TECHNICAL NOTE 4
FINANCING MICROFINANCE IN INDIA

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The purpose of this note is to estimate the investment required to enable the microfinance sector SHGs and MFIs to meet the overall demand for micro-credit by 2010 in a financially sound and sustainable manner.

MFIs are expected to meet about 25% of the micro-credit demand by 2010, while the other 75% of the demand is expected to be met by the bank-SHG linkage programme. This paper estimates the equity investment required by MFIs to grow while maintaining a sound capital adequacy position. It also estimates the promotional and operational expenses likely to be incurred in enabling the bank-SHG linkage programme to meet the overall demand from poor families.

The combined resources required to enable outreach to some 72 million families by March 2010 amount to over Rs6,295 crores ($1,415 million).

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M-CRIL is an international rural finance consultancy providing specialised services like credit rating of MFIs, monitoring, evaluation and sectoral research services for the microfinance industry. **M-CRIL is the world leader in MFI ratings and assessments.**

Context

Microfinance in India has grown at a tremendous pace in recent years, achieving significant outreach amongst the poor as well as non-poor (but low-income) households across the country. Linkages between banks and self-help groups (SHGs) supported by the National Bank for Agriculture and Rural Development (NABARD), on the one hand, and Microfinance Institutions (MFIs), on the other, have emerged as the two most prominent means of delivering microfinance services in India. Growth in terms of outreach across both models has been very high. Under the bank linkage model, a substantial amount of Rs2,994 crores (US$665 million) was disbursed as loans during 2004-05 alone, amounting to over 43% of the cumulative disbursement of Rs6,898 crores[1] ($1,533 million) until that date. Information from M-CRIL's database (of over 50 MFIs rated more than once) shows that the MFI portfolio in India has grown by 146% over the past two years.[2]

Though this performance is impressive, M-CRIL's experience of rating MFIs over the past 8 years has shown that the growth of MFIs in India has been greatly restricted by the inadequate capacity of a number of MFIs to access loan funds from interested lenders. This restriction is caused by raters' or lenders' assessment of the MFIs' limited management capacity, or the poor quality of MFI loan portfolios or even the lack of potential for expanding microfinance in the MFIs' area of operations. However, a key concern resulting in the inadequate inflow of loan funds has been the perception of high risk in MFI operations on account of their poor capital adequacy position.

Since most MFIs in India were initially NGOs involved in grant-based welfare activities they had a modest beginning, supported by grants and small loans as seed money provided by institutions with social motives. During the time MFIs were substantially grant-funded institutions, the perceptions of the financial market were not so much a concern. However, as the scale of operations of the MFIs increased, they borrowed increasing proportions of their on-lending funds and their net worth position in relation to their overall loan portfolio became a matter of interest. Since, in recent years, the net worth position has not grown at the same rate as the loan portfolio, interest has turned to concern. The lack of growth of net worth has happened mainly on account of an

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[1] Source: NABARD Website (http://www.nabard.org/roles/microfinance/index.htm)
[2] Source: M-CRIL database. These numbers correspond to the MFIs who were rated more than once over the last three years and the rate of growth has been calculated from the first rating to the latest rating during this period.

i inadequate inflow of grants for microfinance operations, owing to the perceived commercial nature of microfinance programmes,

ii high initial operating costs of MFIs resulting in a high level of accumulated losses adversely affecting their net worth position, and

iii the legal status of the NGO/MFI,[3] which inhibits the flow of investors' equity.

The mismatch between the growth rate of MFIs in terms of portfolio size and net worth has resulted in very high debt-equity ratios for most MFIs. The debt-equity ratio of the 87 Indian MFIs rated by M-CRIL during the three year period 2003-2005 ranged from 0.1 to 316.0 for those with positive net worth and went as low as (-67.0) among those with negative net worth. The average debt-equity ratio for Indian MFIs rated by M-CRIL during 2003-05 was as high as 11.8 (excluding MFIs with negative net worth). This is much greater than the relatively prudent ratio of 7:1. The average capital adequacy ratio for MFIs looks moderate at 13%, but a significant number of the MFIs (nearly 30%) have either negative or marginally positive net worth. While the low capital adequacy of most MFIs restricts their growth (due to their limited ability to borrow for operations), the bloated debt-equity ratio increases the sector risk of the MFI model of microfinance.

In spite of the impressive growth of microfinance in India, only a small proportion of the estimated overall demand of Rs40,000 crores (US$9 billion)[4] is presently being met. Assuming that a substantial part (even 75%) of this demand for credit will be met by the bank-SHG linkage programme, disbursements by MFIs would still need to grow at a phenomenal rate from the present Rs1,200 crores ($270 million) per annum in order to meet the residual demand. An attempt to achieve this growth is, however, likely to be restricted by the low capital adequacy ratio of most MFIs since this will limit their ability to raise debt. This is notwithstanding the partnership model; a model that has already resulted in MFIs operating beyond their capacities. It is apparent that a return to prudential behaviour and lending to MFIs based on capital adequacy norms is required. In the absence of sufficient equity, a failure of MFIs to grow at the required rate would only widen the gap between the credit needs of low-income families and the supply of credit.

