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CAPITAL MARKETS- USE IN MICROFINANCE

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Abstract

The Paper deals with the situation for efficient use of Capital Markets for financing Micro-finance Institutions. In order to sustain the growth in the microfinance industry, it is necessary to shifting the loan financing for MFIs from traditional lenders to capital markets. This can primarily be achieved through securitization and CDOs. Both have different advantages to offer which can be tapped separately and also customized on a case-by-case basis. Apart from the domestic commercial investors, foreign market debt can also be tapped for the funding needs of the MFIs but for that to function properly, the FXR has to be managed which can be effectively done through the creation of a "global local currency fund" which basically works on the principle of diversification.

Keywords- Micro-Finance, Capital Markets, Securitization, Tranching

Biographical Notes- Debasis Kumar Dash is a post Graduate from IIT Madras in field in Micro-electronics and VLSI. He is currently doing his MBA from IIM Kozhikode with Majors in finance. His major areas of interest are financial derivatives, Valuation models, risk management and banking sector. He has undertaken several finance projects in field of risk management, corporate finance and financial services. He worked as an intern in KPMG Global Services where he developed a model for Customer acquisition strategy for a financial services firm.

WHAT IS MICROFINANCE?

Rutherford [1999] states that Microfinance refers to the means via which poor people convert small sum of money into large lump sums. The objective of microfinance is to make financial services like credit, insurance, savings and fund transfer available to members of lower strata of our society. Most of the conventional market players chose to ignore catering to the demands of this sector because of the substantial cost being involved in managing these accounts. We therefore have a huge market to which conventional financial institutions are unwilling to provide their services. Microfinance has come up as a mechanism to cater to needs of this market. Specialized financial institutions known as microfinance institutions (MFI's) provide these services. These institutions commonly tend to use new methods developed over the last 30 years to deliver very small loans to unsalaried borrowers, taking little or no collateral. These methods include group lending and liability, pre-loan savings requirements, gradually increasing loan sizes, and an implicit guarantee of ready access to future loans if present loans are repaid fully and promptly. The loan is usually used to establish or expand small businesses that generate additional income for the family. This extra income allows a poor family to buy food, access healthcare, educate their children, put aside savings and lay the foundation for a better future. Microfinance has been successful in enabling numerous families to lift themselves out of poverty. Microfinance has emerged as an effective poverty alleviation tool because it is based on the fundamental principle that human beings are motivated to do whatever it takes to make themselves as well off as possible.

CURRENT SCENARIO OF MICROFINANCE

Microfinance has transformed itself into a huge market. It's estimated that there are still around 3 billion people who don't have access to financial services[1] & around 500 micro entrepreneurs worldwide[2].

The microfinance industry is rapidly transforming. Professionally managed, profitable leaders are emerging from a fragmented marketplace of approximately ten thousand MFI's. Evidence shows that among

[1] CGAP Estimates (2006)
[2] Chang (2005)

these leaders, poverty-focused microfinance institutions (those committed to serving customers below the poverty line) are among the most cost-efficient and have the highest portfolio quality in the sector. Further, and perhaps more importantly, the statistics show that the poverty level of an MFI's customers does not necessarily influence profitability; a track record exists of profitable MFIs working with the very poor.

Despite of all its promises, microfinance has been unable to fulfill its potential. Market demand for microfinance services is estimated at more than US$300 billion, while market supply is just US$4 billion[3]. Despite important role played by international donor community in promoting microfinance, their current investment is only US$ 1.2 billion[4]. *Diekmann in his paper on emerging opportunity in Microfinance[1997]* states about the various sources for investing in Micro-finance institutes.If the MFI's want to close in this huge supply-demand gap, they need to tap into external resources. If we take a long-term perspective, only the financial markets have resources that can provide sustainable & optimal growth.

