



Microfinance: An emerging investment opportunity

Uniting social investment and financial returns

December 19, 2007

Socially responsible investments (SRIs) rank high on investors' agendas today. SRIs have risen sharply to USD 2.3 tr in the US and to EUR 1.0 tr in Europe in recent years.

Amongst all SRIs, microfinance investments increasingly attract institutional and individual investors due to their double bottom line. While they allow investors to adopt a social investment strategy geared toward poverty alleviation they offer an attractive risk-return profile at the same time.

The microfinance sector currently has an estimated total loan volume of USD 25 bn. Yet, it **is unable to serve more than a fraction (~100 m) of today's total sector demand of roughly 1 bn micro-borrowers.** This situation translates into an immense funding gap estimated at around USD 250 bn.

In order to narrow this funding gap a greater involvement of capital markets is one key medium-term priority. Since 2004, international public and private-sector investors have more than doubled their investments to USD 4.4 bn in 2006.

Microfinance constitutes an emerging investment opportunity for institutionals and individuals alike. Investors have barely started to explore its full potential.

By 2015, we expect institutional and individual investments in microfinance to rise sharply to around USD 20 bn. The underlying assumptions are that (1) microfinance will gradually evolve into a niche investment product that will increasingly attract retail investors and benefit from the general strong rise in SRIs. Furthermore, it will appeal to a wider range of commercial investors as it might even be conducive to investors' portfolio diversification. (2) A critical mass of MFIs will over time become capable of absorbing foreign funding.

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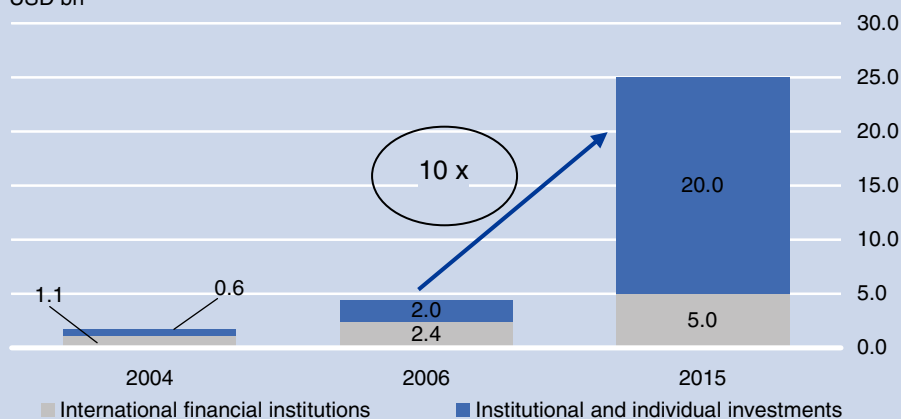
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Forecast of institutional and individual investments in microfinance

USD bn



1. Introduction

Sharp rise in socially responsible investments

Socially responsible investment

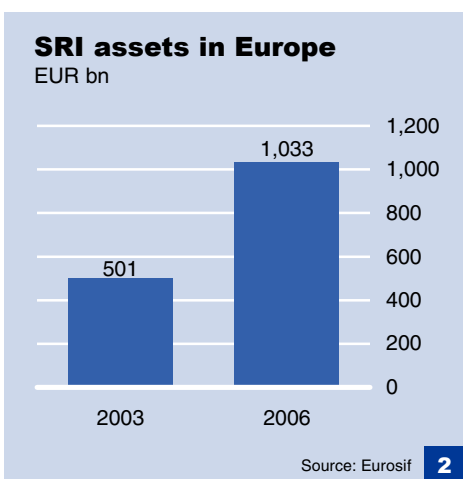
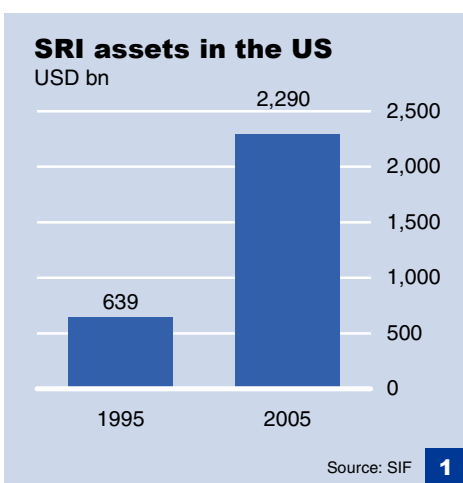
In essence, SRIs strive to consider both the financial return of an investment and its social, environmental and ethical consequences. Basically, there are three overall investment strategies that include screening, shareholder advocacy and community investing. While the large majority of assets is held in socially screened investment funds or managed accounts, community investments such as microfinance currently enjoy strong growth rates. Social investors include not only foundations and NGOs but also individual investors and, increasingly, professional institutional investors, including pension funds, insurance companies, universities and religious institutions.

Socially responsible investments (SRIs) rank high on investors' agendas. In the US, the volume of SRIs has increased by a compound annual growth rate (CAGR) of 13.6% from USD 639 bn in 1995 to USD 2.3 tr in 2005 while in Europe SRI assets grew even faster by a CAGR of 27.3% from EUR 501 bn in 2003 to EUR 1.0 tr in 2006.¹ In the US, nearly a tenth of professionally managed assets is already related to socially responsible investment by now. These impressive growth rates demonstrate the growing weight investors attach to the social and environmental consequences of their investments. Amongst the great variety of SRIs, investments in microfinance have recently started to increasingly attract institutional and individual investors.²

Currently, the microfinance sector is in a transition process from a donor-driven NGO-dominated framework towards an increasing involvement of capital markets. The reasons are that, on the one hand, some microfinance institutions have begun to explore new funding opportunities, e.g. by securitising microfinance loan portfolios; some microfinance institutions have even gone public. On the other hand, private-sector investors increasingly appreciate microfinance investments for their dual nature: First, they allow investors to adopt a social investment strategy geared toward poverty alleviation and social development in developing countries. Second, they simultaneously offer an attractive risk-return profile that is marked by largely stable financial returns, low credit default rates and low correlation to the mainstream financial assets as well as the general domestic economy. Some evidence even indicates that microfinance investments might be conducive to the efficient portfolio diversification.³

This study takes a closer look at the role that institutional and individual investors might play in the medium-term development of the microfinance sector. What contribution can private investors make to scaling up microfinance and narrowing its immense funding gap? Which market volume is already captured by institutional and individual investors and which volume may private-sector investments in microfinance reach by 2015? What do typical microfinance investments look like and what are the associated benefits and risks for private-sector investors? What are the major constraints on the development of the microfinance sector? What role can microfinance play as an emerging investment opportunity in the context of investors' efficient diversification of portfolios? We conclude by summarising our main findings and providing a medium-term market forecast for the development of institutional and individual microfinance investments.

Microfinance attracts private investors in a twofold manner



¹ Social Investment Forum, Eurosif.

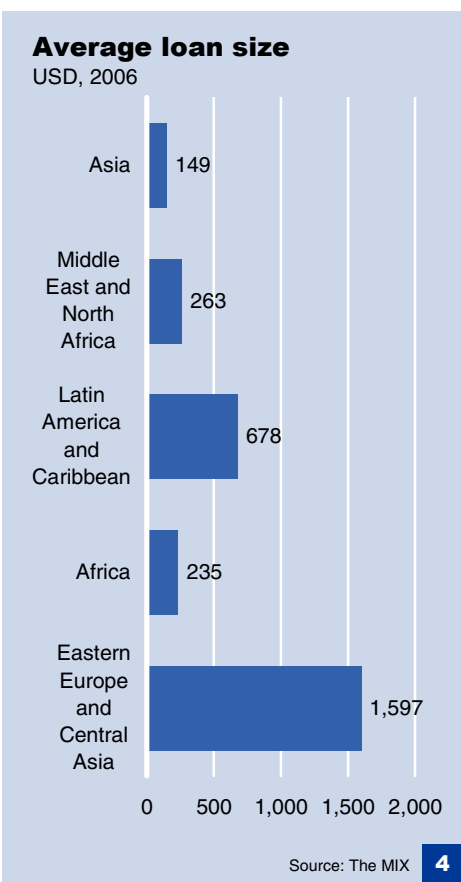
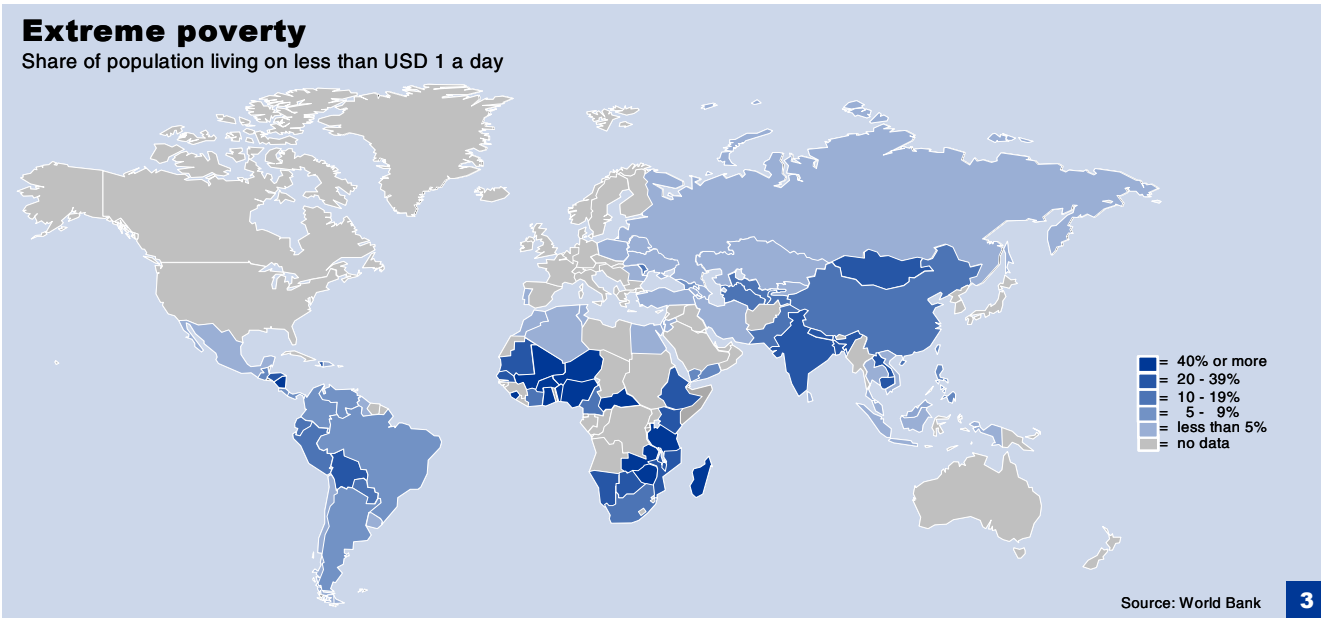
² The terms institutional and individual investors and private-sector investors are used interchangeably in this study.

