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Information Asymmetry and Trust: A Framework for Studying Microfinance in India

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Executive Summary

In recent times, microfinance has emerged as a major innovation in the rural financial marketplace. Microfinance largely addresses the issue of access to financial services. In trying to understand the innovation of microfinance and how it has proved to be effective, the author looks at certain design features of microfinance. He first starts by identifying the need for financial service institutions which is basically to bridge the gap between the need for financial services across time, geographies, and risk profiles. In providing services that bridge this gap, formal institutions have limited access to authentic information both in terms of transaction history and expected behaviour and, therefore, resort to seeking excessive information thereby adding to the transaction costs.

The innovation in microfinance has been largely to bridge this gap through a series of trust-based surrogates that take the transaction-related risks to the people who have the information — the community through measures of social collateral. In this paper, the author attempts to examine the trajectory of institutional intermediation in the rural areas, particularly with the poor and how it has evolved over a period of time. It identifies a systematic breach of trust as one of the major problems with the institutional interventions in the area of providing financial services to the poor and argues that microfinance uses trust as an effective mechanism to address one of the issues of imperfect information in financial transactions. The paper also distinguishes between the different models of microfinance and identifies which of these models use trust in a positivist frame and as a coercive mechanism.

The specific objectives of the paper are to:

- Superimpose the role of trust in various types of exchanges and see how it impacts the effectiveness of repeated transactions. While greater access to information fosters trust and thus helps social networks to reduce transaction costs, there could be limits to which exchanges could solely depend on networks and trust.
- ➤ Look at the frontiers where mutual trust cannot work as a surrogate for lower appraisal costs.
- Use an example in the Canadian context and see how an entity that started on the basis of social networks and trust had to morph into using the techniques used by other formal non-neighbourhood institutions as it grew in size and went beyond a threshold. Using the Canadian example, the author argues that as the transactions get sophisticated, it is possible to achieve what informal networks have achieved through the creative use of information technology.

While we find that the role of trust both in the positivist and the coercive frame does provide some interesting insights into how exchanges with the poor could be managed, there still could be breaches in the assumptions. This paper identifies the conditions under which the breaches could possibly happen and also speculates on the effect of such breaches. \checkmark

KEY WORDS

Microfinance
Intermediation
Trust
Transaction Costs
Financial Services

icrofinance, in recent times, has emerged as a powerful tool to provide access to some financial services to the poor. It has tried to bridge the gap between formal institutions and the poor by providing some intermediary mechanisms of transaction aggregation and rationalizing transaction costs. In this context, it is important to examine the basic construct on which microfinance is built and see how it is different from the mainstream financial service providers. We examine the theoretical elements of the design of the delivery of microfinancial services and try to find an explanation as to how it works, when it works, and under what conditions the methods adopted by microfinance institutions are expected to work.

The edifice of intermediation in financial services sector offers the following services:

- It helps individuals to plan their differing needs of finance at differing points in time by an intervention that helps to balance these needs. The intermediation offers a mechanism of meeting the demand for finances of a person by the person's own supply. This is done by putting away some money (savings) to be used at a future point in time or using the money in the current point with a promise to replace it in future (loans). In either case, the service of intermediation is usually used to manage the time differences.
- There are several individuals who have these time differences; moreover, the differences across persons are not uniform. Therefore, there are cases where some persons are savers and have no current needs for money while there are some borrowers who have a current need for money to be met from future savings or to be taken away from past savings. Thus, there is a demand and supply situation where one could get/pay a price for the difference in timing. This creates opportunities for transaction between people.
- Since full information about who is willing to supply money and who is willing to borrow is not easily available, there is asymmetry. A person might have greater amount of information about the needs and reliability of a small circle of people with whom he/she might have regular dealings. But, that small circle might not always be enough to take care of the demand-supply gap. So, there is a need to expand this pool of people with whom the exchange could be carried out. In case the exchanges are carried out

with unknown people, there is further information required before the exchange could happen — will the exchange contracts be honoured? If they are not honoured, how could the contracts be enforced? Who in the larger pool of people needs or can supply money and how reliable are they? This gap invites intermediation.

So, intermediation bridges the timing gap within the person's own cash flows; it bridges the gap between the differing needs for money at the same time and also between reliability and trust to enable exchanges with unknown people.

