The Role of International Capital Markets in Microfinance

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Introduction

In 2004, international capital markets awoke to the attractiveness of investing in microfinance. Since then, debt and equity security issues for microfinance have raised an estimated $1 billion from private sector financial institutions seeking commercial returns.[1] The deals have taken forms that are familiar in developed markets such as initial public offerings, bond issues, collateralized debt obligations, and securitizations of the underlying microloans. In addition, private sector debt and equity microfinance funds have sprung up -- for investors who prefer to give discretion to professional managers-- and are now thought to control more than $2 billion, of which more than $300 million is "mainstream" commercial investment.[2]

Overall, cross-border investment in microfinance surged to $1.4 billion in 2006, triple the rate only two years previously. [3] While traditional microfinance funders -- non-profit organizations, governmental development agencies and individuals -- are contributing to this surge [4], the novelty since 2004 is the participation by private sector institutional investors seeking full market returns. These mainstream commercial investors, most located in Western Europe and the USA[5], are driving the opening of capital markets to microfinance.

How and why commercial mainstream investors have come into microfinance and the likely evolution of capital markets funding for microfinance is the topic of this paper.[6]

The Need for Capital Markets Funding in Microfinance

When properly conducted, microfinance is a profitable, low risk and expanding financial activity. For example, from January to June 2007, the 26 widely dispersed microfinance institutions (MFIs) in Microfinance Securities XXEB, a $60 million collateralized debt obligation sponsored by Developing World Markets, had an aggregate annualized return on equity of more than 25% and were growing their loan portfolios by more than 50% on an annual basis, while their "PAR- 30" (total amount of "portfolio at risk," or loans with payment delays, beyond 30 days) was only 2.9%[7]. This is a performance that any commercial bank would be proud to announce.

Already, the number of borrowers served by MFIs globally is estimated at 100 million.[8] With an average loan size of $170, the total market size is estimated at $17 billion. Yet the potential demand is 15 times the current market -- estimated at 1.5 billion, or half the 3 billion global working poor. Thus microfinance represents a total commercial market of more than $250 billion.

Currently more than ¾ of the $17 billion funding total is raised from domestic markets. However, this number is skewed by the amount – almost $8 billion – coming from deposits in the few countries where MFIs are allowed to take deposits. Most of the estimated 10,000 existing MFIs are not deposit-taking institutions-- and are unlikely to

become so, given the cost and complexity of complying with regulations typically applied to institutions taking deposits from the public. Future funding for MFIs is thus unlikely to be sourced mainly from deposits.

Domestic emerging country commercial banks, which should be major funding sources for MFIs, are typically averse to lending to them (see "Local Currency"). Moreover, capital markets in most developing countries are thin and the major institutional players are averse to or legally constrained from significant investment in microfinance. For these reasons, it is unlikely that domestic sources in emerging countries will generate more than a fraction of the more than $200 billion that will need to be raised to satisfy potential demand.

Moreover, while non-commercial investors account for 80% of the $4 billion in funding now sourced internationally, this is a legacy of the origin of microfinance in charitable and officially sponsored development activity. As MFIs' appetite for capital grows exponentially, it is unlikely that government agencies and non-profit organizations will increase their flow of funding proportionately: first, they will be faced with competing demands for assistance; and, second, they will begin to question whether their mission is best served by funding financial enterprises that are profitable and are increasingly transforming into privately owned companies able to attract commercial investment. (However, this realization may not have begun to sink in yet -- see discussion of "role reversal" below in "The Contribution of Non-Commercial Investors".)

The only available source of funding for commercial lending of this magnitude is the international capital markets. Already, microfinance investment vehicles, which typically include private sector institutional investors, are growing their investment portfolios at 233% per year, while official development agencies are lagging at 150%.[9] For the international capital markets, funding a $200 billion industry is routine.

<u>From Fund to CDO</u>

The first [10] microfinance fund to reach beyond socially responsible investors was established in 1998. The Dexia Microcredit Fund, sponsored by Dexia, a Franco-Belgian bank, and advised by BlueOrchard Finance SA, based in Geneva, offers investors a return above their cost of funds (typically 1-2% over a benchmark rate[11]) and an ability to redeem their investments. In November 2007, funds under management were $233 million[12].)

As a fund (a Luxembourg-based SICAV[13]) offering redemption rights to investors, Dexia needs to keep its maturities to MFIs relatively short and a large portion of its assets in cash (typically 20% or more). This limits returns to investors and the attractiveness of Dexia's funding to MFIs, many of which need longer-term maturities on a portion of their liabilities to better manage risk.

In 2004, after six years of operations and with $45 million under management, BlueOrchard desired to provide longer-term funding to MFIs and more attractive rates to investors. They partnered with Developing World Markets (DWM), an emerging markets

fund manager and advisor based in Connecticut, to create the first collateralized debt obligation (CDO) in the microfinance industry. In this transaction, loans were made to MFIs for seven years from the proceeds of issuing fixed rate bonds. As the bond investors were not entitled to their principal until the bonds' maturity, there was no need to keep large quantities of cash on hand to deal with redemptions. Furthermore, MFIs had use of the funds for the full period with no interest rate uncertainty.

