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Five Strategies to Minimize Foreign Exchange Risk for Microfinance Institutions

Abstract

As the microfinance industry matures and MFIs require increasing amounts of capital from a variety of sources, there has been extensive growth in international lending to MFIs and a similar increase in foreign exchange risk for MFIs. As microfinance managers seek to finance their future business plans, this Progress Note offers five suggestions on how to best minimize or manage this risk.

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Introduction

The microfinance industry continues to grow at a rate of more than 30 percent a year, and the supply of funds for growth is only one-fifth of total demand.[1] To meet this demand there has been an increase in international investors in microfinance institutions (MFIs). It is estimated that the value of international foreign investment available to MFIs will soon top US $1.2 billion, of which $750 million is debt capital. At least 92 percent of this debt capital is in hard currency (primarily US dollars or euros).[2] As a result, foreign exchange risk for MFIs is on the rise.

Foreign exchange risk is defined as the possibility of a loss or a gain from the variations in exchange rates between currencies. This risk is acute for businesses, such as MFIs, that operate in countries with volatile local currencies and carry both local currency and hard currency on their balance sheet. While it is difficult to fully eliminate foreign exchange risk, it can readily be identified, measured, managed, and mitigated. This paper highlights strategies to minimize foreign exchange risk, provides examples of actions taken by MFIs, and suggests actions that MFIs, donors, and international lenders can take to offset this growing risk in the in the microfinance industry.

Background

The microfinance industry has increased its awareness and understanding of foreign exchange risk, however, there has not been any significant actions taken at the industry level. It is true that there have not been

> *As more international hard currency funds enter the industry, development organizations and international banks should consider how they can help MFIs and international funds mitigate foreign exchange risk.*

[1] Microcredit Summit data from the "State of the Microcredit Summit Campaign Report 2004" suggests supply may be as high as 23 percent. Typical industry reports cite supply at 10–15 percent, including the CGAP web site, Spring 2005. ResponsAbility, Klaus Tischhauser, powerpoint, 2005, www.responsability.ch

[2] See Ivatury and Abrams, *The Market for Foreign Investment in Microfinance.*

sizeable publicized losses to date, and the level of most MFIs' hard currency debt, at present, is considered to be reasonable. However, MFIs' losses are rarely made public and many international microfinance funds have disbursed only a small portion of their overall hard currency funds. The industry seems to have adopted a free market approach of letting the MFIs and international microfinance funds figure out how to resolve this risk on their own on a case-by-case basis.[3]

Unfortunately, most MFIs have limited access to information on how to measure and minimize foreign exchange risk and even less experience negotiating with international investors. As more hard currency funds enter the industry, donors, development agencies, multilaterals and international banks should consider how they can help MFIs and international microfinance funds mitigate foreign exchange risk. Below are five ways that MFIs can deal with the foreign exchange risk.

1. Avoid It: Pursue Local Currency Loans First

The best solution for an MFI is to avoid foreign exchange risk altogether and fund itself in local currency. There a number of strategies to accomplish this.

[3] In the sense that either the MFI or lender purchase foreign exchange hedging or risk mitigating instruments, or investigate other alternatives to these hard currency loans (discussed later).

CHF International's Experience in Mexico

In 1994 CHF initiated a home improvement loan program in northern Mexico to address the lack of housing near the US-Mexico border. While CHF strives to avoid asset/liability currency mismatches whenever possible by borrowing in local currency, conditions in Mexico and the nature of home improvement lending made it difficult to borrow in pesos. Between 2002 and 2003, CHF International borrowed $1 million for loan capital and was unable to negotiate risk sharing with the lender. The funds were converted into pesos and on-lent to housing microfinance clients for average terms of 18 to 24 months. The Mexican peso depreciated by 11.7 percent in 2002, and 9.9 percent in 2003.

By the end of 2004, CHF had accumulated US $197,000 in foreign exchange losses on the loan principal. CHF now has a team of finance and legal professionals who are exploring alternative financing strategies to minimize foreign exchange exposure, including indexing client loan payments to the US dollar, using forward markets to hedge foreign exchange risks, and arranging borrowing arrangements in local currencies—such as the commercial bank lines of credit it has secured in Jordan, Bosnia, and Romania, among others.

