



**Consultative Group to Assist the Poorest (CGAP)
Working Group on Savings Mobilization**

**SAVINGS IN THE CONTEXT OF
MICROFINANCE –
STATE OF KNOWLEDGE**

**Michael Fiebig, Alfred Hannig,
Sylvia Wisniwski**

Eschborn, 1999



CONTENTS

ABBREVIATIONS	iii
1 INTRODUCTION	1
2 THE CLIENT PERSPECTIVE	3
2.1 Main factors determining the demand for savings facilities	3
2.2 Savings capacity	5
2.3 Transaction costs	6
3 THE INSTITUTIONAL PERSPECTIVE	7
3.1 Institutional incentives for efficiency: depositors as quasi-shareholders	7
3.2 Cost management	8
3.2.1 Cost management in intra-sectoral MFIs	9
3.2.2 Cost management in inter-sectoral MFIs	10
3.3 Liquidity and risk management	10
3.3.1 Liquidity management	11
3.3.2 Risk management	12
3.4 Regulatory barriers and the necessity of self-regulation	13
3.4.1 Regulatory barriers and constraints	13
3.4.2 Self-regulation	14
3.5 Forced and voluntary savings mechanisms	15
3.6 Social intermediation	16
3.7 Savings versus other sources of funds	17
3.8 Timing and sequencing of savings mobilization	18
4 THE MACROECONOMIC PERSPECTIVE	19
4.1 Relevance to macroeconomic development	19
4.2 Local and regional financial cycles	19
5 PROPOSALS FOR FUTURE RESEARCH AND DONOR ASSISTANCE	20
5.1 Key issues for future research and discussion	20
5.2 Donor assistance	20
6 REFERENCES	22

ABBREVIATIONS

AID	Agency for International Development
BKK	Badan Kredit Kecamatan
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung
BRI	Bank Rakyat Indonesia
CGAP	Consultative Group to Assist the Poorest
FAO	Food and Agriculture Organization
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit GmbH
MFI	Microfinance Institution
NIE	New Institutional Economics
NGO	Non-Governmental Organization
NPO	Non-Profit Organization
RoSCA	Rotating Savings and Credit Association
WOCCU	World Council of Credit Unions

1 INTRODUCTION

Savings mobilization has only recently been recognized as a major force in microfinance. In the past, microfinance focused almost exclusively on credit; savings were the "forgotten half" of financial intermediation (Vogel 1984). The former perception of low savings capacity and low demand for deposit facilities has been shattered in the last decade. It is now generally acknowledged that households will deposit their surplus capital in financial institutions if the institutions are appropriately structured and offer the clients savings products that meet their specific needs. If demand-oriented deposit facilities are embedded in appropriate institutional settings, they may achieve a level of outreach and impact that credit-only facilities cannot achieve.

Many microfinance institutions (MFIs) offering only credit for microentrepreneurs face problems of inefficiency and instability. As recent studies have shown, the performance standards of outreach in quality and quantity, viability and sustainability of credit-only MFIs have not been widely met (Schmidt/Zeitinger 1994b, 1996; GTZ 1996; Yaron 1992; Christen et al. 1994).¹ Few MFIs have reached financial self-sufficiency in terms of being fully financed by client savings and funds from formal financial institutions ("level four" institutions: Rhyne/Otero 1992). Low levels of savings mobilization may be attributable to the fact that many MFIs began their operations as channels for external funds from governments and/or donors and did not act as, and were not required to develop into, formal financial intermediaries for microentrepreneurs, offering deposit and other financial services.

MFIs mobilizing savings are likely to have a better governance structure than credit-only MFIs because their leadership is not required to answer to a long chain of government officials, development practitioners and donors; but answers directly to their clients, depositors and borrowers. In addition, government and donor-based loan programs often lack strong regulation and supervision mechanisms because their priority is channeling money to specific target groups rather than protecting their assets, i.e. mainly the loan portfolio, from risk, and maintaining or even increasing the value of their assets, which is a key ingredient of financial viability. In comparison, the regulatory and supervisory frameworks of deposit-taking MFIs are very strict. Such requirements necessitate that deposit-taking MFIs adopt additional and higher management capabilities than exclusively lending institutions. Strong legal requirements to protect public savings therefore ensure high management standards.

Savings mobilization especially requires more sophisticated risk and liquidity management capabilities. Lending and savings operations can produce synergies with regard to costs and gaining knowledge about clients' financial behavior. However, the maturity structure of small and microsavings combined with the strong risk adversity of deposit-taking MFIs might induce the crowding-out of small- and microborrowers. Therefore, the trade-offs between credit and savings operations must be balanced.

Opinions on the relevance of savings range from referring to financial institutions that neglect savings in general as "incomplete institutions" (Vogel 1984) to calling for specialized deposit institutions to replace credit-only MFIs (Gadway/O'Donnell 1996). Strategies for establishing deposit-taking MFIs vary from credit-first to savings-first sequencing. Approaches include the establishment of new institutions as well as the down- and up-scaling of existing financial institutions.

¹ Yaron lists only four successful rural financial institutions worldwide; Christen et al. (1994) list twenty success stories. Their evaluation is based on empirical data provided by the evaluated institutions themselves, however, and may need to be adjusted downwards (see Schmidt/Zeitinger 1996).

This paper will provide a brief overview of the state-of-knowledge of savings in the context of microfinance. Section two of the paper will focus on the depositor, presenting the main factors that determine depositor demand for savings facilities and savings capacity, with special emphasis on transaction costs.

Section three will concentrate on MFIs and discuss the following topics:

- Institutional requirements for deposit-taking and the effects resulting from it;
- Requirements for cost, liquidity and risk management and their consequences on the financial institution;
- The regulatory framework and the necessity of self-regulatory measures;
- Forced savings in contrast to voluntary savings;
- The socio-cultural dimensions of financial intermediation;
- Savings compared to other sources of financing; and,
- Timing and sequencing of savings of savings mobilization.

Section four will concentrate on the macroeconomic context and section five will outline suggestions for further research and donor assistance.

2 THE CLIENT PERSPECTIVE

2.1 Main factors determining the demand for savings facilities

Economic actors in the context of savings include individuals, households, groups, enterprises and institutions. Savings as an alternative to consumption consist of a voluntary aspect subject to the economic actor's decision, and an involuntary aspect, subject to external factors such as inflation, taxes and the social security system. These external factors will not be covered in this paper.

The allocation of disposable income is a portfolio decision with various alternative options. Voluntary savings can take the form of cash, institutional or in-kind savings. Institutional savings include deposits in formal (e.g., banks), semi-formal (e.g., cooperatives) and informal (e.g., Rotating Savings and Credit Associations/RoSCAs) financial institutions. In-kind savings include savings in grain, animals, gold, land, raw material, finished goods and construction material. The line between savings, investment and consumption is not always easy to draw. For example, construction material can either be stored and sold when cash is required, or used as an investment in the family's housing. Another allocation for disposable income is on-lending it to relatives or friends for either economic or non-economic returns (the latter referring to social reciprocity). This paper will focus on the volume and structure of institutional savings.

The main determinants of an economic actor's savings portfolio decision can be summarized as follows (Vogel/Burkett 1986; Bouman 1994; Robinson 1994):

- The transaction costs incurred on transforming available surplus into a specific savings option or on liquidating it;
- The liquidity of the savings option;
- The real rate of return of the specific option (real interest rates);
- The divisibility of savings;
- The safety of the savings option;
- Trustworthiness and confidence, especially when formal savings accounts are considered;
- The possibility of locking money away from relatives and friends; and,
- The possibility of using savings to gain access to credit (financial reciprocity, see 3.5) or to other services (social reciprocity, see 2.2).

Depending on the motives behind the savings decision, certain factors become predominant. Possible decisive motives include, in accordance with the factors stated above (Robinson 1994):

- Insurance against disability, disease, retirement, sudden income losses and other contingencies;
- Safeguards against uneven income streams due to seasonal variations (savings of high-income periods are used to finance consumption expenditures during low-income periods);
- Wealth accumulation to finance a household's long-term goals (social and religious purposes, heritage, consumer durables); and,
- Savings for future investment.

If the primary motive for savings is insurance, liquidity and safety will be of particular importance to the depositor. Low-income earners with irregular income streams save in periods of high income to compensate during periods of low income. Liquid deposit facilities

or overdraft credit facilities could provide sufficient margins for decisions on the timing of consumption and investment. Motives for wealth accumulation focus on safety and interest rates while motives for future investment require security and immediate access to funds in the event that an investment opportunity suddenly arising.