FINANCIAL MARKETS & MICROFINANCE

The advantages of linking microfinance market with our main financial markets are manifold. First is that the industry can become a honey pot for global investment banks since it's a largely untapped source of micro credits that can be pooled together, securitized & then sold to investors all over the world. Another reason for microfinance being able to attract the attention of investors is that the risk-adjusted returns from microfinance are higher than returns from traditional lending together with the benefits of diversification. Since return from micro-loans are largely uncorrelated with returns from other asset classes, it provides as a great hedging instrument which investors use to protect their portfolio value from changes in global political & economic conditions. With introduction of new financial instruments like credit derivatives it's become much easier for investors to tailor their risks & returns. This in turn will transform microfinance market landscape from a subsidized market to a large efficient market with thousands of profit maximizing investors with various levels of risk appetite.

[3] Tulchin, p4. Please note that these figures are not limited to microfinance for poor
[4] CGAP Estimates

WHY SECURITIZATION?

"In a basic securitization structure, an entity, often a financial institution and commonly known as a "sponsor," originates or otherwise acquires a pool of financial assets, such as mortgage loans, either directly or through an affiliate. It then sells the financial assets, again either directly or through an affiliate, to a specially created investment vehicle that issues securities "backed" or supported by those financial assets, which securities are "asset- backed securities." Payment on the asset- backed securities depends primarily on the cash flows generated by the assets in the underlying pool and other rights designed to assure timely payment, such as liquidity facilities, guarantees or other features generally known as credit enhancements. The structure of asset-backed securities is intended, among other things, to insulate ABS investors from the corporate credit risk of the sponsor that originated or acquired the financial assets."

Subsequent to the launch of NGO MFIs in India in the subsidy and the soft loan era, commercial lending by the banks to the MFIs has led to another round of expansion. However the conventional debt options leaves the MFIs with little option for reasons that can be accounted to the insufficiency in capital base, resulting high leverage, and the rising cost of debt. Thus the need rose for the MFIs to explore opportunities other than the available traditional ways of attracting capital. Following the same in the early years of the 2000"s, amid the mortgage backed securities frenzy; MF industry took interest in this funding strategy. Indeed, this solved the main issues faced by both the deposit and non-deposit taking MFI.

For regulated MFIs that have the capability to take deposits, securitization enables them to reduce reserves and free capital so they can use the surplus to leverage more credits. For the institutions that are not allowed to take deposits, the sale of the receivables raise their liquidity, proportionally augmenting their capacity of lending. For non-regulated MFIs the implementation of securitization lets them get the liquidity of the deposit-taking activity without the regulatory burden of a formal financial institution. *Stieber [2007]* advocates the use of alternate sources for capital acquisition for MFIs.

As the loan-financing shifts from the traditional philanthropists to the capital markets there is an improved access to debt capital, reaching out to a larger investor class. Typical subscribers to securitized notes could be mutual funds, pension funds, insurance funds, etc. MFIs can churn out significant value in selling these assets to banks, with regards to Priority Sector Lending requirements for banks. Recent regulatory updates (an additional percent requirement to lend to weaker sections) will only increase the appetite. There is good appetite for such short-term assets (characterized by high repayment rates and minimal non-performing assets, as per the historical data) in the capital markets.

With most of the large NBFC MFIs now under the category of systemically im-portant or SI-NBFCs, capital adequacy is a key constraint. One of the issues within the Indian microfinance sector has been high leverage (10-15 times). Proper structuring can help MFIs free up their regulatory capital and enable them to borrow more to fund operations.

Securitization thus serves as an effective balance sheet management tool for originators, through which hidden values could be identified and unlocked, asset-liability mismatch, currency, commodity and interest rate risks could be hedged and an enhanced return on capital and equity could be managed through the continuous churning of portfolio. While from an investor's perspective, securitization offers an alternative investment medium which, for a given rating level, usually offers a safer investment avenue and higher risk-adjusted returns compared to equivalent rated bank or corporate debt.

THE CONCEPT OF SECURITIZATION

Securitization is the process of conversion of existing assets or future cash flows into marketable securities. Securitization primarily involves the sale of assets to a bankruptcy remote special purpose vehicle (SPV) in return for an immediate cash payment. Generally, the assets are held in a bankruptcy remote vehicle termed as a Special Purpose Vehicle (SPV) or are otherwise secured in a manner that gives the investors a first ranking right to those assets. The SPV may be a corporation, trust or other independent legal entity. The SPV issues securities to public or private investors, which are backed (i.e. secured) by the income flows generated by the assets securitized and sometimes also by the underlying assets themselves. The net proceeds received from the issuance of the securities are used to pay the transferor for the assets acquired by the SPV. Through this process homogenous illiquid financial assets are pooled and repackaged into marketable securities.

