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Securitization and the Challenges Faced in Micro Finance

by

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Securitization and the Challenges Faced in Micro Finance

Evolution of financing models – from traditional lending to asset backed securitization, credit derivatives and mezzanine financing

1. Traditionally the world over, commercial banks have been performing the role of financial intermediation by lending to corporates in the form of loans or subscribing to their debt issuances thereby taking direct exposures on the overall credit risks of the underlying borrowers. It is critical to understand that credit risk is a culmination of different factors such as industry risk, business risk, financial risk, project risk and management risk faced by the underlying borrowing corporate, some of which can be within the corporate's control while the others are not. Therefore, quite often, banks end up taking lending decisions without fully understanding and appreciating the nature of the multiple risks that represent the borrowing organizations.

2. This quest of lending against specific risks that are understood and appreciated by the banks culminated into the development of an alternative lending approach where the borrowing entity was envisaged to be an aggregation of risks of diverse nature represented by the assets of the entity, which could be de-constructed into different buckets, evaluated separately and allocated thereafter to various lenders or investors as per their needs and risk appetites. This approach intended to move the lenders from the traditional platform of lending to an undifferentiated organization to a new improved paradigm of lending against specific assets and represented an improvement over the traditional lending model.

3. Lending secured by specific cash flow receivables as collateral trapped in escrow arrangements, represented the earliest forms of such asset-backed transactions. However, the lenders here did not have exclusive rights over these flows and shared a pari-passu charge with other lenders or investors over these assets. Next, the lenders' interests were strengthened by enabling them to have exclusive first charge on the underlying designated cash flows with other bankers / lenders formally agreeing to such an arrangement. This was followed by complete isolation of the borrowing entities' interest in the designated cash flow streams and transfer of the same to lenders / investors either with or without the support of further collaterals. Thus "securitization", in the sense the term is used in the present day capital markets came into being.

4. The development of securitization was thus premised on credit being converted into a commodity. In the process, the risk inherent in credits was being professionally measured and rated. As a logical follow-up, if the risk could be measured and traded as a commodity with the underlying financing involved, the financing and the credit could be stripped as two different products and the risk could be undertaken by guaranteeing the total expected return from the credit transaction. This led to the development of credit derivatives.

5. Further, as more cash flows loans were being securitized, often gaps got created between the new asset-based deal and the amount financed previously for two primary reasons:

    1. receivables and assets being discounted at rates greater than in the past for fear that their values will not be realized in the future, and

    2. banks placing ceilings on the amount of total debt a company can obtain as a result of defaults and regulatory pressure.

6. While additional liquidity to bridge these gaps could be obtained from equity investors, equity being the most expensive source of capital and calling for dilution in ownership stake, mezzanine finance, a hybrid form of capital, structurally junior in priority of payment to senior debt, but senior to equity, evolved as an attractive alternative to fill up the gap. Traditional mezzanine lenders have been book-and-hold investors, generally focused on cash flow lending and looking for call protection and equity participation to generate longer-term results. However, owing to a dearth of traditional deals at present, mezzanine investors are starting to show structural flexibility, including shortening their call protection.

Key concepts

7. Securitization is a process through which homogenous illiquid financial assets are pooled and repackaged into marketable securities. 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.

8. 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.

9. Securitization involves isolation of specific risks, evaluation of the same, allocating the risks to various participants in the transaction (based on who is best equipped to mitigate the respective risks), mitigating the risks through appropriate credit enhancement structures and pricing the residual risk borne by the originator. It entails evaluating the transaction from the legal, regulatory, taxation and accounting implications from the perspective of various participants.

10. In a securitization transaction, the assets to be securitized are transferred by the asset owner (the originator or transferor) to a special purpose vehicle (SPV) as the asset purchaser. 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.

11. Securitization transactions deal with various asset classes that include, among others, mortgages, automobile loans, aircraft, equipment and municipal leases, credit card receivables, hospital, retail, royalty and trade receivables, real estate, purchase contracts for natural resource assets such as oil, gas and timber, student and home equity loans, etc., and has emerged as an efficient and cost-effective efficiency resource raising mechanism with the potential to integrate the apparently illiquid underlying assets with the capital markets.