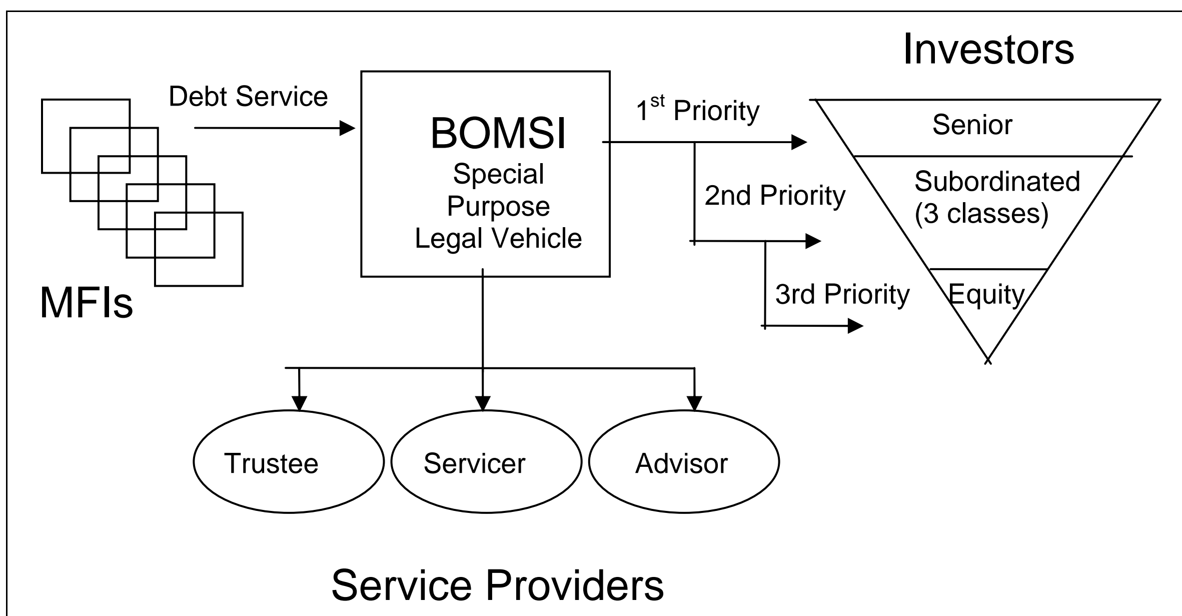
The CDO was named BlueOrchard Microfinance Securities I (BOMSI). The first closing of $40 million occurred in July 2004 and a subsequent closing of $47 million was held in April 2005.

This transaction looked very different from any existing microfinance investment vehicle and it marked the beginning of mainstream capital markets investment in microfinance. The major innovations in microfinance funding pioneered by BOMSI include:

First, BOMSI is not a fund – investment decisions are not handed off to a professional manager. There is no asset substitution or active management. Investors in BOMSI have a single source of repayment, a static pool of 14 loans to MFIs taken on at closing. When investors came into BOMSI, they did so on the basis of their own assessment of the credit risk of the underlying MFIs – and they have to live with this decision for seven years.

Legally, BOMSI is a special-purpose vehicle (SPV)– a limited liability corporation – registered in the business-friendly state of Delaware. The vehicle is limited by its constitutional documents solely to servicing its loans to MFIs and repaying its creditors. Cashflows from debtors to creditors pass transparently through the vehicle. When the loans pay off and the liabilities mature, BOMSI will make its final payments to investors and be liquidated. (See Diagram 1)

Diagram 1: Cashflows from Loan Repayments



Second, BOMSI's funding is stratified in five levels of risk – senior, three classes of subordinated, and, at the bottom, equity. (Both BlueOrchard and DWM are equity investors in BOMSI.) The cashflow from BOMSI's loans to MFIs is applied according to a strict order of precedence, known in structured finance as the "cash waterfall". Senior investors are paid completely first, then the other classes in order of precedence. Equity investors do not get a current return on their investment but if, after all MFI loans have reached maturity and all other investors have been repaid, there is residual cash left in the BOMSI SPV it will be allocated to the equity investors.

Third, BOMSI's investors do not hold units in a fund and have not made loans to BOMSI. Rather, they have purchased securities – bonds and equity interests. As we will see later, this distinction was important in attracting institutional investment.

These elements are common to CDOs and other forms of securitization in more-developed asset classes such as mortgages, corporate loans, auto loans or student loans. But these are asset classes with substantial data going back a number of years describing default performance under a number of economic scenarios. In the microfinance industry, by contrast, MFI write-off policies vary widely and data on microloan defaults typically are not recorded consistently by different MFIs. Moreover, these data typically are neither independently audited nor rigorously modeled to determine likely performance under varying circumstances. (Although recently, a non-profit research firm, Center for the Development of Social Finance, did a static pool analysis of more than 600,000 microloans from two MFIs – SKS in India and IMON in Tajikistan – using developed world methodology, in order to demonstrate that at least some MFIs are rigorous enough in their record keeping to permit this style of analysis.[14])

Moreover, BOMSI securitized loans to only 14 institutions in nine countries – much less diversification than typical CDOs or other securitization transactions in developed markets, where the asset pool may comprise many hundreds or thousands of loans.

Given these factors, implementing a CDO for the microfinance industry required changing the way investors viewed both microfinance and the CDO product.

<u>Introducing Commercial Investors to the Microfinance CDO</u>
Despite the relative paucity of data and diversification, DWM, which took primary responsibility for structuring the transaction, encouraged investors to compare BOMSI to mainstream commercial investments. DWM held the view that to attract sufficient investor interest, BOMSI had to reach beyond the circle of funders primarily motivated by social, not financial, returns.

To distinguish BOMSI as a commercial investment – different from investment funds, donations to NGOs or other means then available to support microfinance -- DWM highlighted the following:

- *Low default rate in MFI loan portfolios*. All participating MFIs reported default rates below 1%. Although reporting systems were not consistent or their results independently verified, the professionalism and the track record of the MFIs themselves added credibility to their findings.

