INCLUSIVE FINANCE INDIA REPORT 2020

An ACCESS Publication

Edited by

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List of Abbreviations

AePS	Aadhaar-enabled Payment System
AI	Artificial intelligence
ANBC	Adjusted net bank credit
AP	Andhra Pradesh
APB	Aadhaar Payment Bridge
APIs	Application programming interfaces
APMAS	Andhra Pradesh Mahila Abhivruddhi Society
AS	Accounting standards
BC	Banking correspondent
BC	Business correspondent
BDS	Business development service
BFIL	Bharat Financial Inclusion Ltd
BMGF	Bill and Melinda Gates Foundation
bn	Billion
BPL	Below poverty line
CASA	Current account saving account
CBO	Community-based organization
CDFI	Centre for Digital Financial Inclusion
CEO	Chief executive officer
CGSME	Credit Guarantee Fund Scheme for MSE
CGTSME	Credit Guarantee Fund Trust for Micro and Small Enterprises
CIC	Credit information company
CIF	Community investment fund
CLCSS	Credit Linked Capital Subsidy Scheme
CLF	Cluster-level federation
CMF	Centre for microfinance
CMIE	Centre for Monitoring Indian Economy
CMRC	Community-managed resource centre
CoR	Certificate of registration
CPHS	Consumer Pyramids Household Survey
CRAR	Capital to risk-weighted assets ratio
CRI	Climate risk index
CRL	Code for Responsible Lending
CSO	Civil society organization
DAY-NRLM	Deendayal Antyodaya Yojana-National Rural Livelihood Mission
DBOD	Department of Banking Operations and Development
DBT	Direct benefit transfer
DCCB	District central cooperative bank
DEPR	Department of Economic and Policy Research
DHAN	Development of Humane Action
DHFL	Dewan Housing Finance Corporation Ltd
ECLGS	Emergency Credit Line Guarantee Scheme
ECWG	Evidence Consortium on Women's Groups
EMI	Equated monthly instalment
EPF	Employees' Provident Fund
EWI	Equated weekly instalment
FAFAAF	Framework for Agritech and Fintech Applications for Agricultural Financing
FOFs	Fund of funds
FPO	Farmer producer organization
FY	Financial year
GDP	Gross domestic product
GLP	Gross loan portfolio

GP	Gram panchayat
IBC	Insolvency and Bankruptcy Code
IBG	Inclusive Banking Group
IDEA	IndEA Digital Ecosystem in Agriculture
IE	Impact evaluation
IFAD	International Fund For Agricultural Development
IFC	International Finance Corporation
IL&FS	Infrastructure Leasing & Financial Services
IMF	International Monetary Fund
IMPS	Immediate payment service
IPO	Initial public offering
IRDAI	Insurance Regulatory and Development Authority of India
IWWAGE	Initiative for What Works to Advance Women and Girls in the Economy
JJM	Jal Jeevan Mission
JLG	Joint liability group
KCC	Kisan Credit Card
KYC	Know your customer
LAB	Local area bank
LE	Lesser expenditure
LEDP	Livelihood and Enterprise Development Programme
Loan OS	Loan outstanding
MCR	Malegam Committee's Report
MEDP	Micro-Enterprise Development Programme
MFI	Microfinance institution
MFIN	MicroFinance Institutions Network
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MIS	Management information system
ML	Machine learning
MLIs	Member lending institutions
mn	Million
MOSEC	Multi Originator Securitisation
MP	Madhya Pradesh
MSEs	Micro and small enterprises
MSMEs	Micro, small and medium enterprises
MSRLM	Maharashtra State Rural livelihood Mission
MUDRA	Micro Units Development and Refinance Agency
NABARD	National Bank for Agriculture and Rural Development
NABFINS	NABARD Financial Services
NACH	National Automated Clearing House
NBFC	Non-banking finance company
NBFCs-MFIs	Non-banking finance companies-microfinance institutions
NCGTC	National Credit Guarantee Trustee Company
NERL	National E-Repository Limited
NGTC	National Credit Guarantee Trustee Company
NIM	Net interest margin
NPA	Non-performing asset
NPCI	National Payments Corporation of India
NRETP	National Rural Economic Transformation Project
NRLM	National Rural Livelihoods Mission
NRLP	National Rural Livelihoods Project
NSFI	National Strategy for Financial Inclusion
NSS	National Sample Survey
NSSO	National Sample Survey Office
NULM	National Urban Livelihood Mission

OCEN	Open Credit Enablement Network
ODF	Open defecation free
ODF-S	ODF status
PMFBY	Pradhan Mantri Fasal Bima Yojana
PMGKY	Pradhan Mantri Garib Kalyan Yojana
PMJDY	Pradhan Mantri Jan Dhan Yojana
PMMY	Pradhan Mantri MUDRA Yojana
PoS	Point of sale
PRADAN	Professional Assistance for Development Action
PSB	Public sector bank
PSL	Priority sector lending
PSLC	Priority sector lending certificate
PSU	Public sector undertaking
QAR	Quarterly adherence report
QR	Quick response
RAROC	Risk-adjusted return on capital
RBI	Reserve Bank of India
RF	Revolving fund
RM	Reduced number of meals
RoA	Return on asset
RoE	Return on equity
ROI	Rate of interest
RRB	Regional rural bank
SBA	Small borrowal account
SBI	State Bank of India
SBLP	Self-help group–bank linkage programme
SBM	Swachh Bharat Mission
SCB	Scheduled commercial bank
SDG 6	Sustainable Development Goal 6
SECC	Socio-Economic Caste Census
SFB	Small finance bank
SHG	Self-help group
SHPI	Self-help promoting institution
SIDBI	Small Industries Development Bank of India
SKDRDP	Shri Kshetra Dharmasthala Rural Development Project
SLBC	State Level Bankers' Committee
SMEs	Small and medium enterprises
SMF	Small and marginal farmer
SRLM	State Rural Livelihood Mission
SVEP	Start-up Village Entrepreneurship Programme
TReDS	Trade receivables discounting system
UAM	Udyog Aadhaar Memorandum
UCB	Urban cooperative bank
UP	Uttar Pradesh
UPI	Unified payments interface
USAID	United States Agency for International Development
UT	Union territory
UWSSA	Unorganised Workers' Social Security Act
VLE	Village-level entrepreneur
VO	Village organization
WASH	Water, Sanitation, Hygiene
WISE	Women's Integrated and Synergistic Empowerment

Foreword

The last year of the last decade - 2020, left nothing that was unscathed. Country after country succumbed to the global pandemic, losing lives and livelihoods, battering all segments of the economy. India was among the worst affected, not only in terms of numbers that got afflicted, but also in terms of its impact on the economy. And, when something of this magnitude hits a country, those teetering on the brink of poverty are the worst hit. The story of the 2020 pandemic amplified this, in perhaps the starkest manner, when the vulnerability and misery of the informal workers became so dramatically visible; on front pages of newspapers and in the electronic media. The poor always face the worst brunt of disasters, and it's not only about this health catastrophe that's still on the rampage. While the Government continued to respond with a series of schemes and stimulus packages; given the mayhem and the disruption caused, how much of these packages actually benefitted this large mass of the poor and petty informal workers and provided them with relief is yet to be assessed. In the meanwhile, there has been an on-going discussion and debate for the need for appropriate safety nets and a more durable social protection framework; and the need for putting money in the hands of the poor quickly.

Among the first tangible response to the affected low-income households was to leverage the PMJDY accounts, through which Rs 500 each for three months were transferred to 200 million PMJDY women account holders. PMJDY that was started by the NDA Government in 2014 is known as the most ambitious financial inclusion programme, globally. Over the last six years, the number of accounts has swelled up to over 400 million accounts. While earlier there was a criticism that these accounts were mostly dormant with zero balances, and few visible benefits, during the pandemic, however, they provided some succor. Similar relief was provided to small and marginalized farmers under PM Kisan, with an installment of Rs. 2,000 front loaded; and Rs. 50 billion transferred to construction workers. MNREGA wages were increased from Rs 182 to Rs 202 per day, benefitting 136 million families. There were several packages announced by the government; some as relief, some as stimulus, besides a few long-term structural initiatives. Despite these measures, given the long periods of lock down, the pandemic rattled the economy badly. India's economic growth suffered its worst fall in the April-June quarter, with the GDP contracting 23.9 per cent. As per CMIE, there was a huge spike in the country's unemployment rate from the under 7% level before the start of the pandemic in mid-March to 27.11% for the week ended May 3. In recent months, the economy has shown signs of picking up, with record GST collections. Whether the recovery will be "V" shaped, or "U" or "K" shaped, is perhaps too early to predict, even if some rich people have become richer, and many poor households sliding further into debt and penury.

In times of such a pandemic, financial inclusion can play a critical role in bringing relief to low income households. Over the years, India has done well to develop an impressive FI infrastructure, created digital highways, the JAM trinity, and several programmes and entitlements towards delivering benefits to the base of the pyramid, efficiently through DBTs. While some of these came together well, in this period of the great pandemic, some sclerosis, lack of supply side spontaneity, and lack of financial education continues to deprive large numbers from fully benefitting from the schemes of the government. Maybe this is a good time to identify the gaps that need to be plugged.

The banking infrastructure, specifically the PSUs, perhaps is the mainstay of financial Inclusion in the country. Over the last few years, given the bank-led financial inclusion strategy, the physical network of bank branches has peaked, with almost 586,000 rural branches. Now, with the ground covered fully, it might be important to look at the products, and the proactivity with which these outlets deliver. For instance, although there is a facility for overdraft under PMJDY, only 8 million have been able to avail the facility. In the last few years, the private sector banks and the SFBs have also begun to cater to a larger percentage of small borrowers.

An important new category of banks is the Small Finance Banks. Both by mission and by mandate, these banks are focused on small borrowers, given the MFI origins of most SFBs. It has been 5 years since the licenses were issued for establishing these SFBs, and they already account for about 10% of all small accounts and credit limits. Almost all the SFBs are in profit, and are well settled with the SFB business mandate, using high end technology, and have been responsive to their core client base. In fact, within three years of their existence, the SFBs have higher business volumes than most DCCBs, UCBs and RRBs. The SFBs have demonstrated a great potential to contribute significantly to the financial inclusion mission, given their core client base. While on the one hand, the RBI has put SFB licenses on tap, paradoxically, on the other hand, several SFBs have a strong ambition to become Universal Banks. If so, do SFBs become an interim stage for MFIs to eventually become regular commercial banks? And, then does this defeat the very idea of creating a separate SFB category.

In the last few years, fintechs have been the new phenomenon added to the financial services architecture. India has become one of the fastest growing digital economies in the world. A paradigm shift in consumer behavior is underway for where and how consumers make payments, carry out transactions and shop. With tech-giants and corporates diversifying into digital financial services, growth in this space is likely to accelerate across various segments, spanning payments, credit, micro-insurance and trade-finance. Usage of digital banking and contactless payments particularly surged during the COVID-19 pandemic as Indian consumers began opting for digital and contact-free payment experiences instead of using cash. The total digital wallet transactions in India nearly doubled to Rs 25.3 billion in May this year, from Rs12.4 billion in February 2020. About 70% Indian consumers are now using online or mobile banking to conduct financial transactions. The payments landscape is witnessing disruptive changes; with consumer preference moving swiftly toward contactless payments, offering new opportunities for innovation and growth. These new habits are likely to continue in the post-pandemic world. For financial institutions and merchants, it is imperative that they see the opportunity, understand these trends and create products and services that cater to the changing needs of their customers.

The two important tracks, which have for long served the BOP segment are the MFI and the SHG tracks. While both strands responded to the pandemic situation well, there were challenges. Irrespective, MFI portfolio grew steadily during the year, not as exponentially as has been in the past; it grew by only 1% during the year. This is, to some extent, because of inroads being made by commercial banks and the continued legacy focus of SFBs in this segment. The larger MFIs continued to dominate the portfolio, with top 23 MFIs accounting for 97 % of the portfolio. Besides the pandemic, political turmoil in Assam, natural disasters like cyclones and floods, continued to trouble operations on the ground. During the period, not unexpectedly, the quality of portfolio dipped slightly. Given the propensity of the MFIs to bounce back after a crisis, it is hoped that the rate of acceleration for MFIs will return to pre-pandemic times. Given the uncertainty in times of the pandemic, investors were cautious, new deals slowed down and on-lending by banks too was choked, which could be a reason for slower growth in portfolio during the year.

With the SHG-Bank linkage programme nearing 30 years since it was first launched in 1992, it has come a long way, with ten million SHGs linked to saving. The number of SHGs linked with bank credit, however is only about half (5.6 million), highlighting the struggle that the programme has faced right from the beginning - attracting banks to sustainably lend to these SHGs. In the last one decade, NRLM has all but taken over the leadership of the movement, with 57% of the SHGs promoted by it, and NGOs have been mostly relegated to the fringes as technical support agencies. Over these years, while the numbers and volume of loans has been steadily growing, there is little innovation in helping SHG members graduate to individual enterprise loans. Towards graduation of SHG members, while NRLM has initiated the SVEP programme as also NRETP through which both individual and group enterprises are promoted, NABARD is trying to provide higher loans through the JLG model. It is high time that long time SHG members should now start to get individual loans to set up their own enterprises. At some stage, the grant and interest subvention elements also need to be phased out of the programme. As a consequence of the pandemic, SHG meetings could not be held, and savings collections came down. However, in their own ways, the SHGs responded well by running community kitchens, engaged in mask making and building awareness on COVID related precautions. It's an important large programme, and its time that it metamorphosed into a new economic enabling mechanism for the poor rural women.

MSMEs in India constitute about 95% of all enterprises in the country, and while they provide employment to about 120 million people, they remain vulnerable. Of the 12 million SMEs in India, almost 86 % are unregistered, which only exacerbates their plight, specifically for accessing formal finance. During the pandemic, it was these informal enterprises that were the most affected, several of them shutting down. Although there have been several schemes for the SME sector, and several new ones were announced as a response to the pandemic's impact on their fortunes; on the ground, these don't get fully operational. With the setting up of the SFBs, and MUDRA, there is some hope of microenterprises, within SMEs, getting a better deal in formal finance. The U K Sinha Committee, among others, has recommended for collateral free loans up to Rs 2 million. Of late, with the advent of several fintechs, new methodologies are being developed for credit rating and digitizing transactions, on the basis of which, traditional ways of risk assessment are being replaced and the fintechs are able to provide instant loans. All this augurs well for the SMEs. In achieving our aspiration to become a 5 trillion economy, the role of MSMEs is critical.

Given that Swacch Bharat has been an ongoing campaign since 2014, and the need for clean drinking water and sanitation has been there for decades before that, WASH financing is so important for rural and BOP segments across the country. While the traction initially was lukewarm, in recent years, WSS financing has picked up, specifically after it was included as a part of the priority sector lending by the RBI in 2015. NABARD too has created a Rs 800 million refinancing facility for WSS. All this augurs well for a sector that is critical to the socio-economic well being, particularly of the rural communities.