12. From an originator's perspective, the main advantages of securitization include the ability to raise finance at a relatively low cost, partial or total removal of assets from its balance sheet, diversification of funding sources, access to the capital markets for unrated entities and access to liquidity. Thus it 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. Additionally, banks that raise funds through securitization are able to reduce their regulatory, and sometimes economic, capital requirements.

13. 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.

14. Depending on the originator's financing requirements, and the characteristics of the underlying assets, funding can be arranged through term securities, balance sheet warehouse facilities or asset backed commercial paper.

Participants

15. The following parties are involved in a typical securitization transaction:

16. *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.

17. *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).

18. *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.

19. *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.

20. *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.

21. Besides these primary parties, the other parties involved in a typical securitization deal are:

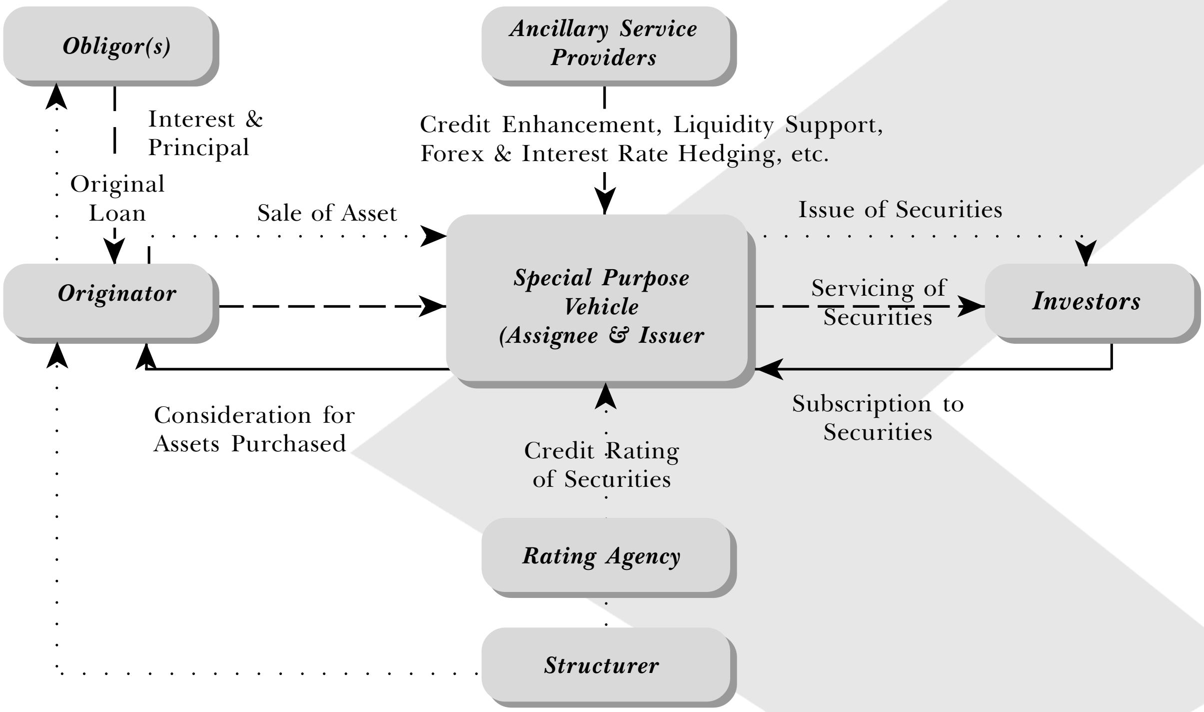
22. *Rating Agency:* Since structured finance deals are generally complex with intricate payment structures and legal mechanisms, rating of the transaction by an independent qualified rating agency plays an important role in attracting Investors.

23. *Administrator or Servicer:* The Servicer performs the functions of collecting the cashflows, maintaining the assets, keeping records and general monitoring of the Obligors. In many cases, especially in the Indian context, the Originator also performs the role of the Servicer.

24. *Agent and Trustee:* The Trustee is the manager of the SPV and plays a key role in the transaction. The trustee generally administers the transaction, manages the inflow and outflow of moneys, and does all acts and deeds for protecting the rights of the Investors, including initiating legal action against various participants in case of any breach of terms and triggering payment from various credit enhancement structures etc.