- *Favorable risk-return ratios*. The tiered capital structure enabled BOMSI to offer high returns to the higher-risk tranche investors, while providing the lower-risk investors with a substantial degree of collateralization, enabling them to feel satisfied with a low credit spread over the benchmark Treasury bond because their notes had the highest priority of repayment. Investors were not asked to discount their return expectations in view of the presumed social value of microfinance. With a variety of securities offering different risk and return parameters, DWM was able to segment the international investor base and thus appeal to a wide spectrum of potential investors.

- *Familiar investment instruments.* BOMSI debt investors purchased bonds drafted in language, and carrying features, common to commercial bonds. They benefited from the appointment of a trustee to safeguard their interests, as is the case in most bond issues. The bonds are transferable and each series is endowed with a unique CUSIP[15] number which facilitate recordkeeping, valuation and permitted transfers. (However, the bonds were privately placed, are not listed, and are not intended to be actively traded.) These features helped to ensure that investors had a high comfort level with the form of the investment and could focus clearly on the underlying risk and return.

In one important respect BOMSI was differently structured from other commercial transactions: Overseas Private Investors Corporation (OPIC), a United States government development agency, purchased the most senior tranche of securities. Note that OPIC's ownership of the senior tranche conveyed no protection to more junior investors – by virtue of the cash waterfall, they were exposed to risk in the MFI loan portfolio ahead of OPIC. However, the participation by a large and well-respected development agency – often referred to as "the halo effect" -- encouraged investors who otherwise might have been unwilling to consider the transaction.

Growing Participation by Commercial Investors

In the event, the first closing of BOMSI attracted only $1.5 million, or 4% of the capital raised, from private sector investors seeking a full market return (see Table 1 below). However, by the time of the second closing, nine months later in April 2006, interest in the transaction had spread and commercially-motivated institutional investors accounted for 41% of the amount invested. Moreover, the commercial investment came from a wider spread of investor types.

A little over a year later, in June 2006, DWM closed its third CDO transaction, Microfinance Securities XXEB (MFS), for which it was sole sponsor. This $60 million securitization of loans to 26 MFIs had more investment primarily commercially-motivated than primarily socially-motivated. Moreover, for the first time commercial

investors (besides the sponsor) purchased equity. By this time, not only had market familiarity with microfinance grown, but DWM had also obtained an investment grade rating –A -- on the MFS senior notes from MicroRate, a specialized microfinance rating agency. This heightened commercial investors' comfort with the senior tranche. In addition, DWM had sponsored a study indicating that microfinance is less correlated to economic downturn than other emerging markets assets, making portfolios including microfinance, in theory, less volatile. (See below, "On the Path to an Asset Class".) This development was of interest to commercially-motivated investors.

The table below shows the amount of investment in three CDO transactions contributed by institutional investors seeking full market returns, with socially positive impact a desirable additional benefit. The remainder of the investment came from investors whose primary motivation was social – thus, for these, financial return was of secondary importance.

Table 1: Commercially Motivated CDO Investors by Type and Risk Category

Investor Type	BOMS 1 USD	BOMS 2 USD	MFS USD	Total USD
Bank	500,000		9,139,640	9,639,640
Money Manager	1,000,000	500,000	3,036,000	4,536,000
Insurance Company		500,000	1,000,000	1,500,000
Pension Fund		18,000,000	20,500,000	38,500,000
University Endowment		100,000		100,000
Total	1,500,000	19,100,000	33,675,640	54,275,640
% of Total Investment	4%	41%	56%	37%

Risk Category	BOMS 1 USD	BOMS 2 USD	MFS USD	Total USD
Equity			1,500,000	1,500,000
Junior (1)	500,000	600,000	125,320	1,225,320
Mezzanine (2)	1,000,000	18,500,000	1,125,320	20,625,320
Senior			30,925,000	30,925,000
Total	1,500,000	19,100,000	33,675,640	54,275,640

Notes
(1) For BOMS 1and 2, Subordinated Notes C and B
(2) For BOMS 1 and 2, Subordinated Notes A
Source: DWM

High net worth individuals (HNWIs) constituted 10% of the investment amount in the first BOMSI close. (They are not shown in the table above as we do not characterize them as commercial investors.) This percentage fell in the second close and by the closing of MFS, HNWIs as a group were down to under 5% of the total capital invested.

While there is doubtless a significant potential market among HNWIs, and among retail investors generally, for microfinance risk, financial institutions are the bellwethers as they have greater sophistication, more resources and stronger tolerance for volatility and illiquidity.

The market for microfinance CDOs has continued to grow. Notably, BlueOrchard has sponsored two more CDOs, with Morgan Stanley as placement agent, in April 2006, and May 2007, raising $99 million and $110 million, respectively. The entrance of Morgan Stanley, a "bulge bracket" investment bank, is another signal that microfinance funding is gaining credibility as a capital markets activity.

However, in the latter half of 2007, and continuing into 2008, the failure of a number of CDOs based on sub-prime mortgages in the USA made the very term "CDO" suspect in the eyes of many institutional investors and slowed the pace of growth in microfinance CDOs, even though the two types of assets are unrelated. As MFIs in microfinance CDOs have continued to perform well, capital markets intermediaries believe that receptivity among investors to this asset class will improve with increasing recognition of the inherent robustness of microfinance credit risk.