The bringing together of the Inclusive Finance India Report (14th Edition) was a departure from previous years. Given the diversity of cuts and sub themes within the ambit of financial inclusion; for a few years, we have been pondering whether one or two authors by themselves were equipped to bring together this voluminous effort. Appropriately, for the 2020 Report, ACCESS decided to assign each chapter to a separate author. With some efforts, we were fortunate to bring together amongst the most experienced, academicians, practitioners, and researchers to help write the report.

Prof. M S Sriram, who has authored the two chapters for this Report on Policy Response and Review of The Banking System has earlier, brought together the full Report for three consecutive years. Indradeep Ghosh from Dvara Research has contributed to the topical chapter on Informality and Unprotected Risk in India Labour Markets. The chapter has greatly helped in understanding and analyzing the vulnerabilities that the informal sector faces, particularly during disasters and pandemics, like the one sweeping now. R Bhaskaran, former CEO of IIBF, has authored the chapter on Small Finance Banks, the new differentiated banks that hold great promise to advance financial inclusion in India. The chapter on Microfinance Institutions has been put together by Alok Prasad, the Founding CEO of MFIN; while tracing the evolution of the microfinance sector in India, he has highlighted the challenges that they faced during these turbulent times. Similarly, Girija Srinivasan, author of the chapter on SHG Bank Linkage Programme has deftly argued for moving on to use this huge base of SHGs to create livelihoods options for the members. Samir Bali, erstwhile Managing Director at Accenture has contributed the chapter on Digital Financial Inclusion; and we were fortunate to get Prof H K Pradhan from XLRI and his colleague Pankaj to author the chapter on MSME financing. This years Inclusive Finance India Report contains two new important chapters - WASH financing written by Vedika Bhandarkar and Manoj Gulati of Water.org and Fintech in Agriculture put together by Hemendra Mathur, Co-founder of ThinkAg, which offer additional perspectives on diverse dimensions of financial inclusion.

Most importantly, ACCESS was in luck to have Tamal Bandyopadhyay, the most insightful analyst of the banking sector in India to agree to edit the Report. I say that we were in luck because, Tamal just managed to finish "Pandemonium: The Great Indian Banking Tragedy"; and unless this important book was out of his way, he was not likely to take on any other assignment. The timing worked very well for both Tamal and for us. Tamal's incisive interjections and comments significantly helped to sharpen the content of the Report.

I am grateful to all the authors for their contributions to the Inclusive Finance India Report. Given the situation created by the pandemic, bringing together the Report proved a challenge this year. The situation on the ground remained fluid all along, new pandemic related challenges kept popping up in regular frequency; an evolving policy response of the government, fresh data not being available for a few important sections, the inability of authors to travel and consult with stakeholders and assess the situation on the ground, were all impediments that needed to be overcome to put the Report together.

I take this opportunity to profusely thank NABARD for their continued support to the Report. Besides providing financial support, NABARD was forthcoming in providing the necessary data support, wherever required. With a new top leadership in place, led by Chairman Chintala, ACCESS is confident that this decade old partnership will only be further strengthened. I would also like to thank BMGF, specifically Pawan and Prabir for the huge support that we get in bringing out the Report. Year on year, Pawan's critical inputs have helped in widening the perspectives on key issues. Mastercard too has continued its support to the Report for over half a decade now, and I take this opportunity to thank Porush and Ashutosh for this continued association. It's great that after a gap of a few years, SIDBI is once again on board as a sponsor to the Report. I would like to also thank Arindom and the Rabobank team for their support, and for helping us add an important chapter of Agri Fintechs to the Report. Similarly, I would like to thank Manoj for the support from Water.Org for helping us add an important chapter on WASH in the Report. There have been several other stakeholders who have supported the process of bringing out the Inclusive Finance India Report, and I take this opportunity of thanking all of them for their continued association over the last 14 years.

Finally, I would like to thank my small ACCESS ASSIST team of Radhika, Arya and Priyamvada for managing this entire process of bringing the Report together. Coordinating with the Group of Authors, back and forth with Tamal, digging out the relevant data and undertaking secondary research painstakingly is indeed a laborious task. Praveen put in a lot of effort towards research assistance support to multiple authors. The team responded well to all the requirements of the authors. Well done champions.

Given the restrictions due to the pandemic, the Inclusive Finance India Summit, this year has got pushed to January 2021, and will be held in a virtual format. Over the last 17 years, the Summit has become one of the most important "go to" events on financial inclusion, certainly within India, but globally as well. Besides the value from high reverberating sessions, with thought leaders sharing diverse perspectives, the Summit also attracts stakeholders for great networking opportunities, which unfortunately will be denied to the participants this year. The Report too will be released virtually. Like previous years, I hope the 2020 Inclusive Finance India Report will be valued for its insights and analysis, and for chronicling the advancement of financial inclusion in the country.

Vipin Sharma
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access

Preface

Financial inclusion is the process of ensuring that weaker sections and low-income groups get access to banking services as well as timely and adequate credit at an affordable price. It ensures a universal gateway not just to deposits and loans but other financial services such as insurance and equity products as well.

Y. V. Reddy came up with the term 'Financial Inclusion' when, as Reserve Bank of India (RBI) governor, he was working with Usha Thorat, the then deputy governor, on the annual monetary policy statement for FY 2007. The banking regulator had already done much to address financial exclusion by then. Since the central bank was trying to encourage commercial banks and other intermediaries to reach out to more people, Reddy believed the right term was financial 'inclusion', not 'exclusion'.

But banks had begun the drive to bring the masses into the system in the 1960s, when they began giving loans to neglected areas of the economy and disadvantaged sections of the population. In the 1970s, the RBI framed norms for 'priority sector' lending, making sure that 40 per cent of bank credit went to agriculture and small industries, among others starved of financing. This has continued, although the profile of priority loans has been changing at intervals.

The linkage between self-help groups (SHGs) and banks, another pillar in the financial inclusion architecture, started in 1992, a year after economic liberalization. This, along with regional rural banks and local area banks, helped spread banking services to the hinterland.

As we discuss and debate what should come first—economic and social inclusion or financial inclusion—what better time to launch the 14th edition of the annual Inclusive Finance India Report. This unique initiative of ACCESS Development Services seeks to take a holistic view of financial inclusion and the ground reality. Over time, Report has become a ready reckoner for policymakers and researchers as well as finance professionals.

The backdrop of this report is very different from all past ones because of the COVID-19 pandemic. Inclusion has never been so critical for the nation as it is today. In fact, it's one of the key reasons why the Indian economy has been faring better than what most analysts and economists had expected at the beginning of the current financial year. India had laid down the building blocks over the past decade through an array of institutions and initiatives—microfinance, small finance banks (SFBs), fintechs and techfins, the National Rural Livelihoods Mission, the Pradhan Mantri Jan Dhan Yojana (PMJDY) and the Pradhan Mantri MUDRA Yojana, among many others.

This edition features 10 chapters by scholars, practitioners and sector experts who know the inclusive finance space like the back of their hands.

The first chapter, 'The Policy Response to COVID-19 Pandemic', sets the context, offering a 360-degree view of what has been happening in the inclusive finance space: The lockdown and its aftermath, reverse migration, reforms by 'stealth', the loan moratorium, structural changes in agriculture and labour laws and the business and financing of micro, small and medium enterprises (MSMEs).

Summing up the current scenario, it says the short-term policy response has been mainly in the form of interventions through the financial sector. It also calls for examining the reforms in the context of power relationships between individuals and institutions. It opines that freeing the movement of commodities, providing choices for selling in the market, or even price discovery, based on demand and supply could all be done if there are no welfare considerations—both at the farmer and the consumer level. The pandemic has opened up opportunities for the inclusive finance sector to engage proactively through effective financial instruments with the real and service sectors.

The next piece, by the same author, takes a close look at the six-year journey of the PMJDY, arguably the world's biggest financial inclusion drive. It says that Basic Savings Bank Deposit Accounts, which don't require customers to maintain a minimum or monthly average balance, have significantly risen since the launch of PMJDY. The average balance kept in such accounts has also gone up. The tipping point has been reached, and it's now time to route more transactions through such accounts, enabled by technology. The happy sign is that the private banks' share in this pie has started growing, although from a very small base.

The third piece, which chronicles the growing informalization of India's labour market, emphasizes the urgent need for comprehensive and universal social security and clarity on the benefits available to workers in the unorganized sector. It concludes that social security in India must provide for inflation-adjusted income security to those in the informal sector as well as access to health, disability, maternity, sickness and death benefits.

The chapter on SFBs examines the evolution of the newest baby on the Indian banking turf. The SFBs have a market share of less than 1 per cent but have been emerging as an important instrument for financial inclusion. It also talks about the higher capital requirement for such banks and the cost of compliance which, over time, should come down if we want them to be successful ventures.

No anthology on inclusive finance can be complete without dealing with the role technology is playing in this space. The fifth piece analyses key policy and market initiatives in the past year and how the fintech revolution is rewriting the rules of the game.

An exhaustive chapter on the challenges and opportunities before the microfinance industry hits the nail on the head when it says that although it has been growing at a healthy pace, its systemic importance is on the wane. Microfinance players face increasing competition from universal banks and SFBs, the time-tested joint liability model of lending is becoming obsolete and credit costs are rising; the much-touted 99 per cent repayment rate is no longer a reality. The fintech companies can disrupt them further. The industry needs to evaluate products and services to remain relevant for customers, the author suggests.

The rest of the compendium, through the last four chapters, deals with almost three-decade-old SHG–bank linkage programme and its progress, MSME financing, the emergence of water supply and sanitation lending, and innovations in fintech for agriculture lending.

The SHG–bank partnership has grown in outreach and the volume of finance, but this has been uneven, and the quality of such groups lacks consistency. There is virtually no product innovation. The author of the piece also asks an uncomfortable question: How long will the SHGs depend on interest subvention support?

Financing MSMEs is critical as these units constitute close to 95 per cent of all enterprises, employing 120 million people and accounting for about 8 per cent of the gross domestic product (GDP). There is a need for addressing supply-side constraints and making the lending framework more inclusive through innovative tools such as credit guarantees, leasing and factoring. The banks can use credit scores to plug information gaps and must approach lending to this segment as a business and not an obligation to comply with regulatory norms.

The inclusion of water and sanitation loans within the priority sector loan norms reflects changing national priorities. Fund flows to this segment are particularly important amid a pandemic. No wonder then that, as water and sanitation structures evolve, collaboration among multilateral agencies, financial institutions and government entities have been taking new forms.

The last chapter focuses on how technology is changing agriculture financing. A series of loan waivers has impacted the credit culture and technology can come in handy to make such exercises data driven, benefiting only those who cannot afford to service their debt. One can capture data on farm stress arising out of climate change, demand–supply imbalance and sudden crashes in commodity prices to create models which will raise red flags and make a case for farm loan waivers.

Financial Inclusion without Economic Inclusion?

The COVID-19 pandemic has taught us to look back at the age-old question: Can we achieve financial inclusion without economic inclusion?

Indeed, direct benefit transfers—through Jan Dhan accounts—have the potential to change the culture of banking in rural India and the people who live there. When such entitlements under various state and centrally sponsored schemes flow directly into the bank accounts of people, account holders feel encouraged to save. Theoretically, this paves the way for initial investments by an individual and flow of bank credit. The contraction in the economy for two successive quarters in the financial year 2021 has changed the scenario but one of the key reasons why rural India turned into an island of hope during this trying time is the flow of money into the accounts of millions of people through government schemes.

The policy rate in India is at a historic low. RBI's monetary policy in December 2020 continued with its accommodative stance—even into the next financial year—and committed to doing anything to support growth mauled by the pandemic. Ahead of the policy, in November, finance minister, Nirmala Sitharaman, announced yet another stimulus plan—a ₹2.65 trillion Aatma Nirbhar Bharat 3.0 package. She released it in a situation that was very different from what prevailed at the time of the earlier two, with many high-frequency indicators showing that the Indian economy was on the mend.

Although the size of the package was ₹2.65 trillion, the fiscal cost it entailed was roughly around ₹1 trillion. More than half of the package, close to ₹1.46 trillion, is meant for production-linked incentives to 10 sectors. Indeed, this will boost growth and create employment, but we'll need to wait for years to see the results.

By a liberal estimate, the ₹29.88 trillion three-package stimulus (inclusive of RBI's liquidity measures), announced between May and November, roughly translates into a fiscal stimulus of 2.3 per cent of GDP—far lower than what most pandemic-hit nations have been willing to spend. Subsidies and doles constitute a large part of these packages—they are more welfare measures than stimulus steps.

The best part of Aatma Nirbhar Bharat 3.0 was the extension of the ₹3 lakh crore Emergency Credit Line Guarantee Scheme to 31 March 2021. It was to have closed in October 2020, then was extended to November end. The repayment period is being stretched from four years to five, with a one-year moratorium. The scheme now covers companies with outstanding credit of ₹500 crore in 26 stressed sectors identified by the K. V. Kamath Committee.

The original scheme was meant for any business unit with a turnover of ₹100 crore and outstanding bank credit of ₹25 crore on 29 February 2020. They could get up to 20 per cent of their outstanding debt as fresh loans from the banks. This pegged the maximum fresh credit for one unit at ₹5 crore. Any unit that had not delayed paying an instalment for its existing loan beyond 60 days was eligible. The government later raised the turnover limit to ₹250 crore and outstanding bank credit limit to ₹50 crore. In November, the government did away with the turnover clause and made the outstanding credit limit of ₹500 crore the only criterion. Each stressed company can get up to ₹100 crore in fresh bank credit.

One reason for extending the scope of the scheme could be that half the package remained unutilized.

Very few MSMEs have a direct interface with customers. They supply products to companies, many of which have not been in the best of health, and unless they get back on their feet, MSME woes will continue. The new package will take care of those relatively larger companies to which MSMEs supply goods. This will, in turn, help MSMEs recover fast besides serving as a lifeline for many corporations in the stressed sectors. In some sense, it's a 20 per cent equity infusion by the government. Once they return to health, tax collection will rise, and there will be a positive impact on many layers of the economy. This will also ease the pressure on banks for restructuring loans.

Until the government redefined MSMEs in May 2020, there were about 63.05 million micro, 0.33 million small and about 5,000 medium enterprises—together the second biggest employer in the country. Even in normal times, they have problems with cash flow as bills don't get paid on time. Quite often the government is the culprit, holding back payments. MSMEs cannot carry such receivables. The pandemic has played havoc with many of them because they had to eat up their capital when the business was shut for months.

The ₹20,000 crore sub-debt scheme with a 90 per cent government guarantee, part of the Aatma Nirbhar Bharat package, may come in handy for them. Under this scheme, the MSME promoters can be given money equal to 15 per cent of stakes in the company or ₹75 lakh, whichever is lower, for a maximum of 10 years, with a seven-year moratorium on principal payment. Interest has to be paid only for the first seven years and the principal is to be repaid within three years after the moratorium ends.

