First, this arises when client receives a loan and promises to reimburse the lender in the future. The payment incentive problem emerges in standard agency models because of lender-borrower asymmetric information (Bester, 1994; Wong, 1992). Borrowers could act against the lender's interest. This behaviour is known as moral hazard. In *ex-ante* moral hazard, borrowers do not put effort for the success of their business; low effort affects negatively revenues, which could be not sufficient to reimburse the loan. In *ex-post* moral hazard, borrowers decide not to pay back the loan even though they have sufficient budget.

Second, individuals’ behavioural anomalies also determine a payment incentive problem. In the microfinance literature, this is known as the poor people’s difficulty to save (Rutherford, 2000). The difficulty to save emerges from, for example, external pressure from the family, friends or neighbours, when their claims for money are hard to refuse (Anderson and Baland, 2002). Difficulty to save is also due to lack of attention or failure to plan; because of those, clients forget when payments are due (Karlan et al., 2010; Cadena and Schoar, 2011). Finally, the most interesting behavioural anomaly is lack of self-control. This might be due to variations in preferences over time, called time-inconsistency. Time-inconsistency is represented by quasi-hyperbolic discounting function, as opposite to the standard time-consistent exponential model (Strotz, 1955; Laibson, 1997). In the case of intertemporal choices over the amount of income to save and to consume, a time-inconsistent agent decides to consume in the present period (time t) and postpone her savings to t+1, and then, in t+1 again consume and procrastinate her savings plan in t+2; and so on. As a consequence, time-inconsistent agents tend to over-consume and under-save.

As Banerjee and Mullainathan (2009) show, temptation issues characterize all income groups, but this is likely decreasing as income grows. Indeed, temptation has graver consequences for the poor than for the rich because of the lower margin for absorbing errors.

In such situations, represented by either standard or non-standard models, discipline devices alleviate the payment incentive problem. In standard model with asymmetric information, loan contracts require screening, incentive, and enforcement mechanisms. For example, collateral serve for mitigating moral hazard. In non-standard model, behavioural economics point to the role of commitments for solving the incentive problem (e.g., Laibson, 1997; Ashraf et al., 2006b). Commitments are arrangements restricting the set of future choices available to agents. They do so by making some choices costly, sometimes even infinitely costly (Amador et al., 2006; Bryan et al., 2010). Indeed, by tying one’s hand, commitment imposes discipline.

For example, in microfinance microcredit contracts (Bauer et al., 2010) and fixed savings plan involve commitments. Microcredit contracts use discipline mechanisms such as joint liability, compulsory savings, weekly repayment schedule, and dynamic incentives (Armendariz and Morduch, 2000 and 4 It is intended both to save up (for savings accumulation) and to save down (for loan repayment) (Rutherford, 2000).
First, group lending consists of delivering a loan to a group of persons who are jointly responsible for repayment. If one member of the group defaults, the other should pay in her place, otherwise the entire group is punished. Motivated by peer screening and monitoring, clients are encouraged to act safely. Second, compulsory savings improve loan repayment because they test clients’ ability and willingness to pay. Clients get used of respecting deadlines. A further incentive comes from the threat to seize funds of defaulting borrowers. Third, progressive lending permits the MFIs to verify borrowers’ creditworthiness, starting with small amounts of loans. Moreover, the threat to deny future access to credit is an effective punishment for clients who value the lending relationship and have no access to alternative funding (Armendariz and Morduch, 2000 and 2010).

Also the structure of the payment schedule should encourage clients’ discipline. In microcredit, weekly payment structure without grace period is the most common one. This imposes discipline thanks to the regularity and frequency of transactions and meetings. On the one hand, this overcomes asymmetric information problems, e.g., moral hazard. Frequent and early instalments – paid soon after the loan is disbursed – screen safer borrowers, which count on multiple sources of income to reimburse the loan, such as family members, neighbours or moneylenders (Jain and Mansuri, 2003). Moreover, frequent transactions and meetings act as an early monitoring system about emerging problems. Lenders are aware and can react promptly before delinquency gets grave (Armendariz and Morduch, 2000 and 2010; Karlan and Mullainathan, 2006). On the other hand, the frequent and regular repayment schedule mitigates borrowers’ behavioural inconsistencies, such as inattention problems and the lack of self-control. Microcredit payments schedule imposes regular deadlines and set out a sort of routine, so that clients remember when payments are due (Karlan and Morduch, 2010). Moreover, frequent and small payments are easier to manage for clients with self-control problems (Fisher and Ghatak, 2010).