The relatively small volumes outstanding to date and the legal restrictions on trading privately-placed securities mean that secondary markets have not developed. Secondary markets should not be anticipated until the number of participants and amounts outstanding increase significantly, including several listed issues to act as price indicators for the markets.

CDOs vs. Funds

CDOs were the first non-fund capital markets products in microfinance for several reasons:

- MFIs typically have balance sheets that are too small to justify transactions of the scale required to access international capital markets-- aggregating MFI loans is necessary
- On the other hand, MFIs are used to borrowing internationally -- creating loans to international standards and packaging them into the asset side of a special purpose financing vehicle does not present insuperable challenges
- Capital markets investors predominantly demand instruments denominated in USD or euro (although the decline of the dollar and relative stability of many emerging market currencies in recent years are persuading investors to become more open to local currency risk). On the other hand, MFIs typically (but not always) lend in local currency; therefore, they are used to borrowing in hard currency and passing the risk on to their clients, whose demand for loans is relatively interest rate inelastic.
- Top quality MFIs are found throughout the emerging markets so geographic diversification can be achieved

- MFIs typically have very few loan products, so their risk on the asset side is relatively easy to analyze and can serve as a proxy for the underlying risk of the microborrower – highly diversified, highly granular – that strongly draws the typical capital markets investor.

Despite these factors, the relative scarcity of top-quality MFIs may act to brake the growth of this asset category. Of an estimated 10,000 MFIs worldwide, fewer than 100 have qualified for inclusion in a CDO to date. As market demand for CDOs grows, CDO arrangers will need to push farther "down the pyramid" to tap MFIs of lesser size and credit quality to generate assets. But, given the absence of data in the microfinance industry, as noted above, the analysis of risk in CDOs is not a function of statistics but rather of individual assessment of MFIs.

Investors find it difficult to make the time necessary to take individual credit decisions on numerous MFIs, especially given that the investment represents only a very small part of the investor's portfolio responsibility. Up to now, the presence in CDOs of MFIs that are mostly top-ranked – demonstrated either through ratings or performance over time – has served to ease these credit decisions. But with the top tier of MFIs growing "overbanked" (see below, "Is Microfinance Riding for a Fall?"), CDO arrangers will need to persuade investors to take risks on MFIs that are less known or appear financially weaker. Part of this persuasion may come through education – some smaller MFIs may be as credit worthy as their larger peers – but structural features such as credit guarantees or higher collateralization levels may become necessary in some deals to assuage investor concern.

While the CDO has broken new ground as an investment instrument in microfinance, investment funds have also been growing, and, as previously noted, are thought today to control more than $2 billion of capital. Of course, investment funds in microfinance are not new. Traditionally, low-return or no-return funds sponsored by non-profit organizations have been a major source of funding for microfinance. What is new is an emphasis on funds that actually offer a return to investors.

Even as of January 2008, of the 89 microfinance funds listed by MicroCapital, a microfinance news and research service, only 26 are characterized as actually seeking a financial return.[16]

Would-be institutional microfinance fund managers have several hurdles to overcome in persuading clients to invest:

- *Investment fee "cascades":* Institutions that manage funds make it a practice for their funds not to invest in other funds in order to avoid a buildup of fees that erodes the ultimate returns to their investors. Also, ceding investment discretion to others may appear to weaken their own standing as managers

- *Lack of transparency:* Investors may find it difficult to understand the pricing, volatility and performance of assets that exist primarily in funds, as the portfolio effects and the manager's screening activities could mask the underlying data

- *Liquidity*: Funds typically trade off liquidity (ie redemption) for return. If they provide an easy exit for investors, funds that invest in illiquid assets like microfinance will find it necessary to keep a relatively large percentage of their portfolio in low-yielding cash. Investors with long time horizons, as many institutions have, may prefer to invest directly in the underlying assets and run the liquidity risk.

However, funds do play an important role in the growth of capital markets access for microfinance. For example, many institutions will choose a fund as their first investment in a new asset category, relying on the manager's experience and knowledge of the market to enhance the investor's comfort level, as well as to gain familiarity with a multiplicity of MFIs through a single investment.

Microloan Securitizations

CDOs and funds that specialize in senior loans to MFIs are not the only capital markets insruments in microfinance. Direct securitization of microloans has attracted a great deal of interest, as microloans are relatively homogenous and vastly diversified. As the spectacular growth in recent years of asset-backed securities in international markets makes clear, investors welcome a "pure play" risk on granular financial assets. However, several important constraints are slowing the emergence of a true asset-backed notes product in microfinance:

- *Short maturity of microloans:* As opposed to 30-year mortgages, most microloans mature in less than a year and feature frequent amortization, so that all but the shortest-term microloan securitizations will need to incorporate a mechanism to roll over or substitute the underlying assets, which greatly increases the structuring complexity and administrative cost.
- *Origination risk.* Because the portfolio of underlying microloans needs constant replenishment, the ability of the MFIs continually to originate a sufficient volume of microloans is a significant additional risk.
- *Important role of servicer*: Successful MFIs cultivate intimate relationships with borrowers. Thus the MFI role in servicing securitized microloans is a critical element in the performance of the securitized portfolio. This makes it difficult to portray microloan securitizations as pure borrower risk. In effect the performance risk of the MFI servicer is a key component in the overall risk profile – and a difficult one to quantify, much less hedge against.
- *Government regulation:* Many emerging market jurisdictions have non-existent, rudimentary or inflexible regulatory structures that pose daunting obstacles to the legal structuring necessary to set up securitization vehicles, execute true sales of microloans, and transfer payments transparently to offshore investors.