Such government schemes, an ultra-loose RBI monetary policy and rapid technological strides, particularly in the payments space, are helping the economy recover faster than expected. Much is happening in the inclusive finance space and this report offers some glimpses of these in the social, economic and financial segments.

TWO ANECDOTES

Let me close with two anecdotes. In the first week of May, when the nation was still under lockdown, one of the watchmen in our building in a Mumbai suburb left for his village in Uttar Pradesh, vowing never to return. He reached his village after four days, travelling mostly in a truck and walking the proverbial 'last mile'—about 27 km. He called a few days later to say how happy he was to get back home. He would help his father in farming and stay put. As I write this towards the end of December, he's back to Mumbai and working as a watchman in another apartment complex.

A woman in our locality lost her cleaner's job at a few households and a large bookstore. After a few weeks, I found her selling eggs, bread and milk on the street corner. As the days progressed, she added more items and her clientele increased. As the city opened up again, her former employers took her back. But she hasn't given up on her new venture, which is being run by her daughter-in-law.

These two incidents reflect the indomitable spirit of entrepreneurship at the so-called bottom of the pyramid. They also suggest that reverse migration is as much a reality as is the fact that rural India may not be able to accommodate everyone who returns home. Only the umbrella of inclusive finance can offer a shade to these people and change their lives for the better.

Let's not waste the pandemic crisis—this is the moment to forge ahead. For sure, we are forging ahead on the digital financing turf. As Nandan Nilekani has said, COVID hastened digitalization from years to weeks. We need to see the same warp speed in other segments of inclusion.

Tamal Bandyopadhyay

COVID-19 Pandemic: The Policy Response

M. S. Sriram

1

While data on how the pandemic affected the inclusive finance sector will pan out over a period of time, this chapter examines the policy response to reflect its impact on institutions and clients in the inclusive finance space.

From what was evident, it was clear that the biggest jolt that came to the nation was in the form of a national lockdown that lasted almost five weeks. While this was progressively eased and we still do not have complete normalcy as I write this report, the latest data available indicate a technical recession with the gross domestic product (GDP) showing negative growth for two successive quarters. This recession has affected the economy as a whole but in particular the informal sector, which possibly had a fragile security net and a shallow savings pool. The informal sector also did not provide an appropriate framework for policy intervention that could lead to relief for the affected communities.

SHORT-TERM TRANSFERS: A RESULT OF LONG-TERM INVESTMENTS

One aspect that came in handy was the intervention that happened through the banking system using the Pradhan Mantri Jan Dhan Yojana (PMJDY) accounts. The first tranche of the stimulus package under the Pradhan Mantri Garib Kalyan Yojana, in May 2020, used the banking architecture to announce that 20 crore women Jan Dhan account holders would get ₹ 500 per month for three months; an ex gratia of ₹ 1,000 to three crore poor senior citizens, poor widows and poor *divyang* (people with disability); the relief under PM Kisan would be front-loaded and the instalment of ₹ 2,000 would be paid to each small and marginal farmer household. It also increased the limit for collateral-free lending to self-help groups from ₹ 10 lakh to ₹ 20 lakh along the lines of finance for non-banking finance companies (NBFC), microfinance institutions (MFI) and other financial institutions. There were also measures taken up by the Reserve Bank of India (RBI) to shore up liquidity after the announcement of the moratorium. This opportunity was also taken to issue 25 lakh new kisan credit cards.

In addition to institutional intervention, there were also direct benefit transfers (DBTs): 80 crore poor people to be given benefit of 5 kg wheat or rice per person, 1 kg pulse and 1 kg of chana for each household for free every month; gas cylinders, free of cost, to be provided to 8 crore poor families for the next 3 months (extended later till Diwali and Chhath). This logistic was possible essentially because of the past identification and linkage with the Aadhaar numbers under the JAM trinity.

The government, using this situation, also announced the one nation-one ration card scheme that would make the ration card interoperable. Even this was possible only due to the experiments with the use of technology over a period of time.

The government also announced a package of providing additional loans to street vendors and assistance to construction workers. Nearly ₹ 5,000 crores were transferred to the construction workers during the period from the cess collected. Street vendors were to get an amount was up to ₹ 10,000 per loan account to be rolled out within a month of the announcement. This would also result in boosting the livelihood opportunities for 50 lakh street vendors, and hopefully boost the demand side, albeit marginally.

When we examine this package, we realize that it is not an easy plan to roll out because the process of identifying street vendors, opening their accounts and classifying, registering and having a database has not been done. While the state can initiate the relief programme, this should also be an opportunity to develop a mechanism to formally recognize street vendors. They not only need a loan, but they would need some security of (a) identity and valid permission to legitimately carry on their trade without harassment from the police and other law enforcement agencies and (b) spaces in the urban architecture that allow for the trade to be carried out on the streets.

The study by Ghosh[1] showed that the existing architecture of banking, particularly with reference to PMJDY accounts, helped the customers to cope. Not only were the existing accounts used by the State for direct benefit transfer, but the rate of opening new accounts and transaction velocity also increased. The average balances initially moved down and later moved up, and the study was able to conclude that the architecture was good and robust to be used for benefit transfers.

RESPONSE TO MIGRATION: IMMEDIATE RELIEF

There was also an increase in the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) wage to ₹ 202 a day from ₹182, thereby benefitting 13.62 crore families. There was also a proactive provision of work for migrants returning to their villages. The question that we will have to examine in the longer run is to see if the reverse migration and the relatively low incidence of the pandemic in rural areas would be lasting in nature. The government can provide immediate relief, and employment and income for returning migrants by providing wage income and financial support proactively. By the time they have settled down back in the villages, inclusive finance architecture could provide some instant livelihood opportunities through financing. These two initiatives could result (a) in diversifying the livelihood opportunities in rural areas and (b) in the reduction of the pressure on urban centres.

It was also most likely that returning migrants, having seen the world of opportunities outside, would also be inherently entrepreneurial. However, this thinking and strategy did not seem to be embedded in the response plan.

It is also important to note that this roll-out of providing immediate work and payments for the work was possible, essentially because there was an architecture that was available. There was a greater demand for having an urban equivalent of MGNREGA, but that would be a longer term measure and the design and architecture for it would have to be laid out.

RESPONSE TO MIGRATION: STRUCTURAL AND LONG-TERM INITIATIVES

However, some of the measures announced in the aftermath of the lockdown could have fairly long-term implications and innovation. For instance, the finance minister announced the construction of affordable renting housing complexes through the public–private partnership route. If this is undertaken at a rapid pace, it will result in creating a stimulus, because the construction activity will lead to employment generation, pump resources into urban areas and also provide better housing, thereby reducing the stress on existing slums and partially preventing the formation of new slums. This is ideally a project that could be dovetailed with the urban employment guarantee scheme that would create a stimulus for the poor to come back to the consumption economy. This provides an immense opportunity for the inclusive finance space to provide services of payments, remittances and savings.

It was, however, not clear how central the rental housing announcement was to the rehabilitation package. Even the financial outlay for this was not specified. The announcement indicated not only the union government but also the involvement of state governments and private parties with a rental and concessionaire agreement. Irrespective of whether this comes as a pandemic relief package or not, the government should peruse this proposal with all the vigour and acquire land and construct these complexes proximate to areas that provide high employment opportunities.

While providing more livelihood opportunities through state-driven initiatives (MGNREGA) and private provision of financial services through microfinance and other inclusive finance players, it may encourage workers on the reverse migration path to stay back in rural areas and stem the pace of urban in-migration, the initiative of rental and urban equivalent of employment guarantee would actually encourage migration. These two appear to be contradictory but actually they are not. Poverty is multidimensional and not just spatial and, therefore, multiple strategies need to be employed to blunt the sharpness of the problem.

MSME SECTOR

The relief package announced to the Micro, Small and Medium Enterprises (MSME) sector was more in terms of stimulus rather than a relief. These included increased liquidity, a guarantee mechanism to ensure that collaterals do not come in the way of bank finance, setting up of an equity fund and support for the social security of employees through a contribution to the employees provident fund. The Emergency Credit Line and Guarantee Scheme (ECLGS) introduced in May included full guarantee on the line of credit and was collateral free. The total package was near about ₹ 3 trillion. This was followed by ECLGS 2.0, which was focused on larger enterprises, but would also have an impact on MSMEs as they would be suppliers to larger firms. Most of these would make the ecosystem better for the MSMEs to operate, but possibly did not directly look at their viability and business continuity. A package for the MSMEs had to be employee-centric to ensure that the crisis did not spill over into reverse migration and distress among the classes that are at the cusp of formalization.

Another relief for the MSME sector was the availability of moratorium that would have helped enterprises to manage liquidity.

FINANCIAL SECTOR: MORATORIUMS AND MORE

The policy response of declaring the moratorium was announced on 27 March to ensure that all financial institutions could extend the moratorium to standard accounts for a period of three months; that the accounts would not be classified as non-performing and that no provisioning had to be made. The interest and the instalments during the period of moratorium would be recovered by extending the tenure of the loan. The moratorium was extended for another three months.

While the measures taken by the government were in terms of direct relief, it is not clear how the moratorium will play out and we will have to wait for a much longer period to understand the effects of this. For one, it will not recognize the stress; it will encourage organizations to accrue interest on loans that are actually stressed and will lengthen the tail.

The effects of the moratorium would have differing effects on loans of different tenures. For instance, its effect on say a 20-year housing loan would not be significant from the perspective of the customer, but on a 12-month loan would be significant. Even if we take the six-month moratorium into account, the tenure will extend to 18 month immediately, with added interest for six months and no change in the equated instalments, it may go beyond a few more months.

For a short-term loan, where we assume that the activity has come to a standstill and therefore the borrower is availing the moratorium, this would be stressful and difficult to cope with. The best way to assess the situation is to estimate the proportion of the portfolio that has not availed the moratorium. That part of the portfolio is at least certain and the rest of it will be tested over time.

The offering of a moratorium was one aspect that led to some controversy and debate. Apart from the usual arguments as to whether it should have been left to the discretion of the bank or offered by default to all borrowers and the possible negative impacts of the moratorium would create in the long run, it was also a matter of litigation. While there was a holiday on payment of instalments, interest on loans continued to accrue. Since the interest was calculated on a monthly rest, the accrued interest got added to the principal and got compounded. The matter was taken to the Supreme Court, and finally the government volunteered to waive the amount of compounding and compensate the banks as a one-time ex gratia payment to the borrowers. Interestingly, this not only benefitted those who had availed of the moratorium but also those who had not to the extent of the opportunity loss.

However, the reports indicate that there was a complete stoppage of activity during the lockdown. In particular, given that the microfinance activity runs largely on cash and through meetings proximate to the clients, it is bound to have a significant impact. Not only the collections but also the off take of loans during the first quarter of 2020–2021 were greatly affected. While there has been a recovery in the flows into the account, the actual impact of the balance sheet would be seen much later, when the effect of the moratorium wanes.

In the quarter of the lockdown, that is, the Q1 of FY 2020 – 2021, CRIF High Mark reported a 91 per cent decline in disbursements in comparison to Q4 of FY 2019–2020.[2] Each of these events will have significant and long-term impacts on the methodology of lending, the methodology of collections and how social collateral pans out. While demonetization forced the industry to rethink the frequency and method of collection—moving from weekly meetings to more infrequent meetings and the collections through digital means—the COVID-19 pandemic would put some question marks on group meetings and further move towards contactless transactions.

In addition to the moratorium, the RBI also announced that the interest subvention for the prompt repayment of agricultural loans would also be valid for a further period of two months from March 2020 to May 2020.

REFORM BY STEALTH: ARE WE READY?

There have been three important measures which were announced as a part of the relief package in May 2020, both long term and structural in nature. While they appeared almost like a footnote, the implications were significant. The question is not whether or not the reforms are needed, but more important is the question on how the reforms could be sequenced. Any move that brings market forces will move the system towards efficiency. However, would efficient systems also move towards equitable systems is a dilemma that policymakers have been facing for quite a while. The role of the state is not just to be a cheerleader for the markets but also to correct distortions and pace the reforms according to how the competitive landscape is shaping up.

A good example of reform, without announcing that it was reform, has happened in the inclusive finance space. Allowing not-for profits and private sector players to operate in the formal lending space, watching innovations happen, not clamping down on institutions for their operational practices and back-ending the regulatory framework was a good example of how markets could come in and still continue to operate, while the set of customers could be from very vulnerable sections of the economy. The regulation of the microfinance sector came in after the regulator gave it a long rope to innovate and experiment. When the microfinance crisis hit the state of Andhra Pradesh, with allegations of multiple lending to vulnerable clients, coercive recovery practices and excessive interest rates, the RBI set up a committee with Mr Y. H. Malegam as Chair (Malegam Committee) and the regulatory architecture was designed on the basis of the report submitted by the committee. This was topped up by a better institutional architecture that was in the space with greater regulation—the setting up of Bandhan Bank as a universal bank and offering licences to differentiated small finance banks are no mean reforms, but they were never packaged as reforms.

If we were to look at the other changes proposed in the inclusive space, then the sequencing of the reforms has to be examined more carefully. There are three sectors where reforms are proposed which may have serious implications on the market structure and the resultant bargaining power and equity. They would also have implications on the architecture erected for financial services. We examine the three verticals in the following sections.

Reform in MSME Sector

Apart from the relief packages announced for the MSME sector, which involved the payment of the provident fund for employees, the reservation for the sector in tenders and the insulation from global competition in terms of government procurement and liquidity infusion, there were deep structural changes which had implications vis-à-vis the financial sector.

Two significant changes that have had a direct implication on the inclusive finance space are worth discussing. The first significant change was the change in the limits of investment and turnovers that defined and classified the enterprises. These changes moved the limits for the enterprises upwards (see Table 1.1). The idea of these changes was to ensure that the enterprises were not penalized for having achieved growth and do not spawn a larger number of small firms but still enjoy the benefits accorded to the sector. However, since the limits enhanced were substantial, these could have had a crowding-out effect on small and tiny enterprises accessing credit from the formal sector.

Table 1.1: Changes in Definition of MSME (Figures in ₹)

Enterprise	Annual Turnover		Investment Limit		
			Previous Investment Limit		Revised Investment Limit
	2006 Act	Revised	Service Sector	Manufacturing Sector	
Micro	Up to 5 crore	Up to 5 crore	Up to 10 lakh	Up to 25 lakh	Up to 1 crore
Small	5 to 75 crore	5–75 crore	10 lakh to 2 crore	25 lakh to 5 crore	1 to 10 crore
Medium	75 to 250 crore	Up to 250 crore	2 to 5 crore	5 to 10 crore	10 to 50 crore

Source: PRS Legislative Research, *Analysis of the Aatma Nirbhar Bharat Abhiyaan* (2020). Available at https://www.prsindia.org/policy/report-summaries/analysis-aatma-nirbhar-bharat-abhiyaan (accessed on 6 December 2020).