Authors like Von Pischke (1983), Adams (1978, 1985) and Vogel/Burkett (1986) emphasize the predominance of positive real interest rates as major determinants in the monetary savings portfolio decision. Empirical evidence from various ethnic groups and countries has shown that savers, poor and non-poor, respond positively to increased interest rates. Anecdotal evidence from informal savings mechanisms, however, has suggested that people will save even in the presence of negative real interest rates. Poor rural savers may show less relative sensitivity to positive real return than urban savers. This indicates that for the rural poor, different factors may be decisive.

Gadway and O'Donnell (1996) have recently argued that poor savers mainly demand safe and liquid assets. They point out that the prevailing investment of surplus in illiquid assets (in-kind savings) is an expression of the limited set of savings options the poor can choose from. In general, informal savings mechanisms are characterized by limited liquidity and divisibility – or, as Gadway and O'Donnell put it: "You can't sell half a cow." Under such conditions, immediate liquidity is often provided by credit rather than by savings products if relative prices benefit the former. Gadway/O'Donnell report from customers of Badan Kredit Kecamatan (BKK) Indonesia that the access to credit from BKK induced an increase of households' stock of gold. This suggests that liquidity was provided by the credit facility. The authors argue that credit and savings in this sense are substitutes providing the same benefit to the poor: liquidity. However, well-designed credit programs that finance profitable investment projects and are combined with savings facilities can also increase savings potential due to income-generating effects. Credit programs can therefore have a triggering effect on local savings.

Robinson (1994) has pointed out in this context that the demand for deposit facilities is determined by a mix of motives and determinants and can therefore be best met with a mix of savings products offering different levels of liquidity and return. Bank Rakyat Indonesia (BRI) mobilizes savings from different strata of rural societies with a mix of liquid and non-liquid savings products and various levels of return, based on the deposit amount. While this mix of liquidity and return respects the depositors' demand, it also permits BRI to offer manageable and profitable savings services from the institution's perspective.

Appropriate deposit facilities and institutional arrangements must include technical features such as positive real return and liquidity. However, this is not enough to make deposit facilities in financial institutions appealing to savers. The depositor must also trust the institution holding his or her money. Because financial intermediation includes promises about (re-)payments in the future, the "trust factor" (Otero 1989) is an important issue. Fraud or mismanagement of funds, much more than the failure of a credit program, lead to long-lasting client mistrust towards the deposit-taking financial institution. MFIs must build the confidence of clients to compete with informal and in-kind savings options.

Informal savings options can offer important advantages to depositors. When inflation and general economic instability prevail, in-kind savings can be viewed as a rational decision to hedge against instability. In stable conditions, or with price-indexed deposits, the availability of safe and liquid institutional savings options can lead to better utilization of capital by preventing it from being frozen in unproductive forms. RoSCAs and contractual savings provide an opportunity to lock away funds that would otherwise, due to social, ethnic or religious obligations, be transferred to relatives or friends or used for household consumption. This could explain the preference for non-liquidity (see Bouman 1994).

Future research should focus on savings motives as well as market research on the elasticity of demand for deposit facilities with a different mix of return, liquidity and security.

2.2 Savings capacity

Policy makers and development planners were long convinced that poor people do not have a significant savings capacity. The neglect of savings mobilization in poor population segments of developing countries was explained by low income resulting in a low savings capacity for rural households and a high propensity to spend economic surplus on social and religious activities or consumption (Adams 1978). Formerly, the perception of low savings capacity was grounded in the limited funds deposited by the poor in formal financial institutions. For the past several years, however, practitioners have realized that this is attributable to inappropriate deposit facilities and institutional structures (Von Pischke 1984; Robinson 1994).

The old perception was shattered, however, by research on rural financial savings and reports on informal savings mechanisms and in-kind savings as well as experience from savings banks, cooperatives and deposit-taking MFIs such as BRI in Indonesia. RoSCAs can be found in almost every developing country; savings groups, money-keepers and in-kind savings absorb a great portion of the poor's savings capacity. (Miracle/Miracle/Cohen 1980; Bouman 1977, 1984, 1990; Von Pischke 1984; Fernando 1991; AID 1991). Particularly rural households are induced to save during harvest periods when income streams are higher than consumption levels.

Successful mobilization of institutional savings can, therefore, only be ensured by the existence of demand-driven savings products offered by appropriate institutional structures. A broader understanding of the savings decisions of poor households has shown that appropriate supply can attract significant volumes of savings. Furthermore, a much larger number of clients can be reached through savings mobilization than through credit-granting.

Microsavings also have strong gender implications. Experience indicates that women are very reliable microfinance clients, demonstrating more discipline than men in making regular savings deposits and loan repayments (Goetz/Gupta 1996; Ardener 1995). An adequate supply of microsavings facilities will therefore supply much-needed services to women, especially considering the fact that women represent a large share of the poorest segments of the population and often pursue independent economic activities. Microsavings enable women to enter the financial system by building their own financial security. While this strengthens women's economic and social independence, it is also widely recognized that funds managed by women have a greater effect on the welfare of the entire family.

Even appropriate and trustworthy institutional arrangements will fail to mobilize savings if an enabling macroeconomic environment does not exist. The lack of political and macroeconomic stability and unsuitable legal and regulatory conditions discourage institutional savings. In countries where political distress, inflation and discretionary government interventions into the financial system prevail, households may prefer informal, especially in-kind, savings options.

The mobilization of microsavings entails certain difficulties for MFIs that may discourage them from becoming engaged in the savings business. The amounts deposited by individual, poor households in financial institutions are normally very small. Volatility of savings, particularly in rural areas, may be perceived as another disadvantage. Financial institutions mobilizing small savings face the same problems here as with providing small credit: administrative costs are mainly fixed and require economies of scale and scope. The mobilization of microsavings in sparsely populated (rural) areas is even more difficult due to increasing transaction costs. This is why innovative technical features must be included to

make savings mobilization a cost-covering business for the institution while still generating an attractive return to depositors (see also 3.2).

Even if the mobilization of institutional savings is rewarding for both MFIs and depositors, there may nevertheless be some adverse effects on the depositor's household. When surpluses are on-lent or given away to kin and neighbors in rural settings this may be part of a social security net as a form of social reciprocity (see 2.1). Monetization of savings and locking them away in formal deposits may decrease the depositor's access to financial support from the social environment in times of scarce resources. Social cohesion as well as individuals' safety nets may be disrupted (see Bouman 1994; Nitsch 1993).

2.3 Transaction costs

In new development economics (Stiglitz 1986), transaction costs are considered to be of substantial interest for development finance. Transaction costs for savings on the client side include the number of visits required to complete a transaction and the time spent traveling to the intermediary and completing the transaction. Geographical proximity plays a major role. Empirical evidence indicates that an increased bank density encourages higher volumes of institutional savings as bank agencies get closer to their customers. When the MFI is close to its customers, the clients are able to access their funds more easily and, hence, transaction costs are reduced.

Transaction costs for the depositor are increased by extensive paper work and regulations on the withdrawal of funds. Some MFIs, however, limit access to deposits to ensure a stable capital base and instill a spirit of thriftiness, and some even block savings (see 3.5).

Transaction costs play a very important role in individuals' decisions to deposit their savings with an MFI (see Vogel/Burkett 1986; Otero 1989). Within the portfolio decision of the saver, the return is closely linked to transaction costs. A seemingly positive real rate of return may turn negative for the individual when transaction costs are considered. High transaction costs can therefore encourage in-kind savings rather than institutional savings. Thus, collecting deposits "at the door step of the customer" reduces the customers' transaction costs and may lead to an increased volume of all savings.

3 THE INSTITUTIONAL PERSPECTIVE

Appropriate financial institutions and institutional settings are at the core of savings mobilization. Large volumes of savings will only be attracted when appropriate financial products and institutional arrangements are easily accessible. Savings mobilization itself may become a strong incentive to improve the performance of MFIs and contribute to institutional viability and sustainability. Many more clients can be served by savings products than by credit, so that the introduction of savings products may considerably improve the client outreach of MFIs. The incorporation of savings facilities may induce more demand-driven services and, hence, improve efficiency and profitability in order to provide a sustainable basis for expansion.