Given these constraints, there have been only two case of microloan securitization in international capital markets (as opposed to CDOs that securitize loans to MFIs), and both of them have featured substantial credit enhancement by non-commercial investors.

- In May 2006, ProCredit Bank Bulgaria, a subsidiary of ProCredit Holding AG, sold €48 million of its loan portfolio to institutional investors in a deal rated BBB by Fitch Ratings. The European Investment Bank and KfW, the German development agency, provided partial guarantees.[17]
- Four months later, BRAC, a large Bangladesh MFI, held the first close of a program, backed by microloans, which will issue $15 million (local currency equivalent) of 6-month maturity notes twice a year for 6 years. The issue was rated AAA by a local rating agency. The partial guarantors were KfW and the Dutch development agency FMO.[18]

Equity

As MFIs mature and transform from non-profit organizations into companies, including in some cases regulated institutions, their need for equity grows. With the high return on equity and fast growth of the industry, the internal rate of return of MFI equity investment looks compelling on paper. Consequently, at least 15 private equity funds mobilizing $620 million (much of it from non-commercial sources, however), have been set up to address this need.[19]

The major uncertainty in commercial equity investment in MFIs is the small number of "exits," ie portfolio investment liquidations, to date. Most private equity investors look more to capital gains upon sale of their stakes and less to dividends as the principal component of their return. This is appropriate in microfinance as MFIs need to retain earnings in the business to finance further growth if they are to escape an endless cycle of sourcing fresh equity. But without a deep track record of successful exits, the private equity investor is entitled to puzzlement if not skepticism regarding the prospective return on MFI equity investment.

The only private equity fund that has gone through a complete cycle of investment and liquidation is ProFund Internacional SA, which from 1995-2005 invested approximately $20 million total in 10 Latin American MFIs for an annual average return of 6%. ProFund is of interest here not for its financial returns – it was sponsored by socially motivated investors and did not set out to maximize profits – but for its success in realizing all 10 exits within its allotted 10-year life.[20]

All but one of ProFund's exits came from sales to shareholders or sponsors of portfolio MFIs, several of them pursuant to a put (ie, a contract requiring one counterparty to purchase an asset at a specified price from another party at the seller's option) or pursuant to an agreement among existing shareholders. While effective in the case of ProFund, exits to insiders (management, major shareholders and sponsors) are worrisome to private equity investors if they are the only feasible means of liquidating investments. Investors prefer a mix of mechanisms including those that bring in third party buyers, such as initial public offerings (IPOs), mergers and acquisitions, in order to set arm's-length

pricing and foster competition. Moreover, puts to insiders expose the put-holders (ie, investors) to the credit risk of put-writers (ie, insiders), and expose the put-writers to substantial future liabilities they may not be willing to take on, or may accept only at very conservative valuations. If a put can be agreed, and the credit risk of the counterparty is acceptable, the risk-adjusted return is not likely to excite the private equity investor.

Acquisitions by financial or strategic investors are more welcome pathways to exit, but there have been very few examples of this in microfinance. Microfinance networks might seem to be likely acquirors but most, whether for-profit or non-profit, prefer to build their own operations in new countries from the ground up or to partner with smaller, non-corporatized MFIs. No substantial organization has attempted a "roll-up," or a growth strategy though acquisition to date.

IPOs have been used to provide exits to investors in two significant cases – Equity Bank in Kenya and Compartamos in Mexico. The latter transaction, in April 2007, garnered much publicity, some of it unfavorable, for putting $450 million into the hands of existing investors who had paid approximately $2 million for these shares originally.[21] Equity Bank also rewarded its early investors, but on a smaller scale. These examples have given MFI owners and private equity investors hope that IPOs will provide lucrative exit opportunities. However, few emerging country stock markets have sufficient liquidity to provide assurance of full valuation. In addition, both Compartamos and Equity Bank are relative giants in their jurisdictions. As market leaders and first-movers, they represented unique investment opportunities that by definition later entrants to these domestic public markets will not provide.

It is more likely that MFI acquisitions will provide consistent exit paths for private equity investors. Strategic investors such as commercial banks, leasing companies and insurance companies will see the value in MFIs not just as lenders but as delivery vehicles for other financial services to a proprietary and loyal customer base. These potential investors in many cases will come cross-border, recognizing that the fundamentals of microlending are roughly similar in most countries, as shown by the success of networks that apply a common methodology across the developing world. Already some Western European banks have purchased Eastern European banks that specialize in small and micro enterprise lending in order to extend their footprint into the European Union hinterland.

Another likely source of acquisition is by a competitor. Already some countries, including Bolivia, Ecuador, India, Nicaragua and Peru, are seeing competition among MFIs that previously relied for growth on an underpenetrated market.

The Contribution of Non-Commercial Investors

As we saw in the BOMSI case, an official development agency can provide credibility and ease market acceptance of a product even without direct enhancement of risk. But as international capital markets grow more familiar with microfinance, the value of the "halo effect" is diminishing. Yet non-commercial investors are not superfluous in

microfinance. They can play a valuable role in taking on risks that commercial investors don't understand or are uncomfortable with, and in so doing leverage this investment.

For example, the Global Commercial Microfinance Facility (GCMF), sponsored and managed by Deutsche Bank, is a $75 million fund whose investors include socially responsible HNWIs, official development agencies (from the US, the UK and France), foundations, and also a number of commercially motivated investors such as banks, insurance companies and pension funds. The facility is designed to make it easier for MFIs to obtain local currency loans from local banks.[22] While we deal with local currency issues later in this paper, the importance of the facility for this section is to recognize that most institutional investors are uncomfortable taking local currency risk, especially inasmuch as many currencies in emerging markets either cannot be hedged or can only be hedged at unacceptable cost.