The reason why we argue that this might have a crowding-out effect is because of the broad targets provided in the priority sector lending requirements. As per the guidelines,[3] 7.5 per cent of the adjusted net bank credit has to be disbursed to micro-enterprises, which was defined as enterprises having an investment of ₹ 10 lakh in the service sector and ₹ 25 lakh in the manufacturing sector. Now this limit has been increased substantially to ₹ 1 crore, which means that a large number of enterprises that were getting financial support in the small category will naturally get added to the micro-segment, thereby crowding out really smaller enterprises. While the overall reform measures may be welcome, the collateral damage to nano-enterprises has not been very positive.

The second aspect of the changes pertains to moving the retail and wholesale trade, which was under the definition of MSME from the MSME Ministry to the Commerce Ministry, thereby removing them from the classification of MSMEs. This is a significant blow to the inclusive finance segment. The number of unincorporated non-agricultural enterprises is estimated at 6.34 crore, employing about 11.23 persons as per the 73rd round[4] of the National Sample Survey and of these about 5.3 crore enterprises were own-account enterprises.

These will be the ones that will be crowded out because of their size. Of the 6.34 crore unincorporated entities, 2 crore entities are involved in trade. As they are no longer classified as trade, they would be out of the priority sector lending classification and also from the reserved procurement process of the government. This anomaly needs to be corrected urgently in order for the inclusive finance space to continue to operate in a vibrant environment. The classification not only affects banks (particularly small finance banks) but also has an implication on bulk finance for MFIs operating in this segment.

Agriculture

The reforms in agriculture were indicated in the first package or reforms announced by the Finance Minister. Following the announcement, this was quickly followed up by ordinances and later converted into bills. These reforms pertained to opportunity for the creation of infrastructure for storage, freedom to trade beyond specified zones (market yards) and the free movement of goods and commodities. All three measures appear to be pro-competitive and forward-looking. However, we have been witnessing a massive pushback on these reforms and, therefore, it is important to pause and look at the issue of sequencing of the reforms as well as at how the inclusive finance space can participate in space going forward.

There are significant lessons that the inclusive finance space can offer for reforms in other sectors. We have identified this as the creation of alternative infrastructure and ecosystem that need to move ahead of policy and legislative reform. The inclusive finance space has moved from the creation of physical infrastructure, technological infrastructure and banking correspondent network and payment architecture first. After this, the government took the saturation approach of the PMJDY. Similarly, the agricultural sector also needs significant investment in creating alternatives, through farmer producer organizations, infrastructure for markets on a public–private partnership mode. It needs a chain of warehouses where the farmer can store the produce without the need to sell and still have a robust warehouse receipt system to access financial services.

Providing inadequate choices to store, transport and discover the markets at the ecosystem level and opening up free trade will lead to the angst that the farming community has anticipated. The lack of a network of storage and choices will result in oligopolist forces moving in. State support for the vulnerable is needed, and therefore the reform is not about a choice on whether there should be state intervention or free markets. It is about understanding whether markets are well regulated, deep and competitive enough for the state to step back.

From the perspective of inclusive finance, it is important for organizations working in this space to look at the entire value chain and examine how infrastructure for storage and transportation could be financed and how new hybrid financial products could be introduced, largely leading to lesser arbitrage and better price discovery. Warehouse receipts would play a major role as a financial instrument to provide benefits to the marginalized communities among the farming fraternity.

Labour Laws and Formalization

The next structural change that the state is attempting, using the principle of 'never waste a crisis', is to look at labour law reforms. These reforms are also a mixed bag, starting with moving people into the formal sector employment, covering more employees in the social security architecture and encouraging the formalization of jobs. The formalization of employment should therefore not be seen as distinct from other reforms. If there is a requirement that all MSMEs register on the Udyam portal in order to seek any welfare benefits, the process itself is moving towards the filing of returns and centralized data that helps one to identify gaps.

Livelihood opportunities in the formal sector can be provided through this strategy. However, the anxiety is that some of the protections that were available in the extant law on duration of work, overtime and other terms of engagement. While there is a belief that there would be tremendous growth due to amendments in labour laws, it is quite possible that it may not fructify. There have been significant investments in the manufacturing sector in the past few decades, which have not resulted in a proportionate increase in jobs because of jobless growth due to automation. The policy needs not only to look at labour law reforms but also to look keenly at sectors that are labour-intensive and have a good multiplier for the rupee invested.

Reforms in general have created a sense of angst and doubt in the minds of both the farmers and the labour class. This angst is valid and justifiable because the other elements that could help the reform to move a few steps ahead do not seem to be around and therefore a frog jump to the next level would not be smooth.

ANALYSIS AND CRYSTAL GAZING

Adequate evidence from the relief package given during the pandemic indicates that the efficiency of any welfare transfers during an emergency situation is a function of the social, technical and physical infrastructure that has been created. In the current instance, it was possible to resort to direct financial transfers because of the banking ecosystem that was built over the decades to deliver the services. It is therefore imperative that this principle also applies to other initiatives.

The short-term policy response has largely been in the form of interventions through the financial sector, either through DBTs or through wage payments. That it was possible to do cashless and contactless transaction is a testimony to the roll-out of technology in the past few years.

It is important to examine these reforms in the context of the power relationships between individuals and institutions, and how it pans out in the long run. The question is how the advantages are weighed between the two contracting parties. A movement towards formalization and a further movement towards market-based formalization is fraught with some risks, particularly if adequate precautions are not taken vis-à-vis issues of the protection of the weak and the disposed. Therefore, any movement towards the market must be accompanied by a protective framework for the weaker link—be it farmers, small enterprises or workers. In this circumstance, one has to see if the conditions are appropriate for the initiatives.

We can examine the agricultural and labour reforms in the context of the initiatives of financial inclusion. If we were to look at the PMJDY that was implemented from 2014 onwards, it is important to recognize that the conditions for launching the programme were almost there. There were years of investment in the physical outreach of banking infrastructure; technology was rolled out and interoperability was made possible and, with Aadhaar, linkages and identity were established. None of these created insecurity in the minds of the beneficiaries. These created a situation for moving subsidies through a bank account rather than cash. These included welfare payments, wage payments and subsidy payments for LPG. Ideally, even the PMJDY would have been better launched a few years later after creating an adequate demand system through the DBT push.

However, there was an initiative to reach saturation levels at an accelerated pace. Pacing initiatives would have prevented dormant accounts and would have also prevented the stock of unused debit cards. If we were to apply the same principle to agricultural reform, healthcare, the public distribution system and education, the question is whether we are ready to move these welfare payments through a technology-enabled direct benefit platform.

Freeing the movement of commodities, providing choices for selling in the market or even price discovery on the basis of demand and supply could all be done if there are no welfare considerations, either at the farmers' level or at the consumers' level. But in order to reach a stage where markets work for the poor, it is important that the necessary conditions are created. The pandemic and the relief package have shown very sharply where these initiatives work and where these do not work and there are significant learnings from the inclusive finance sector to other sectors. This also opens up the opportunity for the inclusive finance sector to engage proactively with the real and service sectors through effective financial instruments.

NOTES AND REFERENCES

[1] Soumya Kanti Ghosh, *Ecowrap* (Mumbai: SBI, 2020), 2–4.

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[3] Available at https://rbidocs.rbi.org.in/rdocs/notification/PDFs/MDPSL803EE903174E4C85AFA14C335A5B0909.PDF (accessed on 5 December 2020).

[4] Available at http://mospi.nic.in/sites/default/files/publication_reports/NSS_581.pdf (accessed on 5 December 2020).

Review of the Banking System: Evolving Landscape

M. S. Sriram

2

The banking system has been going through multiple changes in the past few years; there has been consolidation in the public sector banks, private banks have seen one high-profile failure and the economic downturn has affected the overall performance of the banks. At the same time, the agenda of financial inclusion seems to be well on track with no dramatic changes. The biggest initiative in the recent past was the launch of Pradhan Mantri Jan Dhan Yojana (PMJDY) in August 2014. Following the launch of the programme on a mission mode, the number of new bank accounts opened went up steeply. However, the increase in the number of bank accounts did not have a commensurate growth or impact on transactions and did not show signs of the additional services offered such as the facility of overdraft or the issue of ATM cards or insurance gain traction. While in the past few years there has been improvement in the usage of ancillary services, it still does not fall in line with the vigour with which the PMJDY programme was launched.

In general, the banking sector is moving ahead on an optimistic note. The inclusive banking space has weathered multiple storms, starting with the demonetization of November 2016. While most of the data in this chapter focus on the figures for March 2020, the effect of COVID-19 on the banking sector in general and the inclusive banking sector in particular will unfold in the years to come.

Most of the parameters of inclusive banking have continued to grow. After a blip in the opening of rural branches during the early and mid-phase of liberalization of the Indian economy, during which the Reserve Bank of India (RBI) did away with the licensing policy of permitting one branch in urban and metropolitan areas for every four branches in unbanked rural locations, there was a slowing up in the opening of new branches in rural locations.

However, the growth of physical infrastructure has picked up from 2005 onwards, after the RBI reintroduced the quota requiring the banks to open a quarter of the branches in unbanked rural centres. Over the past few years, RBI has changed the definition of a branch to include a banking outlet that operates for four hours a day for five days a week.

In the current year (2020), RBI launched the National Strategy for Financial Inclusion (Ghose 2020; Mor 2014; RBI 2019b). The document contains

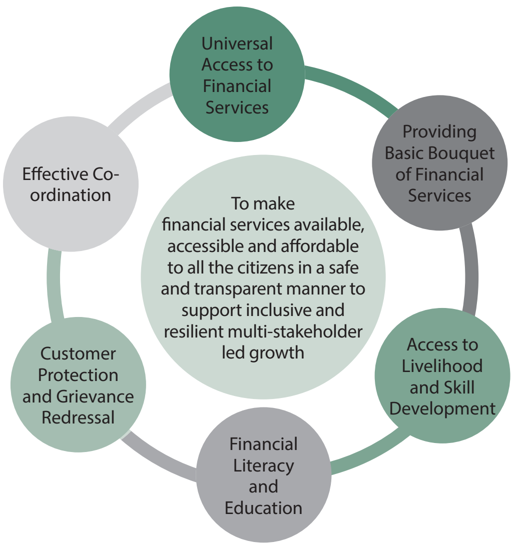


Figure 2.1: The Vision of National Strategy for Financial Inclusion

Source: Reserve Bank of India 2019: National Strategy for Financial Inclusion. Mumbai: RBI.

an ambitious plan for financial inclusion (See Figure 2.1 for the vision). It reiterated the approach of the RBI towards a bank-led financial inclusion strategy. On the physical outreach, the strategy had the following target: increasing outreach of banking outlets of scheduled commercial banks (SCB)/ payments banks/small finance banks (SFBs) to provide banking access to every village within a 5 km radius/hamlet of 500 households in hilly areas by March 2020 (RBI 2019b, 19).

We are not sure if this target has been achieved as the data are provided in numbers and not spatially.

In addition to the ambitious target of physical outlets that could be considered bank-owned and bank-operated, banking policy over the past decade or so also strengthened the business correspondent (BC) network—both in terms of numbers and the regulatory ecosystem in which these agents have operated. BCs are now expected to go through a certification course conducted by the Indian Institute of Banking and Finance and also register under a BC registry maintained by the Indian Banks' Association.

Table 2.1 seems to indicate five interesting aspects.

Table 2.1: Financial Inclusion: Summary of Progress (Including Regional Rural Banks [RRBs])

Particulars	Year Ended March 2016	Year Ended March 2017	Year Ended March 2018	Year Ended March 2019	Year Ended March 2020
Banking outlets in villages (branches)	51,830	50,860	50.805	52,489	54,561
Banking outlets in villages (branchless mode)[1]	534,477	543,472	513,742	544,666	544,656
Of which BCs in villages less than 2,000 population		438,070	414,515	410,442	392,069
Banking outlets in villages (Total)	586,307	598,093	569,547	597,155	599,217
Urban locations covered through BCs	102,552	102,865	142,959	447,170	635,046
*BSBD A/c through branches (no. in million)	238	254	247	255	262
BSBD A/c through branches (amount in ₹ billion)	474	691	731	877	958
BSBD A/c through BCs (no. in million)	231	280	289	319	339
BSBD A/c through BCs (amount in ₹ billion)	164	285	391	532	726
Total BSBD A/c (no. in million)	469	533	536	574	600
Total BSBD A/c (amount in ₹ billion)	638	977	1,121	1,410	1,684
OD facility availed in BSBD A/c (no. in million)	8	9	6	6	6
OD facility availed in BSBD A/c (amount in ₹ billion)	2	2	4	4	5
Kisan credit cards (KCCs) (no. in million)	47	46	46	49	47
KCCs (amount in ₹ billion)	5,131	5,805	6,096	6,680	6,391
General credit cards (GCCs) (no. in million)	11	13	12	12	20
GCCs (amount in ₹ billion)	1,493	2,117	1,498	1,745	1,940
Information and communication technology (ICT) A/c BC transaction during the year (no. in million)	827	1,159	1,489	2,101	3,231
ICT A/c BC transaction during the year (amount in ₹ billion)	1,687	2,652	4,292	5,913	8,706
ATMs of banks (public, private foreign banks)	199,099	214,554			249,515
India post		982			1,000
ATMs of SFBs		724			2,120
ATMs of cooperative banks (both urban and rural)	4,664	5,829			8,067
ATMs of RRBs	1,024	1,038			1,328
White-label ATMs	14,169	14,447			24,195
Total ATMs	218,956	237,574			286,225

Source: Annual Report of 2016, 2017, 2018, 2019 and 2020 Reserve Bank of India. ATM statistics as of September 2020 from NPCI.

Note: *BSBD = Basic savings and bank deposit.

First, the growth of physical outlets, both in terms of branches and in terms of BCs, has been plateauing in the past few years in rural areas (Figure 2.2). We have possibly reached the optimal level of outlets that can viably cater to the population in the catchment area and, therefore, it may be essential for policymakers to look more closely at the quality of the outlets, their viability and the bouquet of services that they could offer rather than the number of outlets. While it is interesting and important for the RBI to have a target of a banking outlet within a 5 km radius and in every habitat of 500 households, this target also needs to be weighed against the overall viability of maintaining it. A detailed evaluation of the economics of this target needs to be undertaken.

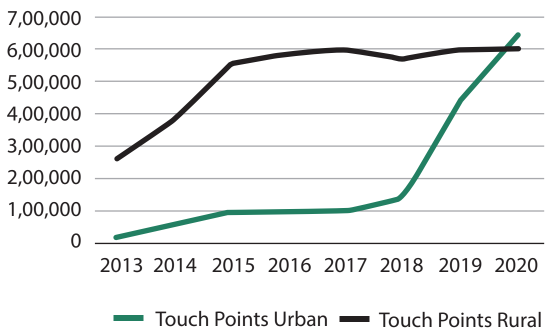


Figure 2.2: Banking Touchpoints

Second, BSBDAs (basic savings bank deposit accounts) (Figure 2.3) are designed to extend a package of minimal services as part of the financial inclusion plans of banks. There was an aggressive growth in the number of accounts in the first two years of the launch of the PMJDY, which possibly reached near saturation levels soon thereafter. At this time, the incremental target of including other adult members in the banking fold would lead to a modest growth in the number of accounts annually. This possibly could be considered as an achievement by the banking sector, and we could move ahead to look at the quality of these accounts.