³ Research on this issue is still in its infancy but there is preliminary evidence that this trend will materialise over time.

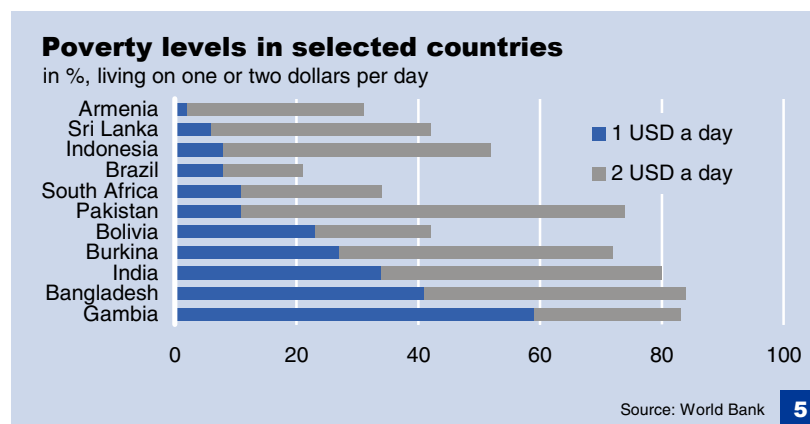
2. The economics of microfinance

2.1 Introduction to microfinance

Microfinance serves as an umbrella term that describes the provision of banking services by poverty-focused financial institutions (microfinance institutions – MFIs) to poor parts of the population that are not being served by mainstream financial services providers.



According to the World Bank, around 1.1 bn people live in extreme poverty of less than USD 1 a day and around 2.7 billion people – equivalent to roughly 40% of the world’s population – live on less than USD 2 per day. Extreme poverty shares in developing countries vary widely with regional figures ranging from 9% in East Asia and the Pacific to 41% in Sub-Saharan Africa.



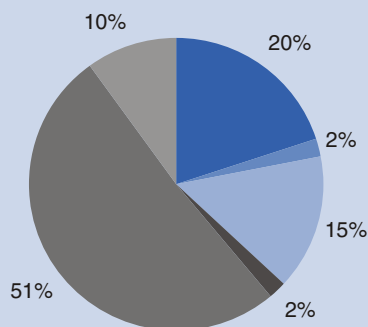
The core service of microfinance is the provision of microcredit. Typically, these are small loans to the working poor. These loans usually amount to a local currency equivalent which starts at just below USD 100 and can, over time, reach several times this amount depending on the geographic region. For instance, in Asia the average loan amounts to around USD 150, while in Eastern Europe and Central Asia loans amount to approximately USD 1600 on

Examples of micro-borrowers:

- Street vendors
- Trades people
- Services providers
- Small farmers
- Fishermen
- Herders

Borrowers per region

Based on a sample of 76.9 million, 2007

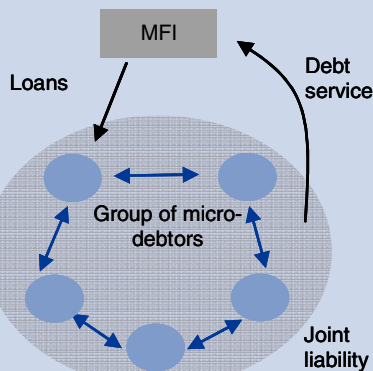


- East Asia and Pacific
- Eastern Europe and Central Asia
- Latin America and the Caribbean
- Middle East and North Africa
- South Asia
- Sub-Saharan Africa

Source: The MIX (2007) **6**

Principle of group lending ensures low default rates and replaces standard collateral

Group lending



7

average.⁴ In addition, many MFIs are increasingly starting to offer micro-deposits and micro-insurance services to their clients.

In terms of institutional and ownership structures, the MFI universe is composed of a large variety of different forms which comprises NGOs, cooperatives, specialised financial institutions and niche banks that in some cases are even regulated financial institutions.

2.2 Micro-lending at a glance

Microfinance is based on recognising that the working poor can act in an entrepreneurial manner and are, in principle, creditworthy. For these micro-borrowers, microcredit is often the only alternative to paying excessive interest rates charged by unofficial moneylenders or pawnshops in developing countries. For instance, in the Philippines loan sharks often charge an annualised interest rate of up to 1000% for a monthly loan.⁵ In contrast, interest rates charged by MFIs are in the range of 15% to 70% p.a. Seen from the perspective of a developed country this may still seem high but these rates result from the small size of loans and the high administrative costs as loan officers need to travel to remote places and intensively advise clients. It is estimated that administrative costs amount of up to two thirds of interests paid by clients. In addition, there is a need for risk provisioning.

Women make up the vast majority of borrowers, especially in Asia. Shares of female debtors are as high as 99%.⁶ The predominance of women reflects the fact that women are more reliable debtors because, due to stronger social and family ties, they often follow a more conservative investment strategy which in turn results in lower default rates for MFIs. This lower credit risk is further supported by a relatively low degree of labour mobility of female clients (due to strong family ties women tend to work from home) which decreases the cost of monitoring debtors for an MFI.

In contrast to commercial banks, micro-lending institutions usually refrain from taking collateral. Instead, in order to influence borrower behaviour, many MFIs apply the principle of grouplending. This entails that an MFI lends a small loan to an individual, who belongs to a group of 5 to 20 people. As soon as the individual borrower proves reliable, credit is extended to additional people within the group. This procedure creates an incentive for the group to monitor each other's behaviour and to ensure borrower discipline, as the group is jointly liable for the failure of any single member to repay her microloan. The average loan size starts from USD 100 and can reach several hundred dollars, depending on the debtor's repayment history. Interest rates vary significantly according to the geographic regions, e.g. in India microloans are usually granted at 15% to 30%. Through weekly meetings between the group members and the MFI, the creditor monitors the repayment status of each debtor publicly, which increases the transparency within the group. This generates a form of peer pressure and is expected to foster internal monitoring among the members of the group.⁷ In addition, debt screening costs in general are minimised by meeting debtors in groups.

However, not all MFIs apply the group lending principle; instead, some MFIs prefer to lend to individuals without any shared liability aspect. This reflects, inter alia, the argument that group lending has

⁴ See 2006 MFI Benchmarks as published in the MicroBankingBulletin by The MIX.
⁵ The Economist, November 5, 2005.
⁶ Benchmarking Asian Microfinance 2005. The MIX.
⁷ Armendariz de Aghion.

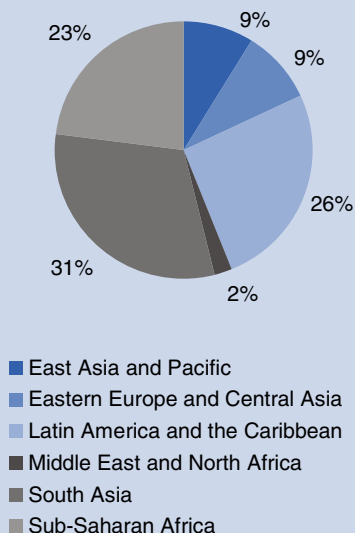
The Grameen Bank

The Grameen bank (literally 'village/rural' bank in the Bengal language) is the institutionalized outcome of a research project led by Muhammad Yunus, professor for economics at the University of Chittagong, Bangladesh. The first micro-loan: USD 27 to a group of 42 people in the village of Jobra.

What started as Prof. Yunus' attempt to save a couple of villagers from the questionable credit conditions of local money lenders evolved over three decades into a community development bank with 2,431 branches employing more than 16,000 people. The bank, into which it was transformed only in 1983 by Bangladesh's legislature, reaches 78,659 villages. In mid-2007, the number of clients totals 7,208,455; 96.6% of whom are female. Since its inception in 1976 the Grameen bank has disbursed over USD 6.3 billion in microloans, mainly to female groups of borrowers.

MFIs per region

based on a sample of 2,207 MFIs in 2007



Source: The MIX **8**

Top 10 MFIs by borrowers in 2006

Rank	MFI	Borrowers
1	Grameen Bank	6,287,000
2	ASA	5,163,279
3	VBSP	4,695,986
4	BRAC	4,550,855
5	BRI	3,455,894
6	Spandana	972,212
7	SHARE	826,517
8	Caja Popular	643,659
9	Compartamos	616,528
10	BANTRA	563,805

Source: MIX Market **9**

some shortcomings, e.g. that it only fully works in rural settings where social control is higher. In addition, opponents of group lending argue individual lending is superior as it judges people on their own merits rather than on the group's. In some countries, individual lending exhibits higher average loan amounts and often primarily serves the self-employed rather than the very poor seeking to start a business.⁸ To sum up, both approaches have their advantages and respond to different circumstances; hence, it can be expected that individual and group lending techniques will continue to coexist over the long term.