In essence, the GCMF takes advantage of the ability of non-commercial investors to shield commercial investors from risks they are unwilling to take on, thus leveraging the risk capital of the non-commercial investors to the benefit of both.

Another, less obvious, example of the catalytic role of non-commercial investors is the $11.4 million bond issued by Microfinance Bank of Azerbaijan (MFBA) in August 2007, managed by DWM. This was the first case of a bond issued in international capital markets by an MFI without credit enhancement. While MFBA had a growing and profitable business, the issue's attractiveness was bolstered by investors' perception that the AAA-rated development agencies owning a majority of MFBA shares --European Bank for Reconstruction and Development, International Finance Corporation and European Investment Bank – would step in if the issuer faced financial difficulty rather than facing the embarrassment of a default in a portfolio investment.

Whether providing a halo to comfort commercial investors or actually taking on risk that commercial investors feel uncomfortable with, non-commercial investors can significantly speed up access to capital markets investment for MFIs. But it appears that bilateral and multilateral development agencies are going beyond this role and actually crowding out private sector investors in commercially credible deals.

MicroRate, a Washington DC-based MFI rating agency, has published a study [23] claiming that "development agencies are today heavily concentrating their funding on the largest and most successful MFIs, exactly the target investment market of private investors". The study posits that development agencies tend to make easy choices and are squeezing private investors out of the market with their subsidized finance rates.

In 2005 (last full year of data), the study found that the development agencies increased their direct funding to top-rated MFIs by 88%. At the bottom of the pyramid, where MFIs are most in need of the "patient capital" and technical assistance that these agencies provide at taxpayer expense, the development agencies actually cut their funding to the lowest-rated MFIs by 25%.

Shortly after the appearance of the publication, a number of private sector microfinance funders joined together to appeal to the development agencies to change this practice, but the results have been inconclusive. Clearly, if development agencies see their roles as competing with private sector investors, they will slow the access of microfinance to capital markets.

Local Currency

One of the largest constraints to growth of microfinance funding is the illiquidity and volatility of many local currencies in the developing world. Of course, if MFIs were able to rely on local funding sources, this would not be a problem. But, as we noted earlier, the bond markets of most developing countries are thin and poorly regulated. Moreover, institutional investors, the largest capital sources in these countries, are often highly restricted in their permitted range of investments.

Paradoxically, local commercial banks, which should be a major source of funding for MFIs, in many countries are less likely to accept MFI risk than foreign banks. This is symptomatic of the larger problem of risk-aversion among these banks. In many countries capital-hungry governments crowd out private lender borrowers. In some countries, banks are content to lend to large corporations, state-owned entities, and foreign businesses and are under no pressure to expand their presence into smaller indigenous businesses. In some countries, banks have simply not made the effort to understand and analyze MFI risk, assuming that "banking the unbankable", whether directly or indirectly through MFIs, cannot be prudent.

Foreign investors typically are uncomfortable with local currency risk that cannot be hedged. This means that many MFIs must borrow in dollars or euros and push the risk onto their borrowers. Fortunately for the MFIs the short maturities of their loans gives them flexibility to effectively reprice their assets to account for currency fluctuations. Even more fortunately for the MFIs, most borrowers are unable to access capital from other sources and so accept interest rate hikes that a more affluent and competitive market would challenge. Nevertheless, adjusting constantly to unforeseeable shifts in exchange rates is a strain on MFI operations and imposes additional risk on borrowers.

On occasion, MFIs and offshore lenders hedge by depositing the hard currency loan in a local commercial bank which then lends to the MFI in local currency, secured by the deposit. (In a variant of this technique, the deposit-taking bank is different from the local bank but issues the local bank a standby letter of credit to secure the risk of the MFI local currency loan.) Although the local bank's loan to the MFI is effectively risk-free, the local bank frequently will not reduce the interest rate to the MFI by a large enough quantum so that the combination of the local currency interest rate plus the guarantee fee paid to the offshore lender for taking the risk works out as a feasible financing cost for the MFI.

A number of initiatives are underway to provide unorthodox hedging facilities for capital markets investors in thinly traded currencies. The Dutch development agency FMO, for example, is putting together a swap vehicle capitalized with $350 million in equity that

would support $1.5 billion outstanding in currency swaps that are beyond the maturity available commercially. By acting as swap counterparty for a basket of emerging market currencies, the facility aims to achieve risk mitigation through diversification while providing a substantial return to equity investors. [24]

Ultimately, local currency markets will mature and provide efficient and flexible hedging tools. In addition, by that time, local capital markets may have sufficiently matured to lessen the strain put on foreign investment to meet MFIs' growing capital needs.

On the Path to an Asset Class

The term "asset class" has a number of definitions. From an institutional investor's standpoint, an asset class is a kind of asset that is suitable for inclusion in an investment portfolio. In order to be suitable, the asset class must fulfill certain requirements. Fundamentally, it must be recognizable as a distinct kind of asset, such that different investments in the same asset class can be analyzed together, can substitute for each other, and can be relied upon to perform similarly in similar circumstances.

Crucially, the asset must be liquid, so that portfolio managers can trade into and out of the asset easily according to their changing viewpoint and their portfolio's cashflow. Liquidity is a function of several factors including volume, exchange listings, ratings, research, etc.