The intent of securitization typically is to ensure that repayment of the securities issued to investors is dependent upon the securitized assets and therefore will not be affected by the insolvency of any other party including the entity securitizing the assets. Most securitization issues are rated by an accredited credit rating agency. The rating applies to the securities that are issued to investors and indicates the likelihood of payment of interest and payment of principal in full and on time.

Securitization has two important characteristics. *First*, the pooling of a large number of assets, such as loans, that are used as collateral for (asset-backed) securities issued by the originating firm, and, *second*, the de- linking of the credit risk of the pool of assets from the credit risk of the originating firm. The de-linking is typically done through a transfer of the underlying assets to a stand-alone special purpose vehicle (SPV) that is closely associated with, but legally de-coupled from, the originator. The SPV is then issuing securities backed by the underlying assets. To highlight the risk-transferring idea behind securitization, the asset-backed securities in a securitization deal are sometimes called pass-through instruments.

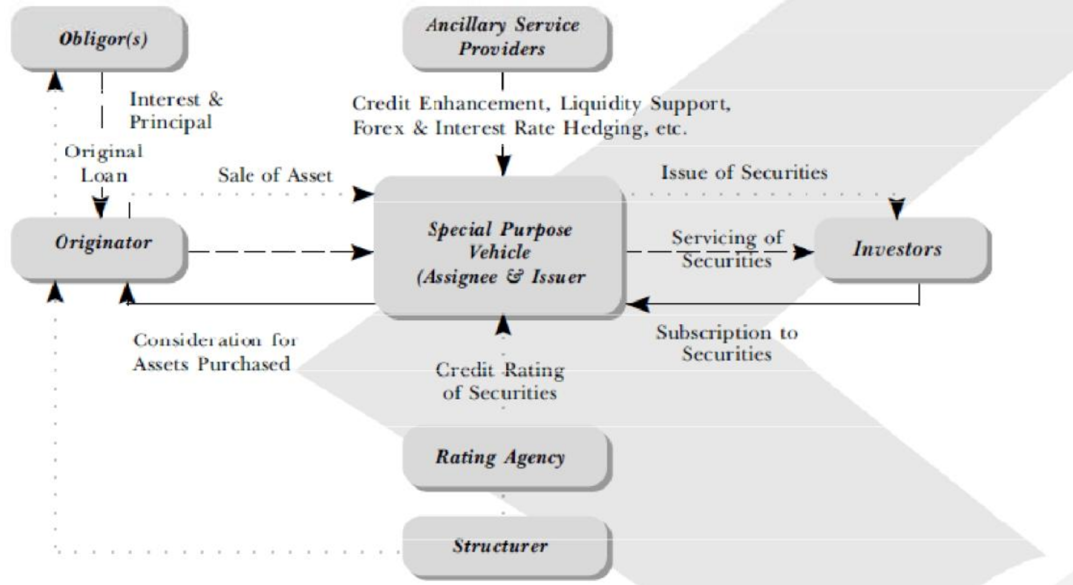
PARTICIPANTS

The following are the primary parties involved in a typical securitization transaction:

Originator: This is the entity which requires the financing and hence drives the deal. Typically the Originator owns the assets or cashflows around which the transaction is structured.

SPV (Special Purpose Vehicle): An SPV is typically used in a structured transaction for ensuring bankruptcy remoteness from the Originator. The SPV is the issuer of securities. Typically the ownership of the cashflows or assets around which the transaction is structured is transferred from the Originator to the SPV at the time of execution of the transaction. The SPV is typically an entity with narrowly defined purposes and activities and usually has independent trustees/directors. The SPV needs to be capital efficient (i.e. nominally capitalized) and tax efficient (i.e. multiple taxation should be avoided).