3.1 Institutional incentives for efficiency: depositors as quasi-shareholders

Vogel (1984), Adams (1985) and others have pointed out that a financial institution mobilizing savings must respond to the depositors' requests for safety, efficiency and stability. In addition, the MFI needs to deliver the products demanded at a reasonable price. Because the roles are reversed in the credit business, the institution must convince depositors that it will handle their funds with care and provide them with benefits such as return and/or liquidity. Hence, the business of deposit taking should increase institutional efficiency and profitability and strengthen the professionalism of the governance structure by introducing greater customer-orientation.

Schmidt (1986) analyzed the conditions of MFIs and concluded that their survival depends to a great extent on the existence of incentive mechanisms and a monitoring system that ensures decisions taken on behalf of the institution are appropriate. When financial institutions are seen as agents² of their depositors-principals, they will necessarily serve the interests of their depositors, reducing asymmetry of information and moral hazard.³ Because financial intermediaries act as principals in relation to their borrower-agents, they must ensure that their borrowers do not default, which would consequently endanger the assets of their depositors. A principal-agent relation also exists between management staff, donors and an MFI. Thus, deposit-taking MFIs operate within a variety of principal-agent relations.

If MFIs do not offer financial services efficiently or tarnish their reputation as trustworthy financial intermediaries, depositors dispose of a strong retaliation device. The massive withdrawal of deposits or sale of shares (in cooperatives) might lead to a severe liquidity crisis or even erode the equity basis of the MFI and provoke an institutional breakdown. This pressures the management of the MFI to balance the different demands of credit and deposit clients. This is not an easy task because microcredit clients imply high operational costs and often lack collateral. Cost-reducing strategies (such as group lending and social peer pressure) should increase depositors' confidence in the safety of their savings significantly (see 3.3).

Attracting microsavings is very much a question of safety for an MFI. There is, hence, a strong need to gain the confidence of target clients. Appropriate incentive systems, organizational culture and regulatory control measures may satisfy this need by reducing the agency-principal constraints between clients and MFIs.

² Here, an agent is a person or institution that manages assets belonging to others, referred to as principals.

³ Asymmetry of information exists between depositors, borrowers and the MFI with respect to the likelihood that financial promises are kept. Depositors (principals) do not know if the MFI (agent) will ensure the safety of their savings and MFIs (principals) cannot be sure that borrowers (agents) will repay their loans on time. Moral hazard describes a situation where an agent endangers the value of the asset by a risky behavior because they do not bear the full costs of loss, but may benefit from an extra profit by their risky actions.

In the informal financial sector, a great variety of techniques exist to reduce problems of asymmetry of information and moral hazard. They may serve as examples for formal financial institutions to gain insight into coping with agency-principal constraints. Traditional RoSCAs, for example, do not offer services for savings accumulation. This negates security risks because funds are not kept in the RoSCA's custody, but are immediately disbursed.

Another measure suggested by Meyer and Cuevas (1992) to gain the confidence of target clients is to monitor credit operations more prudently when funds come from depositors rather than from foreign and national refinance sources. There is some evidence that borrowers care more about repayment when the money borrowed does not come from the government, an aid agency or another bank, but instead from their neighbors, i.e. when it is "warm money."⁴ This has been primarily demonstrated by small village banks and self-help groups. However, their high repayment rates may also result from good borrower selection, especially when depositors take part in the appraisal process. When depositors help select borrowers, agency-principal constraints are further reduced and the efficiency of the institution increases (Gonzalez-Vega/Poyo 1985; Bédard 1992). However, problems of delegated monitoring can arise when the number of group members increases to the point where mutual control becomes difficult. Particularly when borrowers become the dominant force in an informal financial group, they may impose their short-term interest in easy access to credit under soft conditions, to the detriment of the depositors' interests. Conflicts between borrowers and depositors that arise from their dual function as owners and clients may endanger the stability and viability of jointly-owned financial institutions (Poyo 1992).

Future analysis should focus on and develop standards for institutional requirements to ensure safety, viability and sustainability in the provision of financial services. Quality and operational autonomy of management, adoption of ownership responsibility, staff motivation, corporate culture and innovations in technologies and procedures should be analyzed. Efficient internal organization depends on increased attention to these subjects.

3.2 Cost management

A viable and sustainable financial institution must cover the costs for operations, loan loss, capital (the costs of savings mobilization and/or borrowed funds) and inflation with the income they generate. Frequency of account movement, average deposit amounts, administrative costs for branches and retail outlets and deposit rates of interest contribute to the specific costs of savings mobilization. In order to be viable and sustainable, an MFI's loan interest rates must be high enough and administrative and other costs low enough to ensure that income covers all expenses.

Interest rate regulation has proved to be a significant disincentive for savings mobilization. Vogel/Burkett (1986) pointed out that a policy of adequate real interest rates on deposits is "inconsistent with policies of low-interest-rate lending." If interest rate ceilings exist for loans and deposits, the financial spread to cover costs shrinks and thus often makes savings mobilization too costly. Even if official deposit interest rate ceilings do not exist, MFIs must fix them at very low levels to cover their costs when loan interest rate ceilings exist. This often results in negative real interest, which represent strong disincentives for depositors to save in financial institutions. Low-interest refinancing opportunities such as donor quasi-equity and soft loans or cheap rediscount facilities at the central bank also make deposit-taking a costly,

⁴ The term "warm money" refers to the fact that depositors consider themselves "quasi-shareholders" of financial institutions whose funds are exclusively constituted of locally mobilized savings. Because customers invest their own money in the financial institution that provides financial services exclusively to them, it is in their own interest that an effective and efficient intermediation of their financial resources takes place. Therefore, "warm money" creates responsibility and financial discipline through savings in comparison to an injection of money from external sources ("cold money") (see Bédard 1992).

and thus unattractive, alternative. Further to this, minimum reserve requirements may significantly contribute to the cost of savings mobilization by freezing a portion of the capital-earning capacity at no or very low interest (see 3.4).

There is very little empirical evidence on the cost of mobilizing savings within an MFI.⁵ "There have been no more than a handful of empirical investigations that give donors at least some idea of what they can expect from partner institutions in developing countries in terms of the costs of intermediation (Schmidt/Zeitinger 1996: 256)." Cost accounting has often been neglected and donor reporting requirements have not yet focused extensively on this topic. Cost accounting for banking can be difficult due to problems determining the proper allocation of overhead costs to specific financial products (both savings and credit products).

Based on very limited empirical evidence, Schmidt/Zeitinger (1996) argued that providing attractive savings opportunities is difficult and costly for MFIs. On the contrary, Robinson (1994) concludes from BRI's experience that the costs of savings mobilization can be lowered by innovative financial technologies. Burkett/Vogel (1986) cite empirical proof from India, Nigeria and Peru that the provision of deposit services is not a costly task. More insight into cost structure and magnitude are gained by analyzing intra-sectoral MFIs that take deposits from the same low-income clientele that they serve on the lending side as well as inter-sectoral MFIs that mobilize savings from higher-income customers.

3.2.1 Cost management in intra-sectoral MFIs

Schmidt/Zeitinger (1994a) argued that mobilizing microsavings is costly. They pointed out that BKK in Indonesia, Banco Solidario in Bolivia and Cajas Municipales de Ahorro y Crédito in Peru have only mobilized small volumes of savings from the poor. For the Cajas in Peru, administrative costs were estimated to be 10% per year of the average savings deposit volume, and 40% per year of the average deposit volume below US\$500. Most of the costs incurred, they argued, are fixed overheads and thus the mobilization of high volumes of small deposits is more costly than the mobilization of large deposits. They also noted that the supposed higher turn-over of small savings accounts due to depositors' liquidity preference also increases administrative costs. Moreover, Schmidt/Zeitinger argue that lacking depositor confidence in MFIs needs to be compensated for by additional and costly monetary incentives (higher interest rates). These skeptical conclusions question the possibility of significant mobilization of microsavings.

The validity of these conclusions remains open, however, due to the scarce underlying empirical evidence. In addition, the authors did not consider economies of scope and the synergies between savings mobilization and credit operations. The costs of savings mobilization can be viewed as marketing costs for the MFI or as a new business venture. Measures reducing operational costs, such as linking-arrangements, informal savings collection systems, collection by groups, special agents or mobile bankers should be taken into consideration. Techniques that shift transaction costs from the institution to the customer utilizing existing social cohesion through group mechanisms can also decrease the costs of mobilizing small deposits, as they have for microcredit. Schmidt/Zeitinger focused on the establishment of new MFIs and did not include an example of up-grading already existing local savings groups. These groups may, to a considerable extent, be able to externalize and/or reduce transaction costs and thus operate cost-efficiently. Shifting transaction costs to groups may, however, have the disadvantage that individual client track records are lost. The significance of the real deposit rate of interest and the supposed trade-off between gaining borrower confidence and increasing interest rates remains questionable. As has already been stated, poor depositors sometimes select informal monetary savings options even

⁵ Von Pischke (1994) has described this as a "microenterprise project reporting bias."

when negative real interest rates are offered (see 2.1). Institutional savings options are sometimes not even selected when an additional "trust premium" is offered.