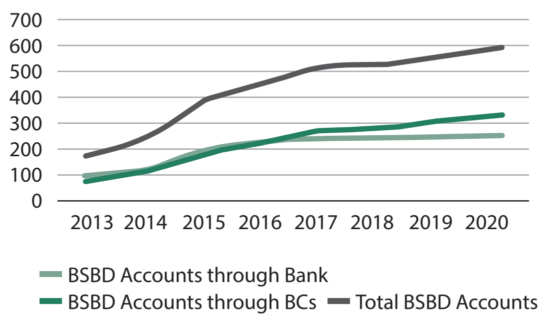


Figure 2.3: BSBD Accounts (in Millions)

The recent study (Ghose 2020) indicates that the opening of bank accounts under this category increased soon after the few months of the pandemic not reflected in the data presented above. The indication is that the direct benefit transfer (DBT) amounts would have encouraged the poor still without BSBDAs to open accounts. The report strongly advocates increasing the use of the accounts for multiple transfers from the state. Unlike the push strategy used in opening the accounts during the PMJDY campaign, the author advocates a pull strategy by increasing the use cases for the accounts, which would naturally create a greater demand for such accounts. In the report, it is also found that the amount of transactions, average balances and remittances through these accounts have increased and these accounts have proved to be particularly useful during the pandemic (Figure 2.4).

Third, we can see adequate traction in the transactions, both through branches and more so through BCs. The average balances in the BSBD accounts have been growing fast (Figure 2.4), indicating that possibly both the outreach model of having transactions proximate to the customer and making DBT transfers to the accounts seem to be working in the medium run. With the exception of overdraft on these accounts, which has not seen a significant uptick, all other parameters seem to be working.

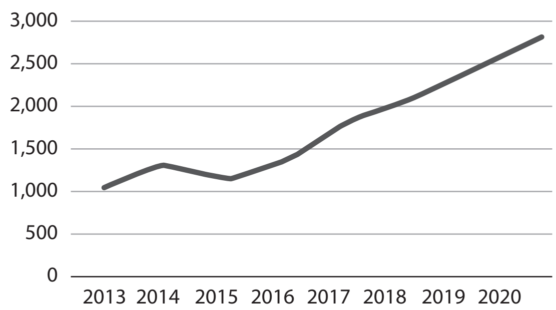


Figure 2.4: Average Balance in BSBD Account

Fourth, there was a thrust on having on-site ATMs in all branches of public sector banks. This target was achieved in 2014.[2] However, there was no such thrust on ATMs for RRBs. The ATMs of RRBs are a fraction of the total number of physical touch points—both branches and banking outlets. After this, the growth in ATM numbers for the banking system as a whole plateaued and stabilized at around 200,000. However, from 2016 onwards there has been a significant increase in the numbers. This growth is fuelled by white label ATMs, new SFBs and cooperative banks.

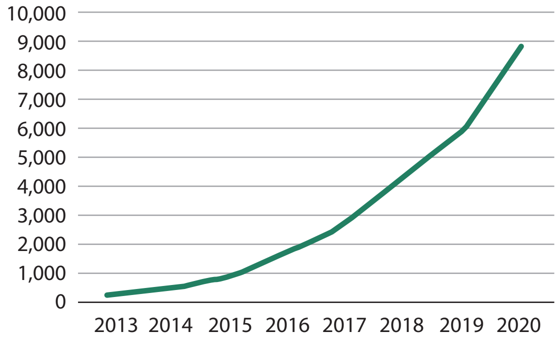


Figure 2.5: ICT Transactions in BSBD Accounts (₹ Billion)

Fifth and most important, information and communication technology (ICT) enabled transactions at both the branch level and the BC level have shown fairly aggressive and smart growth (Figure 2.5).

This indicates that it was an appropriate time for policymakers to look at how to shift the discourse on financial inclusion. The National Strategy is a welcome document in this context, which provides a comprehensive vision for the future. While the vision itself talks about a multi-pronged strategy of making comprehensive financial services available, underpinning its possible achievement is a robust ICT strategy. We saw this happen with direct benefit transfers (DBT) using the JAM strategy. Similarly, the use of fintech will take the agenda of financial inclusion forward.

One of the reasons for the increase in balances and transactions in the BSBDAs could be that the government expanded its DBT schemes through a two-pronged strategy of getting more schemes into the ambit of DBT framework and adding more districts where the DBT would be implemented. This would ensure that the accounts opened under the PMJDY would have some traffic and would continue to be operational. The target of opening accounts under the PMJDY was expanded from every household to every adult. This change represents the aspect that was pointed in the past reports that while the DBT schemes covered multiple members in the family depending on the nature of benefit, the account opening was targeted at one per household. This change in approach creates a demand-driven ecosystem for opening more accounts while also directing transaction traffic through DBTs. This process would also create enough transaction traffic at the last mile through the BCs.

The only parameter that has really not taken off after the PMJDY has been the overdraft facility on the BSBD accounts. While the limits for overdraft has been raised to ₹ 10,000 per account, the outstandings have been low, possibly due to a function of low average positive balances in these accounts. This leads to the reluctance of banks to extend the overdraft facility on such accounts as they lack the requisite transaction trail that gives them confidence to take a call.

BRANCH NETWORK

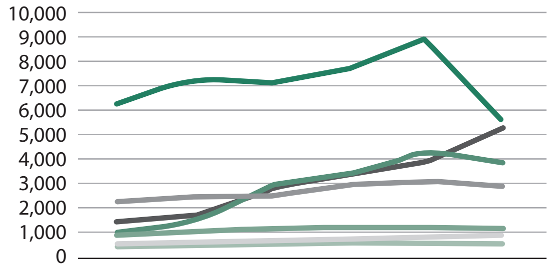
On the banking side, the expansion of commercial bank branches continued. From a total of 140,814 outlets reported in March 2016, the number increased to 156,350 by March 2020. The latest data on the number of branches is given in Table 2.2.

From Table 2.2, it is evident that the preferred mode of reaching out to bank customers is not necessarily through branches, but through outreach models. With the advent of technology and multiple players in the area of payments and settlements, the pressure on the banking network for transactions is being reduced. The rapid growth in ICT transactions shows that the branch now is possibly used more as a place for doing the substantial planned business of seeking a loan or placing a deposit, while most of the deposits and withdrawals, and routine transactions are made in ICT-enabled banking touch points. The data from 2015, given in the Table 2.2 and Figure 2.6, shows a clear shift in this direction and the increase in the volume of ICT-enabled transactions.

Table 2.2: Branches of SCBs (Including Administrative Offices for the Financial Year Ending 31 March)

Branches of SCBs	2016	2017	2018	2019	2020
No. of reporting offices					
Rural	48,317	49,900	50,844	51,622	52,425
Semi-urban	38,035	39,467	40,137	41,579	42,790
Urban	26,153	27,452	27,792	28,667	29,794
Metropolitan	28,309	29,663	29,629	30,178	31,341
Total	140,814	148,402	148,402	152,046	156,350

Source: Quarterly statistics on deposits and credit of SCBs.[3]



2015	2016	2017	2018	2019	2020
181	199	208	207	202	211
1126	1385	2526	3083	3722	5138
533	662	772	861	906	829
6242	7317	7101	7749	8914	5556
761	1129	2712	3189	4076	3632
1987	2246	2259	2664	2890	2677
108	135	357	419	530	476

ATMs ('000) POS ('000s) Number of Card (million)
ATM Transactions (lakh) POS Transactions (lakh)
ATM Tx Value (millions) POS Tx Value (millions)

Figure 2.6: Digital Journey

While the number of ATMs is plateauing at around 200,000 (the chart does not have transaction details for niche banks and cooperative banks) the number of point of sale (PoS) devices is substantially increasing. Similarly, transactions in ATMs in terms of numbers and value have been reduced while corresponding PoS numbers are rising. Growing volume of electronic transfers is also playing a role.

While this part of the data may not be directly related to the transactions of inclusive customers, it indicates the direction in which the technology is taking the sector and therefore if there has not been any substantial increase in the number of bank branches, this should not be a cause for worry as long as they are spatially spread out evenly across the country.

The data for the past five years, looking at the unique locations that the banks were present in rural and semi-urban areas (Table 2.3), seems to indicate that the banks are also moving spatially in the positive direction. As we can see from Table 2.3, there has been a far higher growth in the north and the north-eastern regions compared to the other regions of the country in the case of rural banks and a significant growth in regions other than the south and west—which have been traditionally strongholds for the physical presence of formal banking branches—in the case of semi-urban branches.

This growth is an offshoot of licensing newer banks that have a presence in those regions. These include Bandhan Bank, the largest microfinance institution (MFI) to be converted into a universal bank, North East Small Finance Bank, Utkarsh Small Finance Bank and Ujjivan Small Finance Bank.

SMALL BORROWAL ACCOUNTS: AN ANALYSIS

Each of these initiatives on inclusion looks very impressive when we look at them in isolation. There have been multiple initiatives from within and outside the banking system that focus on inclusive finance. If the thrust of the financial inclusion strategy is with the formal banking system at the core, then we need to look at how all initiatives are meaningfully getting embedded in the banking system and being adequately mainstreamed.

Table 2.3: Number of Unique Rural and Semi-urban Locations that are Served by Banks

	Rural						Semi-urban					
Year	**2016**	**2017***	**2018**	**2019**	**2020**	**Growth (%)**	**2016**	**2017***	**2018**	**2019**	**2020**	**Growth (%)**
North	6,448	6,671	6,858	6,957	7,013	9	644	801	806	806	813	26
North-east	1,312	1,334	1,346	1,357	1,541	17	151	163	163	163	174	15
East	8,369	8,169	8,221	8,254	8,552	2	1,085	1,453	1,455	1,455	1,474	36
Central	9,533	9,338	9,563	9,658	9,813	3	1,102	1,388	1,393	1,394	1,406	28
West	4,834	4,751	4,831	4,895	4,952	2	818	967	971	971	971	19
South	8,270	8,146	8,428	8,541	8,652	5	2,577	2,879	2,893	2,902	2,944	14
Total	38,982	38,410	39,247	39,662	40,523	4	6,377	7,651	7,681	7,691	7,782	22

Source: https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications#!4 (accessed on 10 September 2020).

Note: * The classification of areas into rural and semi-urban for 2012–2016 was based on the population data of census 2001. The classification for 2017 is based on the population census of 2011. As a result of the change in the census base, several rural areas have been re-classified as semi-urban and therefore the 2017 numbers are strictly not comparable to the earlier numbers on a trendline.

Five years have been spent in creating the architecture to open savings accounts and an attempt made to drive transactions through these accounts. Naturally, they should lead to a transaction trail that will help the banks look at the assets side.

In addition, the RBI has created a new category of banks—SFBs—to focus largely on smaller customers, and these have been operating for about three years. How have these initiatives flown into the larger statistics of banking?

We start the analysis by looking at what is happening to small borrowal accounts (SBA; Table 2.4). The definition of an SBA was limited to ₹ 25,000 and was revised in 1999 to the current figure of ₹ 200,000. We look at both the slabs in detail.

If we were to look at these data from an inclusion perspective, the loan accounts with a ticket size of ₹ 25,000, which used to be nearly 22 per cent of the total accounts in March 2016, fell to 17 per cent of the total accounts by March 2020. Loans up to ₹ 200,000 in limit were about 77 per cent of the total accounts (including the 22% above), in 2016 remained at 77 per cent of the total accounts in 2020. The increase in the number of accounts at the higher end of the sub of 200,000 limit is something that has been observed for some time. Both these numbers added up to about 8.7 per cent of the portfolio amount as of March 2020, up marginally from around 8.2 per cent of the portfolio amount in March 2016. This indicates that slowly but surely, the financial inclusion efforts happening within the banking system and outside are translating themselves into the growth of smaller accounts in the banking system itself.

A large part of this development may be explained by the emergence of SFBs. It is mandated that half of the portfolio of these banks have to be in loan sizes of less than ₹ 2.5 million (75% should have priority loan status). Overall, the SFBs contributed significantly to the opening of small accounts. As a category, the SFBs have contributed about 10 per cent of the accounts and credit limits offered to this category. However, the most important development is the increasing presence of private sector banks in this area. As of March 2020, private sector banks accounted for more than 50 per cent of the accounts and the amount of loans of ticket sizes of less than ₹ 25,000, and this dominance was evident across all population categories. The chart in Figure 2.7 gives a break-up of the number of accounts and the amounts that are outstanding in various size buckets and it is evident that the highest number of loan accounts are coming from the small borrowal accounts, but particularly in the bucket between ₹ 25,000 and ₹ 0.2 million. This confirms the past trend that with the reclassification of the limits of borrowal accounts, the exposure in the higher end of the small borrowal accounts is going up.

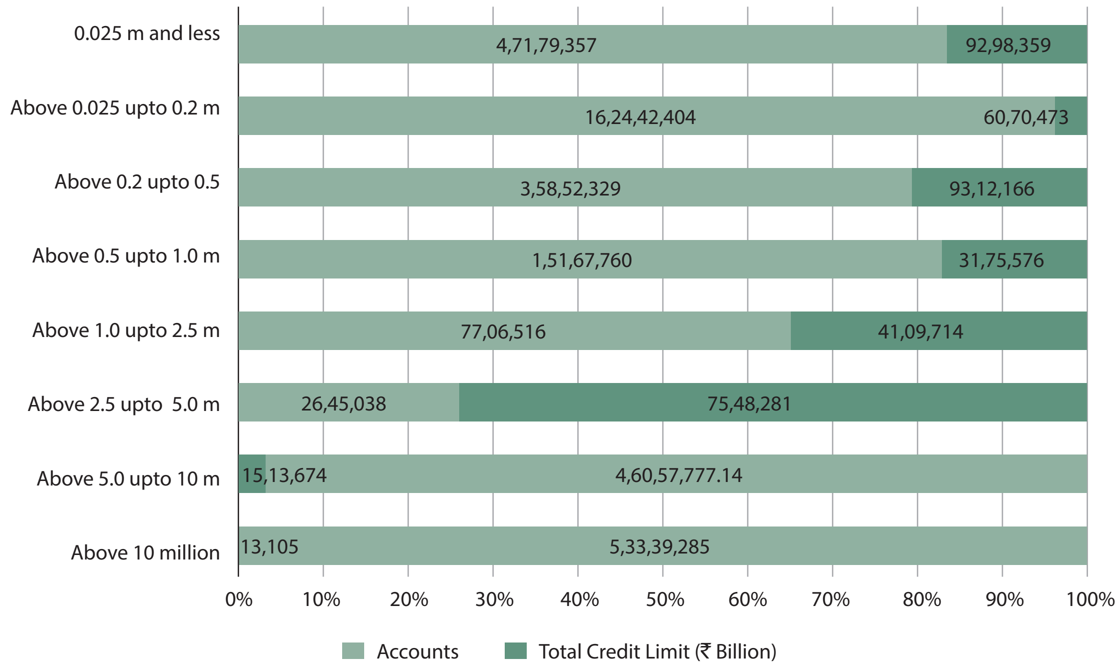


Figure 2.7: Outstanding Credit According to Size of Loan (in ₹ Million)

Source: Basic Statistical Returns of Commercial Banks in India March 2020.

