The moratorium for borrowers enabled by the Reserve Bank of India in response to the economic disruption of the lockdown has created challenges all along the micro-lending value chain. This Advisory Note estimates the magnitude of the liquidity shortfall for Small Finance Banks (SFB) resulting from the current six-month moratorium. It shows that even with improvements in the microloan recovery rates over the past two weeks investors and lenders will need to provide funds of the order of ₹1,500-2,500 crore ($200-330 million) per large SFB equivalent to 20% of the overall funds currently managed by each of them for such SFBs not just to survive but also to revive their businesses after the moratorium period. This is important ultimately to facilitate the livelihoods of the low income families they serve.

Beginning March 2020, many economies worldwide were locked down to reduce the spread of the, presently incurable, Corona virus known as Covid-19. This has caused disruption to the livelihoods of overwhelming proportions of people in the locked down countries. Particularly for the poorest sections of populations in developing countries, this has become a matter of surviving not just the spread of the virus but also surviving the effects of large proportions of their incomes disappearing overnight. For many poor people, this loss of income could become a matter of subsistence turning to starvation. Not surprisingly, many governments have stepped in with direct income subsidies (albeit small amounts) and central banks have attempted to manage the problem by enabling (if not mandating) moratoriums on the repayment of loans.

In India, an initial option for lenders to provide a moratorium of three months on all loans provided to people who were unable to pay due to the lockdown was extended to six months.¹ In an environment of responsible lending, and encouraged by the microfinance industry associations, Sa-Dhan and MFIN, all micro-lenders including all small finance banks offered this moratorium to their micro-borrowers. Reports from the industry – including from a survey conducted by Sa-Dhan – indicated that over 90% of micro-borrowers initially opted for the original three-month moratorium.² Naturally, the moratorium placed substantial stress on the liquidity position of micro-lenders including on Small Finance Banks that serve a substantial 25% of the estimated 87 million micro-borrowers in India. The six-month moratorium covers the period from 1 March 2020 to end-August 2020.

¹ https://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=3859 The initial announcement by the Reserve Bank of India (RBI) of the moratorium option was on 27 March. The option to extend to six months was announced on 22 May 2020.
Surviving the pandemic...

Having provided an initial analysis of the liquidity implications of the moratorium at the end of May, M-CRIL is revising its analysis as the situation evolves. The purpose of this updated note is to undertake a more nuanced review of the liquidity issues resulting from the lockdown-necessitated moratorium for the microfinance Small Finance Banks (SFBs) in India. The preliminary note covered seven of the eight such Small Finance Banks; we are now able to use information from all eight Small Finance Banks. [This analysis is undertaken using information from financial statements available online for 31 March 2019. Detailed information for 31 March 2020 is available for just one SFB at the time of writing at end-May 2020]. The aim of this note is to facilitate the sustenance of the microfinance ecosystem by creating understanding of the liquidity issue amongst the SFB managements, commercial and development banks that lend to them, equity investors, regulators and policy makers and interested observers of the extent of liquidity shortfalls resulting from the crisis under a range of conditions.

The assumptions made for our analysis have been adapted and nuanced since the release of our preliminary note. This is for two reasons

- The analysis for the initial note was undertaken in “stress test” mode, to understand what might happen if the most severe conditions prevailed
- The quantum of information available on the liquidity situation has improved since then though it is largely anecdotal so the approach here is, perforce, speculative.

The analysis in this updated note is based on the following assumptions

1. The contours of the March 2019 balance sheets remain largely unchanged in March 2020 (in the case of the 7 SFBs for which we only have March 2019 data); we recognise this may not be true but the objective here is to indicate the dimensions of the liquidity problem rather than to provide accurate information. This revised note still uses March 2019 data as information for March 2020 is not yet available for most microfinance SFBs.

2. The moratorium period having been extended to end-August 2020, many (but not all) microloan borrowers who opted for the moratorium will also postpone loan repayments and will not resume repayments until September this year. Some 85% of SFB portfolios are with micro-borrowers so over 90% of micro-borrowers having opted for the moratorium initially resulted in very limited cash inflows for SFBs during March to May 2020. As June 2020 came around, and the lockdown started to lift in many areas, repayment levels improved with the opening of branches in those areas.

3. SFB borrowings also have a moratorium from some of their lenders; this is subject to negotiation, is still under discussion and will not be settled for weeks yet (if not months).

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3 Of the ten SFBs currently licensed, eight evolved out of microfinance companies while the other two resulted from SME lending companies. This note focuses on the former eight, referred to here as “microfinance SFBs”. We do not name or identify individual SFBs in this note.
4 **Deposits** with SFBs maturing over a six month period must, legally, be redeemed on the date these become due but not all depositors will need to withdraw and a few may even renew their deposits despite the economic problems caused by the lockdown. In order to limit the number of variables in our analysis, we have assumed 80% of deposits maturing in the first 6 months of the financial year must be redeemed.