25. *Structurer:* Normally, an investment banker acts as the Structurer and designs and executes the transaction. The structurer also brings together the originator, credit protection provider, the investors and other parties to a deal. In some cases the Investor also acts as the Structurer.

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.

Asset classes in securitization

26. Securitization can be classified into two categories:

1. Asset backed securitization, and
2. Future flow securitization

Asset backed securitization (ABS):

27. Here receivables "existing" in the books of the originator (where the obligation of the obligor to make payments is not dependent on further action or performance by the originator) are securitized. Typical ABS receivables are mortgage-backed receivables, auto pool receivables, collateralized debt obligations (CDO) and hire purchase rental receivables with the originator's responsibility limited to collection of the underlying receivables only. Hence, ABS transactions can be bankruptcy remote to the originator as the SPV or the investors can continue to collect from the underlying obligors even if the originator ceases to exist, and can be rated independent of the rating of the Originator.

28. Non-performing loans (NPL) is another asset category which has been securitized in recent times. Securitization of these NPLs release capital in the balance sheets of the originating banks, they can be better managed by specialized agencies, and would appeal to investors having high risk appetites and looking for significant gains.

Future Flow Securitization (FFS):

29. This refers to securitization of receivables which are to be generated in the "future" i.e. the obligation of the obligor to make payments depends on further substantial performance

by the originator. Trade Receivables, arising out of long-term offtake contracts between originator and obligor for sale/purchase of products over a pre-determined period in future, typically qualify as future receivables. Other typical FFS receivables are credit card receivables, electricity receivables, toll road receivables, etc.

30. FFS transactions could be effectively used to overcome the sovereign rating constraints on international transactions in cases of transactions involving cross-border receivables, say Export Receivables.

31. In both ABS and FFS transactions, the other principal characteristics that need to be evaluated are as follows:

- Type of underlying security attached - movable or immovable in nature
- Ability to estimate the cashflows from the asset
- Payment frequency and the propensity to prepay or make delayed payments
- Nature of the obligor(s) on whom cashflows are dependent

Cash flow and contract Analysis

32. Most securitization deals involve complex underlying contracts, between the Originator and the Obligors, which need to be analyzed to understand the implications on the proposed transaction. The rights and obligations of the various parties are defined in these contracts along with termination events, events of default, performance requirements and consequences of defaults. Assignability of these contracts and the rights embedded therein are of paramount importance.

Risk identification, allocation and mitigation

33. The key risks in a typical securitization transaction are:

	Risks		Description
1.	Credit Risk and Bankruptcy Risk	:	Ability of the entity to pay its obligations and survive as a viable entity.
2.	Performance Risk	:	Ability to perform and fulfil contractual obligations.
3.	Asset/ Collateral Risk	:	Variation in the value of the underlying asset.
4.	Payment / Counterparty Risk	:	Ability of other parties to the transaction, like swap-provider, paying bank etc., to meet their obligations.
5.	Interest Rate Risk	:	Risk arising out of variation in interest rates.
6.	Exchange Rate Risk	:	Risk arising out of variation in exchange rates of various currencies.
7.	Liquidity Risk	:	Ability to liquidate the underlying assets or collateral and generate liquidity to service the Investors in a timely manner.
8.	Commingling Risk	:	When a Servicer is appointed to collect moneys from the Obligors, the funds collected may be retained by the Servicer with itself for a short period of time

	Risks		Description
			before remitting to the SPV. The risk of loss of such moneys due to a credit event or bankruptcy of the Servicer is called commingling risk.
9.	Prepayment risk	:	The obligors of the underlying assets may repay their obligations ahead of schedule. This affects the maturity of the investments made by the investors. The variation in the maturity due to pre-payment by the obligors is the pre-payment risk.
10.	Reinvestment Risk	:	Some structures (typically pay-through ones) may have the SPV reinvesting the funds received from the obligors and the originator and paying out to investors only on pre-specified dates. The variability in the returns earned on such investment is re-investment risk.
11.	Legal / regulatory / tax Risk	:	As structured finance deals involve interpretation of various laws (including that of income tax laws) and regulations as also complex documentation, there is a significant level of legal and regulatory risk.