Generic Deal Diagram



Note: Continuing flow of funds from the Obligor to the SPV is routed through the Originator in its capacity as administrator. Any other party appointed by the SPV/Trustee can also perfom the role of administrator. It is also possible that the SPV receives the amounts directly from the Obligors.

Investors: The investors are the providers of funds and could be individuals or institutional investors like banks, financial institutions, mutual funds, provident funds, pension funds, insurance companies, etc.

Obligor(s): The Obligor is the Originator's debtor. The amount outstanding from the Obligor is the asset that is transferred to the SPV. The credit standing of the Obligor(s) is of paramount importance in a securitization transaction.

Guarantor / Credit Protection Provider / Insurer: These are entities that provide protection to the Investor for the investment made in the securities and the returns thereon against identified risks. Typically, on the happening of pre-identified events, affecting the underlying assets or cashflows, or the payment ability of the Obligors, these entities pay moneys that are passed on to the Investor.

SECURITIZATION IN MICRO FINANCE INDUSTRY

Increasingly, the need for broad basing the reach of basic financial service offerings such as credit, savings, money-management and insurance products to the people falling within the low income category brackets in India is being felt, the aim being to allow the participants to smoothen their consumption patterns across time, help them invest in and benefit from their skill sets and tide over the impact of adverse shocks in the process. This, being an area where the formal sector has a bare presence today, is fraught with practical impediments that need to be overcome in order to develop a mechanism for ensuring smooth delivery of such services.

The impediments to be overcome while attempting to deliver these services broadly are:

1. High cost of service associated with the low-value, high volume and cash intensive nature of the business and the high fixed and variable costs associated with putting in place the physical infrastructure required to broaden the reach.

2. Risk management challenges associated with the high levels of information asymmetry, the tenuous nature of the underlying viability of the economic activity for which funding is sought and the high degree of exposure to exogenous shocks.

3. Staff incentives within any formal organization paradigm (private or public) that seeks to deliver these services.

4. Inability of a large section of the population to pay for the ease of access to such financial service offerings.

Securitization transactions have largely taken place in asset classes like automobile loans, personal loans, credit card receivables, real estate, etc. The microfinance sector in India, though, has yet to see a true securitization transaction. While no “true” securitization structures have been undertaken in Indian microfinance yet, portfolio sale transactions with banks present a key opportunity. As per the existing regulatory framework, banks in India have priority sector lending (PSL) targets. Since microfinance assets qualify as PSL, there is immense value for MFIs in doing such bilateral transactions with banks.

There have been nearly a dozen micro-finance securitization transactions in the global capital markets. Of these, two are microloan securitizations (small value loans given by MFIs) while others were collateralized debt obligations (CDOs) characterized by a more heterogeneous asset pool, a smaller number of underlying assets, and more innovative structuring (including bonds, leveraged loans, credit default swaps or CDOs).

COLLATERALIZED DEBT OBLIGATIONS (CDOs)

A *collateralized debt obligation (CDO)*, in turn, is a particular kind of structured finance instrument where the underlying pool to be securitized typically contains a smaller number of assets (perhaps 50-150) than that of a traditional securitization product (which can be made up of thousands of assets). The assets are also typically more heterogeneous than in a traditional securitization deal. As a consequence, the default risks of the individual assets as well as the default correlations between the various assets are critical to determining the loss distribution of the pool. Furthermore, while the assets in a classical securitization typically are fairly small ordinary loans such as car loans and credit card loans, the assets in a CDO are often more innovative. Examples of assets are investment-grade bonds, leveraged loans, asset-backed securities or credit default swaps, and there are even examples of CDOs where the underlying assets themselves are CDOs.

Collateralized debt obligations have been around since the late 1980s, and over the recent years CDOs have been one of the fastest growing segments of structured finance.

As mentioned earlier, an alternative to the MFIs themselves securitizing their assets is for financially more sophisticated firms, such as international investment banks and hedge funds, to pool together and securitize the MFI issued debt. Most of the existing indirect securitizations along these lines have been structured as collateralized debt obligations. Now, why is that? Two imperfections that might create value to a CDO, however, are *asymmetric information* and *market segmentation*. Moreover, both these features are important characteristics of the microfinance industry and they give us strong arguments for why the use of CDOs instead of ordinary securitizations is motivated in the case of microfinance.