5 There will be no default on SFB fund **investments** with the rest of the banking system

6 **Other income** (commissions & miscellaneous) will not decline significantly.

7 Other than in highly exceptional circumstances **deposits with the central bank**, Reserve Bank of India, will not be available to meet any cashflow deficits of individual SFBs. These are, therefore, not factored into the opening cash balances of the SFBs.

Equally important, is that this time we take into account in the main analysis not just the funds required for SFBs to manage the immediate effects of the lockdown and emerge, on the other side, as solvent institutions; we also take into account the funds SFBs will need to disburse as the moratorium lifts in order to revive their businesses. We assume this disbursement amount to be 15% of the pre-lockdown portfolio. This is explained further below.

...**beyond survival, reviving operations is the key to sustainability**

The challenge of the pandemic and its associated economic disruption goes much further than surviving the duration of the moratorium. **What does survival mean if a financial institution arrives at the end of the moratorium period with its books balanced and no money to lend?**

The microfinance operation depends on customers being able to borrow to finance their lives as well as their livelihoods. Like many leveraged large enterprises, microenterprises too need to roll over their finances; in order to rebuild their enterprises some may even need bridging loans; if their lender (the SFB) has no money to lend, its outstanding portfolio could start to go bad and result in insolvency just as quickly as would an inability to service its deposits.

The issue, therefore, is not just to survive the pandemic but also to be in a position to support the livelihoods of borrowers from microfinance SFBs. Fresh disbursements will be needed to enable micro-borrowers to revive their livelihoods after lockdown as well as to re-start the motor of normal SFB operations. There will be demand for a flush of disbursements as the lockdown is gradually lifted. For this purpose, **SFBs** (like other micro-lenders) **need to be prepared with additional volumes of cash for disbursements**.

With normal monthly disbursements at 10-12% of outstanding portfolios and perhaps an additional demand for funds to replace microenterprise stocks, finance growth or meet other needs that have been in abeyance during the lockdown, this means SFBs will need to be ready with cash disbursements equivalent to at least 15% (and perhaps up to 20% of their outstanding portfolios) for a single month’s disbursement. This business rebuilding process may even be stretched out over a 2-3 month period.
The liquidity challenge

For clarity, the liquidity assessment below is for a six month period of moratorium and uses the following definitions

**Inflows** over 6 months (April to September) =
+ opening balances (cash + money at call & short notice)
+ portfolio (repayment) collections
+ interest earned on portfolio collected during the period
+ investments matured during the 6 months (as indicated by the ALM statements of each SFB)
+ interest earned on investments matured during the period

**Outflows** over 6 months (April to September) =
+ deposits matured during the period (as indicated by the ALM statements of each SFB)
+ borrowings repaid during the period (maturity indicated by ALM statements)
+ interest paid on borrowings repaid + interest on ongoing borrowings
+ operating expenses (staff salaries, establishment expenses, travel (minimal in lockdown)) – will be 40% (rather than 50%) of the expected total for the year due to reduced expenses (other than staff remuneration) resulting from the low level of activity during the lockdown.

The results are analysed in **Table 1** which indicates the number of SFBs with negative cash flow or deficits greater than ₹100 crore ($13.5 million) over the 6 month period. [Deficits less than ₹100 crore are assumed to be within a margin of error since our calculations here are necessarily indicative rather than precise]. The variables in the table are

- On the **x-axis**, the proportion of borrowings the SFBs are likely to have to repay within the moratorium period; the % to be repaid reflects the proportion for which they are unable to negotiate a moratorium with their own lenders
- On the **y-axis**, the proportion of loans on which they are likely to get repayment during the first 3 month period due to their borrowers opting for the moratorium; preliminary indications were that 90% of micro-borrowers opted for the moratorium and the balance sheet information shows that, on average, 85% of SFB portfolios are in priority sector loans; the net result was that an estimated 70-80% of the overall portfolio became stagnant during the first three months of the analysis period resulting in recovery of the order of 15-25%. As indicated above, with the easing of lockdown restrictions in early June, repayment rates have improved creating the expectation of a much higher level of average repayments for the second three months of the moratorium period. This is presented in the y-axis of the table as the second percentage figure; so, 10/50 means 10% average recovery for the first three months and 50% average recovery for the second three months of the moratorium period. Since not every scenario can be anticipated, the combinations of first three month and the next three months recovery rates are necessarily selective.