While the public sector banks retained a good 42 per cent of their accounts and 50 per cent of their portfolio in the category of loan ticket sizes between ₹ 25,000 and ₹ 200,000, the dominance of public sector banks even in this bucket had shrunk by March 2019 compared to the numbers in March 2016 (see Table 2.4). This shift is something that needs to be watched carefully.

on mainstream banking. One of the largest MFIs—Bandhan Bank—became a universal bank and has had a significant portion of its portfolio with small customers while growing aggressively; eight other large MFIs were converted into SFBs and several larger MFIs (ASA Grama Vidiyal, SKS Microfinance, BSS Microfinance, Swadhaar) were taken over by banks and several others had strategic tie-ups

Table 2.4: Details of Credit to SBAs Over the Years

Year Ending 31 March →	2012	2013	2014	2015	2016	2017	2018	2019	2020
Loan amount Less than ₹ 25,000									
No. of A/c (million)	44.05	30.88	32.57	29.86	35.29	33.25	36.51	42.46	47.18
% to total A/c	34	24.10	23.50	20.70	21.70	19.30	18.50	18.30	17.30
Limit (₹ million)	701,440	428,593	436,318	429,595	519,372	523,963	591,162	666,008	722,459
% to total amount	0.91	0.50	0.50	0.40	0.50	0.40	0.40	0.50	0.50
Outstanding (₹ million)	762,160	736,827	436,318	359,945	458,836	412,941	439,837	521,412	463,011
% to total outstanding	1.59	1.30	0.60	0.50	0.60	0.50	0.50	0.50	0.40
Loan amount ₹ 25,000 to ₹ 200,000									
No. of A/c (million)	65.06	71.43	76.66	81.27	89.65	97.01	112.04	134.35	162.44
% to total A/c	50	56	55.20	56.30	55.20	56.3	56.9	57.8	59.6
Limit (₹ million)	5,056,960	5,734,745	6,170,673	6,645,862	7,252,009	78,602,339	8,933,146	10,499,674	12,223,498
% to total amount	6.58	6.90	6.50	6.40	6.50	6.40	6.60	7.20	7.80
Outstanding (₹ million)	3,804,050	4,411,501	4,895,252	5,315,041	5,748,489	61,733,228	6,863,220	7,959,219	8,775,303
% to total outstanding	7.92	8.00	7.80	7.70	7.60	7.80	7.80	8.00	8.30
Total up to ₹ 200,000									
No. of A/c (million)	109.11	102.31	109.23	111.13	124.94	130.27	148.55	176.81	209.62
% to total A/c	83	80	79	77.00	76.90	75.60	75.40	76.10	76.90
Limit (₹ million)	5,758,400	6,163,337	6,606,991	7,075,457	7,771,381	8,384,197	9,524,308	11,165,683	12,945,957
% to total amount	7.49	7.40	7.00	6.80	7.00	6.80	7.00	7.70	8.30
Outstanding (₹ million)	4,566,210	5,148,328	5,331,569	5,674,536	6,207,325	6,586,264	7,303,057	8,480,632	9,238,315
% to total outstanding	9.51	9.30	8.40	7.75	8.20	8.30	8.30	8.50	8.70

Source: Basic Statistical Returns for the years 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019 (RBI).[4]

Note: *The gender-wise break-up of the accounts and the amounts indicate that 69.9% of the loan accounts and 73.1% of the loan amounts have been made to men.

However, if we were to look at the data in a slightly longer term perspective, we find that the small accounts, both in terms of numbers and amounts that were tapering off till about 2015—have shown a sharp increase after that. This is not only in the sub-₹ 200,000 but also in the sub-₹ 25,000.

This, combined with the aggressive growth of small-ticket portfolios of private sector banks (including both rural and urban branches), may indicate that the impact of microfinance is being felt

which transferred the portfolio to the commercial banks. All these have possibly started showing in the numbers of the banking statistics (see Appendix Tables 2.1 to 2.4 for detailed statistics). However, they have not made any significant impact in their share in aggregate loans of the banking system.

It should be clarified, however, that these accounts do not strictly represent the accounts of the 'poor', as the data have been classified according to the size of the account. But they still represent the lower segment of customers of the banks. A large part of this portfolio (about 46% of the total number of SBAs and 61% of the total outstanding amount as of March 2020) represents direct lending to agriculture (see Table 2.5).

is not inclusive finance but, given that they have been tagged as a priority, we need to pay attention to the achievements. In fact, in the past few years, the RBI has been tightening the targets of PSL, first by introducing sub-targets for flow of credit to small and marginal farmers (SMFs) and micro-enterprises; and second by including foreign banks with more than 20 branches on par with other banks for the purpose of priority sector targets. In the past year, the RBI significantly altered the targets under priority sector with a road map for a greater inclusion. The targets of SMFs and weaker sections have been further increased and the framework for the targets of urban cooperative banks (UCBs) has been altered significantly to bring them closer to the targets of RRBs and SFBs.

In addition, the RBI has indicated a weightage for agricultural loans on the basis of the difficulty or extent of the inclusion in certain geographical regions. This formula was suggested by the Nachiket Mor Committee (Mor 2014) and has now been brought into the directions.

Table 2.5: Purpose-wise Break-up of SBAs as of 31 March 2020 (Accounts in Million, Amounts in ₹ Billion)

Details	Accounts of Up to ₹ 0.025 Million						Accounts between 0.025 million and ₹ 0.2 million						Total SBAs		
	Accounts	% of Total	San-ction	% of Total	Outstan-ding	% of Total	Accounts	% of Total	San-ction	% of Total	Outstan-ding (₹ Bn)	% of Total	Accounts (Million)	San-ction (₹ Tn)	Outstan-ding (₹ Tn)
Agriculture	16.96	36	301.37	42	243.39	53	79.91	49	5,924.96	48	5,433.43	62	96.87	6.23	5.6
Direct	15.03	32	260.65	36	217.09	47	74.78	46	5,664.15	46	5,232.00	60	89.81	5.9	5.4
Indirect	1.92	4	40.72	6	26.30	6	5.13	3	260.81	2	201.43	2	7.06	0.3	0.2
Industry	2.40	5	42.23	6	29.63	6	5.88	4	316.35	3	246.14	3	8.28	0.4	0.3
Transport operators	0.37	1	6.74	1	4.55	1	1.85	1	144.64	1	106.05	1	2.22	0.2	0.1
Professional and other service	2.80	6	45.32	6	26.93	6	6.99	4	367.67	3	253.92	3	9.80	0.4	0.3
Personal loans	18.97	40	236.19	33	94.98	21	50.32	31	4,337.90	35	1,972.31	22	69.29	4.6	2.1
Housing	0.16	0	2.05	0	1.80	0	1.35	1	125.54	1	100.29	1	1.51	0.1	0.1
Trade	3.99	8	72.50	10	50.03	11	11.99	7	734.71	6	547.95	6	15.98	0.8	0.6
Wholesale trade	0.28	1	4.88	1	3.33	1	1.00	1	55.35	0	38.38	0	1.28	0.06	0.04
Retail trade	3.71	8	67.62	9	46.69	10	10.98	7	679.36	6	509.57	6	14.70	0.7	0.6
Finance	0.08	0	0.80	0	0.70	0	0.63	0	67.85	1	43.46	0	0.71	0.07	0.04
All others	1.61	3	17.31	2	12.80	3	4.86	3	329.42	3	172.05	2	6.47	0.3	0.2
Total	47.18	100	722.46	100	463.01	100	162.44	100	12,223.50	100	8,775.30	100	209.62	12.3	9.2

Source: Basic Statistical Returns of SCBs in India 2020.

Savings

Unlike the data on credit, which are fairly granular, the data on savings and deposit accounts are not granular and we do not have the break-up of smaller deposit accounts. The break-up that was being given by the RBI on deposit size till 2019 seems to be missing from the statistics. While credit is an important feature of inclusion, it is equally important to monitor savings, particularly from the perspective of small savers. In the future, we hope that the RBI would provide more granular data on savings that would help in greater analysis.

Priority Sector Lending

From the perspective of inclusion, another cut that we could take is to look at the achievements under priority sector lending (PSL). All of PSL

Table 2.6: Revised and Current PSL Targets

Categories	Domestic Commercial Banks (Excluding RRBs & SFBs) and Foreign Banks with 20 Branches and Above	Foreign Banks with Less than 20 Branches	RRBs	SFBs
Total priority sector	40% of adjusted net bank credit (ANBC) as computed in Para 6 below or credit equivalent of off-balance sheet exposures (CEOBE), whichever is higher	40% of ANBC as computed in Para 6 below or CEOBE, whichever is higher; out of which up to 32% can be in the form of lending to exports and not less than 8% can be to any other priority sector	75% of ANBC as computed in Para 6 below or CEOBE, whichever is higher; however, lending to medium enterprises, social infrastructure and renewable energy shall be reckoned for priority sector achievement only up to 15% of ANBC	75% of ANBC as computed in Para 6 below or CEOBE, whichever is higher
Agriculture	18% of ANBC or CEOBE, whichever is higher; out of which a target of 10%# is prescribed for SMFs	Not applicable	18% ANBC or CEOBE, whichever is higher; out of which a target of 10%# is prescribed for SMFs	18% of ANBC or CEOBE, whichever is higher; out of which a target of 10%# is prescribed for SMFs
Micro-enterprises	7.5% of ANBC or CEOBE, whichever is higher	Not applicable	7.5% of ANBC or CEOBE, whichever is higher	7.5% of ANBC or CEOBE, whichever is higher
Advances to weaker sections	12%# of ANBC or CEOBE, whichever is higher	Not applicable	15% of ANBC or CEOBE, whichever is higher	12%# of ANBC or CEOBE, whichever is higher

Categories	Primary UCB				
Total priority sector	40% of ANBC or CEOBE, whichever is higher, which shall stand increased to 75% of ANBC or CEOBE, whichever is higher, with effect from 31 March 2024. UCBs shall comply with the stipulated target as per the following milestones:				
	Existing target	31 March 2021	31 March 2022	31 March 2023	31 March 2024
	40%	45%	50%	60%	75%
Micro-enterprises	7.5% of ANBC or credit equivalent amount of off-balance sheet exposure, whichever is higher				
Advances to weaker sections	12%# of ANBC or credit equivalent amount of off-balance sheet exposure, whichever is higher				

#Revised targets for weaker sections will be implemented in a phased manner as indicated below

Financial year	SMFs target (%)*	Weaker sections target (%)^
2020–2021	8	10
2021–2022	9	11
2022–2023	9.5	11.5
2023–2024	10	12

Source: Master Directions on Priority Sector Lending. Available at https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=11959&Mode=0 (accessed on 5 November 2020).

Notes: * Not applicable to UCBs; ^target of weaker sections for RRBs will continue to be 15% of ANBC or CEOBE, whichever is higher.

The changes in PSL targets as reported in RBI's Master Directions Circular on Priority Sector Lending dated 4 September 2020 are reproduced in Table 2.6.

In general, the banks have been able to achieve the targets set under the PSL norms, including those for foreign banks into agricultural lending. The data available on the public domain as far as PSL is concerned are up to March 2019, which are reproduced in Table 2.7. As RBI has been increasing the requirements under sub-segments of the priority sector lending norms, it appears that banks are able to meet their obligations largely on their own book. The most important aspect to note is the achievement of foreign banks in all the sub-segments of the portfolio under PSL.

Table 2.7: Achievement under PSL Advances by Categories of Banks March 2019

					₹ in Billion
	Public Sector	Private Sector	Foreign Banks	SFBs	Total
ANBC	54,583	28,323	3,886	431	87,223
Off-balance sheet exposure	4,640	4,942	1,552	0	11,134
Total agriculture	9,754	4,919	465	159	15,296
% of ANBC	18	17	12	37	18
Weaker sections	6,573	3,283	265	200	10,322
% of ANBC	12	12	7	46	12
Micro, small and medium enterprise (MSME)	9,057	5,944	691	209	15,901
% of ANBC	17	21	18	48	18
Housing	3,384	1,522	53	19	4,978
Educational	581	43	0	0	625
Total priority sector	22,864	12,452	1,601	483	37,400
% of ANBC	42	44	41	112	43

Source: Statistical Tables Relating to Banks in India. Available at https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications#!4 (accessed on 5 November 2020).

While the targets are being made more stringent, the RBI has also provided a platform for trading in priority sector lending certificates (PSLCs) through its *e-Kuber* portal. The RBI Annual Report for the year 2019–20 indicated that the trading volume in PSLCs showed a growth of over 43 per cent in 2019–2020. The highest trades in the PSLCs were in the category of SMFs.

Towards the later part of the year 2020, There was concern among banks, particularly small finance banks (SFBs), about the new classification of micro-enterprises towards the latter part of the year 2020. The retail and wholesale trade category that was under the jurisdiction of the Ministry of Micro Small and Medium Enterprises (MSME) was shifted to the Ministry of Commerce. This was a technicality, but there were unintended consequences. The RBI issued a circular in August 2020 indicating that the borrowing entities had to be registered under the Udyam Portal maintained by the MSME Ministry in order to qualify for claims for target achievement under the MSME category. Since retail trade was shifted out of the MSME, lending to these enterprises would not qualify as micro-enterprises and would therefore be removed from the priority sector classification. This has implications on how the missing middle in the trade chain would be served. This is a technicality that urgently needs to be addressed.

With the shift in wholesale and retail trade to the Ministry of Commerce, these entities could not register themselves under the portal and are at risk of being disqualified from being recognized as eligible entities to be counted under the PSL target. This anomaly will adversely affect SFBs if not corrected immediately as the exposure to the trading sector is significant (Sriram 2020).

CONCLUDING NOTES

There are important takeaways from the review of the banking system with special reference to inclusive finance. In summary, we could say the following:

- The National Strategy on Financial Inclusion provides a vision and a road map for bank-led inclusion resting on six comprehensive pillars.
- The physical touch points have significantly grown and are plateauing. It may now be important to fill in the 'content' into the touch points rather than focusing on increasing the touch points.
- The number of BSBD accounts have significantly increased after the launch of PMJDY, their average balances have also increased, and it is now a phase to route more transactions through these accounts. The overdraft facility on these accounts has not significantly taken off.
- Technology-enabled transactions are taking off, withdrawals in ATMs are falling and it is important to leapfrog aggressively into digital payments technology.
- The performance under SBAs seems to be growing, the most important story being the increasing share of private sector banks in this category—both universal banks and SFBs are increasing their share in comparison to public sector banks.
- The framework of PSL is changing and the banking sector has to gear up to develop better models of delivery to reach the target.