Asymmetric information in a microfinance securitization reveals itself through an information advantage of the originator of the securitization/CDO (the bank that is specialized in lending to MFIs) over the typical investor regarding the quality of the loans in the pool. This causes the investors to demand an extra premium to compensate for the information disadvantage where the investors are afraid that the originator will repackage and sell

”problem debt” with risks that only the originator itself knows about. The problem is likely to be particularly prevalent in the microfinance industry where the information advantage of the originating firm over the investors is huge. Now, the tranching of a typical CDO solves this asymmetric information problem efficiently by supplying the (less informed) investors with safe senior tranches with very low default probabilities at the same time as the originator retains the risky equity tranche itself. In this way the originator will be the first to suffer losses if the loans are of low quality.

Market segmentation, and the arbitrage opportunities it causes, can also help create value from tranching. If the originator possesses private information about certain investors, it can create securities that are tailor- made for these investors’ special demands. The CDO originator can then keep a share of the premium that the investor is prepared to pay to invest outside its “feasible investment domain”. In the case of microfinance loans there are many reasons to believe that risk-return profiles and natural hedges that are unattainable through traditional securities could be achieved through microfinance CDOs. Through tranching it could be possible to attract investors that normally would never consider making (or be allowed to make) retail debt investments in an emerging market. In this way the tranching can help complete the market.

Of course, for the originator to be able to make market segmentation induced arbitrage profits from the tranching it must be impossible, or at least difficult, for other originators to follow suit. As mentioned above, CDOs often reference non-standard assets and this is one reason for the difficulty it creates for other originators to replicate the deal. Luckily for the CDO originator, this is exactly the situation in the microfinance market of today where the assets must be considered highly unconventional. This lends further support to the hypothesis that tranching and collateralized debt obligations are particularly suitable for the microfinance industry.

In order for a microfinance CDO to work in reality there are of course a number of criteria that have to be met. For one thing, a critical (minimum) number of financially healthy borrowers is needed in order to make microfinance commercially viable. Unfortunately, this is something of a vicious circle; if no commercial funding is available the market will never reach a critical mass and if the market is not allowed to grow without distortions there will never be sufficient commercial interest in microfinance lending. The governments, locally as well as globally, have an important role to play here in facilitating the lives of commercial MFIs. For instance, governments and development aid agencies have to make an end to the all too common crowding out of the commercial microfinance sector by state-subsidized MFIs. One way of doing this is for the donors to spend money on the development of a viable, efficient and competitive microfinance securitization/credit derivative market instead of on direct subsidized lending. If successful, this could eventually lead to the reasonably cheap and, importantly, permanent financing for billions of people that public aid-and private philanthropy-based microfinancing has failed to offer.

POTENTIAL HURDLES

A few of the hurdles that might come up are:-

- Mainstream investors & commercial banks are used to deal with regulated entities organized as profit-maximizing firms that operate in a well-defined legal environment. In order to facilitate MFI's role as a middleman and facilitate their contact with mainstream financial institutions, they need to increase their scope of regulation.
- Macro policy and government regulation need to be modified to accommodate commercial micro lending. Stable currencies & predictable inflation rates are required for feasible microfinance. There are still several countries which have interest rate caps & other regulatory hurdles in place
- In order to tap international markets, the MFI's/investors should be able to hedge the foreign exchange risk when they lend/borrow in foreign currency. Unfortunately in countries which require maximum amount of microfinance, there are no effective means for reducing this risk