Banking and financial service institutions intermediate by providing a bridge for the information asymmetry in the market. The institutions get a fee for managing this asymmetry and managing the risk arising out of the asymmetry — this fee is usually the differential between what they pay for savers and what they get from borrowers. It is also known that the lesser the information available to the lender, theoretically, a greater fee should be charged to keep the risk-return equation intact. However, this is not always true because the state has, from time to time, intervened by directing the intermediaries to exhibit certain behaviour *vis-a-vis* a class of clients.

The Indian rural economy is predominantly agrarian. So, most of the cash inflows for individuals is seasonal—around harvest time. Even non-farm incomes usually tend to depend on agricultural income with smoother peaks. There are instances of annual payments made in the form of cereals and pulses to the washerman and the barber. Though barter transactions may be reducing over a period of time, it cannot be denied that the overall availability of cash in the system tends to be seasonal where 70 per cent of the population are dependent on this stream of income. This one-time income has to be smoothened out till the next harvest.

This means foregoing the current lump-sum cash for a future regular cash flow. While there are several formal outlets such as bank branches, post-offices, and cooperatives, it appears that a large segment of the population do not use these services because of barriers pertaining to transaction size, documentation, and other requirements that impose out-of-pocket as well as opportunity costs on the savers.

The alternative is to look for exchanges without intermediation. But, these exchanges are fraught with risks because the saver is not sure that he/she would

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get the inflow when needed. This is because the counterparty could also be a part of the agrarian economy having seasonal inflows and might not have the liquidity to honour the commitments when they fall due. The second part of the risk arises because of the nature of uncertainty involved with agricultural output — in terms of yield and price — the counter-party might just not be able to honour the commitments even if there is the intention to honour. Thirdly, the residual amounts available from individuals — either for saving upward or for loan repayment on a periodic basis — are very small for any direct exchange between individuals. All these elements — seasonality, uncertainty, and scale — make these exchanges without intermediation almost impossible.

INSTITUTIONAL INTERMEDIATION

Firstly, there have not been many organized avenues or products designed to address the saving needs of the rural people. There are not many saving products that address the seasonal needs of income and regular expenses — saving in lump-sum and withdrawing throughout the year. Even at the other extreme where there are exceptional instances of regular income, there are not many products that encourage collection of small residual sums on a daily/weekly basis. While there have been several attempts in the past like the Syndicate Bank's Pygmy deposits, nothing has been available on a large scale and on a sustained basis. Part of the reason might be the very high transaction costs that might be involved in managing the risk and logistics of handling small savings. So, there are instances where rural people use saving agents to pool in small savings on a regular basis to just collect back the principal at the end of a given time period — thereby not earning any fee for foregoing current cash inflows for future inflows. Rutherford (2000) lists instances where the savers actually make an out-of-pocket payment to get this service.

Secondly, on the supply side, there have been several attempts by the state-run institutions to understand and tap the potential in the market. The success rate of institutional intermediation on the supply side has been varying. The All India Debt and Investment Survey indicates a drastic increase in the role of institutional intermediation in the decades of sixties and seventies and a gradual decline in the past two decades (GOI, 1997). In spite of this, the institutional intermediation in the debt market still occupies a significant position.

However, this intermediation has addressed the issue in a skewed manner because of schematic, targeted lending programmes depending heavily on externally determined scale of finance and, in some instances, externally determined subsidies.

The institutional lending programmes have not been designed to foster trust thereby increasing the transaction costs in the process. Over a period of time, experience has reinforced the low levels of trust by way of the state interfering in the repayment ethic by announcing waivers. Waivers disturb the accepted pattern of exchanges between the intermediary institutions and the poor and thus lead to disequilibrium. The borrower is not sure whether the next loan is going to be waived and the lender does not know if the borrower has the intent to repay because the behavioural pattern of the past has been artificially tampered with. It is argued that the trusting intention is likely to be fragile under the condition of tentative and assumption-based nature of antecedent constructs (McKnight, Cummings and Chevarny, 1998).

ROLE OF TRUST IN EXCHANGES

Trust has a significant role to play in the various forms of exchanges that happen in the financial markets. There have been some attempts in the past to look at various levels and the scope of trust and its effects on defining relationships in terms of economic exchange (Humphrey and Schmitz, 1996). We would see later that the lesser the trust, the greater would be the transaction costs. Fukuyama (1995) discusses the matter in great detail in his seminal work on trust. He says that "..the communities do not require extensive contract and legal regulation of their relations because prior moral consensus gives members of the group a basis for mutual trust." He further argues that "..legal apparatus, serving as a substitute for trust, entails what economists call 'transaction costs.' Widespread distrust in society, in other words, imposes a kind of tax on all forms of economic activity..."