Considerations of new institutional economics (NIE) were not included in Schmidt/Zeitinger's analysis.⁶ Appropriate institutional designs for MFIs mobilizing microsavings should receive special attention in future research (see 3.1).

3.2.2 Cost management in inter-sectoral MFIs

Schmidt/Zeitinger (1994a) also argue that the mobilization of funds from higher-income customers is difficult and costly. On the one hand, savings from a higher-income clientele are assumed to be more stable, presenting less frequent account movements and, hence, lower administrative costs than small savings from poor households. On the other hand, if deposit-taking MFIs focus on middle- and upper-income populations, they may lose their often quasi-monopolistic position of serving the poor and find themselves in competition with other formal deposit facilities, national or even international financial intermediaries. In this case, the MFI will have to pay a higher interest rate. In comparison to more conventional deposit facilities, MFIs must pay a premium for the difficult and costly business of lending to the poor. Furthermore, in an inter-sectoral MFI, middle- and upper-income depositors may ask for innovative technical features such as checks and credit cards. In the extreme, this could provide incentives to re-orient the MFI away from microclients. Large-scale depositors such as institutions and depositors from high-income strata of the population entail low administrative costs and may thus use the relative importance of their deposits to induce a re-orientation of the institution.

Schmidt/Zeitinger did not attach importance to the inclusion of higher-income customers and other economic actors for offering non-economic incentives that may assist in the mobilization of larger volumes of savings. The Cajas Municipales in Peru have tried to utilize local representatives and institutions to attract depositors by decentralizing on a regional basis (Lepp 1996). Central European savings banks have demonstrated that the strong influence of local institutions does not necessarily induce a re-orientation of the MFI, but can provide the financial institution with a stable capital base. Such strategies may expose MFIs to liquidity risks due to savings concentration and may increase political vulnerability. Measures to attract "sponsoring" for economic reasons and economics of non-profit organizations (NPOs) should be included in future research.

The question remains to be answered whether cost considerations will lead to the exclusion of savings mobilization from MFIs' activities in early stages or to a complex portfolio of deposits necessitating different institutional and technical capacities in response to the influence of depositors. Socio-cultural considerations and incentive structures should be analyzed in detail. The cost-efficient provision of deposit facilities requires cost consciousness (created through appropriate staff incentives and the adoption of ownership responsibility) as well as cost control based on appropriate accounting systems (see 3.4).

3.3 Liquidity and risk management

The transformation of credit-only MFIs into credit and savings MFIs will have implications for the financial technologies and the institutional structure. A microfinance intermediary will not only need to manage funds provided by the government or donors for the credit operations, it will also need to transform maturities, volumes and risks. It will have to match incoming deposits with outgoing loans. Higher management capabilities will be required and staff will

⁶ Schmidt, however, has worked extensively in this field: see Krahen/Schmidt (1994).

need to be sufficiently motivated to meet the challenge. Appropriate incentive structures and control measures will need to be developed.

To attract a significant volume of deposits, an MFI must meet the demand of their deposit customers with regard to safety and liquidity. Safety requirements for deposit-taking MFIs are higher than for credit-only institutions. Cautious risk management must ensure the safety of deposits. At the same time, demand for liquid deposits will lead to higher standards of liquidity management to ensure the accessibility of deposited funds at all times.

3.3.1 Liquidity management

External factors such as minimum reserve requirements have effects on the liquidity management of any financial institution. Regulation on minimum reserve requirements is intended to ensure a certain degree of stability and liquidity, but may reach burdensome levels as high as 50% (Germidis et al. 1991). Liquidity management may thus be severely handicapped by regulations that freeze significant amounts of deposits (see 3.4).

Internal factors, such as the financial technology reflected by maturities, volumes, and risks of loans and deposits, have implications for the liquidity management of MFIs. Liquidity managers need to solve the matching problem between incoming deposits and outgoing loans. This is an especially difficult task because savings represent largely liquid resources while assets are characterized by longer maturities. Deposit facilities may include mandatory savings, contractual savings, passbook savings and liquid (checking) accounts.

Poor households with high liquidity preference demand savings accounts that are easily accessible, do not restrict withdrawals or require high minimum balances. Schmidt/Zeitingger (1994a) pointed out that institutions with high deposit volumes and political savers (savers for non-economic reasons) also prefer (renewable) time deposits rather than long-term deposit contracts. These are very volatile and thus impose a high degree of liquidity risk on the MFI. Empirical evidence from Banco Solidario in Bolivia and Cajas Municipales in Peru has indicated that due to the high volatility of small deposits, a large share of assets must be held in liquid investments.

To ensure institutional liquidity, MFIs try to attract savings with limited withdrawals, which is often counter to customers' preferences. Middle class households with more stable financial savings could be perceived as attractive clients. However, capturing savings from this income group could be cost-intensive and provoke a gradual shift away from the original target group (see 3.2).

Because customers prefer liquid deposit facilities (see 2.1), liquidity management must cope with sudden changes in depositors' liquidity requirements and frequent withdrawals. Particularly in rural areas, natural disasters may cause the massive withdrawal of deposits and induce rapid depletion of funds. Studies should be conducted on the determinants of savings behavior, the implementation of early warning systems and access to a lender of last resort.

In addition to credit operations, MFIs need safe and liquid investment options to cope rapidly with unexpected changes in depositors' behavior. These can either be provided by second-tier organizations or links to the formal financial system. At BRI in Indonesia, small local retail outlets (Unit Desas) are linked to the nation-wide system of BRI (see Patten/Rosengard 1991). A second-tier institution can be a lender of last resort to an MFI in times of scarce liquidity as well as a place to deposit excess liquidity. A second-tier institution may function like a liquidity pool and transform different maturities and volumes of funds. Particularly when irregular and volatile savings from rural areas predominate, stable relations with a second-tier organization can be very helpful.

Risks and disadvantages related to liquid investment options in money and capital markets may exist. The formation of a self-help second tier of MFIs has its own difficulties (see 3.4, 3.6). Substantial opportunity costs may occur for the MFI if the investment of the mobilized savings at equally short terms in formal banks earns considerably less return than the savings mobilization process cost, as Schmidt/Zeitinger (1994a) reported from Banco Solidario in Bolivia. In addition, as experience from several countries has shown, investment in liquid and riskless bonds may discourage cost-intensive microcredit operations and become a major drawback for poor households that usually have limited access to credit.

3.3.2 Risk management

Risk management measures should contribute to the safety of deposits and strengthen depositors' confidence in the MFI. Deposit mobilization can contribute to superior loan recovery. Evidence from a credit union rehabilitation project in the Dominican Republic showed that delinquency declined considerably when increased deposit rates of interest were offered and an increase in deposits occurred (AID 1991). In a credit union project in Honduras, similar results were achieved (AID 1991). This could be attributed to the shrinking financial spread that results from increased deposit interest rates when credit interest rates cannot be increased accordingly due to market pressures. The shrinking financial margin necessitates cost reductions and, hence, requires better portfolio quality.

Risk management in deposit-taking MFIs may cause a shift in portfolio assets. This changed portfolio will probably consist of riskless and liquid assets, less risky assets and, only to a limited extent, high-risk assets. While some authors perceive microloans as high-risk assets, others stress that large loans are riskier. Considering the former perception, a risk-averse strategy combined with cost and liquidity considerations may induce an MFI to abandon the population originally targeted on the lending side. However, the conflicting interests of clients on the credit (focusing on microcredit) and the deposit (focusing on safe and liquid deposits) sides may be reconciled by organizational self-regulation and restrictions. If the latter perception is true, deposit-taking MFIs retain their target group orientation in credit operations. A mother institution may finance large loans to reduce the risk for the local deposit-mobilizing units that restrict their credit operations to microloans (Gadway/O'Donnell 1996). Medium-risk assets may include pawnbroking and thus stay in the same regional context, but outside the context of microfinance.