INNOVATION OF A GLOBAL LOCAL CURRENCY MICROFINANCE FUND

Introduction

The growth of the microfinance industry has averaged above 25% over the last decade, but still a large part of the demand has not been fulfilled to date. The funding gap is only widening because the funds being provided by NGOs and the multilateral institutions are not sufficient to meet this need. The domestic capital markets and the private investors (individual and institutional) have largely been inaccessible to the Microfinance Institutions (MFIs). During the past decade, most of the commercial banks in the developing countries have been unwilling to lend to the MFIs whilst the domestic capital markets have also been out of the reach of many MFIs. This general lack of access to local currency financing implies that the MFIs have not been able to tap the domestic markets effectively for their funding needs. On the other hand, international donors who contributed initial funding to many existing MFIs are also not capable of supplying further resources to scale up the microfinance services which would satisfy the growing demand. Therefore, private investments (international commercial investments) will be the primary source of funding and access which is capable of sustaining this microfinance growth story. The International Finance Corporation (IFC), institutional investor networks (mutual funds, pension funds, insurance companies and global banks), commercial microfinance funds, university endowments, consortiums (such as the global commercial microfinance initiative) and privately managed international investors have a very important role in funding the gap through the commercial investments in microfinance.

However, this market remains untapped largely due risks of currency devaluation faced by the international investor capital. Particularly, foreign debt is in fact available for the microfinance industry, but the foreign exchange risk (FXR) is a major deterrent preventing the funds from coming in and bridging the gap. Most of the MFIs are usually ill-equipped to deal with this FXR rising out of accepting international commercial funding or are generally unwilling to absorb the extra costs associated with hedging away the extra risk with the use of derivative instruments. Then, there is the additional concern that whether this FXR is passed on to the poor clients through high interest rates, that is, whether foreign investment in microfinance is expensive for poor people.

Recognition of the Problem

What makes this foreign currency exposure such a huge risk?

The largest sources of non-donor foreign capital to local microfinance institutions are generally denominated in hard currencies such as US dollar or Euros. Approximately, 70% of the private capital invested in microfinance to date is in hard currency debt. However, MFIs must make loans to the poor clients in the local currency, thus exposing them to foreign exchange risk (FXR). In addition, microfinance primarily operates in developing countries where the risk of local currency devaluation is the highest. Therefore, the repayment of the hard currency denominated foreign funds could turn out to be significantly more expensive to the MFIs relative to a local currency resulting in high interest rates to the poor clients.

Also, it is generally uneconomical for a fund to offer local currency capital by hedging deals on an investment-by-investment basis (that is, currency-by-currency basis), particularly for emerging market currencies. Hedging foreign currency exposure across local currencies is very expensive and there are minimal hedging instruments for emerging market currencies where MFIs operate. From the perspective of the investment fund, not having local currencies to offer also restricts the number of deals the funds can consider. Furthermore, the industry is slow to respond while the largest international microfinance donors do not appear prepared to develop a risk mitigation vehicle to resolve the foreign currency exposure. Several capital market transactions have evolved in the microfinance industry, but nothing substantial to address foreign currency risks.

So the question is that how can the foreign currency risk in microfinance be managed without passing the buck to the poor people?

The "Global Local Currency Microfinance Fund"

Capital markets hold a great promise for turning private investors to microfinance but as yet have not realized their potential in this area. Microfinance, as an asset class, could provide a double bottom-line return to investors while reducing third-world poverty. The benefits for investors are two-fold: they could invest in the alleviation of poverty while at the same time obtaining a financial return. In this context, recent capital market transactions that have evolved in the microfinance industry reveal a tremendous potential for capital access, but the foreign exchange challenges still pose a major bottleneck.

Financial economics research suggests that there is great potential for developing countries to improve their ability to reduce their exposure to other countries' interest rate and exchange rate volatility and to lower their cost of raising capital abroad by borrowing in their own local currency. According to one study, "Up from Sin: A Portfolio Approach to Financial Salvation" (Dodd and Spiegel 2004), the key to achieving the foreign exchange risk management goals is for emerging economies to borrow in their own local currencies and for investors to lend by creating portfolios local currency government debt securities that employ the risk management technique of diversification to generate a return-to-risk that competes favorably with those of other major capital market securities indices.

The study found that historically there is not a high degree of correlation between local currency securities, which illustrates the power of diversification to lower risk. Also, most developing countries are more highly rated for debt obligations in their own currencies than for those in foreign currencies. Therefore, financial economics conclusion to be drawn from this comparison is that there are greater potential reductions in domestic market risk (interest rate and exchange rate uncertainty) through diversification than reductions in credit risk through diversification.