2.3 From village to global success

It is widely acknowledged that microfinance is a key facilitator to reduce poverty in both developing and developed countries. Modern microfinance had its roots in micro-lending initiatives in South Asia and Latin America in the mid-1970s. Notably the Grameen Bank in Bangladesh was successful with its peer group micro-lending model that was, ultimately, exported to many other countries and copied by other MFIs. It was not before the early 1990s that a small part of the micro-lending business began to increasingly transform itself from a donor-oriented model into formally regulated financial institutions and that some commercial banks started to offer microfinance services.

Currently, the steadily growing popularity of microfinance has reached a global audience. The United Nations (UN) proclaimed 2005 the year of microcredit in an attempt to globally promote the benefits and potential of the microfinance industry. In doing so, the UN acknowledged that, unlike top-down development initiatives such as debt forgiveness or international aid, microfinance stands out for its bottom-up approach. It emerges locally and enables micro-borrowers to improve their situation through their own efforts rather than relying on external development strategies. In their collectivity, micro-loans lead to large-scale economic improvements and foster growth in target countries. In 2006, Prof. Yunus and the Grameen Bank were awarded the Nobel Peace Prize for their "efforts to create economic and social development from below". The Nobel committee honoured the contribution microcredit has made to the advance of democracy and human rights worldwide.

3. The funding situation of microfinance institutions

Although MFIs offer a similar range of microfinance services to their customers there are a great variety of MFIs in terms of types of institutions, legal forms, business approach, degree of sustainability and funding sources.

3.1 MFIs at a glance

Globally, it is estimated that a total of over 10,000 MFIs exists that is made up of a large array of types of MFIs such as credit unions, NGOs, cooperatives, government agencies, private and commercial banks and various permutations of these forms. As MFIs were initially founded as non-profit enterprises that focused on assisting the poor through access to credit their activities were initially mainly funded through donations, subsidies and grants provided by

⁸ See IMF.

Advantages of becoming a regulated MFI

The advantages of the transformation process are manifold. First, the sheer size of the microfinance industry has reached a point where subsidised loans are no longer sufficient to cover the funding needs. By becoming regulated, MFIs are allowed to take deposits which broaden their funding structure and, if they constitute additional funding, ultimately allow them to expand their lending business. Second, commercial funding can be obtained easier as commercial lenders primarily target tier 1 and tier 2 MFIs. Third, the financial viability of an MFI might be enhanced significantly over the medium to long-term as in some cases subsidised money has become a disincentive to the efficient management of commercial microfinance and, hence, sometimes even obstructed social objectives as financial resources were used for non-core businesses. As a matter of principle, the more independent an MFI is, the better positioned it is for further business expansion and the achievement of its original development goals.

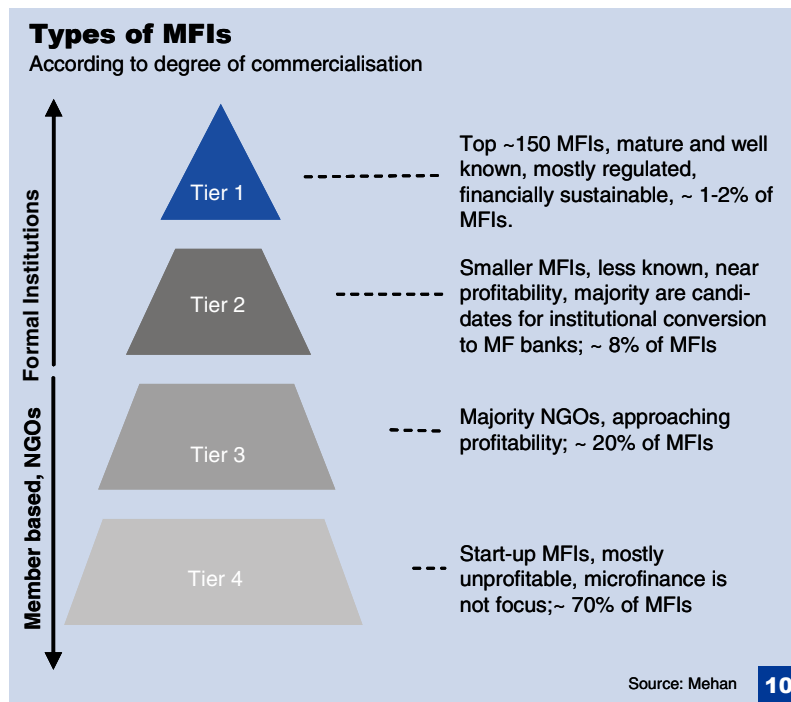
Industry trends

- Industry consolidation both between tier 1 and tier 2 classes and within each class.
- Even stronger differentiation between the tier 1 and 2 segments and the remaining MFIs than today.
- Increasing integration of MFIs into the domestic financial sector as some MFIs mature and transform themselves into regular banks. This enables MFIs to explore deposits as a new funding source.
- Some commercial banks enter the market of microfinance directly or indirectly through partnerships.

Increasing involvement of conventional banks in microfinance

Commercial banks become increasingly involved in microfinance mainly in four different ways. First, some banks directly grant micro-loans to the poor. Second, other banks such as Citibank or ICICI provide funding to MFIs. Third, banks distribute microfinance investment vehicles, e.g. Credit Suisse offers the Responsibility Global Microfinance Fund and Deutsche Bank distributes db Microfinance-Invest Nr. 1. Lastly, some banks such as ICICI, Deutsche Bank or Citibank have also been active in the securitisation of MFIs' loan portfolios.

development agencies and private donors. Over time, some MFIs gradually started to become more formal financial institutions or even regulated (niche) banks. This trend notably reflects the idea that becoming a more formal financial institution helps to reach financial sustainability as it facilitates access to commercial borrowing and deposit-taking. For instance, in many countries only regulated MFIs are allowed to take deposits.



The great variety of MFIs can be classified into four categories according to the respective degree of commercialisation. While the two top segments include the most developed MFIs the bulk of MFIs belong to the third and fourth categories that comprise approximately 90% of the total microfinance sector. However, in terms of outreach tier 1 MFIs serve the vast majority of borrowers and also hold most assets.

The top tier MFIs that already have transformed themselves into more formal structures are increasingly attracting the interest of commercial banks and institutional and individual investors. As top-tier MFIs are usually profitable and have a more experienced management, private-sector investors consider them the most suited to absorb commercial funding and to effectively channel it to micro-borrowers. In 2006, there were already about 30 MFIs with a loan portfolio in excess of USD 100 m.⁹ While most of the top 150 MFIs are regulated financial institutions, tier 2 institutions are made up of smaller, younger MFIs. These are predominantly NGOs that are in the process of converting themselves into regulated MFIs. Some tier 2 MFIs also receive funding from foreign investors but to a lesser extent than tier 1 MFIs. Experts estimate that in total 300 to 400 MFIs are ready to absorb microfinance investments.¹⁰ Consolidation in the microfinance sector is expected to increasingly take place both between tier 1 and tier 2 MFIs and within these groups of MFIs. Tier 3 MFIs are in the process of approaching profitability while suffering from a lack of funding. Tier 4 institutions

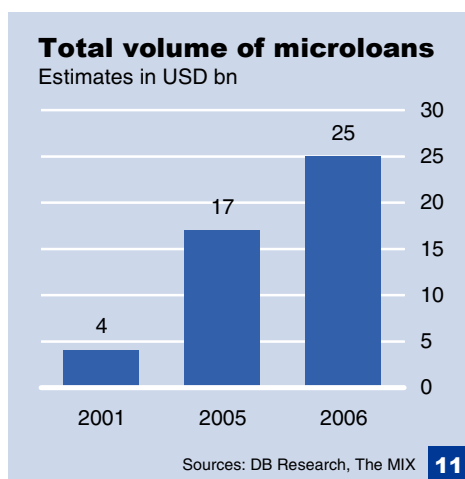
⁹ MIX Market.

¹⁰ Accion International.

are made up of start-up MFIs or institutions where microfinance is not the primary focus. Over the medium term, we expect the current divide between larger, increasingly commercially oriented MFIs and smaller NGO-type MFIs to become even more evident.

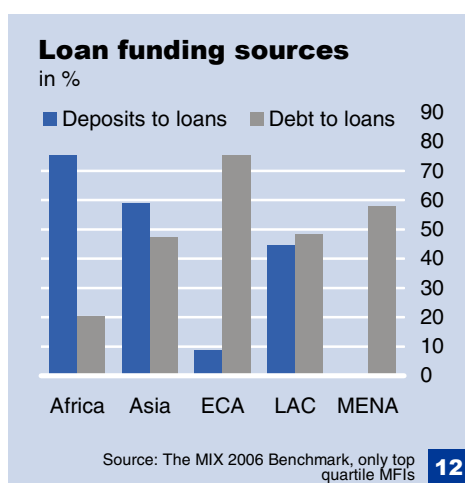
3.2 Loan volume, funding sources and funding structures of MFIs

Total loan volume estimated at USD 25 bn



The volume of total microfinance loans has risen sharply in recent years from an estimated USD 4 bn in 2001 to around USD 25 bn in 2006.¹¹ One important driver of this trend is the increasing access of leading MFIs to commercial funding sources that comprise debt finance and national retail deposits. Depending on the geographic region tier 1 MFIs finance lending operations to a larger (e.g. in Asia) or to a lesser extent (other regions except for Middle East & North Africa) with national deposits or foreign and national debt finance. This trend is also reflected in foreign investments in microfinance that has more than doubled from USD 1.7 bn in 2004 to around USD 4.4 bn in 2006.¹²

Traditionally the funding structure of an MFI has followed a certain pattern over its life cycle. While start-up MFIs are characterised by a larger dependency on donations usually made in the form of equity grants, donations and technical assistance, the more advanced MFIs tend to display a higher debt leverage through domestic or foreign borrowing; over time some even evolve into more formalised financial institutions (e.g. non-bank financial institutions) or even regulated MFIs such as niche banks. Especially the most advanced tier 1 MFIs use domestic deposits (if their legal status permits their doing so) and debt financing as their core funding source. Apart from deposits, debt financing usually comprises both subsidised and commercial borrowing from a large variety of domestic and foreign sources that range from (international) development agencies and social investors to quasi-commercial and commercial lenders. Some tier 1 MFIs even access capital markets by issuing bonds, going public or securitizing their loan portfolios. However, an increasing number of institutions do not follow this traditional pattern any longer. For instance, some start-up MFIs are even set up as regulated microfinance providers. Others decide to operate as specialised lenders and not to develop into a regulated MFI.