Credit Protection

34. Support mechanisms (or credit protection) are utilised in the structure in order to minimize or mitigate certain potential risks. The support mechanism in each transaction is a function of the nature of the underlying assets and the transaction structure. The following are some of the frequently used support mechanisms:

- *Insurance / Guarantee / Letter of credit* (full or partial) provided by a third party or the Originator itself
- *Credit Tranching* provided by issuance of multiple tranches of securities with a pre-determined priority in their servicing, whereby first losses are borne by the holders of the subordinated tranches (at times the Originator itself). Apart from providing comfort to holders of senior debt, credit tranching also permits targeting investors with specific risk-return preferences.
- *Over-collateralization* provided by setting aside assets/cashflows in excess of the collateral required to be assigned to the SPV
- *Cash collateralization* provided (usually by the originator) by keeping a specified quantum of money as a cash deposit in a bank earmarked to meet any shortfalls in investor payouts for the transaction. The Trustee draws on this cash reserve if there is any shortfall in payment to the Investors. Cash collateral can be used as a liquidity support as well as credit support in transactions.
- *Excess interest spread* being the difference between the yield on underlying the assets and yield to the investors from the securities. In its simplest form, a spread account traps the excess spread (net of all running costs) within the SPV up to a specified amount sufficient to satisfy a given rating or credit quality requirement. Only realizations in excess of this specified amount are routed back to the

Originator. This amount is typically returned to the Originator after the payment of principal and interest to the investors.

- *Swaps and Options* used to hedge interest, price and exchange rate risks

Legal, taxation and regulatory considerations

35. The key issues that impact structured finance are as given below:

- *Legislation governing the transfer of property:* The interpretation of such guidelines has implications on the rights of the transferee, the requirements of a valid mode of transfer etc.

- *True sale considerations:* This is critical to ensure bankruptcy remoteness to the originator as also to secure the interest of the investors in the underlying assets. The structure of the SPV and the level of recourse to the Originator are key aspects of the transaction that affect true sale.

- *Transfer costs:* Any transfer of the assets together with the incidental rights and obligations to the SPV could attract duties payable to the statutory authorities. This could also impact the liquidity of the instruments issued by the SPV depending upon the duties on transfer of the underlying instruments.

- *Structure and constitution of the SPV:* Each jurisdiction is at a different stage of evolution with respect to the laws relating to SPVs.

- *Taxation:* One key challenge in a structured finance transaction is to avoid creating additional costs to the Originator in the form of additional tax payments. Hence the tax treatment of the SPV through which the income from the underlying assets would be passed on to the investors, as well as the availability of the same tax concessions to the SPV as were available to the originator on certain assets are key considerations.

The Securitization Market

International experience

36. The securitization market in the US has a fairly long vintage, with the Federal Government supporting the MBS market through institutions like the Freddie Mac, Fannie Mae and Ginnae Mae. Over the last quarter of a century, securitization has become one of the largest sources of debt financing in the US representing around 30% of the total outstanding US bond market and is enjoying extraordinary growth. Between 1996 and 2004, the market grew at an average rate of 19% per annum from US$ 152 billion (in 1996) to US$ 624 billion (in 2004). In fact, the growth rate has been showing an up trend in the recent past with the CAGR between 2001 and 2004 being 28%. Despite being the most matured market, traditional asset classes such as the MBS (72%) and ABS including CDOs (14%) have driven the volumes in the US, the balance being contributed by FFS transactions (credit cards, student fees, etc.). In 2005, the market issuances till date gross up to US$ 176 billion (as compared to US$ 167 billion achieved during the same period in 2004). The share of the traditional asset classes like MBS stands at 70% with ABS including CDOs contributing to around 19% of the issuance volumes.

37. European securitization market began in the mid 1980s with UK leading the way with an MBS issue in 1986. For a long period, issuance volumes were modest with UK and France being the dominant markets. Bulk of the volumes was accounted for by traditional MBS and ABS (mainly CDOs) transactions. However, at present, Europe provides a thriving securitization

market. Between 1997 and 2003, the market grew at an average rate of 23% per annum from US$ 66 billion (in 1997) to US$ 285 billion (in 2004). In fact, the growth rate for the European market between 2001 and 2004 being 39% much exceeds the growth rate of the US markets during the same period. In 2005, the year to date volumes of securitized paper amount to US$ 71.5 billion as against US$ 72.6 billion in the corresponding period in 2004. MBS (60%) and ABS including CDO (28%) continue to dominate the issuances in Europe. In terms of countries of origin, UK leads the pack with a market share of around 45%, followed by Italy with a share of around 14%, while Spain and Netherlands have around 8% share each. Other significant countries of origin are Germany and France. In terms of currencies of issuance, around 64% of the issuances are Euro denominated, around 21% are denominated in GBP while the remaining are denominated in US$.[1]

