

The rapid growth of Indian microfinance has been at the center of the recent crisis - industry watchers focus on whether microfinance loan portfolios have grown too aggressively and if the debt burden on clients has become unmanageable. Microfinance institutions cannot lend money out of thin air though - this growth has to have been financed somehow. In this piece, we look at the other side of the balance sheet for Indian MFIs and the basics of how funding has evolved for the sector. We then dig into detailed transaction data on over 1000 MFI borrowings from the MIX Funding Structure Database to see what we can learn about the future.

Microfinance institutions worldwide have three primary sources of funds: debt, equity and deposits. In India, these funds allow MFIs to maintain <u>roughly 5 billion in assets</u>, with the typical Indian MFI investing <u>83 percent of these funds</u> in the loan portfolio as of 2009.

Financing is heavily weighted towards debt in India. Debt / equity ratios are high relative to other regions of the world and equity only covers <a href="https://doi.org/10.20/

Chart 1 below lets you explore the funding base for Indian MFIs in more detail. The chart displays the main categories of debt and equity, and also provides breakouts for small-, medium- and large-scale MFIs and by MFI (click the link to shift the data display or to drill down on a category). What does this additional detail tell us?

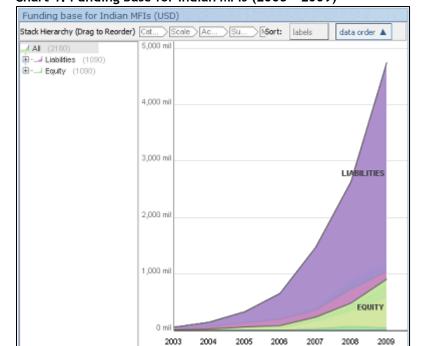


Chart 1: Funding base for Indian MFIs (2003 - 2009)

Equity

In light of the recent SKS IPO the composition of the equity base of Indian MFIs has received substantial attention, at least at the leading MFIs. While MIX does not (currently) track detailed data on shareholders, we do have detail about different classes of equity and their evolution over time. Four main classes of equity are likely to be of interest for practitioners:

- Donated equity: the accumulated historical donations to the MFI
- Retained earnings: accumulated profits retained by the MFI. This represents the historical net balance of revenue from clients and other sources and expenses for operations.
- Share capital: represents the capital contributed by investors along with any premium over the share price.
- Reserves: while not required in general, many MFIs choose to retain some equity balances in reserve for times of crisis

Ramesh Arunachalam asks 'what is the actual level of equity investment into Indian micro-finance?' Looking at share capital balances is a quick window onto investment in privately-held MFIs. Chart 1 shows that the majority of equity in India - over 60 percent - is from share capital. Accumulated retained earnings comprise the next largest share - around 20 percent of current balances (and thus around 4 percent of current assets), while donations have trickled to less than 1 percent. The relatively low level of retained earnings accords with the notion of a low-margin sector that relies primarily on commercial financing. Reserve balances have increased rapidly over the past three years, reaching over 120 million USD, although a 3 percent loss on the loan portfolio would be enough to wipe this out.

In other words, investors, rather than clients or donors, provide the majority of equity financing to Indian MFIs. However, leverage (the proportion of debt to equity) has decreased for this same group since 2006, meaning capital buffers have increased over the past three years. Since debt and equity jointly fund lending activities, we will have to look further for the main drivers of growth.

Debt

The remainder of funding for Indian MFIs comes through debt, three-quarters of which is borrowed by Indian MFIs from other financial institutions. If debt is the main source of funds for Indian MFIs, where does this debt come from? Chart 2 explores debt composition in more detail, using detailed transaction data from the MIX Funding Structure database for 2007 - 2009. This database compiles data on individual borrowings, including details on lenders, interest rates and terms (over 2500 borrowings are covered here). The data in this chart is tagged with the type (and subtype) of lender, the source (foreign or local) and a taxonomy of funder types (financial institutions, DFIs, NGOs, etc.).