Table A Five Recommendations for Managing Foreign Exchange Risk

Recommendations	Complexity	Cost
1. Avoid it: Pursue local currency loans first	Low	Low-Moderate
2. Establish policies on foreign exchange management and exposure	Moderate	Low
3. Convert hard currency loans to local currency risk	Moderate	Moderate-High
4. Explore local hedging instruments	High	Moderate-High
5. Other alternatives (but often less ideal….)	Low	Moderate-High

Borrow from your local bank. A growing number of MFIs have been successfully borrowing from local lenders. This is best accomplished through an organized strategic approach, flexible negotiations and a view toward the long-term.[4] Banks that hold an MFI's operating accounts recognize the MFI's ability to generate sufficient cash flows and service increasing amounts of debt. Negotiating an overdraft facility or a small revolving line of credit is an easy first step. Over time, banks become familiar with the MFI's performance and recognize the potential for a long-term profitable lending relationship.

Access local capital markets. Several MFIs have secured significant financing from their local capital markets through bond issues, securitizing loan portfolios, and other instruments.[5] Liquid investors, particularly domestic pension funds and insurance companies, are important sources of long-term capital. While linkages between such institutional investors and MFIs are still weak, local capital markets are becoming more sophisticated and these investors are looking for the type of stable, low-risk, long-term investments that MFIs with strong portfolios can offer.

Use guarantees to increase local currency financing. Guarantees and credit enhancements strengthen (or enhance) the collateral supporting an MFI borrowing from banks and participating in capital market transactions like those mentioned above. They are made available to MFIs from third parties including microfinance networks, donor organizations, and some governments. Credit enhancements can be flexible and instruments vary. The most common is the standby letter of credit, which promises to reimburse the investor in the event of loss. Most enhancements and guarantees provide partial loss coverage, usually only on principal. MFIs pay a fee, typically ranging between 1–3 percent of the guarantee amount.

Negotiate local currency loans from international lenders. A few international funds offer local currency debt as an option.[6] This transfers the foreign exchange risk from the MFI to the international lender. The lenders then manage the risk by limiting foreign exchange exposure to a small percentage of their portfolios, pricing loans according to the perceived risks, purchasing foreign exchange hedging instruments, and using donor funds to cover foreign exchange losses. The more MFIs advocate for, negotiate to include, and demand local currency funding, the more international funds will offer this option.

2. Establish Policies on Foreign Exchange Management and Exposure

MFI managers and boards should pro-actively determine policies and put specific measures in place before taking on foreign exchange exposure.

Grameen Foundation USA's Guarantees to Indian Partner

In 2004, Grameen Foundation USA (GFUSA) supported its Indian partner, Share Microfin, Limited (SML), in raising US $4.3 million in Indian rupees through the sale of 25 percent of its loan portfolio to ICICI Bank. Based on negotiations with ICICI, GFUSA funded $325,000 of a $350,000 first loss guarantee. As a result, ICICI charged nearly 4 percent less in interest than SML was paying to borrow from local banks. ICICI then sold SML's portfolio to another Indian bank in the secondary market. The deal provided SML with a large amount of local currency to fuel its rapid portfolio growth. By selling its portfolio, rather than borrowing more funds, SML was able to maintain a higher capital adequacy ratio necessary to satisfy its current (and future) creditors.

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[4] Refer to strategies for approaching local banks for loans; see Schneider and Greathouse, "Strategies for Financial Integration"; and Meehan, *Tapping Financial Markets for Microfinance.*

[5] Capital market vehicles include bond issuances (ie, Compartamos, Mexico) and portfolio sale (Share, India). See Jansson, "Microfinance from the Village to Wall Street," for more examples; and www.gfusa.org/programs/capital_markets/.

[6] As an example, Triodos Bank and Oikocredit in the Netherlands have lent in local currency for some time, while the IFC and other development organizations have only done it more recently. Several international funds are investigating this option; MFIs should continue pressing microfinance funds. As more international funds place capital, there is increased competition, boding well for MFIs.