In general, the banking sector is moving ahead on an optimistic note.

APPENDIX 2.1:
Progress of Commercial Banking at a Glance

Important Indicators	June 1969	March 2016	March 2017	March 2018	March 2019	March 2020	June 2020
No. of commercial banks	89	152	152	149			
SCBs	73	149	150	149	147	141	133
Of which: RRBs	–	56	56	56	53	45	43
Non-scheduled commercial banks	16	3	2				
Number of offices of SCBs in India^	8,262	135,350	140,388	148,383	146,011	149,986	150,045
Rural	1,833	48,292	48,869	50,799	51,565	52,346	52,356
Semi-urban	3,342	37,631	39,036	39,672	41,106	42,313	42,301
Urban	1,584	24,004	25,042	25,358	26,300	27,258	27,286
Metropolitan	1,503	25,423	26,441	26,407	27,040	28,069	28,102
Population per office (in thousands)	64	8.94	8.62	8.15	8.28	8.06	8.06
Deposits of SCBs in India (₹ billion)	46	96,599	107,514	114,344	126,309	137,486	141,275
of which: 1. Demand	21	35,190	44,144	48,546	53,015	57,896	59,339
2. Time	25	61,409	63,370	65,798	73,314	79,592	81,936
Credit of SCBs in India (₹ billion)	36	75,209	79,270	87,670	98,976	105,188	103,332
Deposits of SCBs per office (₹ million)	5.6	728	780	770	865	916	941
Credit of SCBs per office (₹ million)	4.4	567	575	591	678	701	689
Average per account deposits of SCBs (₹)	88	58,316	58,741	59,819	64,069	66,449	
Average per account credit of SCBs (₹)	68	46,329	45,931	45,523	42,606	38,598	41,692
SCBs' advances to PSL (₹ billion)	5	27,577	29,301	32,200	37,399	37,540	
Share of PSL in total credit of SCBs (%)	14	41	41	40	42	41	
Share of PSL in total non-food credit of SCBs (%)	15	31	31.16	30.82	31.73		
Credit deposit ratio	78	77.9	73.7	74.16	75.34		
Investment deposit ratio	29	31.45	32.87	34.99	33.52		
Cash deposit ratio	8	5.59	6.12	6.19	5.42		
The numbers pertaining to 2016 and 2017 are on population statistics based on census 2011, the other years are based on census 2001.							

Source: RBI (2019).

Note: ^Excludes administrative offices.

APPENDIX 2.2:
Outstanding Credit to SBAs According Population Group, March 2020 (Numbers in Million; Amount in ₹ Billion)

Population Group	Up to ₹ 0.025 Million			Between ₹ 0.025 and ₹ 0.2 Million			Above ₹ 0.2 Million		
	No. of accounts	Credit limit	Amount outstanding	No. of accounts	Credit limit	Amount outstanding	No. of accounts	Credit limit	Amount outstanding
Rural	1.44	244.79	185.81	5.25	3,822.56	3,323.66	1.17	8,564.39	5,598.69
Semi-urban	1.04	168.74	132.38	4.27	3,297.74	2,838.78	1.60	13,770.12	10,240.28
Urban	0.65	97.74	63.12	2.41	1,779.57	1,269.84	1.26	20,815.89	14,704.25
Metropolitan	1.59	211.19	81.71	4.32	3,323.63	1,343.02	2.26	101,338.11	65,406.58
All India	4.72	722.46	463.01	16.24	12,223.50	8,775.30	6.29	144,488.52	95,949.80

Source: RBI (2020; Table 2.8).

APPENDIX 2.3:
Outstanding Credit to SBAs According to Category of Borrowers

Percentage Distribution of Outstanding Credit to SBA of SCBs According to Broad Category of Borrowers March 2020(%)								
Population group	Individual				Other		Total	
	Male		Females					
	No. of accounts	Amount outstanding	No. of accounts	Amount outstanding	No. of accounts	Amount outstanding	No. of accounts	Amount outstanding
Rural	47.3	60.8	45.9	34.1	6.8	5.0	100.0	100.0
Semi-urban	48.9	59.4	38.3	34.6	12.8	6.1	100.0	100.0
Urban	48.9	58.2	37.5	34.5	13.6	7.3	100.0	100.0
Metropolitan	71.8	67.9	20.0	23.8	8.3	8.4	100.0	100.0
All India	54.9	61.1	35.4	32.7	9.7	6.2	100.0	100.0

Source: RBI (2020; Table 1.12).

APPENDIX 2.4:
Outstanding Credit to SBAs According to Occupation

Population Group-wise Outstanding Credit of SBAs of SCBs According to Occupation March 2020 (Number in '000s; Amount in ₹ Billion)

Occupation	Rural			Semi-urban		
	No. of accounts	Credit limit	Amount outstanding	No. of accounts	Credit limit	Amount outstanding
I. Agriculture	54,421.53	6,155.19	5,231.00	40,503.03	5,790.31	4,960.00
1. Direct finance	52,222.15	5,888.57	5,031.22	36,858.39	5,399.84	4,689.81
2. Indirect finance	2,199.38	266.62	199.79	3,644.64	390.47	270.18
II. Industry	2,443.06	958.74	614.65	2,546.29	2,466.87	1,635.85
III. Transport operators	339.41	137.23	93.25	775.58	364.76	255.46
IV. Professional and other services	3,465.99	373.40	263.85	2,416.97	761.66	551.81
V. Personal loans	8,149.28	2,709.72	2,037.47	15,816.11	6,265.39	4,599.46
1. Loans for housing	1,294.17	1,056.41	842.65	2,222.27	2,651.47	2,076.14
VI. Trade	7,816.21	2,501.59	912.74	4,533.44	1,724.76	1,240.56
1. Wholesale trade	271.07	1,686.72	323.35	458.13	504.32	306.55
2. Retail trade	7,545.14	814.87	589.39	4,075.31	1,220.44	934.01
VII. Finance	719.52	211.37	135.52	381.49	232.75	129.68
VIII. All others	2,010.62	382.38	292.87	1,858.68	454.55	298.85
Total bank credit	79,365.62	13,429.61	9,581.36	68,831.58	18,061.05	13,671.66

Occupation	Urban/Metropolitan			All India		
	No. of accounts	Credit limit	Amount outstanding	No. of accounts	Credit limit	Amount outstanding
I. Agriculture	14,583.88	2,619.55	2,119.03	3,849.37	1,837.88	1,369.66
1. Direct finance	12,908.43	2,231.07	1,858.12	3,650.59	998.98	767.20
2. Indirect finance	1,675.45	388.48	260.91	198.78	838.90	602.47
II. Industry	2,932.99	8,078.57	4,998.06	2,508.45	39,929.37	24,979.05
III. Transport operators	1,448.08	898.16	617.63	1,400.65	2,100.51	1,277.01
IV. Professional and other Services	2,950.45	2,244.81	1,522.59	2,713.18	7,980.09	5,776.49
V. Personal loans	25,190.94	9,448.41	6,470.92	55,359.66	19,526.85	12,193.04
1. Loans for housing	2,654.79	4,313.20	3,319.33	3,645.95	9,466.37	7,128.75
VI. Trade	4,046.30	3,238.23	2,348.05	2,933.13	9,366.15	6,101.52
1. Wholesale trade	483.06	1,346.37	915.13	631.87	5,565.18	3,637.30
2. Retail trade	3,563.24	1,891.87	1,432.93	2,301.25	3,800.96	2,464.23
VII. Finance	151.71	1,770.49	829.78	122.85	12,659.37	9,094.93
VIII. All others	1,409.95	983.70	607.86	2,721.41	3,261.66	1,629.47
Total bank credit	52,714.30	29,281.93	19,513.92	71,608.69	96,661.89	62,421.17

Source: RBI (2020; Table 1.16).

APPENDIX 2.5:
Bank Group-wise Credit According to Loan Size and as of March 2020 (Accounts in '000s, Amounts in ₹ Million)

Bank Group	Population Group	Less than ₹ 0.025 Million			₹ 0.025 to 0.20 Million			Above ₹ 0.20 Million		
		No. of Accounts	Credit Limit	Amount Outstanding	No. of Accounts	Credit Limit	Amount Outstanding	No. of Accounts	Credit Limit	Amount Outstanding
Public Sector Banks	Rural	3,595,586	56,849	52,232	22,352,663	1,948,198	1,751,774	7,703,853	6,212,050	3,892,991
	Semi-urban	2,783,476	42,311	39,017	20,697,383	1,900,614	1,721,237	10,759,417	8,761,376	6,654,549
	Urban	955,166	12,709	11,582	6,756,256	656,978	558,955	7,145,357	12,523,664	9,162,385
	Metro	667,140	7,228	7,597	3,209,487	318,030	249,585	6,112,490	52,751,040	36,598,007
	All India	8,001,368	119,097	110,428	53,015,789	4,823,819	4,281,551	31,721,117	80,248,129	56,307,931
Foreign Banks	Rural	13	0	0	55	10	7	1,217	30,532	17,833
	Semi-urban	92	1	1	221	22	22	245	36,853	16,796
	Urban	1,479	22	31	7,915	747	379	9,699	180,596	128,529
	Metro	812,878	6,222	3,091	3,837,988	374,582	80,761	2,143,401	7,304,076	4,155,891
	All India	814,462	6,244	3,123	3,846,179	375,361	81,168	2,154,562	7,552,058	4,319,049
Private Sector Banks	Rural	7,522,482	130,180	77,180	6,848,914	812,460	604,865	1,346,977	1,056,134	800,923
	Semi-urban	4,881,645	75,613	55,362	11,937,571	781,640	593,743	3,945,484	4,250,096	3,050,445
	Urban	4,350,201	61,715	37,505	12,402,589	877,998	537,224	4,990,292	7,678,303	5,095,554
	Metro	13,518,516	180,326	61,610	31,434,589	2,431,326	887,344	13,904,480	40,841,416	24,328,187
	All India	30,272,844	447,834	231,657	72,623,663	4,903,423	2,623,175	24,187,233	5,38,25,949	33,275,110
RRBs	Rural	2,666,147	45,108	48,528	11,728,347	998,138	924,778	2,657,923	1,248,742	873,534
	Semi-urban	1,065,952	18,113	18,977	4,809,818	405,340	388,491	1,084,764	607,735	427,484
	Urban	150,126	2,502	2,574	743,032	66,966	59,900	312,534	284,163	202,407
	Metro	16,394	280	243	120,415	11,163	9,551	71,362	72,467	54,046
	All India	3,898,619	66,004	70,322	17,401,612	1,481,607	1,382,720	4,126,583	2,213,108	1,557,470
SFBs	Rural	585,701	12,652	7,866	1,549,969	63,754	42,241	19,415	16,936	13,406
	Semi-urban	1,687,998	32,704	19,025	5,239,112	210,126	135,287	160,319	114,061	91,010
	Urban	1,062,613	20,787	11,424	4,177,838	176,880	113,381	180,123	149,166	115,376
	Metro	855,752	17,136	9,166	4,588,242	188,527	115,779	349,070	369,115	270,448
	All India	4,192,064	83,280	47,481	15,555,161	639,287	406,688	708,927	649,278	490,241
Total	Rural	14,369,929	244,789	185,807	52,479,948	3,822,560	3,323,665	11,729,385	8,564,394	5,598,687
	Semi-urban	10,419,163	168,742	132,382	42,684,105	3,297,742	2,838,779	15,950,229	13,770,121	10,240,283
	Urban	6,519,585	97,736	63,116	24,087,630	1,779,568	1,269,839	12,638,005	20,815,893	14,704,252
	Metro	15,870,680	211,192	81,707	43,190,721	3,323,628	1,343,020	22,580,803	101,338,115	65,406,580
	All India	47,179,357	722,459	463,011	162,442,404	12,223,498	8,775,303	62,898,422	144,488,522	95,949,802

Source: Basic Statistical Returns of Commercial Banks in India March 2020 (Table 2.8). Available at https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications (accessed on 8 November 2020).

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1 The branchless mode outlets include BCs, ATMs, PoS points, USB, mobile vans and any other mechanism that provides a touch point for the customer of the bank.

2 Available at https://www.indiabudget.gov.in/doc/bspeech/bs201314.pdf (accessed on 4 December 2020).

3 Available at https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications#!9 (accessed on 2 October 2020).

4 Data for 2020 are from the Quarterly BSR1 Outstanding Credit of SCBs (available at http://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications#!9 [accessed on 10 November 2020]).

Vastness of Informality and Unprotected Risk in Indian Labour Markets

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Dvara Research*

3

INFORMAL SECTOR IN INDIA[1]

This chapter documents the growing informalization of India's labour force and the consequences of this phenomenon for the state of social protection in India. COVID-19 offers an especially effective context for examining these issues, and we draw on our work during the pandemic and lockdown months, as well as that of others, to present evidence for the growing lack of risk protection that informal sector workers and households are subject to.

Having laid out the scope of the problem in this section, we then turn to the question of how to address this problem in the second section.

'Informalization' of Workers in the Formal Sector

The growing informalization of the formal workforce is the result of a number of distinct but related forces shaping the Indian economy. On the one hand, the distress caused by the persistent uncertainty of agricultural incomes in the last two decades has produced a steady and protracted movement of labour out of the sector and, on the other hand, the capacity of the manufacturing sector to absorb this surplus labour has been greatly limited by the absence of any significant and sustained corporate investments in the sector. Indeed, large corporations and industries have moved towards cost- and labour-saving technologies, owing to the increasing complexity of navigating state and central labour laws.

Jobs for these workers have appeared in the small-scale business sector, mostly at the micro-end of the scale (solo, nano, etc.). This sector remains unorganized, though growing rapidly.[2] Over the last 15 years, there has been a 34 per cent increase in the size of the informal sector, considering only non-farm employment (Table 3.1). While there is a mild decrease in the share of informal sector employment in the last decade, evidence suggests that informality in the labour force continues to persist, if not increase. This is a problem from the social insurance perspective, since employers in this sector (when they can be identified clearly) do not bear any responsibility for providing social security to their workers. Therefore, the growing informalization of India's workforce has also meant a growing proportion of its population having no access to employer-provided social insurance.

Table 3.1: Size and Share of Informal Sector Employment in India[3,4]

Type of Employment: Formal and Informal	Formal			Informal		
	2004–005	2011–012	2017–018	2004–005	2011–012	2017–018
Total non-farm employment (in million)	28.3	34.8	42.8	162.4	207.5	217.0
Total non-farm employment (in %)	14.8	14.4	16.5	85.2	85.6	83.5

Source: Mehrotra (2019).