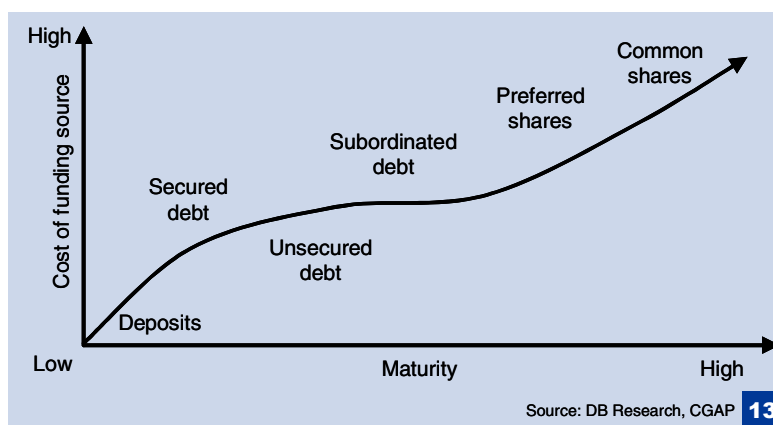


There is of course no single optimal capital structure for an MFI; rather, decisions on funding structures for the individual optimal funding mix is in practice based on a variety of determinants. On the one hand, internal factors such as growth of loan portfolio and savings mobilisation and external factors such as the regulatory framework, the availability of donors and commercial lenders and, lastly, the development and openness of the domestic financial system are very important factors. On the other hand, the costs and maturity of individual funding sources play a key role in determining the optimal funding mix. For MFIs, issuing equity is the most costly source of finance (except of grant equity and other donations) followed by unsecured and subordinated debt, while retail deposits are reported to be the cheapest funding source. For foreign funding, potential currency risks must also be considered. However, decisions on capital structure also need to consider the maturity of each instrument. While equity capital primarily serves as a long-term

¹¹ DB Research.

¹² CGAP Brief April 2007.

funding source, debt has rather a medium-term maturity while deposits have usually a short-term maturity.¹³



In the very long run and from a normative point of view, it would be desirable to enable MFIs to primarily refinance themselves from domestic funding sources, either through national deposit-taking or accessing local capital markets by issuing bonds or equity. After all, microfinance is a response to the underdevelopment of the financial sector in a developing country. The ultimate objective of developing financial markets in emerging markets and developing countries is to mobilise domestic financial resources and to enable domestic investors to efficiently draw on domestic savings. Ultimately, in the course of such a development, the role of foreign private sector investors in MFI financing would gradually change from providing direct loans to MFIs via structured debt instruments or funds toward increasingly investing into a MFI's domestic bonds or shares.

International investors include:

- IFI investors include public arms of national and multilateral developing agencies, e.g. the African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Nederlandse Financierings Maatschappij voor Ontwikkelingslanden NV, Kreditanstalt für Wiederaufbau.
- Foundations are mostly privately owned non-profit organisations that distribute private wealth with development and charitable objectives.
- Private funds that predominantly adopt a dual objective of both social and financial goals. These are made up of a large variety of funds.

3.3 Two main types of foreign investors

There are two main types of foreign investors that provide the lion's share of foreign funding to MFIs. On the one hand, these are international financial institutions (IFIs), which include bilateral or multilateral development agencies such as the World Bank and the European Bank for Reconstruction and Development.¹⁴ IFIs raised both their equity and debt investments significantly by doubling their investments since 2004 to an estimated USD 2.4 bn in 2006¹⁵.

IFI sources of finance, 2005

	Amount (USD m)	Proportion of total (%)
KfW (German development bank)	660	27.2
AECI-ICO (Agencia Espanola de Cooperacion Internacional and Institut de Credito Oficial)	420	17.3
IFC (International Finance Corporation)	379	15.6
EBRD (European Bank for Reconstruction and Development)	250	10.3
OPIC (Overseas Private Investment Corporation)	126	5.2
14 other IFIs	590	24.3

Source: CGAP **14**

¹³ See CGAP Brief August 2007.

¹⁴ IFIs often also lend to governments, but this study primarily focuses on IFIs granting direct loans to MFIs.

¹⁵ See CGAP Brief April 2007.



Profund is one of the earliest microfinance investment funds that was set up by development agencies and some private donors. It was established in 1995 with the dual goal of achieving both a social and financial return. The fund invested notably in equity stakes of MFIs. Over the fund's lifespan of ten years an internal rate of return of around 7% to 8% is expected.

The first dual-objective commercial MIV that was launched by private investors is the **Dexia Micro-Credit Fund**. This was set up in 1998 in Luxembourg and became actively managed in 2000. The fund has assets of USD 205 m in September 2007 and is managed by BlueOrchard Finance.

Specialised microfinance fund investors*

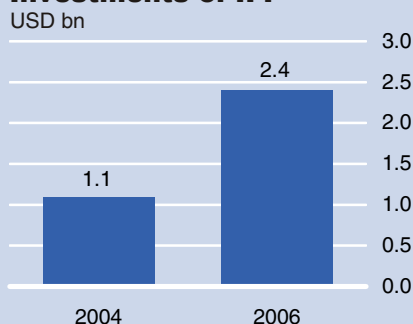
Fund	Microfinance portfolio (m)	
	EUR	USD
ProCredit Holding	757	
European Fund for Southeast Europe	245	
Oikocredit	231	
Dexia Micro-Credit Fund		205
responsAbility Global MF Fund		167
BlueOrchard Loans for Dev. (BOLD 2)		110
Global Commercial MF Consortium		75
Gray Ghost MMFund LLC		75
XXEB		60
db Microfinance-Invest Nr. 1	60	

* As latest available data is used figures do not necessarily reconcile with GGAP figures

Source: Company information

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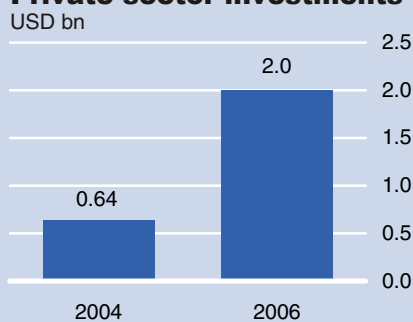
Investments of IFI



Source: CGAP

16

Private sector investments



Source: CGAP

17

On the other hand, a range of private investors made up of NGOs, individual donors, foundations, individual and institutional investors has evolved whose investments increased even more rapidly than those of IFIs, reaching an estimated USD 2 bn at year-end 2006. Among the largest vehicles, ProCredit is reported to have the largest loan portfolio¹⁶ of around EUR 757 m followed by the European Fund for Southeast Europe with EUR 245 m.

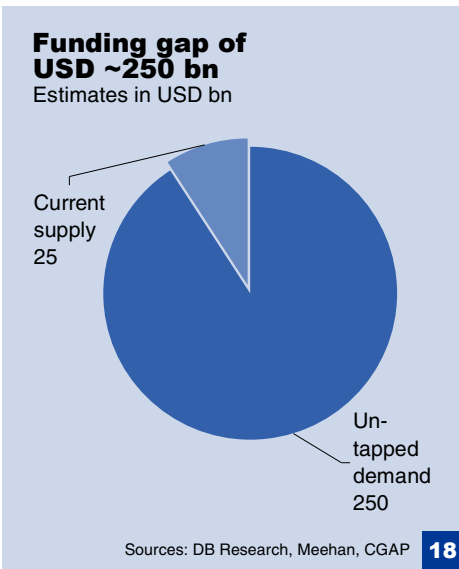
3.4 Direct access to capital markets is rare

As described above, domestic funding sources tend to assume a greater importance only in the later stages of an MFI's life cycle. Other than the indirect access to capital markets through loans from structured investment vehicles MFIs have rarely yet gained direct access to capital markets by issuing shares or debt instruments. One of the few examples is the Mexican MFI Banco Compartamos that went public in April 2007. Compartamos was originally founded as an NGO in 1990 and, in early 2006, served around 600,000 microclients. On the whole, the IPO was well received by capital markets with the issue being over-subscribed 13 times on an initial price to book ratio of 12.8 and an initial price-earnings ratio of 24.2.¹⁷ Other examples include the IPO of the Equity Bank in Kenya which became listed on the Nairobi Stock Exchange in 2006.

Direct access to capital markets through debt instruments mainly comprises the securitisation of MFIs' loan portfolios. The first securitisation transaction was conducted in India by ICICI. Meanwhile, securitisation constitutes a more frequently used instrument by MFIs to access domestic and international capital markets for funding; e.g. in 2006 the Bangladesh-based BRAC securitised receivables in microfinance worth USD 180 m. As issuance was in Bangladesh, BRAC did not face any currency exposure. The Netherlands Development Finance Company (FMO) bought one-third of the transaction and another third was acquired by Citibank; this tranche had an additional guarantee by FMO and KfW. The remaining third was purchased by local banks and Citibank Bangladesh. In total, the issuance provided funding to BRAC over a period of six years in a stream of six one-year notes.

¹⁶ Only loans < EUR/USD 10,000 are considered. The total loan portfolio of ProCredit Holding amounts to EUR 2.1 bn in 2006.

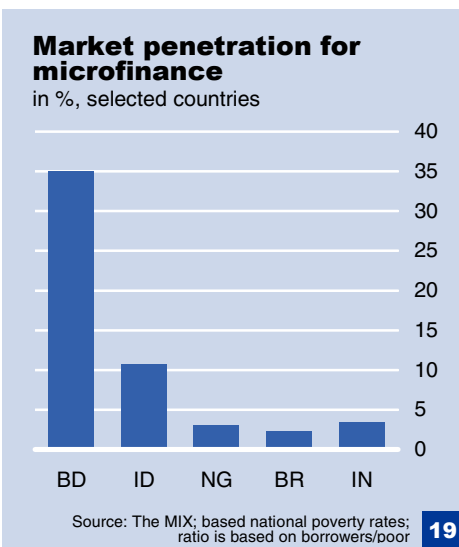
¹⁷ Credit Suisse and Accion Insight No. 23.