Define foreign exchange risk tolerance levels. Finance managers should assess the MFI's level of foreign exchange exposure and ability to absorb potential losses based on various currency fluctuation scenarios. Management should clearly understand and set maximum risk exposure levels. MFIs should test the impact of these stress scenarios on their earnings and the ability to absorb it from an equity perspective.

$$\text{FX Exposure} = \frac{\text{FX Assets} - \text{FX Liabilities}}{\text{Equity}}$$

"FX" is foreign exchange.

Establish written procedures. Most MFIs have no policies related to managing foreign currency. Management and board should approve policies governing foreign exchange exposure, procedures (including approval levels) for foreign exchange borrowing, and acceptable measures for addressing extreme currency fluctuations when risk tolerance levels are exceeded. Management (with technical assistance, if necessary) should develop specific guidelines that address an MFI's particular needs and planned growth.

Measure and monitor foreign exchange exposure. An MFI should track its exposure regularly, at least monthly, to ensure the risk remains within acceptable levels. Management should have prescribed actions for treating any excess foreign exchange exposure *before* a crisis, so that management is able to anticipate and avoid an internal crisis or respond quickly and minimize any losses during a crisis. This might include accelerating repayment of foreign exchange obligations, replacing them with local financing, or using any established foreign exchange cash reserves.

3. Convert Hard Currency Loans to Local Currency Risk

There are specific methods for using hard currency capital and minimizing foreign exchange exposure.

Negotiate back-to-back loans. MFIs can use the foreign currency loan from a microfinance fund as collateral for a local currency loan from a local bank. The MFI deposits its foreign exchange borrowing into a local bank and uses the deposit as collateral to borrow from a local institution, usually the same bank. This arrangement can be costly because the MFI pays interest on both loans. This cost can be partially offset by interest earned on the foreign exchange deposit. Given the potentially high cost of this arrangement, MFIs need to negotiate effectively with both lenders to secure an attractive net rate by asserting that both lenders face lower risk—the local lender has cash collateral and the microfinance fund has no foreign currency risk. MFIs should also seek to maximize the leverage on the transaction by increasing the size of the local currency loan relative to the amount of the deposit.

Secure guarantees from international sources. International microfinance funds may be willing to provide a guarantee instead of transferring funds directly to the MFI. MFIs can request an SBLC or other collateral to secure local funding. Although the guarantee option should be cheaper than a back-to-back arrangement, it is important to investigate the costs. Microfinance funds need to achieve a certain return on investment that may force them to charge a high rate for the guarantee. In addition, local lenders may prefer or require cash collateral (i.e., a deposit) in order to offer a lower borrowing rate or leverage beyond the value of the guarantee.

Arrange a loan participation. In this case, the MFI negotiates a local currency loan with a local bank. In order to borrow more than the credit limit (or risk appetite) that the local bank may allow, the MFI and bank invite the international microfinance fund to participate in the loan by lending to the local bank, effectively funding a portion of the bank's loan. Most arrangements involve some risk-sharing between the local and international lender on the loan to the MFI, such that the microfinance fund has to evaluate the credit risk of the MFI and the local bank.[7]

[7] An example is Deutsche Bank's new Global Commercial Microfinance Consortium. See www.deutsche-bank.de/presse/en/index.html?contentOverload=http://www.deutsche-bank.de/presse/en/552.shtml

The Case of ProMujer Peru

In countries with non-convertible, thinly traded, or highly volatile currencies, non-deliverable forward contracts (NDFs) can offer MFIs an efficient way to hedge their US dollar-denominated liabilities. With NDFs, no cash is exchanged until maturity, when the MFI receives or pays the difference between the prevailing market (spot) exchange rate and the previously agreed upon (forward) exchange rate. To hedge its US $800,000 loan exposure in 2003, Pro Mujer Peru entered into two 6-month NDF contracts with Banco Continental. The transaction increased Pro Mujer Peru's cost of funds by 2.0 percent and 1.8 percent, respectively. Alternative strategies of converting its US dollar loans into Peruvian sol loans with either a stand-by letter of credit or guarantee loan, would have raised Pro Mujer Peru's cost of funds to 20 percent. Pro Mujer Peru has since renewed its NDFs with Banco Continental twice.