Additionally, it is important that the asset have a track record, data that can be analyzed to make predictions about price changes in response to market conditions. If the asset is relatively less correlated to other assets in the portfolio, that is, of course, a positive as the overall volatility of the portfolio will be reduced by including the new asset in the mix.

Overall, microfinance funding is a long way from meeting these requirements. It approaches the definition most closely in its distinctiveness and relative homogeneity. But it is extremely illiquid and likely to remain so for an extended period of time while volumes build up. Secondary markets are not likely to develop until there is a critical mass of exposure among a large number of investors so that willing buyers can be matched with willing sellers.

Interestingly, a case can be made that microfinance is largely uncorrelated to other emerging market assets and so would reduce portfolio volatility, or beta. In a study sponsored by DWM and carried out by New York University [25] the operating performance under different economic scenarios of 283 MFIs in 65 developing countries was compared to that of 112 commercial banks from 33 developing countries. The findings were that MFI financial results are less sensitive to economic downturn than that of emerging market commercial banks. While the authors concede that the study is based on somewhat inconsistent and incomplete data, it nevertheless serves as a useful indicator and will likely lead to further useful investigation of the characteristics of microfinance as a prospective asset class.

Is Microfinance Riding for a Fall?

Looking ahead, some microfinance investors see events on the horizon that worry them:

How will microfinance perform in turbulent economic conditions? The concern is that the risk of default in the event of global or even localized recession is unknowable, and may be substantial, for MFIs that have only operated during periods of prosperity.

This fear overlooks the fact that microfinance as a financial service segment is not nascent, even though capital markets only recently "discovered" the asset. Many MFIs have been in business for 10-20 years and have weathered significant economic and political instability in countries such as Indonesia and Bolivia. Experience and research, such as the correlation study noted earlier, indicate that MFIs are inherently less vulnerable to economic shocks than other finance providers. (Of course, a sovereign event such as rescheduling or capital controls, or a breakdown of law and order, could force default on even the strongest and most liquid MFI, as well as any other debtor to external markets.)

The top tier of MFIs shortly may be "overbanked". The fear is that too much investment is chasing too little opportunity and that returns are falling to the extent that investors will lend imprudently to lower quality MFIs in order to meet return expectations. The current compression of emerging market spreads relative to higher rated paper, while cyclical, highlights this concern.

However, while many of the best-known and largest MFIs are attractive candidates for investment, many smaller and more obscure MFIs also have high quality credit risk. This stems from the underlying robustness of the microfinance business model.

Most microenterprises operate "under the radar" of the formal economy. The level of economic activity they engage in is so basic as to be immune from the normal ebb and flow of the economic and political systems they operate in. Their operating margins are commonly quite high (although of course small in absolute terms). Their employees are family members or close associates whose terms of employment are informal and flexible. Their owners' liability for business debts is not limited by a legal form – microborrowers take personal responsibility for the loans made to them, and they know their ability to continue to make a living, and often to maintain the respect of their community, is intrinsically tied to their punctual payment of all amounts due.

For the MFI, administering the loan book is time-consuming and labor-intensive, but once the procedures are carefully designed, inculcated and tested in practice, operations are usually stable, and extending the customer base of the MFI by opening new branches becomes almost routine. Financial controls need to be strict and minutely observed, however.

In fact, it is difficult to find instances of default by MFIs that seek self-sufficiency (ie do not view themselves as charitable operations) and have been in business several years. Certainly some MFIs may have sought support from the international networks they belong to in order to shore up a weakened balance sheet or improve faulty operations. In

addition, some MFIs are believed to understate their portfolio at risk numbers by routinely extending the maturity of overdue loans. But MFIs that practice this usually do end up collecting close to 100% of the principal and interest from the overdue borrowers.

Are MFIs abandoning their core constituency? A third concern is the move of some MFIs upmarket along with their more successful clients. While the vast bulk of MFI activity currently consists of small loans to individual micro-entrepreneurs some MFIs have begun to offer more sophisticated services to larger clients involving more substantial risks --small business lending, mortgages, factoring, leasing, insurance, etc. – and also enhanced revenue. Generally speaking, a larger loan is more profitable to a financial institution than a smaller one, as administration costs do not increase proportionately with loan size. This is a controversial development. Some observers denounce MFI "mission drift" and worry that MFIs will abandon their low-income clients as they progress upstream. Others believe MFIs can continue to remain committed to poverty alleviation and still retain their more successful clients as they accumulate wealth.

As these products take on more importance on MFIs' balance sheets, the analysis of the MFIs' financial strength will grow more complicated, and their performance vis a vis other emerging markets assets may grow more highly correlated, reducing their value in lowering portfolio beta. On the other hand, as these MFIs grow to more resemble mainstream financial institutions, both in terms of size and structure, they may attract the attention of some mainstream analysts, traders and investors, further enhancing investment sources and liquidity. Ultimately, while some MFIs may turn their backs on their origins, most will keep their focus on microloans even while providing higher level services, both because microfinance is good business in itself and because it will provide the breeding ground for the higher value customers.

