

MICROFINANCE POLICIES AND RURAL DEVELOPMENT: CHANGES AND CHALLENGES

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1 INTRODUCTION

There have been government policies on the role of microfinance in the rural development process for more than four decades. In the 1960s and 1970s, the policies focused on the provision of agricultural credit as a necessary support to the introduction of new, more productive agricultural technologies that would simultaneously improve farmers' incomes and feed the nation. Later, the focus broadened to include credit provision to the rural population engaged in other enterprises such as trade, handicrafts and small-scale industry. Presently the international development agenda is dominated by the Millennium Goals, with poverty eradication heading the list of goals, and with microfinance firmly linked to this goal.

The implementation of rural credit policies through financial institutions has been debated internationally. What triggered this debate was the publication of the "Spring Review", an evaluation of small-farmer credit programmes by USAID in the 1970s (Donald, 1976), which made available world wide experience on the achievements and failings of credit programmes supported by governments and donors. In the 1970s, the discussion shifted from "lack of capital" and consequently "the need for cheap credit", to "cost-covering interest rates" that would enable financial institutions to continue to operate (Adams and Von Pischke, 1980). Later, the discussion widened to include imperfect information as one of the distinctive characteristics of rural credit markets (Hoff, Braverman, and Stiglitz, 1993) that leads to insight into the screening, monitoring and enforcement problems that rural microfinance institutions face. Presently we see a sort of consensus about the operations of microfinance institutions: they should strive towards both outreach and financial sustainability.

The debate on microfinance largely assumes a micro perspective, with a short- to medium-term horizon. From this perspective, assumptions about the behaviour of farmers, the rural population, or the poor, and about the constraints these groups face lead to policies to be implemented by financial institutions. These institutions measure the effects of access to finance on their target group after a couple of years. Finally, the objective to become financially sustainable is to be reached in a few years time. Long-term analyses of the role of microfinance institutions in rural development are scarce. Mellor (1966) and Timmer (1988) deal in macro terms with the role of the agricultural sector in national development and discuss the transfer of people and capital from the agricultural (or rural) sector to the services and industrial sectors in the urban areas. They do not, however, discuss the mechanisms for such a transfer of capital. McKinnon (1973) and Shaw (1973) deal explicitly with the development of the financial sector within economic development and plead for financial liberalisation to enable savings to be mobilised, followed by an efficient banking system that lends to investors with expected high return investments. More recently, financial development and the links with economic growth and with poverty reduction have been discussed by King and Levine (1993) and Li et al. (1998). Though these authors make no distinction between the rural and urban sectors, their analyses are relevant for the rural sector too.

The three issues identified above: views and policies regarding microfinance; the operations of microfinance institutions; and the position of microfinance in rural development, are linked. In this paper I will discuss these issues and then draw overall conclusions regarding the long-term role of microfinance institutions in rural areas.

The reason for focusing on rural microfinance is because this differs from microfinance in urban areas in several ways. The most obvious difference is that the dominant economic enterprise in rural areas is

agriculture, with known seasonality and unpredictable climatic conditions. This results in similar cash flow requirements for many households and in co-variant risk. Additionally, in many rural areas the population is widely dispersed, which means high transaction costs for clients and possibly low volumes of services per microfinance location. These aspects require specific attention from microfinance institutions operating in rural areas, in addition to the general microfinance problem of handling financial transactions for the small sums low-income clients require.

2 VIEWS AND POLICIES

Nowadays microfinance enjoys widespread support from governments, development agencies and non-governmental organisations. The reasons for this support are, however, diverse, and the term microfinance is linked with very different views and assumptions about the relationship between finance and development. Various authors have attempted to classify these views: Krahen and Schmidt (1994) distinguish four views by tracing development thinking from the 1950s: capital as the engine for economic growth; financing specific target groups; the focus on financial systems; and, from the 1990s onwards, the insights from the new institutional economics emphasising the dominant role of institutions in development and with specific views on the peculiarities of financial institutions. Robinson (2001) distinguishes two approaches: the poverty lending approach and the financial system approach. Different views or approaches have consequences for the policies shaping the environment of microfinance institutions, the financial services provided, and microfinance institutions themselves. Below I will discuss two opposing views and their resulting policies. The consequences for microfinance institutions and for the role of microfinance in rural areas will be discussed in the sections that follow.