Further examples include the true sale securitisation of the loan portfolio of ProCredit Bulgaria in May 2006 that initially comprised EUR 47.8 m and has a target issuance volume of EUR 150 m. This transaction is backed by a guarantee from KfW and the European Investment Fund for the senior note and was arranged by Deutsche Bank. In March 2007, ProCredit Serbia accessed the international public bond market by issuing a EUR 125 m senior loan participation note with a coupon of 6% and a maturity of five years.

3.5 Demand exceeds supply: Funding gap totals roughly USD 250 bn

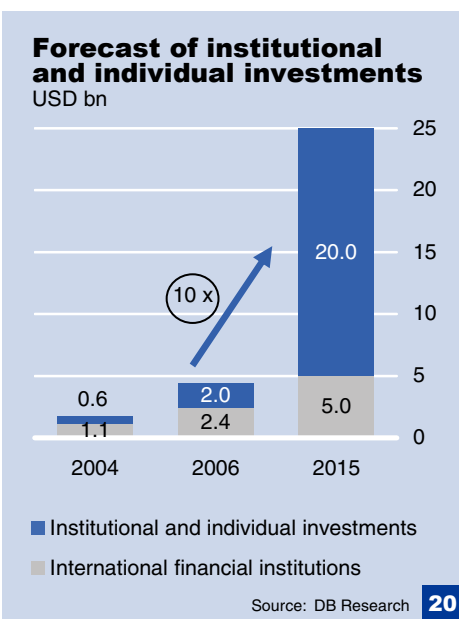
Although MFIs expanded their customer base in 2006 on average by around 23%¹⁸ the microfinance industry is still unable to meet more than a fraction of today's potential borrowers' demand. The number of unserved micro-borrowers exceeds the current supply of microfinance loans significantly. While MFIs currently serve an estimated 100 million micro-borrowers, the total potential demand is roughly estimated at 1 bn.¹⁹ This ratio illustrates the considerable unexplored growth potential, i.e. an untapped growth factor of around ten. In geographic terms, the untapped demand is unevenly spread around the globe. The largest fraction of poor people is located in India (~310 m), Bangladesh (~70 m), Indonesia (~60 m), Nigeria (~45 m) and Brazil (~40 m).²⁰ Assuming that national poverty rates are related to the portion of the population that already has access to microfinance services, penetration rates for different countries can be computed. While the penetration rate is the highest in Bangladesh at 35% it is as little as 2 to 3% in India, Brazil and Nigeria, i.e. in these countries only two to three persons out of a hundred are already served with microfinance while 97-98 people are potentially in need of it.



To meet demand fully over the long run a total funding mix of debt, subordinated debt, equity, deposits and guarantees for MFIs of roughly USD 275 bn would be required. In the light of the current level of microfinance loans outstanding of around USD 25 bn, a funding gap of USD 250 bn results.

3.6 Medium-term outlook on private-sector investments

Although the above obviously is a very rough estimate, it clearly points to the fact that the funding gap is substantial. An increasing involvement of private-sector investors is therefore a key medium-term priority to scale up microfinance. Fortunately, the prospect for a greater involvement of private investors is actually good. By 2015, we expect the volume of private-sector investments, i.e. by private institutional and individual investors, to increase to around USD 20 bn with the main drivers being increasing institutional and retail investor demand, regulatory changes and the enhanced capability of MFIs to absorb commercial funding. The total foreign MFI funding of both IFIs and private-sector investors is expected to increase to USD 25 bn by 2015, of which the estimated share of IFI funding will roughly amount to USD 5 bn or 20% of total funding. Private-sector investors would provide the balance. This forecast is primarily based on seven core assumptions:



¹⁸ See 2006 MFI Benchmarks as published in the MicroBankingBulletin by The MIX.
¹⁹ CGAP, Meehan and Gonzalez and Rosenberg.
²⁰ Based on national poverty rates. See "How Many MFIs and Clients Are There?". The MIX.

Germany: Regulatory changes in investment funds

The German Parliament agreed in late 2007 on regulatory changes that are expected to enable retail investment funds to invest in the microfinance sector. As of today, eligible instruments shall include direct loans to MFIs and listed securities of MFIs issued in local capital markets. Investment shall be subject to the following restrictions that ensure a high degree of retail investor protection:

- Only regulated MFIs shall be deemed suitable for investment.
- Only MFIs with a loan portfolio in excess of EUR 10 m are eligible.
- Only MFIs with a bank licence may be included (NGO and unofficial money-lenders are excluded) and an IFI must be involved in the respective MFI.
- The volume of locally listed securities is limited to 15% of the investment fund's total volume.

- First, more and more private-sector investors will become attracted to MIVs thanks to either the dual nature of microfinance or solely due to their attractive risk-return profile (see chapter 5).
- Second, the first trend will be reinforced by the general sharp rise in socially responsible investments. This will give an additional (external) growth impetus to microfinance investments.
- Third, changes in the regulatory framework – as, e.g. recently happened in Germany – will increasingly attract retail investors as they become enabled to invest in the microfinance sector. In this light, microfinance investments will increasingly become a more mainstream investment product.
- Fourth, private-sector investments will be fostered by a significantly increased number of joint investment activities of public and private investors, with public investments ideally acting as multiplier for private-sector investments and ‘crowding in’ additional non-public investors to MIVs.
- Fifth, the frequent use of structured debt instruments allows involving risk-averse commercial investors, as they can reduce their risks by purchasing senior notes of a structured debt product.
- Sixth, some private institutional investors such as pension funds, insurance companies or trusts will discover microfinance as an attractive supplement for their portfolios.
- Lastly, as the industry as a whole matures, it can be expected that a critical mass of MFIs will become capable of absorbing commercial funding and channelling it effectively to micro-borrowers.

"Microfinance investment vehicle" is the more appropriate terminology

4. Microfinance investment vehicles: Investment strategies and instruments

4.1 Microfinance investment vehicles

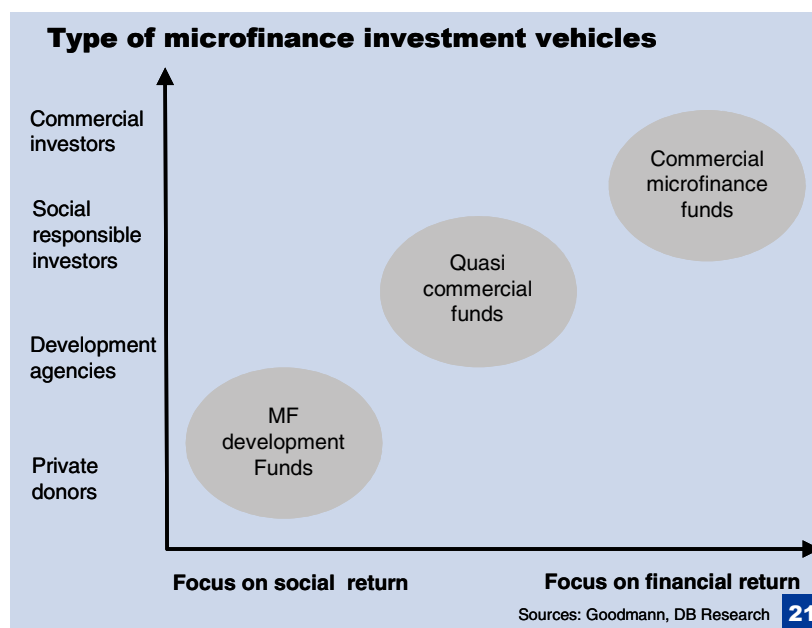
During the last few years, an increasing number of microfinance investment funds has been set up with the goal of mobilising funding for MFIs from foundations, individual and institutional investors and development agencies.²¹ However, the term investment fund is misleading in a legal sense as in practice funds are rather specialised investment vehicles that make use of a variety of debt, mezzanine, equity and guarantee instruments. Hence, the term microfinance investment vehicles (MIVs) seems to be more appropriate to describe current funding structures. In total, it is estimated that a variety of around 74 different vehicles existed at year-end 2006.²² In contrast to debt and sub-debt instruments, equity investments still seem to be rarely included in commercially-oriented MIVs because equity stakes in MFIs are difficult to place at a reasonable price, as they are perceived as more risky by investors and exit strategies might prove to be difficult until domestic capital markets develop further and become transparent in less developed countries.

²¹ IFI investors conduct a wide variety of microfinance lending activities. Investing in MIVs is just one option.

²² CGAP Brief April 2007.

4.2 Three major investment approaches

In general terms, three types of MIVs can be differentiated according to their respective degree of commercialisation.



Microfinance development funds: examples

- Oikocredit
- Accion Gateway Fund
- Deutsche Bank Start-up Fund
- Développement International Desjardins
- Incofin

Dual objective funds

- AIM - ACCION Investments in Microfinance, SPC (AIM)
- I&P Développement - Investisseur et Partenaire pour le Développement
- PROFUND - ProFund International
- responsAbility Microfinance Leaders Fund

Commercial microfinance investment funds

- AXA World Funds
- Dexia Micro-Credit Fund
- Blue Orchard Debt Sub-Fund
- Gray Ghost Microfinance Facility
- MicroVest
- Responsibility Global Microfinance Fund
- Global Commercial Microfinance Consortium (Deutsche Bank)
- db Microfinance-Invest Nr. 1

First, *microfinance development funds* act as non-profit entities or cooperatives and primarily target the development of MFIs by granting capital at favourable financial conditions without necessarily seeking a financial return. Usually, funding is provided below market rates and often complemented by technical assistance. Investors are made up of development agencies, corporations and private donors that include individuals and foundations. This investor base seeks a social return and aims at maintaining its real inflation-adjusted capital at maturity. In contrast to other socially-minded investor groups, this investor group is more commercially minded in that it usually refrains from providing grants and donations. Microfinance development funds primarily target MFIs approaching financial sustainability. In an ideal manner, these MFIs would be funded at a later stage – i.e. when they have reached full financial viability – by more commercially-oriented MIV or local deposits as subsidised funding is then no longer necessary.