It is also argued that a detailed legal contract is one mechanism for controlling behaviour (Rousseau *et al.*, 1998). Microfinance institutions resort to minimizing these contracts using trust as a surrogate. Therefore, they may actually be fostering trust. It is argued that if the exchange is highly structured and easily monitored through detailed contracts and documentation, people need not develop trust (Macaulay, 1963).

Exhibit 1 gives a brief description of the various types of institutions and a broad picture of the level of trust and the resultant transaction costs. While we have, in this paper, used trust in a positivist frame, there are streams of argument that talk about deterrence-based trust where the costly sanctions in place of breach of trust exceed the potential benefits of opportunistic behaviour and ensure that trust is fostered in letter (but possibly not in spirit as this is coercive trust) (Rousseau et al., 1998). We illustrate the role of trust and/or information and its effect on transaction costs in two different scenarios to take this point further. In most parts, we would be talking only about the lending activity of rural institutions because saving products have never been the focus of these institutions involved in financial intermediation in the rural areas. Savings, if any, has only been incidental (Exhibit 1).

We consider the Indian scenario where there was a significant increase in the role of formal institutions in the rural sector following the All India Rural Credit Survey of 1954. It first started with the increased share of cooperatives in the first two decades and then, following the nationalization of commercial banks in 1969, the banking system also increased its role. However, there was a declining role of these institutions in the decades of eighties and nineties, particularly with reference to poorer segments represented by small borrowal accounts. This decline of formal lending institutions has seen a concurrent (though not matching) growth of informal self-help groups (SHGs) taking charge of the savings and credit needs of rural India. The overall role of SHGs is still not as significant as the formal credit but, over the past two decades, there has been a significant growth in this sector.

What is the explanation for this change in the role of formal lending institutions? As we can see, in the early decades, the state exhibited significant interest in the arena of rural credit. The First Five Year Plan had a thrust on agriculture and subsequently, at every stage, the state was concerned about how the credit needs of the poor and the marginal sections of the population were being serviced. The Integrated Rural Development Programme and the *Swarnajayanti Gramin Swarozgar Yojana* (SGSY) were the largest poverty alleviation programmes that targeted the rural poor.

Role of Intermediary Institutions in Fostering or Breaking Trust: Their Impact on Exchanges

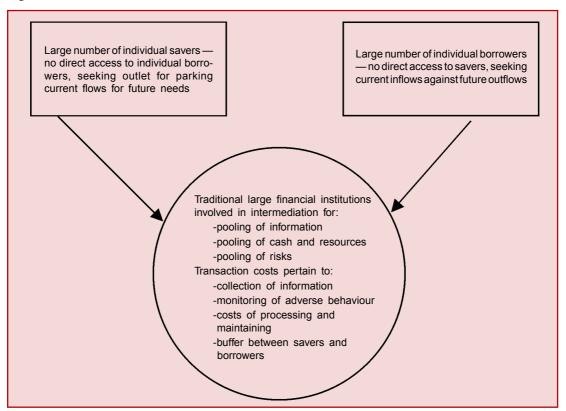
The state was intervening in a market which was believed to be seeking excessive return because of information asymmetry and trust. The state-sponsored programmes were a signal of trust in the ability of the poorer sections of the society as being bankable. However, there was a 'subsidy' involved in the programme both in the administered interest rates which were much lower than the prevailing market rates and in the underlying asset bought out of the loan. This was a clear invitation for rent-seeking by the channels leading to corruption. As long as the subsidies continued, there did not seem to be a problem about the transaction costs because the increased leakage was in some way buffered up by the state subsidy. However, it certainly was eroding the basic tenet of honouring all the clauses of a contract. This meant that even when there was no information asymmetry, the available information was not used in the best interest of the sustainability of the system. It was an artificially propped up system that was to collapse when the subsidies were removed and the transaction costs became real.