The two opposing views are: a) "*credit for target group*", and b) "*pushing the financial frontier*". Based on Robinson's poverty lending approach, the first view is defined in a wider sense, with the poor being replaced by any target group. The phrasing of the second view echoes Von Pischke (1991), who refers to the financial frontier as the dividing line between the established formal financial institutions with their large-scale business and private clients, and the majority of the rural population without access to formal finance.

Credit for target group is the oldest view, and can be summarised as follows: a specified group of people lacks the capital to undertake certain enterprises that would lead to development. The group of people and their enterprises can be specified to a greater or lesser degree: small farmers, fishermen, market women or small scale entrepreneurs with their respective enterprises in agriculture, fishing, trade and industry. The specification of development too may differ: improved health, food security, poverty reduction or improvement in general welfare. The perspective on the financial environment of the specified group is limited: the only way the target group can access credit is through private moneylenders whose interest rates are unacceptably high and would nullify any positive effect of the credit. It was this view that led many governments in the 1960s and 1970s to provide targeted credit with or without support from donors, for example to enable small farmers to use modern production technologies such as hybrid seeds or imported dairy cows. This credit would increase their incomes and provide enough and sufficiently diversified food for the domestic market. The *credit for target group* view is still widespread, and nowadays generally targeted at "the poor", in line with the international attention for poverty eradication. The micro-credit summit (not microfinance summit) held in Washington in 1997, for example, advocated providing credit to the world's poor to enable them to shed their poverty. Barrett (2003) mentions targeted microfinance (together with land reform, targeted school meals programmes and subsidies for agricultural inputs) as one of the "cargo net policies" that can lift people out of poverty. In short, the *credit for target group* view is based on the following two central assumptions:

1. the factor constraining development is capital;
2. the target group is unable to mobilise this capital under acceptable conditions.

The policy implication of these assumptions is straightforward: lend capital to the target group.

The "*pushing the financial frontier*" view developed in the 1970s to the 1990s from an increasing understanding of the financial capabilities of low-income rural households and the existing formal and informal financial institutions in rural financial markets. According to this view, rural households are economic units that make daily decisions about production, consumption and the resource base under conditions that are characterised by: a) seasonality that rules rural economic life; b) uncertainty about future production and consumption requirements; and c) income levels that are generally not far above subsistence. The decisions are reflected internally in the size and composition of the household's assets and in the enterprise choice, and externally in the household's participation as buyer and seller of financial assets in rural financial markets (Moll, 1989).

The sharper focus on rural households was accompanied by insight into the rural financial markets (Von Pischke et al., 1983), defined as the totality of relationships between buyers and sellers of financial assets who are active in rural economies. Rural financial markets are characterised by having a range of institutions that are usually divided into formal institutions: state or private banks; semi-formal institutions such as co-operatives and NGOs involved in financial services; and informal institutions, ranging from private moneylenders, traders, to relatives and friends, and groups. Despite the wide range of institutions present, individual rural households generally have access to only some of the institutions and the products these institutions provide, as rural financial markets are highly segmented (Moll et al., 2000).

New, comprehensive explanations for the observed segmentation in rural financial markets have been offered by Bell (1988), Hoff and Stiglitz (1993) and others. These focused on the information asymmetry between lender and borrower as a central issue in credit provision, with as consequences the absence of credit relationships where information on borrowers was perceived as insufficient, and the failure of government-supported financial institutions if these information asymmetries were neglected.