Savings plans are also considered as commitments. Commitment savings accounts fix the timing and amount of the deposit schedule. Withdrawals are restricted until clients reach their savings target or a certain commitment date (Ashraf et al., 2003; Ashraf et al., 2006b). Discipline mechanisms associated to savings plans might impose material sanctions such as fees for early withdrawal and social sanctions such as loss of reputation. Discipline could derive from shame for missing a deposit in a special purpose savings plan, which is a psychological sanction. Deposit collectors are another discipline mechanism. Deposit collectors inflict a sort of moral imperative to save, as well as they act as reminders to save (Rutherford, 2000; Ashraf et al., 2006a).

These examples show that there are a variety of discipline devices, associated to microcredit and savings plans. I classify them into two broad types. In some case, discipline devices try to reduce the information gap. For example, screening mechanisms serve for selecting only good clients; and monitoring mechanisms serve for observing if clients are behaving safely and honestly. Information-intensive systems and procedures soften the incentive problem (Boucher and Guirkinger, 2007). In other cases, discipline devices impose sanctions. The sanction can be positive (reward for success) or negative (punishment for failure). Moreover, the sanction can be material (e.g., loss of collateral), social (e.g., loss of reputation), or psychological (e.g., personal shame).

4. The Trade-Off between Flexibility and Discipline in Microfinance

This section shows that flexibility worsens the payment incentive problem. At this purpose, I make two cases. The first is an example of ex-post flexibility, where I show the impact of relaxing the policy of intolerance for default. The second is an example of ex-ante flexibility, where I compare the incentive problem linked to different payments structure, for example weekly versus monthly instalments.
Punishment for default is a way to cope with asymmetric information in lending. Forbidding access to credit in case of default is a common punishment. This works especially with poor, and thus credit constrained, clients. Easing the lending conditions, for example, allowing for *ex-post* loan renegotiation in case of a sudden difficulty could exacerbate the borrower’s incentive problem. The banking literature explains why, in theory, *ex-post* loan renegotiation weakens clients’ discipline. *Ex-post* loan rescheduling aggravates adverse selection and moral hazard problems (Boot, 2000). This makes the bank threat to call the loan non credible and the borrower reacts by placing low effort to avoid default (*ex-ante* moral hazard) or by strategically declaring default (*ex-post* moral hazard) (Wong, 1992; Bester, 1994). Furthermore, *ex-post* renegotiation might hurt *ex-ante* efficiency, because the punishment for default is not sufficiently harsh to discourage the entry of borrowers with inefficient projects (Bolton, 1990).

Behavioural economists bring forward similar arguments against *ex-post* renegotiation of commitment contracts (Amador *et al.*, 2006; Bryan *et al.*, 2010). Time-inconsistent clients need to bind themselves through effective commitment restricting the spectrum of future choices. With uncertainty regarding the future, the clients would benefits from renegotiating the commitment *ex-post* and adjusting it to new information. However, if the shocks are unobservable and unverifiable by both parties, the clients can unilaterally choose to exercise flexibility and the commitment would lose effectiveness.

Also the structure of the payment schedule should encourage clients’ discipline. In microcredit, weekly payment structure without grace period is the most common one. Diminishing the frequency of payments, for example from weekly to monthly, should increase the temptation to default. Fisher and Ghatak (2010) model represents well this trade-off between (*ex-ante*) flexibility and clients’ discipline. In their model, safe behaviour is rewarded through the continuation value $V$. The incentive-compatible loan size $X$ is defined as the loan amount for which the temptation to default is not superior to the reward for repaying successfully. Given a continuation value $V$, the incentive-compatible loan size $X$ is directly related to the frequency $f$ at which payments occur. What matters for controlling temptation at each time is the instalment size relative to the continuation value. For time-inconsistent borrower, the temptation to default increases with the payment size (associated to less frequent instalment schedule). Large low frequency payments need big reward to be incentive-compatible.

Empirically, the trade-off between flexibility and payment discipline is difficult to demonstrate. There are a number of empirical experiments studying the impact of loan repayment structure on clients’ delinquency and their results are contrasting (e.g., Field and Pande, 2008; Field *et al.*, 2011; McIntosh, 2008). Using randomized control trials (RCTs), Field *et al.* (2011) show that introducing a two-month grace period increases the default rate, but also increases the clients’ business investments and profits. On the other hand, Field and Pande (2008) find no significant difference in the default rate when relaxing the frequency of the repayment schedule, from weekly to monthly. McIntosh (2008) finds a slight improvement in repayment (and a large increase in client retention) changing from a monthly to a by-monthly payment structure.

Indeed, clients’ payment performance is affected by both the ability and willingness to pay. Flexibility has two opposite effect: flexibility raises the clients’ ability to pay, but decreases their willingness to pay. The net impact on clients’ delinquency can indeed vary. This explains why it is difficult to prove empirically the trade-off between flexibility and discipline (Fisher and Ghatak, 2010).