Another strategy for restructuring the asset portfolio may lead deposit-taking MFIs to adopt the risk policies instituted by savings banks in Central Europe in the 19th century. These typically invested small deposits in safe government bonds. However, in some developing countries, access to safe and liquid bonds is limited. Alternatives may include investing small deposits in formal financial institutions or investing in foreign currency. Investment in foreign currency, however, implies additional exchange rate risks that require even higher management capabilities.

Finally, risk management may go beyond balancing the risks of the asset portfolio and directly address the trust factor between savers and the MFI. A local short circuit⁷ in the intermediation process may reduce the necessity for extensive risk management by strengthening the depositors' confidence in the institution (e.g. in village banks: Holt 1994;

⁷ The term "short circuit" refers to financial institutions that lend mobilized savings mainly in the community where they are collected (see Causse 1985). The requirements of risk management are related to the proximity of the customers to the financial institutions. When the customers are "quasi-shareholders" and organized into small groups that strictly control the access to these funds and whose volume of funds is limited (e.g. RoSCAs), the risk management capabilities are lower than in savings and credit associations. Peer group control and, hence, strong group cohesion is more difficult to achieve in savings and credit associations even when non-members are not accepted as customers. In addition, savings and credit associations are more susceptible to fraud due to higher intermediation volumes.

FAO 1995). Locally operating financial intermediaries, however, may have difficulties achieving economies of scope and scale due to limited local funds. The implementation of a network joined by several decentralized MFIs may compensate for these limitations.

Liquidity and risk management requirements of deposit-taking MFIs are very high, but very little empirical evidence exists on this subject. Further analysis should focus on the asset portfolio of existing MFIs and on the identification of appropriate institutional linkages (networks, liquidity pools, second-tier organizations) as well as on possible links to the formal financial sector (rural retail outlets of full-service banks). Highly trained and motivated staff and appropriate monitoring and accounting systems contribute to valid risk and liquidity management. Whether risk and liquidity management requirements and cost considerations will crowd out microclients on the credit side or prohibit the mobilization of microdeposits remains open to further investigation.

3.4 Regulatory barriers and the necessity of self-regulation

3.4.1 Regulatory barriers and constraints

Inappropriate and interventionist regulations are characteristic of repressed financial systems that impede financial intermediation. Government interventions such as interest rate ceilings, burdensome minimum reserve requirements and excessive restrictions to enter the market may seriously restrict credit operations and deposit mobilization and hamper the provision of adequate financial services to customers. When interest rates are administered, the accessible spread of the financial institution to cover costs decreases and may even turn negative. Financial institutions then have no incentives to mobilize deposits and savers often prefer other savings options with higher return.

Regulatory barriers on the deposit-taking side of financial intermediation may often be higher than on the lending side. This is due to the preoccupation of spill-over effects from the failure of individual depositor protection, which can endanger the entire financial system. Regulatory requirements should serve the safety preferences of depositors, and protect them from questionable and unstable institutions. According to Chaves/Gonzalez-Vega (1994), two different regulatory frameworks can be identified:

- *Preventive regulation* introduces appropriate incentives to reduce moral hazard; and
- *Protective regulation* serves as an emergency safeguard for depositors when financial institutions get into trouble despite preventive regulation.

Preventive regulation may restrict the business of deposit-taking to formal banks with clearly defined financial services, minimum equity requirements, management qualification requirements, accounting standards and obligations concerning reporting and audits. Other preventive measures include the maintenance of minimum solvency, or a maximum leverage ratio. Restrictions on credit to insiders and minimum diversification rules serve to reduce the portfolio's exposure to risk concentration and foreign exchange risks.

If regulations for a semi-formal financial institution do not exist and deposit-taking is restricted to formal banks with high equity requirements, the mobilization of savings may not be possible for MFIs. However, semi-formal financial institutions are often subject to specific regulations allowing them to mobilize savings, but restricting the asset portfolio of the institution. For NGOs lacking permission to carry out any savings operations, their specific legal status (such as savings and credit cooperatives) may be used. Few efforts are documented that introduced new legal entities that reconcile minimum banking standards with the special features of microfinance (e.g., *Fondos Financieros Privados* in Bolivia). However, every measure taken in this field is an extremely complex and time and money

consuming (Otero 1989). In order to avoid legal hurdles, some NGOs resort to forced savings as a collateral substitute and to build a client's credit rating.

Restrictions in deposit-taking can also lead to a different asset portfolio of deposit-taking MFIs. Regulation on legal forms, equity requirements, reporting standards and minimum reserve requirements may have a strong impact on cost, liquidity and risk management. These requirements set high standards for institutional management and monitoring.

Protective regulation may consider a lender-of-last-resort facility that provides short-term liquidity for solvent and sound financial institutions suffering from temporary liquidity shortages. In addition, deposit insurance systems protect depositors from losses when troubled MFIs go bankrupt and, hence, increase the stability of and confidence in the financial system. However, protective regulations may become counterproductive if they induce higher risk-taking practices by MFIs, undermining the soundness of their financial operations. Hence, protective measures must be combined with prudent preventive regulations and efficient supervision.

3.4.2 Self-regulation

The wide-spread existence of informal financial institutions such as RoSCAs indicates that these institutions can compensate for formal non-regulation of their activities by gaining the customers' confidence through social and geographical proximity. By taking self-regulatory measures, a deposit-taking financial institution can gain the confidence of local depositors. Effective self regulation can signal and actually provide deposit security.

Nevertheless, self-regulation of MFIs faces limits when divergent interests between borrowers and depositors are a permanent source of conflict. Peer monitoring also becomes more difficult as the number of clients increases. In addition, short-circuits generate little liquidity and portfolio risk concentration occurs due to highly synchronized borrower risks.

The establishment of a network of MFIs may increase institutional stability for individual MFIs. Regional or national umbrella organizations can reduce risk by contributing to portfolio diversification and assistance in managerial, auditing and training tasks. Second-tier organizations can also provide MFIs with a liquidity pool (see 3.3), which is especially important to institutions that are net savers during certain periods of the year and net lenders during other periods because their customers are dependent on agricultural cycles or cyclical investment opportunities. In addition, second-tier organizations can also create economies of scale in providing monitoring and training support. By exercising control through audits and reporting standards, second-tier organizations may help stabilize their member institutions. They permit members to benefit from trading claims (loans) for money (savings) and/or money for claims without incurring prohibitively high transaction costs or shying away from such a trade because of anticipated costs (see Schmidt 1986). Further to this, self-regulation may also include standardized statutes that support corporate identity and peer monitoring opportunities. Self-regulatory institutions can also carry out staff training and provide staff support to MFIs.

The establishment of a peer monitoring system and training support measures within a network of MFIs will only work if the members have economic or non-economic incentives to link with other MFIs. Networks can provide cost-covering services due to economies of scale (economic incentive) that an individual MFI could not produce. Networks can be further tied together by socio-cultural bonds, such as organizational culture or common institutional ideology. Socio-cultural components must be taken into account to ensure the stability of a second-tier organization.

Self-regulation is dependent on a sound system of incentives for the MFI's staff to provide the services demanded in an efficient, viable and cost-effective way. Part of the incentive

system should include a basic orientation on client-ownership and staff responsibility for the institution's depositors. A two-way flow of information, benefits and obligations between MFI and customer may impose control from below on the MFI's management staff (see 3.6; Gadway/O'Donnell 1996).

In sum, regulatory barriers may seriously restrict MFIs from entering into the deposit-taking business. MFIs operating in the semi-formal financial sector may need to adjust their credit and deposit operations to the requirements of financial regulation. Whether regulatory constraints ensure stability of and confidence in an MFI and/or seriously restrict the savings mobilization efforts of an MFI needs case-by-case judgment. An analysis of regulatory environments should be conducted and proposals of how to regulate deposit-taking MFIs should be elaborated.

Self-regulation through MFI networks has not yet been analyzed in detail.⁸ Control through self-organized audits, mutual monitoring and training support may provide stability and customer-confidence and should be considered in further research.

3.5 Forced and voluntary savings mechanisms

The utilization of forced savings and the mobilization of voluntary savings reflect two different savings approaches. The former perceives savings as an integral part of credit; savers learn financial discipline and qualify for credit by a convincing savings record. The latter assumes that savings and credit are integral components of financial intermediation and that savers already know why and how to save (Robinson 1996).