Second, *dual-objective microfinance* or commercially-oriented microfinance investment vehicles aim to strike a careful balance between social and financial returns. While they seek to realise a financial return *eventually*, they are satisfied with this return being below that of market-based returns. Key investors are made up of private donors, development agencies and socially responsible investors.

Third, *commercial funds* have a predetermined financial target rate of return while social returns play a secondary role. The parties involved mainly consist of individual and institutional investors. However, during the initial phase also development agencies and private donors might act as facilitator or risk taker by e.g. investing in subordinate tranches. Commercial funds primarily invest in loans to MFIs and only few funds hold small equity stakes. Generally, commercial funds base their investment decisions on more formal criteria and strive to raise the degree of transparency of their investments by requiring ratings or comprehensive financial reports of MFIs. With the increasing commercialisation of the microfinance

Minimum fund size of around USD 20 m to USD 30 m necessary

IFIs acting as catalyst to crowd in private investors

The recently issued CDO **db Microfinance-Invest Nr. 1** comprises a total volume of EUR 60 m and was issued in July 2007. The CDO provided sub-ordinated debt funding to 21 MFIs. The senior tranche was rated investment grade (BBB by Fitch) and has a coupon of 6.0% p.a. while the mezzanine tranche has a coupon of 9% p.a. Investors were made up of various individual, institutional and IFI investors. For the first time Deutsche Bank as a commercial investor purchased the junior tranche.

A MFI's social and financial objectives need to be carefully balanced. It is often feared that a greater degree of formalisation and the inclusion of private funding might distract MFIs from reaching their original social objectives. While this issue is currently discussed intensively within the microfinance sector, past evidence has revealed that most MFIs were able to carefully combine development objectives with financial viability.

sector commercial funds are expected to raise their proportion of sub-debt and equity stakes over the medium term and to become more open also to investing in riskier parts of MIVs such as equity pieces.

Experts estimate that an average fund size of at least USD 20 m to USD 30 m is required to run a fund in a financially sustainable manner. In practice, various funds lack this minimum size with a survey²³ revealing that in 2004 more than three-quarters of the 38 MIVs included in the analysis were below the size considered necessary for financial sustainability. However, of the funds larger than USD 20 m the majority is commercial or quasi-commercial while socially driven funds are significantly smaller in size. Arguably, for the latter an efficient size is not as critical as for commercial funds.

4.3 Interplay of private and public investors and the threat of crowding out

Official development institutions that lend to poor people – either directly or indirectly by supporting MFIs – generally do so in response to a market failure, i.e. in market segments, in which market-based solutions are not feasible. In this sense, IFIs also use their expertise in MFI funding and risk absorption to lay the foundation for private-sector involvement by actively supporting transactions through guarantees or purchase of first loss pieces of a CDO. E.g. for the Global Commercial Microfinance Consortium, which was issued as the first local currency CDO, USAID²⁴ provided a second loss guarantee and DFID²⁵ provided a first loss guarantee through grant capital of USD 1.5 m. This approach allows the 'crowding in' of private-sector investors, e.g. around thirteen institutional investors invested in this transaction.

Ideally, joint transactions allow synergies in funding and risk allocation between private and public investors and, ultimately, enable transactions that would otherwise not become feasible. Hence, commercial and social funds can be complementary in their investment approaches. Further examples include the joint funding of the European Fund for Southeast Europe or the guarantee from the International Finance Corporation for a bond issue of Compartamos in 2004. Thanks to this guarantee the rating of the bond could be increased and pension funds were enabled to invest in the Compartamos issue. In total, there is an estimated 60 MIVs that benefit from IFI involvement.²⁶ Over time, as MFIs mature, they will increasingly be able to attract private investors even for the riskier parts of their refinancing. Public investors would then focus their activities on lower-tier, less-developed MFIs nurturing their path to market-based funding.

However, some experts argue that this clear assignment of roles between private investors and IFIs has become increasingly blurred in recent years with IFIs targeting the strongest and most successful MFIs, refraining from investing in riskier and smaller MFIs and, hence, failing to develop the next generation of MFIs. As a result, some private lenders might be crowded out by public development

²³ The survey was conducted jointly by CGAP, the Mix and Goodman on behalf of ADA in Luxembourg in 2004.

²⁴ The United States Agency for International Development USAID took a second loss position of USD 15 million.

²⁵ The Department for International Development (DFID) is part of the British government and in charge of managing Britain's aid to developing countries.

²⁶ See KfW / FMO.

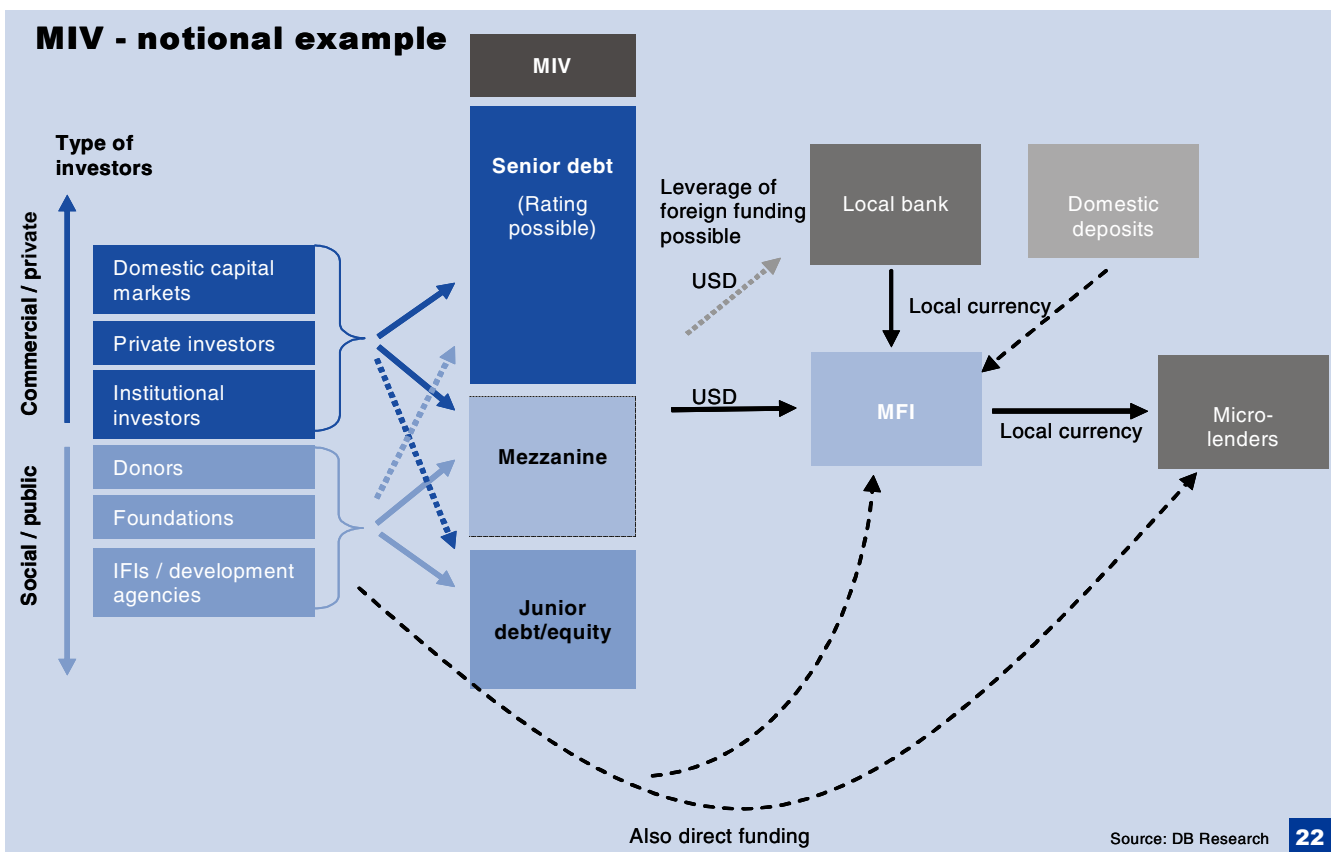
One of the larger early commercial collateralized debt obligations was issued by **Blue Orchard Loans for Development** in April 2006 ('BOLD 1') with a volume of USD 40 m. This transaction was structured in five tranches and attracted around 90 investors. The senior notes benefited from a 75 percent guarantee of the Overseas Private Investment Corporation. A second CDO ('Bold 2') with a volume of USD 110m was issued in May 2007 providing fund-ing to around 20 MFIs in 12 countries. The first two senior tranches were rated AA and BBB by S&P.

The first commercial fund to finance MFIs in local currency was the **Global Commercial Microfinance Consortium** sponsored by Deutsche Bank. This transaction was made up of USD 63.4 m senior debt and sub-debt, equity and grant capital of USD 17.3 m. Senior investors include AXA, Munich Re, Merrill Lynch and Deutsche Bank.

agencies and the traditional and economically warranted roles of private and public investors become reversed to a certain extent. A study of funding patterns by Microrate came to the conclusion that IFIs are not acting in a complementary manner to private investors; instead, by increasing their direct funding to top-rated MFIs by around 88% in 2005 some IFIs crowded out private investment. Private investors willing to invest in these MFIs were unable to fully compete with IFIs on funding terms.²⁷

4.4 MIVs typically structured as debt instruments

As MIVs invest in geographic regions that are usually below an investment grade rating it is crucial to partly offset some risks for certain types of investors. This is usually achieved by structuring debt products into tranches, each one of which caters for the specific risk appetite of an individual class of investors. Senior tranches can be rated and are usually acquired by more risk-averse investors that often seek both social and financial returns; junior tranches are often acquired by investors that primarily target social development returns and, hence, are willing to bear a higher degree of risk, e.g. IFIs. In case a loan to an MFI defaults, the junior tranche serves as a loss cushion while senior tranches remain unaffected until the capital of subordinated parts of the CDO is exhausted. The coupon of a senior tranche that is rated investment grade might be around 6.0% p.a., while the mezzanine tranche might have a coupon of 9.5% p.a. (market conditions as of July 2007). However, as mentioned in the previous section the traditional role assignment of IFI and private-sector investors might change over the medium term as commercial investors maybe become increasingly willing to invest in first loss pieces of CDOs (under the assumption that



²⁷ See "Role Reversal", MicroRate.



market investment conditions of foreign investors stay sound, risks are adequately priced and that market infrastructure will develop further).