Indian experience

38. The Indian securitization market has seen the emergence of diverse asset classes though volumes are driven by traditional asset classes such as auto loan receivables and mortgage backed receivables. The fiscal year 2003-04 witnessed around 82% of the market volumes being contributed by auto loan receivables and mortgage backed receivables. Emerging asset classes include toll receivables, telecom receivables, electricity receivables, fee receivables, deferred tax receivables, etc. The market has already witnessed the entry of international players such as IFC in the role of credit protection providers. The government is also expected to emerge gradually as a key market participant with increasing realization of the potency of securitization as a means to raise low cost resources. However, the markets remain shallow as issuances continue to be restricted to a handful of high quality originators and a majority of the transactions are bilateral. Moreover, the investor base continues to remain small, especially for the long-tenured transactions.

39. The first securitization transaction in the Indian market happened in 1991 where Citibank N.A originated an auto loan receivables securitization deal. In the next six years, the market witnessed 12 more ABS issuances, all auto loan receivable securitization transactions. In 1997, the markets suffered a major setback as the auto loan market crashed on account of a number of defaults from Non-Banking Finance Companies (NBFCs). The market for securitized instruments started picking up again in fiscal year 2000-01. The year witnessed a total volume of Rs. 29.00 billion (~US$ 640 million) from 19 issuances by eight originators. The fiscal year 2001-02 witnessed 25 issuances from 11 originators totalling Rs. 36.82 billion (~US$ 820 million). This was followed by 73 issuances from 18 originators amounting to Rs. 77.66 billion (~US$ 1,725 million) in fiscal year 2002-03, 87 issuances from 22 originators amounting to Rs. 137.62 billion (~US$ 3,050 million) in fiscal year 2003-04, while in fiscal year 2004-05, there have been 123 issuances in all from 27 originators, grossing up to Rs. 313.08 billion (~US$ 7,116 million). Thus between fiscal years 2001-02 and 2004-05, the securitization market in India has registered a growth rate of over 100% per annum. Despite this scorching pace of growth, the market size, in comparison with the developed international markets (US$ 626 billion in the US and US$ 282 billion in Europe in 2004), might not seem to be noteworthy. However, the same assumes significance given the fact that the Indian markets have started growing only in the last couple of years.

40. On the origination side, the participants are primarily banks, Non-Banking Finance Companies (NBFCs), Housing Finance Institutions (HFIs) and to a very limited extent, corporates. On the investment side, Mutual Funds are major participants in the securitization

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[1] Source: Global Structured Finance Research, J.P. Morgan Securities Inc., New York – weekly publications between Sep 2004 and Apr 2005

market, apart from the aforesaid players, especially in the shorter-terms. Besides, insurance companies and corporates, to a limited extent have started investing in these papers.

41. ICICI Bank, the second largest commercial bank in India has been an active player in the domestic securitization market since 1997. Presently ranked the largest player in the market on the originating side with an overall share of around 42% (for fiscal year 2004-05), the bank has contributed to a considerable extent in expanding the market horizons primarily by enhancing origination volumes and attracting different investor categories as well through innovative structuring and pioneering marketing efforts within a short span of time.

42. Issuances of largest single transactions in terms of size domestically in almost all underlying asset classes stand to the bank's credit [auto pool receivables – Rs. 16.32 billion (US$ 370.91 million); mortgage backed receivables – Rs. 11.94 billion (US$ 271.36 million); personal consumer loan backed receivables – Rs. 6.56 billion (US$ 149.09 million); multi-obligor CDO – Rs. 0.94 billion (US$ 21.36 million)].