**Table 1** shows significant liquidity issues arising for SFBs in the following conditions

- **Severe**: With 90% of SFB advances subject to moratorium (10% recovery) in the first three months and 50% average recovery in the next 3 months plus all (100%) of borrowings from development and other banks to be repaid, **5 of the 8** SFBs have significant liquidity issues – prospective cash deficits ranging from ₹200 crore to ₹3,000 crore ($27 million to $400 million) and **another 2** only just balancing their cash.
• **Hard – the most likely scenario:** with 15-20% recovery of advances in the first three months, 60-65% in the next three months and 90-100% of borrowings to be repaid, 5 of the 8 SFBs have substantial liquidity issues – prospective cash deficits of ₹125 crore to ₹2,500 crore ($17 million to $333 million). The situation only improves with 60-70% of borrowings to be repaid; so the role of lenders to SFBs is critical.

• **Mild:** Just two SFBs are still in trouble even under mild conditions with around 65% recovery in the first three months of the moratorium, 65% in the next three months and just 40% of borrowings to pay – estimated deficit around ₹700-800 crore ($100 million). However, all conditions here are very liberal and, therefore, not very likely.

Table 1: # of SFBs likely to have significant liquidity issues resulting from the moratorium

<table>
<thead>
<tr>
<th>Moratorium % for priority sector</th>
<th>% of borrowings to be repaid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>60/95</td>
<td>2</td>
</tr>
<tr>
<td>35/85</td>
<td>3</td>
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<tr>
<td>30/80</td>
<td>3</td>
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<tr>
<td>25/75</td>
<td>3</td>
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<tr>
<td>20/65</td>
<td>3</td>
</tr>
<tr>
<td>15/60</td>
<td>3</td>
</tr>
<tr>
<td>10/50</td>
<td>4</td>
</tr>
</tbody>
</table>

Key: Severe | Hard | Difficult | Moderate | Mild

The number of SFBs able to meet their liquidity needs is illustrated in a bar graph in the Annex.

Based on this analysis, the key pre-existing factors that enable institutions (SFBs or others) to manage Covid conditions are

1. Most obviously, since 80% or more of deposits must still be paid out during the moratorium period, the average maturity period of deposits should be high.

2. The normal liquidity management logic of lending short term and borrowing long term is disrupted by a moratorium; now, the average maturity period of portfolio advances should also be high since that will mean a lower proportion of the overall portfolio will be blocked.

3. Certainly, investments with a low maturity period are helpful since maturing investments provide liquidity. While this is logical, what is not logical is that it is helpful to have a high investment to advances ratio rather than the low ratio that commercial logic dictates since advances are normally more remunerative (have higher interest yields) than investments.

4. A high maturity period of borrowings is also helpful in a pandemic since the pressure on liquidity of repaying wholesale lenders is reduced.

This is illustrated by the numbers in Table 2. The table sets out the values for the key indicators based on the above list of factors for the SFB with the most comfortable liquidity position and the one that is the most challenged. The pattern conforms with the principles enunciated in the list.
Table 2: Indicators of liquidity comfort & concerns

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Liquidity status in current pandemic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Most comfortable SFB</td>
</tr>
<tr>
<td>Proportion of deposits maturing within six months</td>
<td>21%</td>
</tr>
<tr>
<td>- portfolio maturing within six months</td>
<td>9%</td>
</tr>
<tr>
<td>- borrowings to be repaid within 6 months</td>
<td>6%</td>
</tr>
<tr>
<td>Investments/advances (first 6 month period)</td>
<td>239%</td>
</tr>
</tbody>
</table>

The numbers above indicate the additional funds from investors or wholesale lenders (mainly development banks/large commercial banks) that some SFBs will need to generate in order to survive. Others have also written about this; both creditors/lenders to SFBs (or other micro-lending institutions) and investors should refrain from putting pressure on deposit taking micro-lenders since it will result in the very outcome they fear – the collapse of the institution – losing thousands of crore rupees (or billions of dollars) worth of money many times the amount lost in the 2010 microfinance crisis.

In this context, experience shows that the concerns of bankers (development or commercial banks) about the long term quality of the micro-loan portfolios of SFBs and MFIs as a result of the lockdown are, in any case, largely misplaced. The experience of the microfinance sector in response to the economic shock of demonetisation in 2016 is presented in Figure 1. The figure shows the sudden spike in portfolio delinquency caused by demonetisation in late 2016 (resulting in very high PAR at end-March 2017) and the gradual recovery over the next two years enabled partly by significant write-offs but also by large numbers of micro-borrowers repaying their loans.

**Figure 1: End of financial year PAR30 collated for microfinance NBFCs by MFIN**

Source: MFIN Micrometer, various, Q4 for each financial year.