Many microcredit programs have used forced savings as part of their financial technology. Part of the credit disbursed is withheld and transferred to a deposit account in the MFI. The main objective of forced savings is the belief that a process of small, regular payments will contribute to repayment performance. Many of these programs lock in the savings, restrict opportunities to withdraw them, and utilize them as collateral substitutes (blocked savings). Group lending programs have reported that the common bond of group deposits, which are reimbursed when the group loan is repaid, is successful (Huppi/Feder 1990).

The technology of tying credit to a required amount of savings and then leveraging the savings through credit disbursement is also used when a minimum deposit account is required to access credit. When microentrepreneurs deposit savings in order to access credit, the savings do not contribute directly to the clients' self-financing potential. They rather increase their access to credit as well as the effective interest rate on the loan.

Contractual savings are also locked away. They are self-enforced and respond to the demand of the depositors. Contractual savings products are chosen by economic actors with surplus capital that they do not need to keep liquid.

Funds from forced, blocked and contractual savings can serve as a small (due to the leveraging of the amounts) but stable capital base for an MFI and can facilitate liquidity management. Blocked savings, member contributions in cooperatives, and entrance fees contribute to the equity capital of an MFI. Forced savings also motivate credit clients to repay, as do typical forms of collateral, and can thereby increase the efficiency of a credit-granting MFI.

It has been further argued that the information gained by observing the savings records of clients can be used as a selection criterion or screening device for credit clients by an MFI. A

⁸ Further research should analyze the experience of credit unions (WOCCU) in this area.

track record of regular and significant deposits contributes to the information base gathered on potential borrowers. However, if blocked savings are deducted from the credit disbursed, the customer will regard them as additional costs of obtaining credit. They could also undermine the confidence of the saver in the institution because the customer is not free to choose savings products according to their needs. Several authors have argued that forced savings do not, in fact, provide the institution with information about customers' real savings potential.

Even voluntary savings with a formal financial intermediary may only provide limited information about clients' savings capacity as long as only a small portion of the clients' savings is deposited in institutional accounts. The portion of potential clients' savings deposited in MFIs depends to a large extent on the features of the savings products offered. Deposit products with low levels of liquidity and relatively low return may only satisfy savings demand for specific purposes such as education, religious activities or buying land. Such products do not provide clients with liquid assets in case of emergency. For this reason, savings only work as a screening device for potential borrowers if appropriate savings products are offered and these products are able to attract the majority of the total household's savings. Even if households deposit a considerable portion of their total savings in MFIs, these savings only reflect the current savings and repayment capacity of the household, not the future debt capacity, which may include the income-generating opportunities of the loan itself.

MFIs use a variety of voluntary savings products to successfully mobilize savings from their clientele. Robinson (1994) reported from BRI in Indonesia that a mix of deposit instruments with different levels of liquidity and profitability are offered in order to attract different types of depositors.

In sum, a focus on savings mobilization should lead MFIs to develop a variety of demand-driven savings products. Further research should be carried out to examine arguments in favor of and against forced and blocked savings.

3.6 Social intermediation

Recent research on informal finance has concluded that informal financial intermediaries focus on sustaining quality relationships with their borrowers and depositors (Adams/Fitchett 1992). Geographical as well as social and cultural proximity lead to increased customer-orientation. Such proximity often makes informal financial agents trustworthier to clients than formal institutions that do not share the same socio-cultural background. MFI staff with different socio-cultural backgrounds than their clientele may have difficulty providing this proximity and, consequently, gaining the confidence of their customers. Grameen Bank staff training attempts to bridge socio-cultural gaps between customers and staff, consisting mostly of university graduates, by extensive training in the field. Trust-building measures may transform MFIs in the eyes of their customers into local self-help institutions.

Bennett et al. (1996) have most recently emphasized that the main factor behind the success of several Asian group-based financial service projects is the concept of client-ownership. They refer to social intermediation as a substantial investment in building the human resources and the local institutions needed to help marginalized groups become self-reliant. A microfinance institution can achieve sustainability if they build a reciprocal contract with their customers consisting of a two-way flow of information, and mutual benefits and obligations exist. Deposit mobilization can gain customers' confidence and contribute to sustainability through the interaction of the MFI with the customer.

Decentralization and intense marketing may provide MFI clients with a feeling of ownership and of operating with "warm" money from their neighborhood or local community when they borrow from the MFI. Formal MFIs may find it difficult to build joint responsibility between their borrowers and savers, which is typical for informal savings and credit groups whose customers are quasi-shareholders and where borrowers and savers are the same people. Therefore, formal MFIs may need to put more emphasis on safe, convenient and accessible savings services with attractive deposit interest rates modeled on the specific demands of their customers. Customer-orientation involves extensive technical assistance and training measures. A prerequisite for success is a staff that is highly motivated by appropriate incentives. Close contact with clients could provide peer pressure, reciprocity and a common value system. A common organizational culture enables networks of MFIs to be perceived as second-tier local self-help groups rather than as external regulators.

Provision of microfinance services on a sustainable basis is much more successful than a welfare or one-way credit approach. Sustainable services provide customers with increased potential for self-financing through deposit facilities. A local intermediary can possibly provide clients with financial management training on a cost-covering basis. Providing sustainable services in a customer-oriented manner may help an MFI evolve from quasi-altruistic lending and subsidy programs to a financial self-help institution owned by and responsible to the poor (Gadway/O'Donnell 1996).

3.7 Savings versus other sources of funds

An age-old topic from advanced financial markets is the relation between savings and other sources of capital. Gadway and O'Donnell (1996) share the view that locally mobilized savings should fund MFIs. Because they do not consider credit as an integral component of the initial stage of MFIs, they argue that additional capital sources are not required.

Otero (1994) proposes a gradual shift for MFIs from relying on donor grants and soft loans as funding sources, which aim at building up viable credit institutions, to commercial sources of funds and, eventually, to public deposits. She states that at an advanced stage of institutional evolution, savings mobilization will provide the largest share of capital. Robinson (1996) points out that savings mobilization is not feasible for every institution that began with a microcredit program. She argues that an obligatory evolution path that leads from entirely donor-financed credit to full-service financial intermediation relying heavily on private savings does not exist.

When MFIs have easy access to cheap rediscount facilities and soft donor loans, mobilization of local savings is discouraged and the adoption of market-oriented and sustainable funding policies is delayed. As a result of continuous support from the donor community in the form of grants, concessional loans and technical assistance, several MFIs have attained high levels of subsidy dependence. Such MFIs are often characterized by poorly developed management systems that primarily respond to donor requirements, which are not entirely governed by economic principles. These institutions may find it difficult to implement an institutional strategy to build competitive and sustainable financial intermediation services. Gaining access to commercial sources of funds may be difficult for such MFIs because they cannot provide sufficient equity capital or tangible assets to collateralize commercial loans (Jackelen/Rhyne 1991).

A more skeptical position is argued by Schmidt/Zeitinger (1996) who doubt that savings can become the major source of funds for new MFIs due to high mobilization costs and additional difficulties in risk, term and volume transformation in intra-sectoral MFIs. They perceive deposit-taking as an additional service to customers and argue that commercial banks in local financial markets may be attracted to mobilize savings, but donors should continue to provide loans under market conditions. They also concede that concessional loans from the

donor community may still be tolerable, and even necessary, to compensate for the high operational costs of deposit-taking. In addition, they argue that soft loans may be used as an economic incentive or leverage device for savings when the disbursement of external funds is based on the volume of small savings deposits mobilized (Schmidt/Zeitinger 1994a).

3.8 Timing and sequencing of savings mobilization

Gadway/O'Donnell (1996) support a savings-first strategy. They emphasize that poor people have a greater need for liquidity than for credit and that because savings form the major source of funds for microenterprises, savings should thus be the entry point for providing financial services to the poor. They go on to say that when savings facilities become available, low-income households abandon the unproductive hoarding of illiquid assets, increasing the marginal productivity of capital. They envision that savings-only programs can eventually be transformed into full-service financial institutions. Because savings operations provide sufficient liquidity for regular capital requirements, credit operations can focus on unforeseen contingencies and larger investment projects. They argue that deposit services could replace much of the demand for existing microcredit programs with lower risk and administrative costs. Injections of donor or governmental money to directly finance investment activities should become unnecessary and should rather be directed at the establishment of MFIs mobilizing savings and re-lending funds locally.