Briefly, financial services for poor people should have flexible features and discipline devices. Discipline devices (e.g., screening, monitoring, and sanctioning mechanisms) help to solve the payment incentive problem. The payment incentive problem is related to clients’ willingness to make payments (e.g., loan repayment and savings deposits). The willingness to pay influences the clients’ payment performance but is not the only determinant. Clients’ payment performance depends also on the ability to pay. Flexibility helps to easy money management and thus the poor people’s ability to make payments. However, flexibility affects negatively the clients’ willingness to pay.
5. Combining Flexibility and Discipline in Microfinance

This section shows that flexibility can be combined with clients’ payment discipline. The key principle is to include some discipline devices into flexible contracts. I propose two practical designs to do so. First, because flexibility worsens the incentive problem, sanctions should be risen. Second, more information on clients should be gathered. For showing how this works, this section provides real-life examples of innovative flexible products offered by the industry worldwide. This mostly refers to the best practices in Hamp and Laureti (2011).

Banco Los Andes ProCredit in Bolivia and Confianza in Peru offer small term loans to rural farmers. The repayment schedule varies from client to client. Instalments match with the expected cash flow from the agricultural activity. In time of expected peak income (for example, at harvest season), payments are high. In time of expected low income (for example, at planting season) payments are low. The repayment schedule is settled at the time of signing the contract. This is not adapted in the future to changes in the state of the words (ex-ante flexibility). For encouraging clients’ discipline, the MFI adopts a severe policy against default. Skipping repayments is not allowed and harsh punishments are applied, such as penalizing interest rates and alternative collateral (i.e., assets pledged for their intrinsic value to the borrowers and not for their real market value).

SafeSave in Bangladesh offers current savings accounts linked to loans. The loan contract does not predetermine any repayment schedule and maturity, which is full flexibility. Among the discipline devices, SafeSave links the loan amount to the savings balance. This is financial collateral. Using financial collateral allows for more flexibility because in case of need clients can withdraw their savings (Collins et al., 2009). In case of bad repayment behaviour, savings are seized. Loan amount increases with good credit history. Payment collectors visit clients frequently at their home or workplace. This makes transactions for clients extremely convenient, but also encourage clients’ discipline, because payment collectors act as a sort of moral imperative for clients to pay.

Vivekananda Sevakendra Sishu Uddyon (VSSU) in India offers one-payment savings scheme (i.e., term deposits) and multi-payment savings plans (i.e., recurrent deposits). Recurrent deposits can be daily, weekly, or monthly. Maturity varies from one year up to 6 years. VSSU permits clients to withdraw some cash before maturity. However, this is punished with no interest payments and a fee, typically a percentage of the withdrawals.

Flexible contracts can be associated to discipline devises inflicting psychological sanctions. Those are called soft commitment (Bryan et al., 2010).5 Firstly, payment collectors, as in SafeSave, work as a psychological pressure to save. Clients feel a sense of shame when payments are missed. Secondly, SMS reminders sent through mobile phone have a similar effect, as in Mamakiba, a savings plan for pregnant women linked to the M-Pesa platform that helps women to save money for their pre-maternal healthcare. Thirdly, Mamakiba also supports clients in planning their finances in advances (for consumption and savings). Indeed, setting financial plans and payments deadlines helps organizing resources, reduces inattention problem, and produce a sense of guiltiness in case of failure. Fourthly, dedicated savings account for a specific purpose is also soft commitment (Ashraf et al., 2003). Labeled accounts dissuade agents to withdraw money for purposes different from that specified because this would create a sense of shame and guiltiness. The reasoning is the mental accounting principle (Thaler, 1985).

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5 Various randomized control trials (RCTs) have found positive impact on savings accumulation and loan repayment of payment collection services and SMS reminders (Ashraf et al., 2006a; Karlan et al., 2010; Cadena and Schoar, 2011).
There are sanctioning mechanisms compatible with flexible microfinance contracts: financial or alternative collateral, fees for early withdrawals, penalizing interest rates, reputational and psychological costs, etc.. Because flexibility exacerbates the incentive problem, imposing discipline requires to raise sanctions.\(^6\)

An alternative solution involves reducing the information asymmetries existing between the institutions and the clients. In a complete information setting, where the states of the world are observable and verifiable, the two parties could contract upon them (Amador et al., 2006). In this case, there would not be incentive problem. With incomplete information, however, the range of possible contingent contract is limited to those that are easily verified by both parties (Arrow, 1974).

Collective shocks, such as flood or drought, are easily observable and verifiable. For this reason, in northwest Bangladesh many microfinance institutions give the possibility to renegotiate loans during the drought season called Monga (Shoji, 2010). Similarly, in Thailand, the Bank for Agriculture and Agricultural Cooperative (BAAC) allow farmers to renegotiate their loans ex-post in case of emergency due to force majeur (Townsend and Yaron, 2002). For verifying the causes of delinquency, BAAC staff visits problematic clients in the field. Severe punishments are applied against cheating borrowers.