The purpose of this note is to estimate the amount of equity investment required by MFIs, in order to enable them to meet the estimated demand for micro-credit by 2010 while maintaining a sound capital adequacy position. The estimate is based on the portfolio size and net worth position of all MFIs rated by M-CRIL over the last three years (between 2003 and 2005), projected over the next five years.

Further, research studies show that the bank-SHG linkage programme – as currently constituted – is highly subsidised and much of that subsidy is covered by NGOs through donors or government programmes. To expand the linkage programme substantially will require greatly increased subsidies. Keeping this in mind, the operational cost of an expanded bank-SHG linkage programme for covering a substantial proportion of low-income households in India has also been estimated in this note.

[3] Most NGO/MFIs are registered as not-for-profit organisations – Societies, Trusts or Companies incorporated under Section 25 of the Companies Act. While equity investment is, in any case, not possible in Societies or Trusts, the not-for-profit nature even of Section 25 companies does not attract equity investors.

[4] Source: Mahajan, Vijay & Ramola Gupta, Bharti, 2003. "Microfinance in India: Banyan Tree and Bonsai", background paper prepared for the World Bank.

Estimating the net worth requirement to ensure capital adequacy

The MFIs rated by M-CRIL, the data set for this paper, cover virtually 90% of the microfinance clients in India and represent different sizes, models (Grameen, SHG, individual lending, sector support and so on) and regions of India. The MFIs have been classified into nine categories based on the size of their portfolio and their capital adequacy position. **Table 1** below shows the number of MFIs in each category (three MFIs have been excluded as outliers).

Table 1: <u>Categories of MFIs</u>

Capital Adequacy Ratio, CAR[5]	Portfolio size[6]		
	Less than Rs1 crore (<$225,000)	Between Rs1-10 crore ($0.22-2.25 million)	More than Rs10 crore ($2.25 million)
Negative	8	5	0
0% to <12%	9	16	7
≥ 12%	15	17	7
Total	**32**	**38**	**14**

Assuming that the MFIs need to maintain their capital adequacy ratio at 12%, the present deficit in net worth of MFIs is estimated in **Table 2**. This is an estimate of the immediate equity investment required in order to improve the capital adequacy position of the MFIs to 12% of their risk-weighted assets and enable them to access commercial funds for future growth.

Table 2: <u>Current deficit in net worth of MFIs</u>

Category of MFIs		Existing net worth[7] (Rs crore)	Deficit (Rs crore)
Portfolio	**CAR**		
Less than Rs1 crore	<0%	(1.0)	5.9
	0-12%	0.7	0.7
	≥12%	34.7	0.0
Between Rs1-10 crore	<0%	(2.4)	5.4
	0-12%	2.9	4.1
	≥12%	67.6	0.0
More than Rs10 crore	<0%	-	-
	0-12%	22.0	6.6
	≥12%	109.5	0.0
		Total	**23.0**

As shown in **Table 2**, an immediate equity infusion of Rs23 crores ($5.1 million) would significantly improve the capital adequacy position of 84 sample MFIs, enabling them to access commercial funds.

Equity required to sustain MFI growth

With the objective of meeting the estimated demand for credit in 2010 from the segment of the population catered to by MFIs, different growth rates have been assumed for MFIs with

[5] CAR: Risk Weighted Capital Adequacy Ratio is the ratio of net worth to risk weighted assets (Risk weights: 100% for all assets except the following: fixed assets & interest bearing deposits: 50%; cash 0%).
[6] US$ = Rs44.5 & 1 crore= 10 million.
[7] The current level of net worth as available in the database takes into account all the in-kind donations and donated equity received by MFIs as well as accumulated losses (covered from other sources) in their operation over the years.

different portfolio sizes. The growth rates have been calculated on the basis of M-CRIL's growth projections for the MFIs in each category. These projections are based on the business plans of the MFI and M-CRIL's assessment of their organisational capacity and external business environment. The growth rates assumed for the above categories of MFIs are shown in **Table 3**.