The insights gained firstly contradict the two assumptions of the *credit for target group* view: a) low-income rural households can and do save both in kind and in financial assets through a variety of informal arrangements; b) the existing savings capacity in rural financial markets refutes the assumption that capital as such is the major factor constraining rural development. Secondly, the insights into rural households and the rural financial market institutions revealed the limitations of the informal financial institutions in mobilising and storing savings, dealing with co-variant risk, and the transformation of small, short-term savings into larger loans of medium-term duration. In this way, these insights revealed an unfulfilled demand for financial services that formal institutions can address more readily than informal ones:

- 1 mobilising savings together with providing unrestricted withdrawal;
- 2 short-term lending for working capital, as and when required;
- 3 medium- and long-term lending for investments.

The overall conclusion was that rural households would benefit from the presence of formal financial institutions with services adjusted to their capabilities. The policy implications are twofold:

- a) government policy attention for rural finance was vindicated, though not policies with the aim to provide capital, but policies to enable formal financial institutions to intermediate between savers and borrowers;
- b) policies should encourage financial institutions to participate in "*pushing the financial frontier*" to include new, low-income rural households as their clients, by tackling the information problem through innovative screening, monitoring and enforcement procedures.

3 THE PERFORMANCE OF MICROFINANCE INSTITUTIONS

The views and policies described above firstly translate into the operations of microfinance institutions and thereafter into the assessment of their performance. The "credit for target group" view results in microfinance institutions that focus on providing loans, generally in specified quantities and possibly provided in kind and earmarked for a specific enterprise. These loans are provided to the defined

target group, to be used to attain the specified development goals. The loans are generally at subsidised interest rates, as the target group is poor - in whatever terms poverty is defined. The assessment of the performance initially focuses on the number of loans provided, or the number of people who have received one or more loans, because this number of people is assumed to reach the anticipated development goal. The latter assumption can be tested through impact assessment³, for which elaborate methodologies have been developed. This operational approach can be summed up as "supply leading finance". Adams and Von Pischke (1992) are among those who have analysed this approach in detail and shown that government interference adversely influences lending and causes the basic economics of banking to be bypassed. The consequences of these failings have been that microfinance institutions incurred losses and sooner or later ceased operating - but not before destroying repayment morale in the population and giving bank staff wrong ideas about banking. Most importantly, the target group was only partly and temporarily reached, and after the demise of the financial institution was again left without financial services.

Two developments in the 1980s and 1990s changed the situation. The emerging "pushing the financial frontier" view showed the importance of permanent financial relationships for rural households, and thereby the permanence of financial institutions. The "cost-covering interest rates" for microfinance institutions (instead of the subsidised interest rates) advocated by Adams and Von Pischke were a major step towards achieving such permanence. Financial sustainability became part of the microfinance discussion and Yaron (1992) made this operational by devising the subsidy dependence index with two levels of achievement: operational sustainability and financial sustainability, whereby the latter indicates the total independence from subsidies. New microfinance institutions took on board the increased insight and the attention for financial sustainability and used new approaches to reach people who had previously lacked access to institutional financial services.

The emergence and expansion of microfinance institutions was greatly facilitated by a second development: financial liberalisation. This meant a reduced role for government in the allocation of capital, less interference with banking and thus new opportunities for banks and microfinance institutions to engage in the central function of financial institutions: intermediating between savers and borrowers. Less interference with banking generally meant the abandonment of interest rate control on savings and credit, and that enabled the microfinance institutions to pay attention to financial objectives.

By the end of the 1980s, case studies had become available on microfinance institutions that had succeeded in reaching low-income households with savings and credit services (Moll, 1989; Patten and Rosengard, 1991; Yaron, 1992) and that showed a wide variety of organisational structures and operations. These case studies provided the material for comparative analyses and the emergence of "best practices" in microfinance literature. These "best practices" offer a wealth of experience, but as the description of the background that shaped the specific institutions is generally limited, these "best practices" need to be tested, assessed and adapted to the individual circumstances.