While this erosion of trust was happening in the formal system, there were other systematic breaches in the contracts. The breach of trust happened in small amounts by small instances of waiver of penal interest. This was followed by instances of waiver of interest on loans and later with the waiver of the loans itself thereby rewarding and making a clean slate of parties who had breached the trust in the first place and penalizing parties who had honoured the trust. This was a sure recipe for erosion of any trust in the system.

However, by the time this happened, the people in general were exposed to institutional intermediation. So, with a little bit of intervention, it was possible for the poor to see the necessity for exchanges through mechanisms of intermediation if the transactions had to be sustained in the long run. There had to be adequate compensation for exchanges and SHGs and other microfinance institutions came in to fill in the institutional gap left by the formal institutions. It is, thus, possible that people who were not exposed to formal institutional intermediation also got initiated in the process (Figure 1).

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Figure 1: Role of Traditional Institutions of Intermediation



The new generation microfinance institutions address the problem of erosion of trust on the basis of mutuality — sorting out local demand-supply gaps locally and going out of the local orbit for incremental or residual needs. This model uses the information available in the best possible manner and gets trust as a major factor back into circulation. There are variations of how information-trust is used in microfinance institutions as we shall see later, but there is no doubt that wherever there is ready information, it is being used to reduce transaction exchanges and costs thereof. Over a period of time, aspects such as repeat transactions and documentation are building up institutional memory. This memory would help in codifying contracts and organizational trust might eventually replace the current inter-personal trust that is used in the transactions.

One of the critical elements in fostering trust and information sharing is the relative degree of certainty that the relationship is going to be sustainable over a period of time. If the relationship is going to be terminal, then, each of the parties would resort to strategic behaviour and would never find a reason to foster trust.

Evidence of using trust to reduce transaction costs is reflected in the level and extent of documentation that is done. In case of several SHGs and cooperative movements, it is possible that the transaction costs which are kept low initially because of informality and access to information are no longer feasible when the movement grows. The necessary element of growth and formalization of the systems lies in increase in transaction costs and developing mechanisms of institutional memory. In a counter example, we see how, over a period of maturity, the nature and role of intermediation itself could change when the type of information availability changes.

It is interesting to look at what happens to this relationship in mature societies where the fiscal discipline has not been affected by external intervention by the state. For this, we take an instance of the Desjardins Movement of Canada (Sriram, 2000) which started off very much like the model for new generation institutions listed in Figure 2. In order to ensure that information about the member/borrower is available in a scenario where the group itself was growing bigger over a period of time, a credit committee was formed. The members of the committee were expected to have information about the borrowers from their area and, therefore, bridged the information asymmetry to a large extent. Over a period of time, due to the growth of technology and competition, two things happened. The members

started getting several alternative institutional intermediaries to bridge the saving-borrowing gap. So, there were channels for savings and borrowings with the maturing market. However, the information at the disposal of the credit committee members started shrinking because transactions could be done off-site, at various outlets, and with various agencies. Did it affect the 'trust' in the system? Quite the contrary. Now, due to technology, member behaviour was available on the machine in the form of credit history and behaviour. So, the credit committee was in any case becoming redundant.

There were many more changes due to revolution in information technology. Information on alternatives for lending and borrowing was available without intermediation of a bank-like institution. Savers could directly invest in equity. Corporations directly borrowed from the retail market thereby paying less than what they would pay to the bank and also increasing the yield to the individual savers by doing away with intermediation. In this scenario, borrowing institutions reduced transaction costs due to reduced asymmetry of information. The savers increased their yields by taking on the risks themselves — by diversifying their savings across

such institutional borrowers. The trend was towards disintermediation in terms of actual pooling and disbursal of cash. Though there would not be a total withdrawal of institutions in the traditional forms of intermediation, the role was being redefined.

However, it is to be noted that the smaller borrowers and lenders would still need the banks to carry out the financial intermediation as their transaction sizes might not justify direct transactions. Secondly, risk-averse savers would continue to use the banking institutions because of the trust reposed in the name 'bank.' This trust has been fostered by the state taking the role of the protector of the depositor by regulating the setting up of new banks through licensing, monitoring the functioning of the banks through regular inspections, and also providing an insurance cover for the deposits.