Schmidt/Zeitinger (1996) propose that credit institutions must first become financially self-sufficient before they should enter the business of deposit-taking. This viewpoint follows prior proposals by Jackelen/Rhyne (1991), Rhyne/Otero (1992) and Christen et al. (1994). Credit-disbursing institutions must first prove their accountability and the soundness of their operations because accumulated expertise is the best protection against the failure of savings programs. These experts argue that increasing and more sophisticated cost, risk and liquidity management requirements should restrict savings mobilization to the later stages of MFI development (Schmidt/Zeitinger 1994a). Highly subsidy-dependent MFIs will find it difficult, however, to adjust their service facilities, governance structure, cost, risk and liquidity management to the requirements of depositors. In this context, Adams (1994) is strongly convinced that altruistic credit-granting NGOs may not be suitable institutions to become financial intermediaries. He argues that development banks present more favorable conditions to mobilize savings efficiently due to better infrastructure and market-orientation.

Different opinions also exist on the timing and sequencing of various savings products within currently-operating savings facilities. Otero (1989) points out that forced savings can be introduced as a first step to permit financial institutions to gain savings experience. At a later stage of institutional evolution, she explains that an MFI can design voluntary savings products. Robinson (1994, 1996) refers to savings mobilization as a gradual process to develop various voluntary savings products and methodologies. She suggests testing new savings products in pilot areas before introducing them on a wide-scale basis.

4 THE MACROECONOMIC PERSPECTIVE

4.1 Relevance to macroeconomic development

The growth of private enterprise is inseparably linked to the financial sector. Efficient savings mobilization increases the resources available for productive investment. Savings increases the possibility of self-financing while financial intermediaries can channel surplus savings to meet credit demand, according to the Theory of Finance (McKinnon 1973, 1988; Shaw 1973; Fry 1988). The Theory of Finance speaks out against financial repression and argues that increased interest rates boost domestic savings. Institutional constraints to mobilize savings, as described in chapter 3, are largely ignored by the theory.

The more recent financial system and institutional economics approach to development finance emphasizes a broader view of the financial system, including all financial institutions, markets and instruments as well as the legal and regulatory environments, financial norms and behaviors. The various subsystems of the financial system include universal banks, financial markets, specialized banks, other formal financial institutions (such as insurance companies) and financial institutions in the semiformal and informal sectors as well as supervisory agencies, regulatory institutions and second-tier institutions. Through the linkage of its subsystems, the financial sector functions as a system to create money, transform risks, maturities and capital and provide payment services.

4.2 Local and regional financial cycles

Many have argued that the flight of savings mobilized in rural areas to support urban lending activities, as in the case of the Reserve Bank of India, represents an urban bias. Causse (1985) and Mauri (1985) have argued that there is a need to "fight the outflow of savings outside the community that saves." They stress that savings mobilization in low-income areas poses the risk of deepening the underdevelopment of the zone.

Other authors (Adams 1985; Vogel 1984; Von Pischke 1983) have argued that an outflow of capital responds to a market-oriented search for the optimum allocation of funds. Gadway/O'Donnell (1996) pointed out that an outflow of funds always incurs a flow of benefits in the opposite direction: because the funds search for their best-paying investment option, the rural depositor gains a higher rate of return.

In addition, the distinction between rural and urban economies is to some point artificial. Large-scale temporary rural-urban migration flows and the diversification of economic activities of rural households, partially realized in urban centers, suggest that rural and urban economies overlap.

If depositors do not primarily look for the highest return, but rather focus on easy access to credit with low transaction costs, local and/or regional financial cycles may present an attractive alternative to larger financial institutions with national coverage. Local or regional MFIs that serve their clientele with a variety of appropriate financial services can defend against capital flight to urban centers. A decentralized network of institutions can provide financial infrastructure with "warm" money to on-lend in the same region where the savings were captured. Improved institutional efficiency and customer-orientation (3.1) through deposit mobilization can decrease if funds from poorer populations are used to finance large urban investment projects. Using locally mobilized funds for loan capital can provide depositors with a feeling of ownership towards the MFI where they are clients, which can further increase the adaptability and responsiveness of the MFI to their clients.

5 PROPOSALS FOR FUTURE RESEARCH AND DONOR ASSISTANCE

The main findings outlined in this paper can be summarized as follows:

- Poor people have a significant capacity to save.
- The volume of institutional savings mobilized in a given location is dependent on the availability of demand-driven savings services supplied by appropriate financial institutions. The geographic and socio-cultural proximity of the institution to their clients is important. If clients have access to appropriate deposit facilities, the portion of economic surplus that they deposit as institutional savings will increase.
- A much larger number of clients can be reached through savings operations than through credit operations.

Based on these facts, the issues listed in 5.1 and 5.2 should serve as guidelines for future research and donor assistance in microsavings.

5.1 Key issues for future research and discussion

1. *Institutional types and organizational structures*: Different types of institutions and organizational structures that have successfully mobilized savings should be analyzed.
2. *Demand-driven savings products*: In order to design successful savings products, financial institutions must understand local client demand in regards to liquidity, return and security and analyze the sensitivity of depositors to changes in these and other features. Market studies should be conducted to provide information to MFIs about the capacity of local populations to save, the products they require and the most appropriate techniques to mobilize savings.
3. *Management capabilities, especially risk and liquidity management*: Appropriate risk and liquidity management procedures should be specified and appropriate institutional support systems that balance risks and respond to liquidity needs (liquidity pools, decentralized MFI networks, second-tier institutions) should be identified. Because several financial institutions "graduate" from forced to voluntary savings services, future research should analyze how management must adjust in transition periods to changes in risk, liquidity, cost, internal and external regulation.
4. *Internal and external regulation*. The minimum standards of self-regulation and external regulation and supervision should be elaborated. The fact that deposits must be sufficiently protected against inappropriate management decisions should be studied in light of the fact that each regulatory measure increases costs for MFIs.
5. *Cost accounting*. Research should be conducted to determine the costs of both voluntary and forced savings products. Future analysis should focus on innovative cost-reducing techniques, the externalization of MFI transaction costs and the synergies between credit and savings operations.

5.2 Donor assistance

Because savings mobilization is crucial to provide the poor with financial services and donors wish to support the development of viable and sustainable MFIs to supply the poor with these services, donors need to coordinate the forms of assistance offered. Donor assistance should focus on:

- Promotion of financial intermediaries rather than MFIs that only channel credit to target groups.
- Support to establish networks of MFIs and/or links of MFIs to the formal financial sector.

- Financial injections by donors should be directed at institution building rather than at pushing credit. This will require a long-term focus.
- Increased professionalism in MFI management with donor assistance to develop enhanced financial management capabilities, including management information systems that ensure:
 1. Close monitoring of deposit fluctuations and the sensitivity of demand in respect to interest rates, liquidity requirements, etc.; and,
 2. Operations based on sustainable pricing that allow MFIs to cover all of their costs with their income.
- Support to help MFIs adapt their organizational structures to the local socio-cultural and socio-economic context.
- The development of standardized donor monitoring and reporting requirements for MFIs that receive financing and the development of performance indicators and standards that will ensure the long-term profitability of donor interventions.

6 REFERENCES

- Adams, D.W., *Mobilizing Household Savings through Rural Financial Markets*, in: *Economic Development and Cultural Change* 26 (3), pp. 547-560, 1978.
- , *Do Rural Financial Savings Matter?* In: D. Kessler and P.A. Ullmo (eds), *Savings and Development - Proceedings of a Colloquium*, pp. 9-15, Paris 1985.
- , *Altruistic or Production Finance? A Donor's Dilemma*. *Economics and Sociology Occasional Paper No. 2150*, Columbus: Ohio State University 1994.
- Adams, D.W. and D.A. Fitchett (eds), *Informal Finance in Low-Income Countries*, Boulder: Westview Press 1992.
- Ardener, S., *Women Making Money Go Round: ROSCAs Revisited*, in: S. Ardener and S. Burma (eds), *Money Go-Rounds. The Importance of Rotating Savings and Credit Associations for Women*, pp. 1-19, Washington, DC: Berg 1995.
- Bédard, G., *Development Banking for the Benefit of the Poor - A New Model for Banking*. Working Paper No. 7, Eschborn: GTZ Section Banking and Financial Systems Development 1992.
- Bennett, L., M. Goldberg and P. Hunte, *Ownership and Sustainability: Lessons on Group-Based Financial Services from South Asia*, in: *Journal of International Development*, 8 (2), pp. 271-288, 1996
- Bouman, F.J.A., *Indigenous Savings and Credit Societies in the Third World*, in: *Savings and Development*, 1 (4), pp. 181-214, 1977.
- , *Informal Savings and Credit Arrangements in Developing Countries: Observations from Sri Lanka*, in: D.W. Adams, D. Graham and J.D. Von Pischke (eds), *Undermining Rural Development with Cheap Credit*, 232-247. Boulder: Westview Press 1984.
- , *Informal Rural Finance. An Aladdin's Lamp of Information*, in: *Sociologia Ruralis*, 30 (2), pp. 155-173, 1990.
- , *ROSCA and ASCRA: Beyond the Financial Landscape*, in: F.J.A. Bouman and O. Hospes (eds), *Financial Landscapes Reconstructed: The Fine Art of Mapping Development*, pp. 375-395. Boulder: Westview Press 1994.
- Causse, J., *Necessity of and Constraints on the Use of Savings in the Community in which they are collected*, in: D. Kessler and P.A. Ullmo (eds), *Savings and Development - Proceedings of a Colloquium*, pp. 153-181, Paris 1985.
- Chaves, R.A. and C. Gonzalez-Vega, *Principles of Regulation and Prudential Supervision and their Relevance for Microenterprise Finance Organizations*, in: M. Otero and E. Rhyne (eds), *The New World of Microenterprise Finance*, pp. 55-75, West Hartford: Kumarian 1994.
- Christen, R., E. Rhyne and R. Vogel, *Successful Financial Institutions*, Mimeo, Washington, D.C: USAID 1994.
- FAO, *Safeguarding Deposits: Learning from Experience*, Food and Agricultural Organization Agricultural Services Bulletin No. 116, Rome: FAO 1995.