5. The risk-return profile and investors' portfolio diversification

5.1 The dual return profile

Measurement of social impact

There is no single definition of social return but rather a set of single indicators that aim to measure the extent poverty is alleviated thanks to microfinance. Some of these social performance indicators include amongst others:

- Increase in the income level of micro-borrowers
- Number of microloans generated thanks to a single fund

MFIs compared to commercial banks

- Higher cost/income ratio due to a large amount of small loans on short maturity
- Credit interest rates are higher due to the nature of micro-lending
- Uncollateralised loans
- Despite non-standard collateral default rates are very low
- Stronger profitability
- Largely stable returns over the economic cycle
- Low correlation of earnings to mainstream capital markets and domestic economy
- Strong social development impacts of microfinance investments

The selection process of MFIs

The asset manager of an MIV is in charge of selecting the MFIs that a vehicle would like to lend to. The concrete investment terms are evaluated with regard to the amount, timing, structure and collateral of the funding provided. The criteria applied for selecting MFIs are usually made up on the one hand of a country's risk assessment in terms of its macroeconomic situation, its legal, tax and investor protection system. On the other hand, various other criteria apply to assess the suitability of an MFI for funding such as the MFI's strategy, management capabilities, client structure, financial and social performance.

MFI investments enable investors to adopt a dual investment approach that pays attention to both social and financial returns. From a social point of view, investors contribute to alleviating poverty in developing countries by fostering the development of the microfinance sector, e.g. by narrowing down the funding gap and by providing stable and full currency-hedged funding for MFIs. This enables MFIs to strengthen their capital structure and some very developed MFIs can sometimes even leverage foreign subordinated loans.²⁸ Ultimately, more microloans can be granted to micro-borrowers and, on the whole, poverty in developing countries may be alleviated.

From a financial analysis point of view, microfinance attracts private investors mainly for two reasons: First, the most advanced MFIs ('self sustainable' MFIs) exhibit an attractive financial return. In a sample of around 704 MFIs published by The MIX²⁹ the leading 176 MFIs exhibited RoE of 17.2% – in other words, an RoE that, in some countries, is even higher than that of conventional banks. In addition, these returns are largely stable over the economic cycle. It needs pointing out, though, that RoEs as high as the ones mentioned are realised by the largest and most advanced MFIs only, whereas the RoE for a broader, more representative sample of MFIs is around 4% only.³⁰ Furthermore, default rates of MFI loan portfolios in the MIX sample are lower than those of commercial banks in domestic countries with MFIs exhibiting an average loan write-off ratio of only 1.1% in 2006. For investors, strong credit quality of micro-borrowers is attractive as it also strengthens the financial position of a whole MFI. Ultimately, the profitability of their investments can be increased and the probability that original investments are fully paid back at maturity is also raised. Second, some preliminary research even indicates that microfinance investments might be conducive to an efficient diversification of portfolios (see chapter 5.3).

5.2 The risk profile of microfinance

MFI investments are medium to long-term emerging market investments that bear a distinct set of risks for investors. On the one hand, investors face risks that are inherent to the nature of the microfinance sector, while on the other hand various risks emanate from the country risks typical of developing markets.

With regard to country risks, investors need to be aware of the fact that legal, institutional and macroeconomic situations in developing countries differ substantially from those in developed countries. A number of risks for investors might emerge from lower standards of financial reporting, greater political instability, exchange rate controls, currency devaluations, liquidity crunches, restrictions on

²⁸ In some rare cases even by a factor of up to 12.5.

²⁹ See 2006 MFI Benchmarks as published in the MicroBankingBulletin by The MIX.

³⁰ See 2006 MFI Benchmarks as published in the MicroBankingBulletin by The MIX.

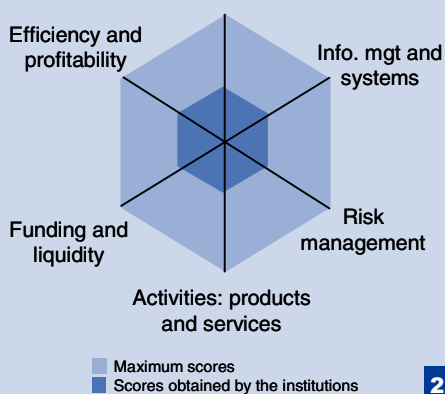
Ratings of MFIs

Ratings constantly gain importance in the investment process as they help to make risk profiles of MFIs comparable across countries and market segments in a standardised manner.

As microfinance institutions are characterised by specificities not common to mainstream capital markets, international rating agencies face the challenge to adequately reflect these special circumstances in their credit risk evaluation. The result is a departure from the conventional methodology used in mainstream capital markets. In early 2007 Standard and Poor's launched a working group to elaborate recommendations for the credit risk analysis of MFIs. In 2005, over 300 MFIs had already been rated by specialised rating agencies such as MicroRate or national rating agencies.

Rating process

Notional example



Rating criteria

- Economic and industry risk
- The relevant economy's strength, diversity, and volatility and the government's ability to manage the subsectors of the economy relevant to the MFI's operations.
- Management and strategy
- Ownership and governance
- Accounting and financial reporting
- Operational risk and enterprise risk management
- Credit risk and its management
- Market risk and its management
- Funding and liquidity
- Capital
- Earnings

the transfer of private capital or on investments of foreigners. In case one of these risks materialises the value of a microfinance investment might be impaired.

With regard to risks inherent to MIVs, investors first of all need to be aware that MIVs are illiquid instruments that sometimes do not pay recurrent dividends or yields. Second, holdings in MIVs usually have no market price as these vehicles are usually not listed on a regulated market or even a stock exchange. For valuation purposes usually net asset values are used.

Third, MIVs might be exposed to local currency risks depending on whether currency risks are transferred to MFIs or even to micro-lenders. In developing countries, currency risks are usually not hedged as hedging instruments are simply not available, illiquid or too expensive. Some relief might be achieved by diversifying currency across countries. Depending on the repayment agreement between MIVs and MFIs these currency risks are to be born by MFIs (repayment is made in a hard currency) or the MIVs (MFIs repay loans to MIVs in a local currency). Fourth, the majority of MIVs (estimated at around 70%) are denominated in US dollars which implies additional currency risks for European investors. Fortunately, at least these currency risks can be hedged effectively for European investors. Fifth, funds invest or lend money to MFIs that are non-listed and sometimes not regulated financial institutions. Investors need to be aware that some MFIs might not be regularly monitored by a local financial authority. Lastly, the ability of micro-borrowers to repay microloans might be undermined by natural disasters or price slumps for local agricultural products and collateral is not available. These uncertainties can be much larger than in developed countries.

5.3 Enhanced portfolio diversification thanks to microfinance? Preliminary evidence

The categorisation of an investment in terms of risk and return is essential for investors to evaluate the financial impacts of a potential investment, both from a solo and portfolio perspective, before investment decisions are made. For microfinance, there is growing evidence that it not only offers investors an attractive risk and return profile but might also be conducive to the efficient diversification of investors' portfolios.³¹ Some preliminary findings indicate that microfinance investments exhibit a very low correlation to the returns in mainstream capital markets and the general domestic economy in developing countries. This especially holds true when MFIs are compared to conventional banks in developing countries. Some experts³² draw the preliminary conclusion that the return of microfinance is detached to a large extent from major markets and macro-economic developments that would impact on conventional banks. This may be so for a couple of reasons.

First, the business models of MFIs differ substantially from those of conventional (retail) banks. MFIs' clients act as micro-borrowers who, by definition, are less integrated into the formal economy and are characterised by a higher capacity to adapt to shifting economic fortunes. In addition, micro-borrowers are less dependent on imports and currency fluctuations as they primarily use domestic products and services – in contrast to commercial banking clients. Second,

³¹ See Menichetti / Oehri / Fausch (2006).

³² See e.g. Krauss and Walter (2006) or Gonzalez (2007). Gonzalez concludes that microfinance portfolios have a high resilience against macroeconomic shocks.

Asset allocation at a glance

Portfolio managers strive to maximise an individual investor’s return for a given level of risk by achieving an optimal degree of diversification of assets. The risk and return profile of an individual investment is usually benchmarked against an established asset class, e.g. a German equity mutual fund is usually benchmarked against the DAX index. As microfinance investments are not yet an established asset class and no commonly accepted benchmark is available, investors often compare MIVs on the basis of their perceived risks to other asset classes which are considered similar in terms of risk and returns. For instance, investors often compare MIVs to similar emerging markets small cap investments.

Efficient portfolio diversification

The concept of efficient portfolio diversification is based on the work of Nobel Prize laureate Harry Markowitz. His research aims to structure risk-return-efficient portfolios that are at the same time utility optimised. Markowitz analysed correlations of different securities when he observed that a portfolio’s diversification can spread risks and compensate for fluctuations in returns within a portfolio. The efficient portfolio has an optimal risk-return profile when a maximum of return is achieved for a given level of risk. In a risk- return diagram, all optimal or efficient portfolios are positioned on the so-called efficiency curve.