Conclusion

The rush of capital markets investment in microfinance is unprecedented and it is wise to question its sustainability. Certainly, risks to continued growth abound, and we have noted a number of them, including:

- eventual exhaustion of investment opportunities at the well-known and accessible tip of the MFI pyramid
- structural obstacles to providing investors with direct exposure to microloans via securitization
- scarce track record of equity exits
- lack of clarity regarding the role of non-commercial investors
- underdeveloped local capital markets, coupled with insufficient hedging tools for foreign currency investment
- illiquidity, sparse data and small volumes slowing the journey toward achievement of "asset class" status

- "mission drift" eroding MFIs' distinctive risks and returns, and lessening their value in reducing portfolio volatility

Many of these risks reflect the fact that microfinance has only recently been introduced to capital markets. They should ease over time as investors accumulate exposure to this asset. Extrapolating current trends points to financial products that are more numerous, more standardized, and more fitted to capital markets norms. At the same time, secondary markets will make their appearance, and ratings agencies and researchers (both commercial and academic) will focus more attention on the sector. Specialized hedging tools will ease the distortions of too much lending in foreign currency. These developments should abet liquidity and help to give investors comfort that microfinance is suitable for regular allocations of portfolio investment. In effect, investor demand for assets itself will become an important and self-fulfilling driver of progress in microfinance.

Moreover, as MFI owners and managers grow accustomed to an environment in which a deep pool of commercial funding is available for the well-run, expanding MFI, we can expect strategic transactions – mergers, acquisitions, buy-outs, roll-outs, listings, etc. – to become integral elements in the lifecycle of successful MFIs. This will result overall in stronger, more efficient and more skilled institutions better serving clients' needs.

Of course, too rapid growth could also lead to speculation, overheating, and a crash, as we have seen many times before in financial markets, from junk bonds to high tech to sub-prime. And certainly some MFIs will expand too quickly and lose control of their costs and their loan books, or cut rates too aggressively for competitive reasons, or push their clients into over-indebtedness. Microfinance is no more immune to excess than any other business activity. But the inherent robustness of the microfinance business model lays down a strong foundation for solid growth, and the sizable potential market ensures absorption capacity for substantial fresh financing.

Overall, the distinctive focus of microfinance on "banking the unbankable" – bringing financial services to customers outside the formal financial system – gives it a unique and attractive profile of risk and reward that can draw institutional investors seeking diversification and absolute return -- even those who are unmoved by the prospect of promoting social values.

Notes

1. Estimate by the author
2. "Building Financial Systems for the Poor," Elizabeth Littlefield, presented at Cracking the Capital Markets Conference, New York, on March 19, 2007. The author adjusted the data to remove commercial investment in CDOs (which are treated in this paper as transactions, not funds) and to add more recent funds aimed at the commercial market, such as the €160 million SNS Institutional Microfinance Fund, managed by DWM, which had its first closing in May 2007
3. "Microfinance Investment Vehicles", CGAP Brief April 2007

4. For example, the CGAP brief cited above states that portfolio investment by international financial institutions doubled from 2004 to 2006, while microfinance investment channels targeted to individuals report increasing assets, such as Kiva <www.kiva.org> --see "Extra Helping", Rob Walker, The New York Times Magazine, January 27, 2008.
5. DWM reseaerch
6. In this paper, "capital markets" means transactions or funds in which all or a major portion of the investment is raised from private sector institutional investors seeking fully risk-adjusted returns
7. DWM research
8. Data in this paragraph and the next three come from "Optimising Capital Supply in Support of Microfinance Industry Growth", a presentation by McKinsey & Company to the Microfinance Investor Roundtable in Washington DC on 24 October 2006. The exception is the reference to 10,000 MFIs, an estimate widely quoted in the literature; see for example, "Microfinance: Catch the Swelling SRI Wave", Odell, Anne Moore, in Sustainability Investment News, January 11, 2008.
9. Littlefield, p. 3
10. According to the Dexia website, January 27, 2008, <http://www.dexia.com/e/discover/sustainable_funds2.php>
11. Blue Orchard uses a standard short-term rate as its benchmark, 6-month LIBOR ("London Interbank Offered Rate"), the rate that prime banks charge each other for liquidity
12. "Dexia Micro-Credit Fund Monthly Newsletter", BlueOrchard Finance, November 2007
13. A SICAV ("Société d'investissement à capital variable") is an open-ended fund common in Western Europe especially Luxembourg, Switzerland, Italy and France, comparable to a mutual fund in the USA
14. "Capital Markets-Style Risk Assessment: Testing Static Pool Analysis on Microfinance," Center for the Development of Social Finance, March 2007
15. CUSIP is an acronym for the Committee on Uniform Securities and Identification Procedures, a standards body. A CUSIP number uniquely identifies a specific security to facilitate custody and trading of securities
16. Microcapital, January 27, 2008, <www.microcapital.org/?page_id=7>
17. "Press Release," ProCredit Holding AG and Deutsche Bank, May 15, 2006
18. "BRAC Micro Credit Securitization Series I: Lessons from the World's First Micro-Credit Backed Security (MCBS)," Ray Rahman and Saif Shah Mohammed, MF Analytics, Ltd., Boston, March 20, 2007
19. "The Investment Opportunity in Microfinance," Paul DiLeo and David FitzHerbert, Grassroots Capital Management LLC, June 2007
20. "ProFund Internacional, S.A.," Omtrix, Inc., no date given

21. “CGAP Reflections on the Compartamos Initial Public Offering: A Case Study in Microfinance Interest Rates and Profits (CGAP Focus Note No. 42),” Richard Rosenberg, June 2007
22. “The Deutsche Bank Global Commercial Microfinance Consortium and USAID’s DCA Guarantee,” United States Agency for International Development, January 2007
23. “Role Reversal: Are Public Development Institutions Crowding Out Private Investment in Microfinance?,” Julie Abrams and Damian von Stauffenberg, MicroRate, February 2007
24. “TCX- The Currency Exchange,” FMO, no date given
25. “Can Microfinance Reduce Portfolio Volatility?” Nicolas Krauss and Ingo Walter, Stern School of Business, New York University, November 2006