Presently there seems to be consensus on at least the objectives of microfinance institutions: outreach towards low-income people, and financial sustainability. Given these two objectives, microfinance institutions must deal with two central issues in their day-to-day operations:

- a) the information issue: how to establish borrowers' ability and willingness to repay;
- b) the cost issue: how to handle cost-effectively the small financial transactions with a short duration generally required by low-income people.

The first issue requires screening, monitoring and enforcement procedures that comply with the specific circumstances of low-income people and that deviate widely from the usual banking practices. The second issue requires operating with transaction costs (including information costs and risk) that necessarily lead to interest rates that are well above commercial bank rates, but that are nevertheless still competitive and thus attractive for the bank's clients.

Microfinance institutions generally experience a trade-off in their operations between the two objectives: a focus on the somewhat better known clients who require somewhat larger loans eases the

cost issue and brings financial sustainability closer. This, however, leaves the smaller clients outside the financial frontier. Conversely, a focus on new clients with small financial capacities who require small loans does bring new clients inside the frontier, but also brings more costs and risk due to an initial shortage of information on the new clients. The consequence is that it is more difficult to achieve financial sustainability. It is in this trade-off between the two objectives that the two views sketched in the previous section have maintained their roles up until today. The *"credit for target group"* view complies directly with the objective outreach, as outreach can be made operational in terms of reaching a specific target group. Successfully reaching the target group with loans, possibly measured through impact studies, may easily provide a justification for slackening the financial sustainability objective by accepting "structural subsidies" or by postponing the date for achieving sustainability. The *"pushing the financial frontier"* view offers more opportunity for a better balance between the two objectives, as financial sustainability is required to keep low-income people inside the financial frontier.

From a long term perspective the *"pushing the financial frontier"* view with an emphasis on sustainability has resulted in a number of remarkable successes. The Bank Rakyat Indonesia's (BRI) Unit Desa microfinance system has from the start focused on a commercial approach. Key data over a period of 20 years are shown in Table 1.

Table 1. BRI Units Desa, key data 1984 - 2004.

| Year | Loans (thousands) | Loans (million US\$) | Saving accounts (thousands) | Savings (million US\$) | Profit or Loss (million US\$) |
|------|----------------------|-------------------------|--------------------------------|---------------------------|----------------------------------|
| 1984 | 641 | 103 | - | 39 | -23 |
| 1990 | 1893 | 727 | 7262 | 892 | 34 |
| 1995 | 2264 | 1383 | 14483 | 2606 | 174 |
| 2000 | 2716 | 816 | 25823 | 1992 | 121 |
| 2004 | 3211 | 2059 | 31272 | 3528 | 233 |

Source: Robinson, 2005.

The table shows the growth of the network of small rural banks from a total of 3400 loss-making branches in 1984 to over 4000, mainly profitable, branches in 2004. In the period 1996 to 2000 Indonesia was hit by a financial crisis and all parameters show a decline, but the system remained profitable throughout this period. The BRI microfinance programme thus succeeded in becoming profitable in a couple of years and this profitability provided the engine from growth and thus outreach.

The BRI Microfinance system is not an exception, in Kenya the Equity Building Society changed into the Equity Bank and serves presently 400 000 customers on a profitable basis and is still expanding services fast. In South America Bancosol (Bolivia) offers an example of fast expansion from its start in 1992 towards an organisation serving 280 000 borrowers in 2002.

The microfinance institutions quoted all emphasised sustainability and were all able to finance their expansion by a combination of savings mobilised and capital borrowed on commercial terms. Sustainability and profitability point to stability and this makes the microfinance institutions mentioned apparently attractive for savers and investors alike. Confidence is thus followed by finance and this enables expansion of the operations; profit thus leads, with a certain time-lag, to increasing outreach.

4 MICROFINANCE AND RURAL DEVELOPMENT

No studies have been done on the long-term effect of microfinance, most likely due to the relative youth of many microfinance institutions and the generally still limited coverage within their area of operation. However, an exploration of studies on the effects of microfinance on rural households and

studies on the role of finance at national level provides indications of what the long-term effect might be.