Table 3: Expected growth rates for different categories of MFIs

Category of MFIs		Growth rate	
Portfolio	CAR	Clients	Portfolio
Less than Rs1 crore	<0%	47%	108%
	0-12%	43%	65%
	≥12%	48%	78%
Between Rs1-10 crore	<0%	44%	82%
	0-12%	37%	54%
	≥12%	23%	47%
More than Rs10 crore	<0%	-	-
	0-12%	51%	61%
	≥12%	31%	46%

The demand for micro-credit in 2010 has been estimated assuming that 30% of all the households in the country would need such services. With the current households being 220 million (for a population of around 1,100 million at 5 persons per household), the microfinance market would consist of over 72 million households in 2010 at the current rate of population growth.

Based on the growth rates shown in **Table 3**, the projected size in 2010 of the 84 MFIs in our sample is presented in **Table 4**. The projected combined outreach of the MFIs in the sample would amount to around 18 million members. This is 25% of the projected potential market of 72 million families. If the total demand for micro-credit is to be met, the remaining 75% of the estimated target population (nearly 54 million families) must be catered to by the bank-SHG linkage model.

Table 4: Projected outreach and portfolio of sample MFIs in 2010

Category of MFIs		Projected outreach ('000)	Projected portfolio (at current growth level, Rs crores)	Projected portfolio (at 40% growth, Rs crores)	Projected portfolio (at 25% growth, Rs crores)
Portfolio	CAR				
Less than Rs1 crore	<0%	1,483	1,024	143	80
	0-12%	796	120	53	30
	≥12%	2,974	540	161	92
Between Rs1-10 crore	<0%	885	453	122	69
	0-12%	1,458	448	275	156
	≥12%	2,046	503	395	224
More than Rs10 crore	<0%	-	-	-	-
	0-12%	5,603	2,157	1,068	606
	≥12%	2,820	1,973	1,602	909
Total		**18,065**	**7,218**	**3,818**	**2,166**

At the current level of growth, this translates into a portfolio of Rs7,218 crores ($1.6 billion). However, if the portfolio grows at a more moderate pace of 40% per annum, the projected portfolio would reach to Rs3,818 crores ($858 million). Alternatively, if growth is a relatively sedate 25% per annum, the projected portfolio would amount to Rs2,166 crores ($487 million) in 2010.

The equity fund required to sustain the above projected growth has been estimated assuming that the MFIs would be required to maintain a capital adequacy ratio of 12% of their risk-weighted assets. The total risk-weighted assets of the sample MFIs in 2010 have been estimated using the portfolio growth rates shown in **Table 3**. The total net worth required by the sample MFIs in order to maintain sound capital adequacy position is shown in **Table 5**.

It has been assumed that the MFIs would be able to generate a part of the total net worth requirement through internal accrual of surplus. The internal accruals have been estimated on the basis of the return that the MFIs are presently able to generate on their total assets.[8] The internal accruals for each category of MFIs are shown in **Table 5**.

Table 5: Total net worth required by MFIs in 2010 and internal accrual of surplus

Category of MFIs		Total net worth required (Rs crore)	Net worth generated through internal accrual (Rs crore)
Portfolio	CAR		
Less than Rs1 crore	<0%	190.9	(26.2)
	0-12%	16.7	(1.8)
	≥12%	94.4	(9.23)
Between Rs1-10 crore	<0%	59.4	(68.1)
	0-12%	61.7	(2.6)
	≥12%	124.63	0.4
More than Rs10 crore	<0%	-	-
	0-12%	310.4	38.3
	≥12%	290.5	127.7

Based on the total net worth requirement in 2010 and the amount of internal accrual of surplus, three different cases showing the total equity investment required are presented in **Table 6.**[9] While in the first case, it is assumed that the MFIs will grow at the growth rates shown in **Table 3**, in the two other cases it has been assumed that the growth will be slower.

If the MFIs are able to maintain their current level of growth they would need additional equity funds of the order of Rs1,090 crores ($245 million). If the growth is moderate, the fund requirement could decline to Rs508 crores ($114 million). However, in the event of it slowing down even further this requirement would be relatively small at just Rs276 crores ($62 million).

Operational expenses of SHGs

As indicated in the above section, the MFIs could obtain a share of about 25% of the microfinance market by 2010. The remainder of the market would be covered by the bank-SHG linkage programme supported by NABARD. This programme had an estimated outreach of around 15 million households on 31 March 2005. The outreach of the SHG programme would need to go up to 54 million households by March 2010, if the entire target population is to be reached.

[8] The Return on Assets (RoA) calculated as part of the rating of MFIs has been used to estimate internal accruals. The RoAs of outliers (MFIs having too low or too high RoAs) have been averaged out.

[9] The equity investment required has been separately estimated for each sample MFI, based on the net worth required in 2010 and the internal accrual of surplus by each individual MFI.