43. Introduction of temporal tranching (Nov 2001) non-funded risk participation (Sep 2002), book building (Dec 2002) and market making (Apr 2003) of securitized papers, par issuances as against the practice of premium issuances prevalent in the markets (May 2003), carving out a prepayment tranche to insulate other senior tranches from prepayment risk (Oct 2003) and issuance of a multi-obligor CDO (Jan 2004) are among the many "firsts" to the bank's credit in India. Besides, the bank has also worked on other innovations such as offering floating yield structures linked to transparent benchmarks, revolving structures, etc. and ramped up its market issuances further.

44. Efforts such as these helped the bank achieve a volume of Rs. 8.26 billion in fiscal year 2002-03 and ramp it up more than tenfold to Rs. 129.57 billion in fiscal year 2004-05.[2]

45. With a legal framework specific to securitization being put in place, rationalization of stamp duty considerations for securitization (which earlier ranged anywhere between 10% and 28% in various states) being effected in six of the 28 states, a detailed accounting framework for securitization laid down by the Institute of Chartered Accountants of India (ICAI) and Reserve Bank of India (the central bank in the country) taking steps to encourage securitization in India by offering capital relief on mortgage backed assets to banks and financial institutions investing in securitized papers, it could now be said that the Indian market has overcome the initial challenges and is gradually coming of age. With time, it is expected that the market participants will increasingly be forced to compete and be judged through their internal strength and capital base rather than by the external support from the central bank or the government while market penetration of financial institutions in the area of loan origination in future will be determined more by the volume of loans originated during a period than by the amount of loans owned at a particular point of time. As the structure of the financial system evolves over time, it is expected that securitization will play a much more important role in the future. However, the securitization market in India still continues to lack the requisite depth, which manifests in the form of securitized papers attracting a premium over corporate bonds with comparable risk profiles. It is hoped that with time, as pass through certificates issued in the process of securitization are recognized as "securities" like the regular debt instruments such as bonds, debentures, etc., the market would gather further momentum and the illiquidity premium prevailing now would eventually disappear.

[2] source: ICICI Bank Limited and ICRA Limited – an associate of Moody's Investors Service

Challenges faced in micro finance

Background

46. 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.

47. 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 organisation 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.

Initiatives taken by ICICI Bank

48. ICICI Bank has been directly involved through the Social Initiatives Group (SIG) and the Rural and Micro Banking Group in developing solutions to all of these aforesaid problems. The bank is focusing its efforts at fostering strategic partnerships with local Micro Finance Institutions (MFIs) and Non-Governmental Organizations (NGOs), which over the last decade have been instrumental in providing basic financial services outside the formal banking system, in order to ramp up its outreach at a rapid pace. While a few of these organizations have achieved a sizeable scale of operation, most, despite some very good track record of performance, have not been able to scale up their operations mainly on account of:

1. inadequacy of risk capital to provide the degree of coverage required to absorb the risks inherent in this business
2. non availability of finance for on-lending to the borrowers even to the extent of the risk capital that already exists
3. non availability of long-term finance to pay for creation of necessary infrastructure and pre-operative expenses
4. inadequacy of well-trained personnel in their rolls
5. not having access to appropriate technology

49. In the fiscal year 2003-04, ICICI Bank has launched a formal comprehensive programme of partnership with these MFIs / NGOs and have been working out multiple financing structures to meet their needs. The essence of such structures is to provide a steady supply of money to these MFIs / NGOs and enable them build up their portfolios to a sizeable scale and expand on a sustainable basis.

50. The bank either enters into a partnership model with these organizations wherein funds are provided in order to generate micro finance loans for the bank's books directly or securitizes the micro finance portfolios already generated by the MFIs / NGOs, thus, in turn, freeing up their equity capital and contributing to enhanced generation of micro finance assets. In either case, the bank provides the organizations with financial support at a mezzanine level in order to enable them offer credit protection on the micro finance portfolios to a reasonable extent.

51. Efforts are on to develop a secondary market for securitized papers to expand the investor horizon and consequently lower the cost of funding these assets on a continual basis. In this regard, the bank is actively working with CRISIL, a premier credit rating agency in India, to develop a smooth and scaleable process for rating the underlying customer assets on an ongoing basis.

52. The aforementioned structures therefore serve the dual purpose of providing a virtually unlimited supply of risk capital (in the nature of contingent equity) to the deserving MFIs / NGOs and utilizing the capital also in a parsimonious manner as compared to the traditional financing models.