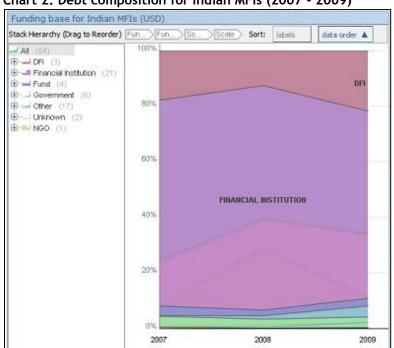


Chart 2: Debt composition for Indian MFIs (2007 - 2009)

A few facts are worth noting from this data:

- Unlike much of the world, lending to Indian MFIs is almost entirely local. International investors play little to no direct role in the sector, where less than 3 percent of funds are from foreign sources. The reliance on local funding is the combined result of regulations that prohibit foreign investment and subsidize local investment: priority-sector-lending-requirements-encourage-commercial-banks-to-finance-Indian MFIs and legislation prohibits foreign investment.
- Roughly three-quarters of funding is from local banks (either commercial banks like <u>ICICI Bank</u> or <u>HDFC Ltd</u>. or public banks such as the <u>State Bank of India</u>). We assume that much (if not all) of this funding is motivated by priority-sector lending considerations.
- Development banks (such as <u>SIDBI</u>) or regulators provide most of the remaining quarter of funds.

Decomposing growth

Chart 3 shows aggregate growth rates for loans, debt and equity at Indian MFIs. From this chart, we can see that growth in equity has been the most rapid - at or near 100 percent each year. Debt balances have grown rapidly as well though - generally near 100 percent each year, although lower than equity growth rates. Interestingly, growth in the loan portfolio has generally *lagged* growth in the sources of funds - money comes into Indian MFIs faster than they can lend it out.

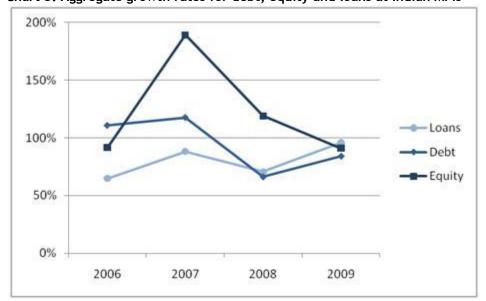


Chart 3: Aggregate growth rates for debt, equity and loans at Indian MFIs

There is a third factor behind growth at some of the larger institutions. Debt and equity fund assets. An MFI can invest these funds in any kind of asset - they can place the money in a savings account at a bank, they can build offices or buy furniture, or they can lend it to clients. In the aggregate, Indian MFIs have gone from investing roughly 80 percent of their funding into the loan portfolio in 2005 to closer to 90 percent by 2009. This change has also been a driver of growth for the largest Indian MFIs.

To see how this works, we can use a simple numerical example. Say an Indian MFI has one dollar in equity, and a debt / equity ratio of 5 - meaning they can borrow 5 dollars for every dollar of equity investment they receive. If they lend out 80 percent of their financing, this is what we would see:

Account	Year 1	Year 2	Growth
Equity	1	2	100%
Debt	5	10	100%
Debt / equity ratio	5	5	0%
Assets (= Debt + equity)	6	12	100%
Loans / assets ratio	80%	80%	0%
Loan portfolio	4.8	9.6	100%

And in fact, this is a fairly good simulation of much of Indian microfinance - rapid growth in debt and equity, high leverage, but with slow growth, and rapid growth in the loan portfolio. But it is missing the additional growth that comes from increasing investment into loans.

We take the same example, and change the loans / assets ratio from 80 percent to 90 percent between year 1 and year 2:

Account	Year 1	Year 2	Growth
Equity	1	2	100%
Debt	5	10	100%
Debt / equity ratio	5	5	0%
Assets (= Debt + equity)	6	12	100%
Loans / assets ratio	80%	90%	12.5%
Loan portfolio	4.8	10.8	125%

Growth in the loan portfolio is now 125 percent - 25 percent higher than in the original scenario. A 12.5 percent increase in this ratio leads to a 25 percent increase in the leading indicator for growth. This is closer to what we see happening in India.

Overall, three factors have combined to support the growth of Indian microfinance:

- Rapid increases in equity investment...
- ...in an environment with easily available commercial financing...
- ...and increasing investment by MFIs into the loan portfolio

None of these factors are sufficient to explain growth in isolation - many other sectors have rapid growth of equity or commercial financing, but without the level of growth seen in India. A focus solely on equity investment ignores the far-larger pool of funds provided by priority-sector lending or the changes in MFI portfolio management. Together these factors create a 'perfect storm' to grow loan portfolios rapidly and are thus under the microscope for the current crisis.

Next up: Using detailed data on debt for Indian MFIs, we project financing gaps for the sector.

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- India scenario analysis: What if microfinance was less profitable?