As a start, an overview of the position of a microfinance institution in the rural financial market is given in Figure 1.

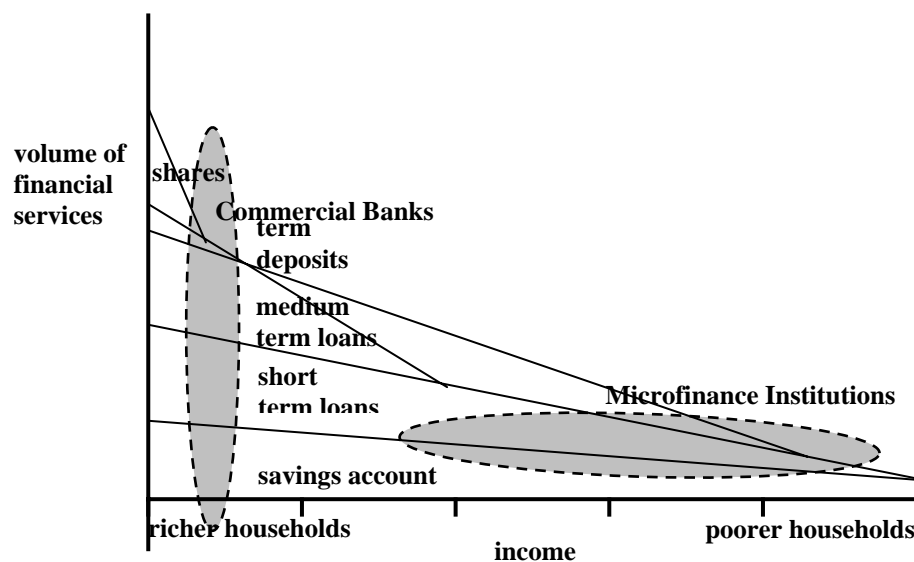


Figure 1. Formal financial services in the rural financial market: demand and supply.

The potential demand for formal financial services by the rural population is depicted by the triangular segments. The population in the lowest income quintile has a demand for saving services and short-term credit. Higher income quintiles require more types of services and a larger volume of these services, with the volumes measured along the Y-axis. The position of commercial banks is on the left: serving the highest income groups with a range of services. Microfinance institutions focus on the population in the lower quintiles and offer a limited range of services. Over time, successful microfinance institutions will reach a steadily increasing share of the rural population and most likely will expand the range of services offered. Commercial banks may also expand their presence by offering services to somewhat less well-off people. In the long run we can envision a gradual change from complementarity to competition between the two types of financial institutions.

The effect of microfinance on individual low-income households has been studied through micro-economic impact studies. Three aspects are generally highlighted. Firstly, an increased capacity to deal with risk through withdrawal of savings or obtaining credit in the case of an emergency. This may mean that productive assets (machinery, inventory, land, livestock) need not be sold after an emergency and thus that the flow of income is not interrupted. Secondly, improved management of consumption requirements over the year, to maintain adequate levels of food intake (Pitt and Khandker, 1998). This is of major importance, as labour is often the main resource of low-income households. Thirdly, increased opportunities to invest in productive enterprises. These increased capabilities of rural households to produce, consume and invest may be reflected only partly in the actual credit and savings relationships with microfinance institutions, because reliable access to microfinance forms a potential that can be tapped if and when required. This potential may, for example, mean that the household's own resources will be utilised more fully for production, with access to microfinance being relied on if there is an emergency.

Extrapolating the effects of microfinance to individual households gives some idea of the consequences for rural areas in general. The increased individual capacity to deal with shocks reduces the effects of a covariant shock for the rural population as a whole, at least when a substantial proportion of the population is within the financial frontier. Further, increased saving in financial

assets means a shift away from storing wealth in assets with zero or low productivity. The financial savings become available for investment in agriculture, in agriculture-related trade and processing, and in a host of other enterprises with expected benefits for technological progress and rural employment. In a later stage, when remunerative investment opportunities in rural areas become limited and the volume of savings overtakes the volume of credit, excess capital can be channelled via microfinance institutions and the national banking system to urban areas where large-scale industries and services offer extensive investment opportunities. In this way, rural savers will benefit from those investments and the children of the savers might find the urban jobs they are looking for.