In spite of a chunk of operations coming from intermediating currency, banking institutions have to slowly redefine their role of going beyond this function as intermediaries of managing the logistics of currency movement (by being an agent for an issue of equity, debt, mutual fund) and that of information exchange. The increase in fee-based activities and a concurrent reduc-

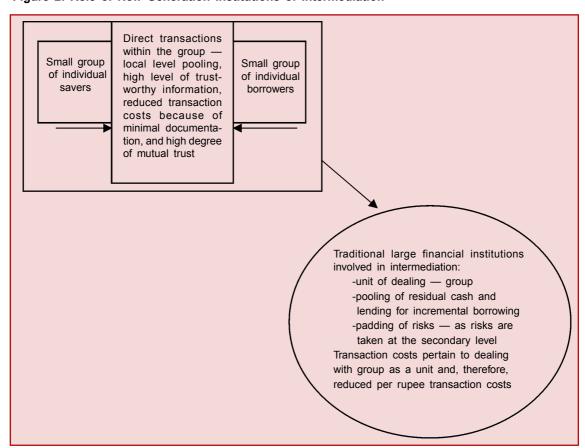


Figure 2: Role of New Generation Institutions of Intermediation

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tion in income from fund-based activities is a trend that can be seen very clearly in some of the western models. We, thus, see a redefinition of the roles taking place when the level of asymmetry of information reduces. In a mature model where technology enables storage and retrieval of large data, the function of intermediation could be as represented in Figure 3.

Trust and Transaction Costs

We can say that trust — which could also be a function of increased information — has a significant impact on transaction costs particularly related to documentation and delay in procuring the loan. When the levels of trust are high, the decisions are taken immediately and the documentation formality is minimal. This is the reason why the moneylender in a village can be rightly termed as an ATM (expanded as Any Time Moneylender!). As institutions get more and more formal, the trust will have to be converted from interpersonal trust to institutional trust which requires recording, storing, and retrieval of information. This might increase transaction costs but would certainly make the transactions sustainable and repetitive in nature.

We also need to recognize the limit to growth within which information and trust could be used on the basis of personal knowledge. If we look at most of the SHGs that are formed in the country, we would find a certain amount of homogeneity in them. This is not a matter of setting right the caste system or ridding the communitybased divide. It is, in fact, about leveraging the current social structure to the maximum extent to reduce information asymmetry and foster trust. However, there is the danger when this formula would be taken up by the state for replication. This would assume that groups could be formed as a result of voluntary contract between individuals who make a rational calculation that cooperation is in their long-term self-interest and may have the danger of assuming that group formation is not culture-dependent. However, it is said that the most effective organizations are based on communities of shared ethical values (Fukuyama, 1995).

We have seen in the above structures that informal institutions and groups manage close-knit groups and communities much better than formal institutions. However, the opposite is quite true of formal institutions where memory is based on records and not on the basis

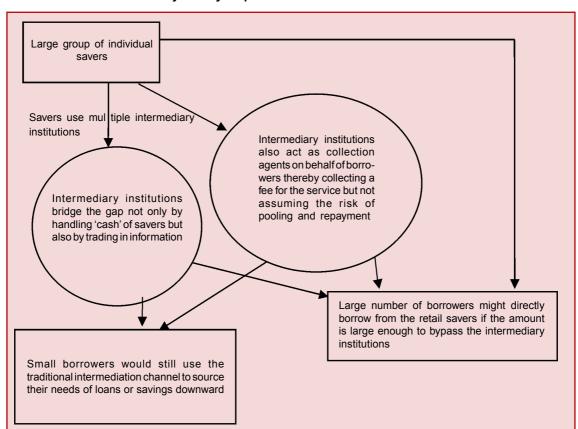


Figure 3: Role of Institutions of Intermediation in Mature Societies where Technology Bridges the Information Asymmetry Gap

of interpersonal transactions. Here, the institutions are capable of managing diversity. In fact, the strength of formal institutions is essentially because they are able to manage diversity and reduce the covariance risk. This also gives scope for rapid scalability and replicability.