Idiosyncratic shocks, such as a health emergency or a business failure, are more difficult to verify. At this regards, informal financial circuits have an information advantage with respect to formal institutions (Guirkinger, 2008). Susu collectors in Ghana are an example. Poor people commit to save a certain amount daily for a certain period, for example one month. They pay Susu collectors for holding their small savings. One advantage of savings with Susu collectors is the ample degree of flexibility. Clients can easily skip payments in the case of emergencies. Though, payment incentive is strong because Susu collectors know the local economy and can easily verify if shirking is justified or not.

The two designs I propose have limitations. Imposing high punishment can determine risk-rationing. This happens when clients do not apply for a credit because they consider the loss in case of default too high (Boucher and Guirkinger, 2007). In this context, collecting more information on clients reduces the payment incentive problem and requires a smaller punishment. However, the adoption of information-intensive systems could have prohibitive costs for microfinance institutions. Best practices show that there are remedies to this. For example, through formal-informal linkages,\(^7\) financial institutions can co-opt the information available locally within informal financial circuit. This is the case of Barclays Bank who has linked with Susu collectors in Ghana (Hamp and Laureti, 2011).

### 6. Conclusion

In microfinance, products are quite standardized and rigid. This works well for keeping operational costs low and enhancing clients’ discipline. However, poor clients need also flexibility. This paper investigates the literature to understand the value of flexibility and discipline for the poor people, why the two might be incompatible, and how they can be combined.

By matching transactions with clients cash-flow, flexibility improve the poor clients’ ability to manage money. Poor clients are able to smooth consumption and cope with shock and, because of this, also their payment performance can improve. However, flexibility aggravates the payment incentive problem. Clients are tempted to cheat in incomplete information settings. In this context, disciple

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\(^6\) In the banking theory, Wong (1992) and Bester (1994) show that ex-post loan renegotiation exacerbate moral hazard. This requires higher collateral for the incentive compatibility constraints to hold.

\(^7\) Formal-informal financial linkages are amply discussed in Pagura (2008).
devices serve for stimulating clients’ willingness to pay. We distinguish two broad types of discipline devices: those working through imposing sanctions; and those trying to improve the information on clients.

Based on this, the paper proposes two practical designs for combining product flexibility and payment discipline. First, flexible contracts require harsher penalties or higher rewards. Example of punishment are seizing financial collateral, loss in reputational, the sense of shame for missing payments to deposits collectors or in labeled accounts, etc.. Second, collecting information on clients can soften the incentive problem. The paper shows some best practices such as deeper clients assessment, closer monitoring in the field, direct verification of the actual condition/situation, etc..

The paper focuses on the flexibility-versus-commitment debate. However, product flexibility implies many other costs, both financial and social.

On the financial side, product flexibility should raise the operational costs for the institutions. For example, flexibility requires stronger management capacity and can be difficult to implement. Indeed, cash flow management becomes harder. Complex financial products are difficult to understand by the staff and the clients. Internal control system should be potentiated for the higher risk of staff fraud. Transparent accounting becomes essential. Least but not last, disciplining clients with flexible contracts might require collecting more information on clients, with evident costs for the institutions. Etc. etc..

On the social side, product flexibility can have some undesirable effects in term of depth of outreach. This should be particularly true for credit access. First, microfinance institutions could make the clients paying for the higher risk and operational costs, raising the interest rate. High interest rates might exclude those poor whose profits are not sufficient for covering interest payments, which is known as price-rationing. For example, SafeSave interest rate on loans is fifty percent higher than the average in Bangladesh (approximately 36% compared to 24% in Bangladesh). Even assuming that the interest rates increase is justified for the increase in operational costs, those costs could be excessively high and not reasonable compared to the benefits clients receive from flexible products. There are two opposite approaches at this regards. On the one hand, if clients are willing to pay, price is fair. This reflects the marginal utility clients derive from the product. On the other hand, there should be some interest rate cap policies, for protecting the poor people against exploitative and/or inefficient lenders. Secondly, disciplining clients may require increasing the penalty for default (for example, higher collateral associated to loans). This determines two forms of non-price rationing: quantity-rationing occurs when an household is excluded because it does not hold enough collateral; risk-rationing occurs when an household, even holding assets to use as collateral, consider the risk in case of default excessively high.

All those costs are unexplored in the literature, specifically the impact of product flexibility on institution’s operational costs and clients’ outreach. I would suggest these two areas for future research. Namely, future research could clarify the effect of product flexibility on outreach. Does flexibility target poorer people than those reached by rigid microfinance products? Rigorous evidences on this are lacking.

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8 [www.safesave.org](http://www.safesave.org).
References