Inclusion of microfinance in a portfolio

The inclusion of microfinance investments in a traditional portfolio of shares and bonds might enhance the efficient diversification of a portfolio. Graphically, the efficiency curve would be shifted to the left, i.e. a higher return can be achieved for a given level of risk.

microcredits usually have a shorter maturity and MFIs have closer ties to the borrowers than commercial banks have. As instalments are usually paid weekly or bi-weekly, MFIs can carefully monitor the repayment of microloans and adjust lending practices if necessary. This situation reduces the borrower specific risk exposure of MFIs. Third, MFI ownership structures differ significantly from commercial banks with MFIs being privately-held companies that usually have long-term owners that are less driven by market forces, e.g. profit and non-profit institutions with a long-term strategic interest in an MFI. Fourth, MFIs benefit from a continuous stream of funding by international development institutions. MFIs sometimes even enjoy support in cases of a general drop in local market liquidity. Lastly, with an average debt-to-equity ratio of 2.6³³, MFIs usually have a lower degree of financial leverage than commercial banks which reduces the volatility of earnings. However, it needs to be borne in mind that the more advanced MFIs display higher debt-to-equity ratios with the average being 5.8.³⁴

To summarise, microfinance as of today can be characterised as an emerging investment opportunity that – if added as a supplement – seems to be conducive to enhancing the efficient diversification of portfolios. Ultimately, there is some evidence that it might even evolve into an asset class of its own over the long run. Having said this, there is also evidence that the correlation of returns will increase over time, the more the microfinance sector is integrated in the domestic economy. Generally, we emphasise that research on these issues is still incomplete and further research is urgently needed to overcome existing shortcomings in data quality and methodological deficiencies.

Conclusion: Investment Highlights

Attractive Investment Proposition	<ul style="list-style-type: none"> • Market-based return • Defined exit strategy • Subordination option
Sound Industry Fundamentals	<ul style="list-style-type: none"> • Encouraging growth potential • Historically low delinquency rates, solid profitability & increasing self-sustainability • Resiliency in periods of market turmoil
High Social Impact	<ul style="list-style-type: none"> • Unbanked sector estimated at 1bn people • Funds will help strengthen the capital structure of MFIs thereby helping to build indigenous financial system • Offers fully hedged funding to MFIs in locally demanded currencies

³³ See 2006 MFI Benchmarks as published in the MicroBankingBulletin by The MIX.
³⁴ ibid.

6. Conclusion

The microfinance sector is currently undergoing a significant transformation from a traditional donor-driven NGO-dominated framework towards a greater degree of capital market involvement while at the same time sticking to its original mission of poverty alleviation and social development. This study has demonstrated that a greater degree of institutional and individual investor involvement is not only a key prerequisite to narrow the immense funding gap of MFIs and to scale up microfinance but also offers private-sector investors an attractive dual-nature investment opportunity that unites social and financial returns. Apart from poverty alleviation, microfinance offers stable financial returns over the economic cycle, low loan portfolio default rates and potentially low correlations to mainstream capital markets.

Although the microfinance sector currently has total estimated loans of USD 25 bn outstanding it is unable to serve more than a fraction (~100 m) of the sector potential demand of roughly 1 bn micro-borrowers. This situation translates into an immense gap that approximately amounts to USD 250 bn. Closing the funding gap will remain a huge challenge for a long time. On the one hand it can be addressed by joint investment initiatives in notably tier 1 MFIs of public and private-sector investors, with IFIs leveraging commercial funding by investing in junior and intermediate tranches of MIV's funding instruments. On the other hand, IFIs might focus on providing riskier funding to smaller tier 2 MFIs while, over time, an increasing number of institutional investors might become willing to invest in more junior tranches of CDOs and, hence, crowd in further social and commercial investors for less risky parts of a CDO that invest in tier 1 MFIs in the long term. From a normative point of view, the full development of local financial systems should be aimed for that would enable MFIs to refinance themselves from retail deposits, bank loans and access to domestic capital markets.

For the time being, microfinance constitutes an emerging investment opportunity that institutional and individual investors have only just started to explore. Yet, we see valid reasons that, by 2015, private-sector investors will have raised their investments in microfinance significantly to around USD 20 bn. Including IFI funding estimated at USD 5 bn by 2015, total foreign funding is expected to increase to roughly USD 25 bn. Our forecast is mainly based on the following assumptions. On the one hand, microfinance investments will gradually become an established niche investment product that will increasingly attract retail investors and benefit from a general strong rise in SRIs. Furthermore, it will appeal to a wider range of commercial investors as it might even be conducive to efficient portfolio diversification. On the other hand, a critical mass of MFIs will become capable over time of absorbing foreign funding.

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Top 50 MFIs ranked by outreach

Rank	MFI	Country	Number of active borrowers	Gross loan portfolio USD	Return on equity	Write off ratio	Average loan size USD
1	Grameen Bank	Bangladesh	6,287,000	482,104,480	22.15%	2.06%	77
2	ASA	Bangladesh	5,163,279	305,268,840	26.08%	0.25%	59
3	VBSP	Vietnam	4,695,986	1,149,165,032	(13.69%)	--	245
4	BRAC	Bangladesh	4,550,855	350,160,812	23.27%	0.63%	77
5	BRI	Indonesia	3,455,894	3,035,685,400	129.96%	0.83%	878
6	Spandana	India	972,212	89,837,686	22.00%	2.65%	92
7	SHARE	India	826,517	91,683,453	15.31%	0.00%	111
8	Caja Popular Mexicana	Mexico	643,659	941,664,645	29.00%	0.16%	1,463
9	Compartamos	Mexico	616,528	271,098,542	57.35%	0.57%	440
10	BANTRA	Peru	563,805	345,920,510	2.47%	10.54%	614
11	Banco Popular do Brasil	Brazil	553,164	32,050,077	(161.30%)	52.51%	58
12	ACSI	Ethiopia	536,804	78,235,885	25.55%	0.07%	146
13	SKS	India	513,108	63,247,733	9.22%	0.63%	123
14	Bandhan	India	449,304	29,998,368	131.21%	0.00%	67
15	AML	India	416,829	45,333,689	33.27%	0.43%	109
16	MFI	India	410,329	50,640,686	78.00%	0.00%	123
17	Al Amana	Morocco	405,558	219,047,933	23.51%	0.49%	540
18	KAS	India	394,462	27,753,142	173.04%	0.00%	70
19	DECSI	Ethiopia	392,693	85,304,139	19.31%	0.37%	217
20	Capitec Bank	South Africa	368,854	124,945,830	18.65%	21.69%	339
21	Zakoura	Morocco	316,177	83,375,046	16.56%	0.49%	264
22	RDRS	Bangladesh	307,482	10,625,496	1.67%	6.40%	35
23	CAJA Libertad	Mexico	290,328	488,526,623	45.13%	0.07%	1,683
24	JCF	Bangladesh	274,899	22,906,777	39.50%	0.06%	83
25	BURO	Bangladesh	263,503	22,683,151	17.35%	0.23%	86
26	Equity Bank	Kenya	239,541	106,374,014	40.36%	0.54%	444
27	Khushhali Bank	Pakistan	236,917	35,351,623	(12.26%)	7.14%	149
28	CREDIAMIGO	Brazil	235,740	88,775,043	63.66%	0.87%	377
29	MiBanco	Peru	221,802	320,419,273	34.44%	4.49%	1,445
30	Banco Estado	Chile	219,069	569,777,574	9.01%	1.84%	2,601
31	Cashpor MC	India	201,692	19,947,354	991.53%	0.07%	99
32	BISWA	India	200,912	21,614,981	29.92%	0.00%	108
33	BASIX	India	198,282	31,982,532	8.14%	0.76%	161
34	BFL	India	185,448	16,557,348	15.22%	0.00%	89
35	GV	India	181,328	18,409,581	17.02%	0.73%	102
36	Mahasemam-SMILE	India	175,089	16,420,804	6.15%	0.10%	94
37	TSKI	Philippines	173,002	14,705,220	34.22%	4.76%	85
38	WWB Cali	Colombia	164,000	146,331,732	21.13%	0.89%	892
39	Shakti	Bangladesh	162,219	15,377,343	18.31%	0.00%	95
40	ACLEDA	Cambodia	159,930	158,076,146	16.65%	0.12%	988
41	CARD NGO	Philippines	159,673	16,104,458	26.13%	0.00%	101
42	Banco Solidario	Ecuador	149,490	243,562,592	2.80%	2.06%	1,629
43	AMRET	Cambodia	141,957	17,595,944	25.21%	0.04%	124
44	WDB	Sri Lanka	138,749	50,456,004	15.30%	--	364
45	FMM Popayán	Colombia	137,855	80,864,332	18.24%	0.44%	587
46	Kashf	Pakistan	136,015	25,190,453	16.18%	0.18%	185
47	FBPMC	Morocco	131,781	70,130,454	20.45%	0.00%	532
48	TSPI	Philippines	125,980	14,226,447	11.04%	1.43%	113
49	CMAC Trujillo	Peru	124,087	193,304,229	32.42%	1.08%	1,558
50	Sarvodaya Nano Finance	India	116,625	14,740,161	(1.20%)	0.00%	126

Source: MIX Market

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Micro-borrowers ranked by country

Country	Total Population (m)	Poor people (m)	Borrowers (total, '000)	Penetration rate for microfinance borrowers / poor (%)
Bangladesh	142	70.7	24,757	35%
India	1,090	311.7	10,886	3%
Indonesia	221	59.9	6,421	11%
Vietnam	83	24.0	6,116	25%
Mexico	103	18.1	2,615	14%
Peru	28	14.9	2,036	14%
Philippines	83	30.6	1,919	6%
Colombia	46	29.2	1,449	5%
Sri Lanka	20	4.9	1,422	29%
Ethiopia	71	31.5	1,420	5%
Nigeria	132	45.0	1,392	3%
Morocco	30	5.7	1,046	18%
Pakistan	156	50.9	926	2%
Brazil	186	40.0	915	2%
Nepal	27	8.4	707	8%
Kenya	34	17.8	692	4%
Ecuador	13	6.1	632	10%

Source: "How Many MFIs and Clients are There?" The MIX

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