4. Explore Foreign Exchange Hedging Instruments

The financial sector sells a number of hedging products for foreign currency risk.[8] These instruments are only available in certain currencies, but the number of institutions willing to work with so-called exotic currencies is increasing. Costs for some hedges can be quite high and require large amounts of capital. Table B, on page 6, explores common hedging products available.

5. Other Alternatives (But Often Less Ideal….)

If the MFI can not avoid, convert, or hedge its foreign exchange risk, or determines that these alternatives are not economically viable, there are additional strategies for addressing foreign exchange issues. Most of these are less effective solutions than those listed above and vary in cost and feasibility.

Match lending to borrowing. MFIs can opt to offer hard currency loans to their clients, effectively passing on the risk to the microentrepreneurs. This limits the MFI's exposure, but transfers the risk to clients who may be even less able to manage or afford it. It can be a reasonable measure in economies that use a hard currency (or have currencies that are officially linked to a hard currency), where business is frequently conducted in both hard and local currency and where exchange bureaus are widespread.

Pass on costs to clients. There is a tension to balance a mission mandate to help poor people while maintaining banking best practices. If not done carefully, passing the cost on to clients can have a negative impact on those clients served. Two methods of passing on foreign exchange loss costs to clients are:

Index local currency lending. MFI's change their rates over time to account for foreign exchange losses. This can be effective in environments with consistent, predictable currency movement. This needs to be managed carefully, however, so that clients' repayment rates do not suffer as a result of such adjustments.

Assess a foreign exchange loss surcharge. At the end of the loan, clients pay an amount of the calculated loss over the period.

Establish reserve accounts. If the alternatives above are deemed unfeasible, then at minimum, the MFI could establish reserve policies that will provide some element of protection. Options include:

Equity reserve. The MFI takes quarterly non-cash charges on its income statement to create a foreign exchange reserve. When losses occur, they are deducted from the reserve, not the income statement, similar to a loan loss provision. This does not avoid true cash loss, but it helps the MFI "smooth its income statement" so that sudden devaluations do not de-capitalize the MFI.

[8] Refer to Cavazos, "Foreign Exchange Risk Management in Microfinance," for in-depth explanation of forwards and swaps.

Table B Common Foreign Exchange Hedging Products

Description	Pros	Cons
Forwards – a customized contract where MFI and bank agree to exchange local currency for foreign currency on a specified date(s), for specified amount(s), at a specified price.	• Customized contracts • Readily available	• Typical maximum length of 1 year • Imperfect coverage (for example, using a series of 1-year forwards on a 5-year loan protects principal only)
Swap – an MFI trades its foreign currency payment stream obligation to another institution in exchange for the other's local currency payment stream obligation.*	• More customized/fuller coverage (matches debt obligation cash flows) • Longer tenors • Flexible application	• Needs appropriate match • Exotic currencies might be more difficult • Large minimum amount required
Futures – a standardized, transferable, exchange-traded contract requiring the holder to exchange a specified amount of currency for another, at a specified price, on a specified future date; i.e., a standardized, transferable, exchange-traded forward contract.	• Can be less expensive • Can be sold in the market by unwinding hedge • Can spread among many contracts which allows for diversification of counterpart risk to MFI • Margin calls	• Available only in 20 currency markets. (Some countries do trade locally, e.g., Columbia.) • Rigid; has preset maturity dates and amounts • Extensive requirements; needs to match situation • Requires management
Option – contract with a bank giving MFI the option, but not the obligation, to buy a foreign currency for a specific price at/or over a given period of time.**	• Limits worst case scenario • MFI maintains control and choice whether to use or not	• A premium is paid for the option even if not used • Does not eliminate all losses, but can minimize them • Limited availability • Complicated • Requires monitoring

* This is effective when the counterpart institution has access to local currency funding but has foreign currency assets. This may include a local bank making loans or investments in a foreign currency, but funding itself through local currency deposits. It may prefer to take on a foreign currency obligation, such as the loan from an international fund that matches its lending activity more closely.