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While it is inevitable that the disruption of an economic shock results in a sudden decline in portfolio quality a subsequent improvement takes place over the next couple of years since micro-borrowers cannot be expected immediately after an economic crisis to dig deep into savings pots that may have become depleted in coping with the economic shock.5

The additional 15% of portfolio needed for disbursement by SFBs at the end of the moratorium period takes the potential cash requirement for the larger SFBs to **₹1,500 to $2,500 crore** ($200-330 million) – 20% of their total funds – in the most likely scenario. The funds will be, indeed are already, required in a combination of equity infusions by investors and additional loan funds from refinance providers/wholesale lenders.

Though some of this may seem obvious, the indications from the market continue NOT to be reassuring – it seems that many investors are willing to provide additional equity for SFBs to leverage for meeting their funding requirements but wholesale lenders – in India, the development and commercials banks – are presently challenged by internal management and board concerns about their own high levels of non-performing loans (NPLs). Despite recent efforts by the RBI (including through additional earmarked lending funds under the TLTRO facility6) and India’s Ministry of Finance to encourage such lending, the indications are not wholly positive. Bankers are currently

- **Demanding full and immediate payment of interest** on the wholesale loan instalments payable over the past three months – despite the RBI’s announcement of amortisation of the accumulated interest payments over the next 10 months (until the end of the financial year), and
- **Refusing to extend the moratorium** to the 6 month period permitted by RBI.

The net effect of these decisions, if allowed to continue, is likely to be the collapse of a number of microlending institutions, MFIs and perhaps also one or two SFBs. This will result in large losses not just to investors but also to lenders with outstanding assets in these institutions; losses that will match and most likely greatly exceed those incurred in the 2010 microfinance crisis. **Most alarmingly, it will result in the collapse of financial arrangements that currently help low income families manage their lives and livelihoods. If this happens, it will become a devastating tribute to the conservatism of a financial system that refuses to adapt to the needs of changing times.**

The orders of magnitude indicated here should facilitate a productive discussion between SFBs and their creditors as well as investors to avoid such an outcome. The key is cooperation not just to maintain the balance of the microfinance ecosystem but also to support the livelihoods of those at the bottom of the pyramid, those whose lives the lockdown has effectively devastated. All stakeholders, including commercial banks and regulators need to pull together to move the needle forward and support those who are suffering the most from the pandemic.

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5 This is also discussed in Fernandes, Kshama, 2020. “Microfinance Recovery Analysis: Using time series of Northern Arc portfolio data” which looks at the effects of demonetization on 3.7 million MFI customers and the geographically more limited economic shock of floods in Kerala in August 2018 and Cyclone Fani on the east coast of India in April 2019.

6 TLTRO = Targeted long term refinancing operations; a pot of ₹50,000 crore ($6.7 billion) provided by the RBI specifically for the purpose of lending to
A disclaimer for readers...

These findings provide a guide for the managements of micro-lending institutions, for wholesale lenders to them and for investors in such institutions to understand the liquidity challenges of the lockdown. As indicated by the qualifying note on Page 1, the note is based largely on March 2019 balance sheets; as the March 2020 financial information becomes available, this advisory will be updated but we believe that the overall pattern will stay the same. This document does not purport to set out rules of operation for SFBs or other micro-lenders in normal times, it is meant mainly as an indicator for all stakeholders in the micro-lending sector of the challenges involved and the orders of magnitude of funds of additional investment or lending to be considered. **However, actions taken by stakeholders are at their own risk and M-CRIL will not be responsible for any decisions based on the contents of this document.**

...and a thank you to commentators

To Frances Sinha, co-Founder, M-CRIL and Tanmay Chetan, CEO Agora Microfinance for their insightful suggestions during the conceptualisation and writing of the preliminary note.

To Daniel Rozas, independent consultant & e-MFP and to Mr Brij Mohan, MFI guru and Board Member, M-CRIL for their comments on the preliminary note that have stimulated some of the revisions undertaken in this updated version.

Sanjay Sinha, Managing Director

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**M-CRIL** is a responsible development research and analytics firm with a concern for **inclusive microeconomics**. Along with its parent firm, EDA Rural Systems, M-CRIL has over 40 years of experience of international issues in microenterprise promotion and financial inclusion through a substantial record of analytics in this field including microfinance ratings, programme evaluations and focused management training and capacity building support for MFIs. Its work in support of smallholder farmers and with agricultural value chains in South and Southeast Asia emphasises its commitment to supporting the lives and livelihoods of low income families.

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**Annex figure:** SFBs with significant cash flow concerns (>₹100* crore cash deficit)

<table>
<thead>
<tr>
<th># of SFBs with &gt;₹100 crore cashflow deficit</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<tbody>
<tr>
<td>40%</td>
<td>60/95</td>
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<td>50%</td>
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<td>25/75</td>
<td>20/65</td>
<td>15/60</td>
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</tr>
</tbody>
</table>

% of SFB advances recovered in the first 3 and next 3 months of the moratorium