Another study, "Foreign Exchange Risk Management Practices of Microfinance Institutions", proposes that debt capital that diversifies across the sources of funds and allocates these funds among many different currencies could be a possible solution for mitigating exchange rate risks. Therefore, if the microfinance network (Opportunity International) incurs debt in three major currencies, such as the U.S. dollar, the euro, and the yen, and then distributes these funds across many different currencies, a reduction in the risk of exchange rate changes is possible.

The economics studies imply that diversification through local currencies (which do not require using hedging techniques to mitigate the currency risk) could be a feasible and less expensive solution for foreign exchange risk management, with substantial benefits for the microfinance industry. The creation of a **global local currency microfinance fund (the "Fund")** capitalized with a combination of hard currencies (such as the U.S. dollar, euro, Australian dollar, and yen) and lending across a diversified basket of emerging market currencies in the form of debt financing to MFIs could reduce foreign exchange risk exposure and provide a higher yield per unit of risk. The MFIs could borrow in the local currency, and the interest rate charged to an MFI would include a risk premium (similar to any corporate bond) to compensate for the credit spread relative to a local currency sovereign bond.

A diversified fund portfolio comprising microfinance investments capturing emerging market premiums offered in local rates, and risk reduction through low correlations between currency exchange rates, could perform as well as a hard currency–denominated debt portfolio. Once sufficiently diversified, and provided with an equity cushion to cover foreign exchange losses, the Fund should be able to provide a competitive risk-adjusted return to the investors.

Advantages

The access to mainstream capital markets in the form of local currency funding is essential to maintain the strong growth rates in the microfinance industry. The direct advantages for the MFI sector include these:-

• The local currency Fund would ultimately assist MFIs in tapping into domestic capital markets, allowing the microfinance sector to leverage resources in multiples while avoiding foreign exchange risk and increasing the flow of information about MFIs to potential lenders.

• The focus on market-based approaches to access local currency financing would pioneer in the development of emerging capital markets, credit ratings, derivatives markets, and credibility with the banking sector, resulting in the promotion of microfinance as an openly tradable and liquid asset class.

• The MFIs would be able to build a credit history and ultimately access funds on their own, thereby building the credibility of the domestic financial sector.

• Commercial financing could be used for a broader range of financial instruments, such as direct loans, guarantees, fixed income instruments (including certificates of deposit), commercial paper, notes, bond issues, and securitization.

Summarizing, there is significant potential demand for local currency financing solutions to be provided by international private investors in the microfinance industry. Loans denominated in hard currencies and existing foreign exchange risk management practices are prohibitively expensive—to the MFI, the microfinance client, or the existing investment funds. The implementation of a global local currency microfinance fund (the "Fund") that employs the risk management technique of currency diversification could be a feasible and less expensive solution, with substantial benefits for the microfinance industry.

CONCLUSION

To conclude, to sustain the growth in the microfinance industry, it is necessary to shifting the loan financing for MFIs from traditional lenders to capital markets. This can primarily be achieved through securitization and CDOs. Both have different advantages to offer which can be tapped separately and also customized on a case-by-case basis. Apart from the domestic commercial investors, foreign market debt can also be tapped for the funding needs of the MFIs but for that to function properly, the FXR has to be managed which can be effectively done through the creation of a "global local currency fund" which basically works on the principle of diversification.

REFERENCES

- Jerome Booth: "*The Attraction of Local Currency Emerging Debt*." The Emerging View, February 2005.
- Peter Crabb: "*Foreign Exchange Risk Management Practices of Microfinance Institutions*." Journal of Microfinance, winter 2004.
- Randall Dodd and Shari Spiegel: "*Up From Sin: A Portfolio Approach to Financial Salvation*." Financial Policy Forum - Derivatives Study Center, August 2004.
- DIECKMANN, R. (2007) *Microfinance: An Emerging Investment Opportunity*, Frankfurt: Deutsche Bank
- STIEBER, S. (2007) '*Is Securitization Right for Microfinance?*' MIT Press Journals: Innovations, Technology, Governance, Globalization
- Global Structured Finance Research, J.P. Morgan Securities Inc., New York - weekly publications between Sep 2004 and Apr 2005