** Options usually include a strike price, or exercise price—the exchange rate at which the MFI can exercise the option.

Cash reserve. MFIs can create a cash reserve, maintaining a portion of equity in hard currency to buffer hard currency liabilities. This acts as a type of insurance against devaluation and is more conservative as it maintains actual cash on hand. However, it also takes funds away from the MFI's loan portfolio.

An MFI should establish a specific reserve policy that addresses its particular foreign exchange exposure (i.e., foreign exchange assets or liabilities).

Conclusion

From this preliminary exploration of foreign exchange risk issues, a number of conclusions can be drawn for each stakeholder.

MFI managers should seek professional assistance before taking on foreign currency obligations or attempting complicated foreign exchange mitigation strategies. Managers are not expected to be experts on this topic, but they are expected to investigate and ask questions to make wise decisions, develop local bank relationships, establish prudent policies, and be aware of the risk being taken.

Donor organizations should look for ways to support the strategies discussed in this Progress Note. A number of donors offer loans to MFIs—in hard currency. Rather than transfer the risk to the MFIs, donors should facilitate direct access to local currency funds from local banks, institutional investors, and the capital

Women's World Banking in Colombia

Fundación Mundial de la Mujer (FMM) participated in Blue Orchard 2005 Collateralized Debt Obligation. FMM received a US $5 million loan with a 6-year maturity, semi-annual interest payments, and equal semi-annual amortized principal payments in years 5 and 6. Based on the loan structure and the limited currency derivative product offering in Colombia, FMM hedged this $5 million foreign exchange risk through four mechanisms at reasonable cost:

1. **Balance sheet matching of foreign exchange assets and liabilities:** FMM had an excess of US dollar assets over US dollar liabilities of $1.2 million (in the form of US dollar investment deposits), which provided a natural hedge for $1.2million of the $5 million borrowed.

2. **Swap:** Purchase of a $2.5 million swap, with 5-year tenor, 4-year grace period, and principal amortizing in year 5 in two semi-annual payments (5 years being the longest tenor available for swaps).

3. **Forward, Non-Delivery:** Purchase of $1.3 million, 1-year tenor. As 6-year swaps were not offered in the Colombian market, and the forward market was liquid for tenors of up to 1 year, FMM used a 1-year forward to hedge its loan principal with maturity after year 5. FMM plans to renew the forward annually to hedge this principal. FMM used a non-delivery forward to hedge this amount of principal because it would not require delivery of the dollar principal at the annual maturities of the forward, since the loan principal would not be due at that time.

4. **Forwards, Delivery:** Interest payments were covered with 6-month and 1-year forwards, delivery. Here also, FMM plans to enter into new forward contracts as these mature to hedge the upcoming interest payments. FMM chose forwards with delivery of the dollar amount at maturity since they need the currency for these interest payments at that time.

markets. Donors can also support international microfinance funds in taking on more foreign exchange risk and explore innovative mechanisms that motivate more local currency financing. This should be done in a way that encourages the flow of private capital, avoids crowding out local investors, and does not distort local market pricing.

International investors can deliver credit without putting all of the foreign exchange risk on MFIs. At present, there is much money chasing too few deals with a limited number of MFIs. It is in the best interest of microfinance funds to use or develop hedging mechanisms and offer local currency loans. These costs will inevitably be passed on to both parties. However, the cost can be spread across a greater number of transactions with both parties taking on reasonable risk.

In light of the large pool of hard currency capital that is coming into the sector, MFIs will need to consider which foreign exchange risk management alternatives are available to them in their market and are appropriate for their organization. MFIs are often less able to manage this risk than the lenders and donors. Given an industry goal of universal access for affordable microfinance services for poor people, it is time for an industry-wide effort to better channel international capital to support MFIs' continued growth in a sustainable and safe manner.

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