- Fernando, N.M., *Mobilizing Rural Savings in Papua New Guinea: Myths, Realities, and Needed Policy Reforms*, in: *The Developing Economies*, 29 (1), pp. 44-53, 1991.
- Gadway, J. and M.G. O'Donnell, *Financing Micro-Enterprises And Rural Smallholders*, Draft 1996.
- Germidis, D., D. Kessler and R. Meghir, *Financial Systems and Development: What Role for the Formal and Informal Financial Sector?* Paris: OECD 1991.
- Gonzalez-Vega, C. and J. Poyo, *Rural Savings Mobilization in the Dominican Republic: Challenges, Accomplishments and Lessons*, *Economics and Sociology Occasional Paper*, No. 1226, Columbus: Ohio State University 1985.
- Goetz, A.M. and R.S. Gupta, *Who takes the Credit? Gender, Power, and Control over Loan Use in Rural Credit Programs in Bangladesh*, in: *World Development*, 24 (1), pp. 45-63, 1996.
- GTZ, *Querschnittsanalyse über die finanzsystemgerechte Handhabung von Kredit-Fonds in der TZ*, Eschborn: GTZ 1996.
- Holt, S.L., *The Village Bank Methodology: Performance and Prospects*, in: M. Otero and E. Rhyne (eds), *The New World of Microenterprise Finance*, pp. 156-184. West Hartford: Kumarian 1994.
- Hospes, O., *Balancing Perspectives on Informal Finance*, Paper presented at the Brookings Conference *Financial Services and the Poor*, Washington, D.C. September 27-30, 1994.
- Huppi, M. and G. Feder, *The Role of Groups and Credit Cooperatives in Rural Lending*, in: *The World Bank Observer*, 5 (2), pp. 187-204, 1990.
- Jackelen, H.R. and E. Rhyne, *Toward a More Market-Oriented Approach to Credit and Savings for the Poor*, in: *Small Enterprise Development*, 2 (4), pp. 4-20, 1991.
- Krahnen, J.P. and R.H. Schmidt, *Development Finance as Institution Building*, Geneva: ILO 1994.
- Lepp, A., *Financial Sector Policy and Access by Small and Microenterprises to Financial Services: The Case of Peru*, Saarbrücken, Fort Lauderdale: Breitenbach 1996.
- Mauri, A., *A Policy to Mobilize Rural Savings in Developing Countries*. in: J.D. Von Pischke, D.W. Adams and G. Donald (eds): *Rural Financial Markets in Developing Countries - Their Use And Abuse*, pp. 408-413, Washington: EDI World Bank 1983.
- McKinnon, R.I., *Money and Capital in Economic Development*, Washington, D.C.: The Brookings Institution 1973.
- Meyer, R.L. and C.E. Cuevas, *Reduction of Transaction Costs of Financial Intermediation: Theory and Innovations*, in: United Nations (eds), *Savings and Credit for Development*, Report of the International Conference in Klarskovgard, Denmark, 28-31 May 1990, pp. 285-317, New York: United Nations 1992.
- Miracle, M., D. Miracle and L. Cohen, *Informal Savings Mobilization in Africa*, in: *Economic Development and Cultural Change*, 28 (4), pp. 701-24, 1980.

- Otero, M., *A Handful of Rice: Savings Mobilization by Micro-Enterprise Programs and Perspectives for their Future*, Accion International Monograph Series No. 3, Washington, D.C: ACCION 1989.
- Patten, R.H. and J.K. Rosengard, *Progress with Profits: The Development of Rural Banking in Indonesia*, San Francisco: International Center for Economic Growth, Harvard Institute for International Development (HIID) 1991.
- Poyo, J., *Relaciones de Agencia, el Banco Agrícola y las Cooperativas Rurales de Ahorro y Crédito*, in: C. Gonzalez-Vega (ed.), *República Dominicana: Mercados Financieros Rurales y Movilización de Depósitos*, pp. 93-121, Santo Domingo: PSFR and Ohio State University 1992.
- Rhyne, E. and M. Otero, *Financial Services for Microenterprises: Principles and Institutions*. *World Development*, 20 (11), pp. 1561-1571, 1992.
- Robinson, M.S., *Savings Mobilization and Microenterprise Finance: The Indonesian Experience*, in: M. Otero and E. Rhyne (eds), *The New World of Microenterprise Finance*, pp. 27-54, West Hartford: Kumarian 1994.
- , *Introducing Savings Mobilization in Microfinance Programs: When and How? Draft* 1996.
- Schmidt, R.H., *Credit Supply, Self-help and the Survival of Financial Institutions in Developing Countries*, in: *Jahrbuch für Neue Politische Ökonomie* (5), pp. 262-279, 1986.
- Schmidt, R.H. and C.-P. Zeitinger, *Critical Issues in Small and Microbusiness Finance*, Frankfurt: IPC 1994a.
- , *Non-Governmental Organizations als Finanzintermediäre*, in: W. Gerke (ed.), *Planwirtschaft am Ende - Marktwirtschaft in der Krise*, pp. 339-374. Stuttgart 1994b.
- , *Prospects, Problems and Potential of Credit-Granting NGOs*, in: *Journal of International Development*, 8 (2), pp. 241-258, 1996.
- Shaw, E., *Financial Deepening in Economic Development*, New York, London, Toronto: Oxford University Press 1973.
- Stiglitz, J.E., *The New Development Economics*, in: *World Development*, 14 (2), pp. 257-265, 1986.
- Stiglitz, J.E. and A. Weiss, *Credit Rationing in Markets with Imperfect Information*, in: *The American Economic Review*, 71 (3), pp. 393-410, 1981.
- U.S. Agency for International Development (USAID), *Mobilizing Savings and Rural Finance: The A.I.D. Experience*, Washington, D.C.: USAID 1991.
- Vogel, R.C., *Savings Mobilization: The Forgotten Half of Rural Finance*. in: D.W. Adams, D. Graham and J.D. Von Pischke (eds): *Undermining Rural Development with Cheap Credit*, pp. 248-265, Boulder: Westview Press 1994.
- Vogel, R.C. and P. Burkett, *Mobilizing Small-Scale Savings*, in: *Industry and Finance Series Vol. 15*, Washington, D.C.: World Bank 1986.

Von Pischke, J.D., *Toward an Operational Approach to Savings for Rural Depositors*, in: J.D. Von Pischke, D.W. Adams and G. Donald (eds), *Rural Financial Markets in Developing Countries - Their Use and Abuse*, pp. 414-420, Washington, : EDI World Bank 1983.

----, *Finance at the Frontier, Debt Capacity and the Role of Credit in the Private Economy*, Washington, D.C.: EDI World Bank, 1991.

----, *Measuring the Performance of Small Enterprise Lenders*, Paper presented at the Brookings Conference *Financial Services and the Poor*, Washington, D.C., September 27-30, 1994.

Yaron, J., *Successful Rural Finance Institutions*, Discussion Paper No. 150, Washington, D.C.: World Bank 1992.