CONCLUDING REMARKS

As we see institutions achieving certain scale, the political economy of the activity dictates that they go beyond interpersonal trust and move towards systems and

procedures. These are represented by contracts, clauses of the contracts, and behaviour arising out of such clau ses. As long as the standardized clauses are adhered to, there is systemic trust and the institution goes on. Now, for a salaried person to get a loan for a two-wheeler, it is not necessary to personally know any lender. With organizational systems, procedures, and learning, such products are now standardized in urban India. Such a phenomenon would happen soon in rural India as well given the right economies of scale and volumes. \checkmark

Exhibit 1: Level of Transaction, Degree of Trust, and Transaction Costs

Level of Transaction	Threshold Size of Transaction	Degree of Trust and Level of Information	Documentation and Transaction Costs	Effect of Breach of Trust
Interpersonal transactions—both the parties are professional intermediaries	Usually small, consumption smoothening in nature. Usually no costs (interest) or nominal costs involved.	High level of information on the counterparty and, therefore, high degree of trust.	 Minimal documentation, usually word of mouth. Negligible or zero out-of-pocket expenses. Negligible processing time for transactions. 	Break of relationships —increase in documentation in case of future transactions. However, enough space for condoning non-wilful default.
Interpersonal transactions with one party as a professional lender/deposit collector but operating on an informal basis	Threshold higher than informal interpersonal transactions. Interest cost on loans dependent on local conditions and risk profile of the borrower — builds in the cost on inherent risk of non-wilful default. Threshold on savings low.	 High degree of information, transactions largely based on trust. Lender operating in a limited market where information is personally stored without formal recording in books. Very high covariance risk. 	Minimal documentation Negligible or zero out- of-pocket expenses. Negligible processing time for transactions. Since there is a pre- mium on information (there will be only a few people who know the borrower and also have the resources to lend), interest tends to be high. Flexibility very high.	Drastic action in case of wilful default. In case of non-wilful default, the rent is extracted by a further loan and making the borrower more dependent on this particular source and charging higher risk premium in future transactions.
Transactions with local informal institutions (chit funds, SHGs)	Usually small, restricted to consumption, pro- duction, and effectivi- zation needs.	High levels of information and trust because of homogeneity and access to each other within the group.	Moderate documentation — more for the needs of accounts keeping and external reporting than for a decision on disbursal. Low transaction costs, low flexibility because of competing needs of different members. Overall costs vary widely.	If the breach of trust (wilful default) is an iso- lated case, there would be a tendency to regro- up. If the breach is wide- spread, the institution (group) collapses.
Transactions with local formal institutions (coops)	Threshold size could be larger given the strength of the institution. Loans could go up to 'diversification needs' of the customers.	Moderate to high level of information — used effectively in institutions having significant member stake (Agrawal et al., 1994), used detrimentally where high external 'subsidy' funds are pouring in.	Transaction costs have a potential to be low but are usually not. Information recorded more for external reporting than decision-making. Since the funds are cheap, there is excessive rent-seeking thereby getting total transaction costs similar to that of informal channels.	Rampant breach of trust in most institutions at both levels — wilful default and breach of trust of individual with the institution. No consequential action on wilful default leading to breach of trust by the institution against 'good' borrowers. Effect: rampant sickness in the sector.

Contd.

Level of Transaction	Threshold Size of Transaction	Degree of Trust and Level of Information	Documentation and Transaction Costs	Effect of Breach of Trust
Transactions with local microfinance institutions (<i>Grameen</i> type)	Moderate, as the pro- grammmes are poverty focused. Could be high in case of established borrower.	Use of coercive trust, externally dictated. Fostering trust by mak- ing the consequences of breach of trust ex- pensive and treating it as a deterrent.	Minimal documentation but the method includes involving the spouse as a guarantor. Again, use of coercive trust in docu- mentation as well. How- ever, transaction costs on the documentation are low as it is done at the doorstep and with minimal formalities.	Collapse of the outlet. The trust intricately links all the borrowing fraternity. If they gang up to snap the ties, the outlet collapses. However, the incentive of continuing transaction mitigates the possibility of collapse.
Transactions with branches of regional/national level formal institutions	Has the theoretical potential to be high. In fact, smaller transactions are usually seen as an obligation.	 Level of information is low because of aspects relating to continuity of the persons at the cutting edge. Degree of trust is also low leading to excessive documentation and collateral-based lending. However, a high degree of trust is usually reposed by the saver when the issue of deposits come up. 	Nominal cost of loan moderate. But, documentation requirements, inspection, and monitoring the usage high. Procedures are inflexible and elaborate to suit internal controls of the lending institution. Usually time-consuming. This leads to high transaction costs (delay or corruption) making it comparable to any other expensive source in the market.	No effective action on breach of trust by wilful default. Excessive docu- mentation makes the transactions impersonal and there is no effective mechanism of convert- ing the documentation into encashable colla- teral.

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