Table 6: Equity fund required by MFIs till 2010

Category of MFIs		Fund requirement (at current growth level, Rs crores)	Fund requirement (at 40% growth, Rs crores)	Fund requirement (at 25% growth, Rs crores)
Portfolio	**CAR**			
Less than Rs1 crore	<0%	217	32	19
	0-12%	18	8	5
	≥12%	104	32	19
Between Rs1-10 crore	<0%	128	42	27
	0-12%	64	40	23
	≥12%	124	98	55
More than Rs10 crore	<0%	-	-	-
	0-12%	272	130	71
	≥12%	163	125	58
Total		**1,090**	**508**	**276**

Presently, the bank-SHG linkage programme is subsidised by donors and state governments. This is because a significant part of the operational and promotional costs incurred by the partner NGOs is met out of the grants received by the NGOs for other projects and programmes. If the outreach of the programme is to attain the level of 54 million households, the volume of subsidies required would have to increase substantially as cross-subsidisation by other programmes may no longer be possible. The annual operational expenses required to enable the growth of the programme to this level is presented in **Table 7** based on the following assumptions:

a. Each field staff of the partner NGO must service 500 clients (25 SHGs assuming monthly meetings, 2 SHGs per day and time required for accounts and administrative work). This client-staff ratio is, in fact, considerably higher that the ~250 ratio indicated for SHG MFIs in the M-CRIL database.
b. The operational cost is Rs10,000 per staff member per month.[10] The overhead has been calculated using the numbers in the M-CRIL database. The break-up of the cost is as follows: salary - 48%; travel - 16%; depreciation - 5% and other administrative expenses - 31%. This makes the annual cost of operations of each SHG Rs4,800 per annum which is more than three times the amount (Rs1,500) that NABARD pays to partner NGOs annually as the operating cost for each of the SHGs.
c. The cost of promotion of an SHG has been estimated to be at least Rs15,000.[11] While a significant portion of the promotional cost is incurred as operational cost (covered above), expenses are also incurred in forming the group and in initial capacity building at the pre-operation stage. M-CRIL has estimated that, in addition, to the operational costs described above, Rs4,000 per SHG will be incurred as the cost of promotion of each new SHG formed during each projected year.

Based on these assumptions, the combined operational and promotional expenses of the bank-SHG linkage programme would come to Rs5,182 crores (US$1,164 million) for the next four years as shown in **Table 7**.

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[10] This cost has been determined on the basis of information from the M-CRIL database. The sample MFIs have a combined staff strength of 9,099. Their total salary expenses come to Rs52.5 crores ($11.8 million) per annum. This translates into a monthly salary of Rs4,800 approximately.

[11] Minimum cost for promotion of an SHG for MYRADA, Karnataka (India). Source: Tankha, Ajay, 2002. "Self-help Groups as Financial Intermediaries in India: Cost of Promotion, Sustainability and Impact," a study for ICCO and Cordaid, The Netherlands.

Table 7: Operational expenses for bank-SHG linkage programme

Particulars	March 2006	March 2007	March 2008	March 2009	March 2010	Total (Apr 2006-Mar 2010)
Outreach (in million)	19	25	32	42	54	
Field staff required	38,760	50,077	64,700	83,592	108,000	
Operational and promotional expenses during the financial year (Rs crores)	582	752	971	1,255	1,621	5,182

Conclusion

Given the potential in the market and the current rate of growth of microfinance in India, the microfinance sector should be able to reach some 72 million (30% of total number of) households in the next five years, if the required equity funds and operational support (for SHGs) is made available to them. According to the calculations presented in this note, the total capital requirement (equity plus subsidies) for maximising the outreach of the microfinance sector in India is summarised in **Table 8**.[12]

Table 8: Fund Requirement for the Microfinance Sector

Particulars	Fund Required (Rs crores)
Immediate equity requirement for all MFIs to reach 12% CAR	23
Additional equity requirement for MFIs in the next five years*	1,090
Fund requirement for the bank-SHG linkage programme	5,182
Total	**6,295**

* assuming present MFI growth rates

As **Table 8** indicates, the Indian microfinance sector would need an investment of Rs6,295 crores ($1,415 million) over the next five years to increase its effective outreach to a reasonable proportion (30%) of the population which has very low incomes. This volume of funds would need to be primarily generated from the government's budgetary resources. However, there is also a need to facilitate private investment in the microfinance sector in India, to supplement investment by the government. This can be achieved firstly, by improving the organisational capacity of microfinance service providers with a view to make microfinance operations more professional and transparent. Secondly, steps need to be taken to create an appropriate legal framework for microfinance, which will be conducive to the growth of microfinance practitioners across models, different regions and scales of operations. These steps would go a long way in bridging the demand-supply gap in micro-credit and help in meeting the goal of providing credit services to the poorest sections of society.

12 This calculation does not include other expenses on capacity building, infrastructure and commercial funds for on-lending that would be required by both the MFIs and the SHG-bank linkage programme.