The above process of increased saving in financial assets followed by intermediation by the banking system and investment by borrowers has been studied extensively at national level. In their theory of financial development, Shaw (1973) and McKinnon (1973) described this process as financial deepening. This theory was developed in the 1960s when governments used the banking system to support investment in their priority sectors (often industry), thereby bypassing efficiency considerations in many cases, and neglecting domestic savings. Since the 1980s, in many countries there has been a policy shift from such situations of financial repression towards financial liberalisation, or from shallow finance to deep finance.

The relationship between financial development and economic growth at national level has received renewed attention now that databases covering many countries over prolonged periods have become available. In a cross-country sample of 80 countries over the period 1960 to 1989, King and Levine (1993) found a positive relationship between financial depth, measured through four indicators⁴, and economic growth. They also showed that financial development has predictive power for future growth, indicating a causal relationship between financial development and growth. Khan and Senhadji (2000) reviewed methodological issues regarding the relationship between financial development and growth and applied these insights to a dataset covering 159 countries over the period 1960-1999. Their results are in line with the findings of King and Levine and they conclude that financial depth is an important determinant of economic growth.

The analysis of the relationships between financial development and economic growth has been expanded to include poverty. Li et al. (1998) studied income inequality in a large data set from 112 developed and developing countries for the years 1947-1994. They found that financial deepening helped reduce inequality and raise the income of the lower 80% of the population. Honohan (2004) gives a recent overview of financial development, economic growth and poverty and concludes that finance-intensive growth is empirically associated with lower poverty ratios.

The discussion on financial deepening, economic growth and poverty cited above considers these issues at national level. However, the central tenet of financial deepening, a shift to saving in financial assets followed by intermediation by the banking system and investment by borrowers, has direct relevance for microfinance in rural areas as providing rural households for the first time with access to savings and credit through local intermediation is financial deepening. The effects of financial deepening go beyond the individual links between microfinance institutions and households, because a reduction of the capital locked up in poorly productive assets and the availability of capital for new, trustworthy clients with productive uses fundamentally affects economic relationships in rural areas. Rajan and Zingales (2003), for example, state: "a healthy financial system can be a powerful anti-monopoly tool, providing the lubrication for the emergence of competitors that can undermine the power of incumbent firms". Microfinance thus positively affects economic life in rural areas and expanding outreach, enlarging the microfinance oval in Figure 1 to include a substantial proportion of the rural population, will make these effects more visible.

The review of long-term financial development at national level also provides a perspective on a potentially negative side of financial deepening: the occurrence of bank insolvency. Caprio and Klingebiel (1996) give an overview of bank insolvencies in 69 countries since the late 1970s. The list includes countries from all five continents, and covers industrialised, transitional, and also developing countries. A number of countries saw more than one crisis in the period covered. The crises involved

government banks, private banks, savings bank and rural banks, and ranged from a few banks to the entire banking sector in a country. The costs or losses ranged from less than 1% of GDP to as much as 55% of GDP, and were borne by taxpayers, savers or a combination of both. The factors cited as reasons for the crises range from macro economic factors, through weak incentives for banks to act prudently, to lack of managerial skill and fraud.

The widespread occurrence of national bank crises means that viewed from a long-term perspective, financial institutions are at risk irrespective of current apparently stable situations. For microfinance institutions this risk has special dimensions. A possible collapse of a microfinance institution in a national banking crisis means a loss of savings for their low-income clients, and this is the more damaging as a financial crisis is usually followed by a period of economic recession. Less visible, but with similar grave consequences, is the loss of the relationship-specific social capital built up between microfinance institution and clients. This social capital cannot be replaced without again overcoming the information gap and building up new confidence between financial institution and client - a costly affair that will take years. Finally, in a national banking crisis the government's priorities are usually with the larger commercial banks. These banks are more likely to be rescued in the name of national interest and with taxpayers' money than the smaller, less visible, rural microfinance institutions.