53. Some of the challenges being faced and mitigating solutions being adopted by the bank in such micro finance transactions are being outlined hereunder:

Challenges faced		**Mitigating solutions being adopted**
Credit risk of underlying obligors	:	Credit risk is being ascertained through statistical analysis of the overall portfolio in a process similar to the ones adopted for standard retail asset securitizations. This is being mitigated through appropriate First Loss Deficiency Guarantees (FLDGs) from the MFIs / NGOs supported in turn by the mezzanine financing structures.
Prepayment risk of underlying obligors	:	Prepayment risk is being ascertained through statistical analysis of the overall portfolio in a process similar to the ones adopted for standard retail asset securitizations. This is usually being mitigated by taking indemnities from the originating entities.
Creation of appropriate rights on the underlying cash flow receivables	:	In several cases, securitization of the underlying receivables is impeded by the fact that existing lenders to the originating entities had created charge on the entire loan portfolio. This is being overcome by obtaining appropriate "No Objection" certificates from such lenders holding charge on the portfolio being securitized.
Stamp duty anomalies in		In some instances the underlying loan documents executed by MFIs
the underlying documents	:	with their borrowers were found to be unstamped / under stamped. This risk was mitigated through stamp duty indemnity, which was taken from MFIs.
Commingling risk at the originator's end	:	Since the originator is being entrusted with the servicing the collection responsibilities in the securitization structures, the funds collected from the underlying obligors get retained by the originator / servicer for some period of time before being remitted to the investor, thereby resulting in commingling at the originator's end. While it is not possible to mitigate this risk

Challenges faced	Mitigating solutions being adopted
	entirely, the risk is being minimized by a considerable extent by increasing the frequency of payouts to the investor as much as possible. ICICI Bank is insisting on monthly payout schedules in their structures.
Servicing risk	: This risk stands unmitigated currently. However, ICICI Bank has already started talking to other MFIs / NGOs operating in the nearby vicinity of the originators, whose portfolios are being securitized, and training them to take up the responsibilities of acting as alternate service providers in case of any eventuality.

54. A brief description of a couple of micro finance securitization deals executed by ICICI Bank is being provided in Annexure 1.

Annexure 1: Securitzation of micro finance portfolio originated by MFIs

1. Bhartiya Samruddhi Finance Limited (Samruddhi)

Background

Samruddhi, a leading MFI established in 1996, is perhaps the only MFI in India to have attracted equity investments from commercial investors including ICICI Bank, HDFC and IFC- Washington among others.

ICICI Bank has securitized the receivables of a selected portfolio of micro-finance loans from Samruddhi amounting to Rs. 42.1 million (US$ 0.96 million) which consists of loans made by Samruddhi to micro-finance clients for the purpose of crop production. The underlying transaction has a par structure.

Deal Structure

The excess spread to be collected from the underlying receivables have been used to:

1. cover the costs of collection incurred by Samruddhi
2. compensate Samruddhi for its role as a Collection Agent
3. provide ICICI Bank a guarantee for 15% of the receivables under the portfolio.

This is to be kept with Samruddhi in a special account hypothecated to ICICI Bank till the maturity of the portfolio. This trapped excess spread shall be, thus, available to ICICI Bank to meet the obligations of Samruddhi under its guarantee.

2. Share Microfin Limited (Share)

Background

Share, a Grameen Bank Replicator, has been one the leading MFIs in the country with a very impressive track record, growth and scale and is the largest MFI in India.

In two transactions with Share having a premium structure, ICICI Bank has securitized the receivables of micro-finance loans from Share amounting to Rs. 215.0 million (US$ 4.90 million) which consists of loans made by Share to micro-finance clients for Agricultural purposes.

Deal Structure

- Buy-out micro-finance loan portfolio by ICICI Bank against a consideration calculated by computing the NPV of receivables amounting to Rs. 215.0 million at an agreed discount rate.
- Partial credit protection provided by Share to ICICI Bank in the form of a guarantee amounting to 8% of the receivables under the portfolio by way of a lien on fixed deposit.

References

1. Global Structured Finance Research, J.P. Morgan Securities Inc., New York – weekly publications between Sep 2004 and Apr 2005

2. ICICI Bank Limited and ICRA Limited – an associate of Moody's Investors Service