The exploration of microfinance and rural development shows a potentially positive impact of microfinance institutions on rural economic life, as they are the primary vehicles for the process of financial deepening in rural areas. This process is not without risk, however, as a failure of a microfinance institution, whether induced by a national bank crisis or through the institution's own actions will result in a loss of both financial capital and the relationship-specific social capital built up between institution and client.

5 DISCUSSION

The foregoing review of views and policies on microfinance and operations of microfinance institutions vis-à-vis the position of microfinance in the long-term process of rural development leads to the conclusions given below.

The first conclusion is that the generally accepted objective of microfinance institutions - financial sustainability, or independence from subsidies - seems to be outdated. It was certainly relevant in the 1980s and 1990s when microfinance institutions were struggling into existence. Nowadays, many microfinance institutions are operational and the established relationships with clients deserve to be safeguarded. This is the more relevant as history has shown that bank crises are the rule rather than the exception. The financial objective must therefore be raised towards financial stability, defined as the ability to withstand financial shocks, whether the shocks come from inside due to adverse conditions of clients or are outside shocks transmitted through the financial links with the national economic and financial sectors. Financial stability must be approached from two sides: diversification of the loan portfolio to minimise the negative effects of co-variant risks facing the rural population; and, building up reserves. The latter means making profit, not as an objective as such, but as a requirement for continuation.

The second objective of microfinance institutions, outreach in the sense of reaching a more or less narrowly defined group is, in the long run not justified. Firstly, a focus on one group of clients makes a microfinance institution vulnerable, thereby endangering financial stability. Secondly, a focus on one type of clients overlooks the indirect positive effects of wider access to financial services for the rural population as a whole. Therefore, the objective that is beneficial for all rural households in the long run is expansion towards new clients and the provision of new financial services. Profit comes in again for two additional reasons: profitable microfinance institutions are more likely to be able to draw capital from the national market for expansion; and profit is required for experiments to include new groups of clients and to develop new financial products to serve old clients better.

The two conclusions show that the two opposing views on microfinance "*credit for target group*" and "*pushing the financial frontier*" should be united into one new perspective for policy formulation by microfinance institutions: "*stability and expansion*". From this perspective the first priority is to achieve profitability to maintain what has been achieved; the second is to expand towards new clients. It is interesting to note that from a long-term perspective there is no trade-off between stability and expansion, as financial stability is a necessary condition for an expansion of services.

The third conclusion stems from the brief overview of successful microfinance organisations. The rapid growth from government/donor supported financial institutions into profitable banks with a considerable market share requires a redefinition of the position of microfinance institutions in the national financial markets. The widespread current discussions regarding the legal status of individual microfinance institutions on the one hand and the regulatory framework to be put in place by the government on the other hand are both signs of growth of the microfinance sector in both quantitative and qualitative terms.

The consequence for governments is that their microfinance policies must aim for "*stability and expansion*" of the microfinance sector in total. This would lead to two sets of policies. In the first place, by legislation that allows microfinance institutions to mobilise savings, to provide credit, and to undertake other services such as insurance and money transfers. This combination of services results in economics of scale and scope, which strengthens the financial position of individual microfinance outlets and thus allows geographical expansion and financial deepening in rural areas. In the second place, prudential regulations are required that buttress the financial stability of microfinance institutions in their specific circumstances.

Notes

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- 2 Impact assessment may include an assessment of the effect of credit on clients as well as a study of the appropriateness of credit services.
- 3 The ratio of liquid liabilities (M3) of the financial system to GDP; the ratio of deposit money bank domestic assets to deposit money bank assets plus central bank domestic assets; the ratio of claims on the nonfinancial private sector to total domestic credit; and, the ratio of claims on the nonfinancial private sector to GDP.

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