**The author thanks Nishanth Kumar, Anupama Kumar and Aarushi Gupta for their assistance with drafting this chapter.*

According to the Periodic Labour Force Survey 2017–2018, only 22.8 per cent of Indian workers are employed on a regular or salaried basis, while the rest are employed in the informal sector. Even among those in regular employment, 49.6 per cent were not eligible for any form of social security.[5]

The COVID-19 pandemic and the economic consequences of the mandated 'lockdown' have had a seismic impact on the labour landscape in India. A particularly significant consequence has been an even further increase in informal sector employment. As the pandemic increased formal sector unemployment, there has been a significant transition of the formal labour force into the informal sector.

A World Bank report,[6] working with data from the Consumer Pyramids Household Survey (CPHS) conducted by the Centre for Monitoring the Indian Economy (CMIE), found that more than 80 per cent of the labour force that could be categorized as formal in August 2019 remained formal in December 2019, but, thereafter, the formal labour market underwent a dramatic turn. More than 30 per cent of the labour force that could be categorized as formal in December 2019 had transitioned to informal status by April 2020.

Features of Informal Sector Employment and the Need for Risk Protection

Volatility in Income

Informal sector work is mostly based on casual employment, structured through personal and social relations, rather than on contractual arrangements with formal guarantees. Such a relationship leaves a labourer vulnerable because of (a) the lack of steady and assured employment and income, and (b) the lack of any insurance to deal with external shocks. Collins et al.[7] highlight the irregularity and unpredictability of income as one of the main factors characterizing the lives of low-income households in India. This is the main reason that the bottom of the income distribution in India is still occupied by informal sector households.[8]

Recent work by Sahasranaman and Kumar[9] shows that over 86 per cent of the bottom decile between 2014 and 2019 is composed of households employed primarily in the informal sector. Even worse, these households have experienced a decline in real income during that period, making them the most economically vulnerable workers in the Indian income distribution.

Recent data from the CPHS round conducted in 2020 show up the disparity in income regularity very clearly. As can be seen from Figure 3.1, almost the entire informal sector is dependent on the erratic, daily or weekly payment of wages, as opposed to the formal sector that pays out wages at a fixed monthly rate.

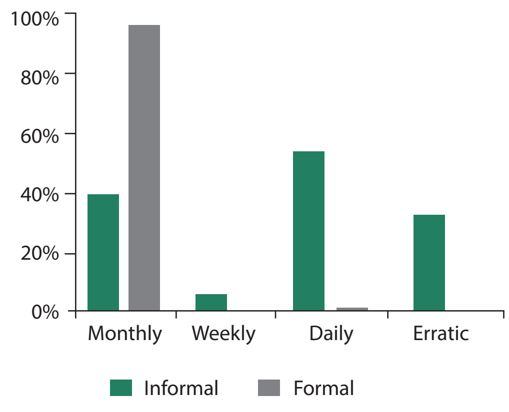

Figure 3.1: Income Frequency of Informal and Formal Sector Workforce

Source: CMIE CPHS May–August 2020.

The COVID-19 crisis has had consequences across different income segments. Early reports in May showed that 84 per cent of households reported a fall in income due to the lockdown. The unemployment rate, on the other hand, had increased from 7 per cent in March to about 25 per cent in early May.[10]

Data collected between May and August, and presented in Figure 3.2, show that informal labourers were also most likely to suffer a pay cut. The left-hand panel of Figure 3.2 indicates that about 90 per cent of daily and weekly wage labourers that were still employed experienced a decline in wages. The right-hand panel indicates that even formal sector workers on regular salaries (about 50% of them) experienced pay cuts in the lockdown months.

Using the data from CPHS, we construct the distribution of monthly surplus of households for the month of May[11] in years 2019 and 2020. Figure 3.3 plots these distributions.

We see from Figure 3.3 that, in May 2019, a majority of formal and informal households were carrying positive surpluses, with the distribution of formal household surpluses having a thicker tail at the positive end owing to the presence of middle- and high-income households. By May 2020, however, both distributions had shifted to the left, and the majority of informal sector households were now showing negative surpluses.

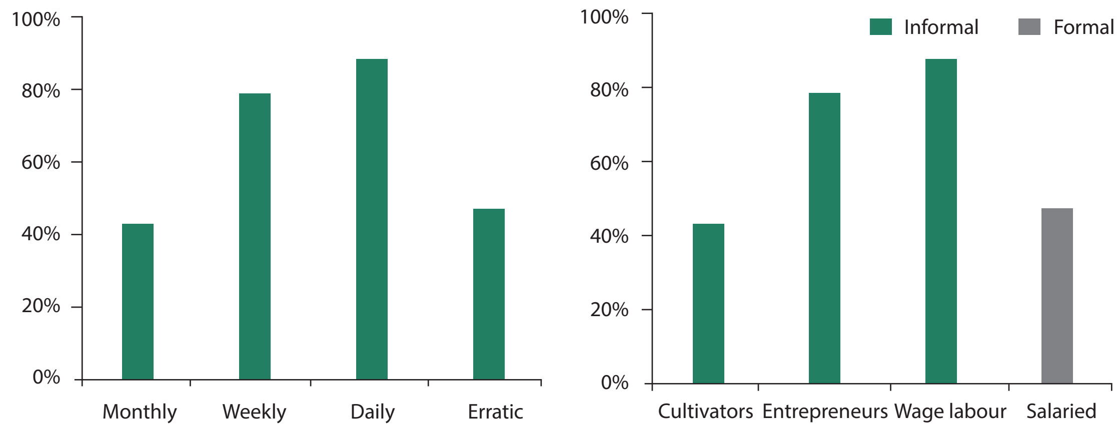

Figure 3.2: Pay Cuts during Lockdown across Formal and Informal Sectors

Source: CMIE CPHS, May–August 2020.

We see in Figure 3.3 that a very large proportion of the formal sector households also showed negative surpluses in May 2020. This can be attributed to the job and income losses for formal sector workers illustrated in Figure 3.2. Further, this also points to a possible increase in the informalization of the workforce itself, as discussed in earlier section and explains some of the worsening of the surplus distribution for informal sector workers.

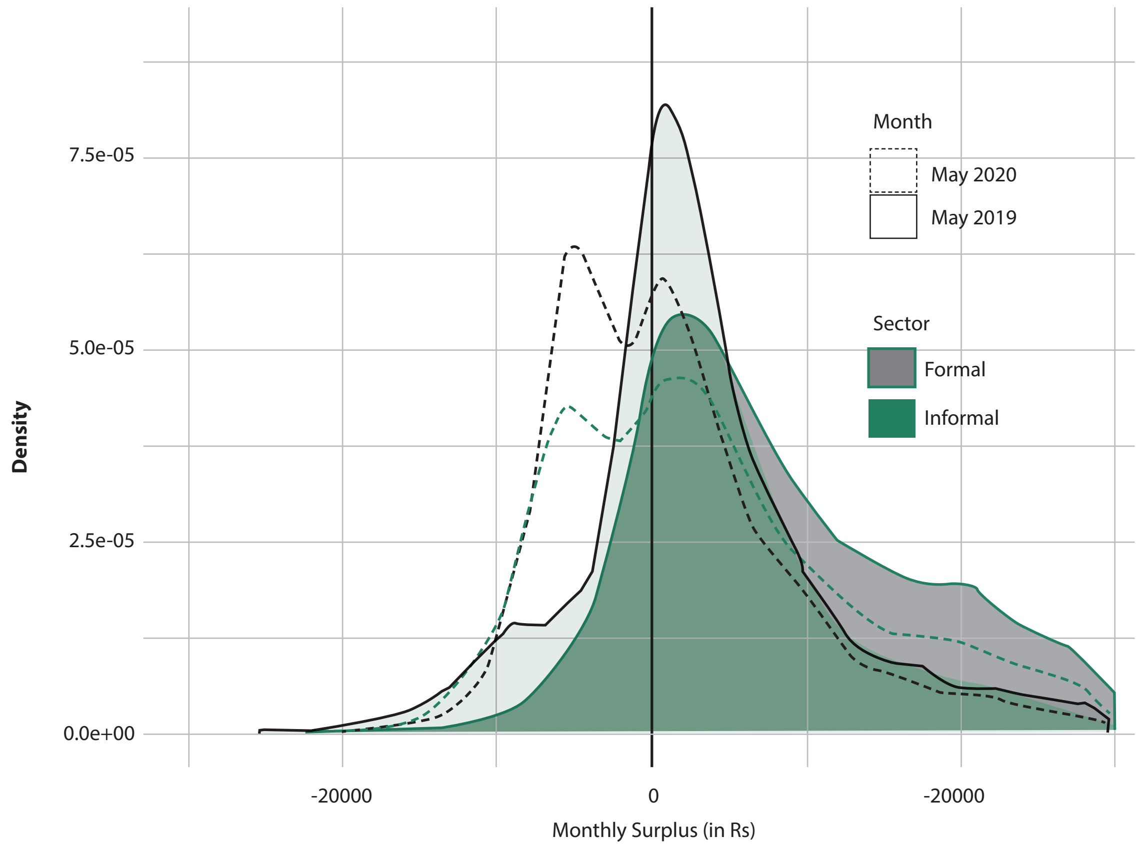

Figure 3.3: Surplus Distribution of Formal and Informal Households, May 2019 versus May 2020

Source: CMIE CPHS, 2019–2020.

We learn more about the dynamics of poverty transitions by looking at the income and expense distributions separately, which we plot in Figure 3.4.

The dotted line in the panels of Figure 3.4 represents the national poverty line as defined by the Rangarajan Expert Committee on poverty measurement in 2014.[12] The top two panels in Figure 3.4 indicate a clear shift across both formal and informal sector households to incomes below the poverty line. Overall, our estimates suggest that about 9 per cent more households have moved below this conservative poverty line. For the informal sector alone, households below the poverty line increased from 13 per cent (of all informal sector households) to 15 per cent between May 2019 and May 2020.

We might expect that these numbers have recovered back to above the poverty line quickly with the removal of the lockdown restrictions and the opening up of the economy. Indeed, various reports indicate that the recovery of employment has been quite rapid. The unemployment rate reached a maximum of 23.5 per cent in April before declining to 8.3 per cent at the end of August 2020.[13] Yet the sharp drops in income levels during those early months of lockdown will likely have a long-term effect on household finances and well-being. As the bottom panels of Figure 3.4 show, the recurring and essential nature of consumption expenditures limited the sacrifices that households could make on their total expenditure. In order to support those expenditures, households most likely improvised various coping strategies to 'farm for liquidity' as characterized by Mas.[14]

Illiquidity of Assets

According to Mas, one of the strategies that low-income households typically use to generate liquidity is selling assets. We may ask what capacity low-income households in India might have to employ this kind of strategy. Badarinza et al.[15] recently reviewed the state of Indian household balance sheets, using data from the decadal All India Debt and Investment Survey conducted by the National Sample Survey Organisation. They find that most Indian households do hold assets, but majority of these asset holdings are not financial in nature—

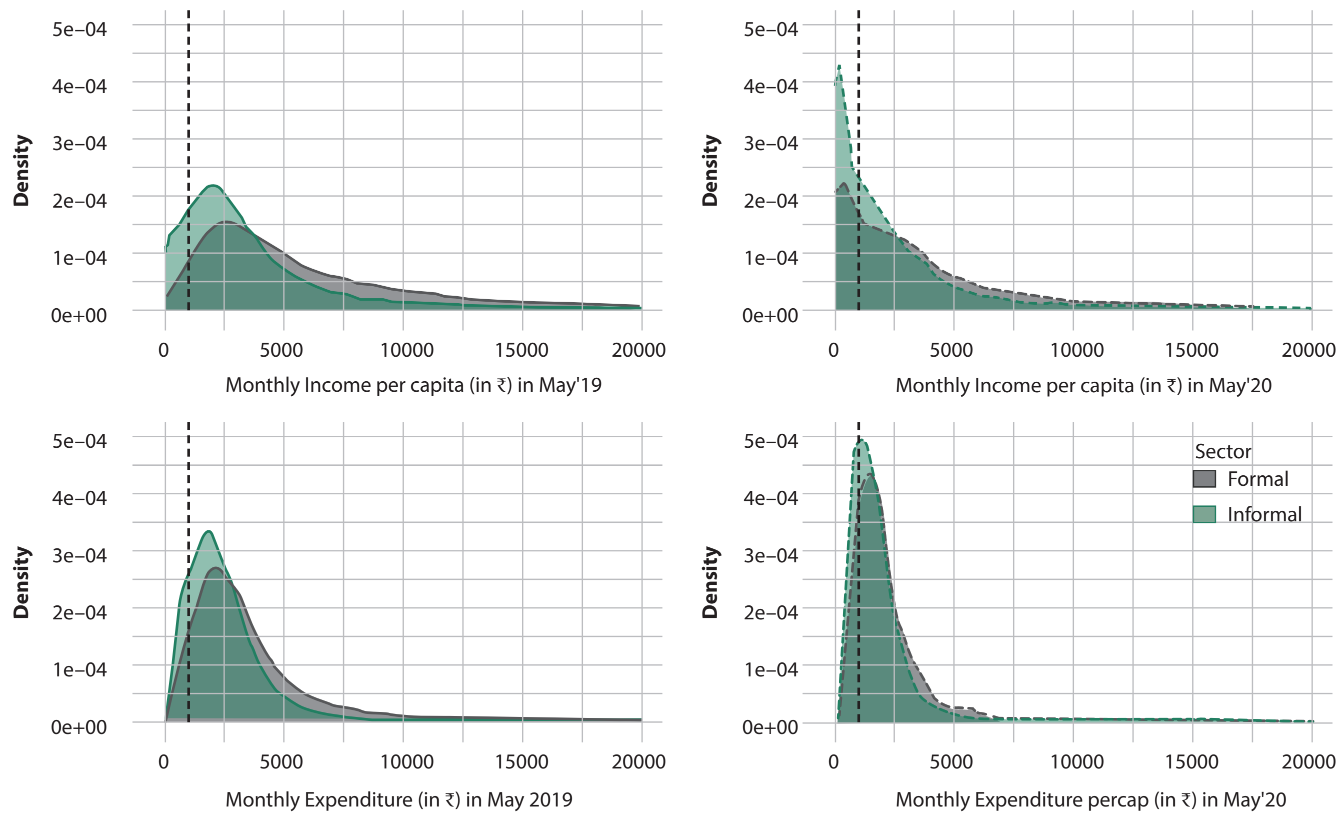

Figure 3.4: Monthly Income and Expenditures of Workers, May 2019 versus May 2020

Source: CMIE CPHS, 2019–2020.

more than 85 per cent of Indian households hold real estate assets and, in this respect, India stands out among developing countries. Similarly, Kumar et. al[16] show that though Indian households employed in the informal sector have experienced a significant increase in their net worth over the last decade, this increase is to be attributed primarily to increases in the value of real estate. The market for real estate in rural India is anything but liquid. Therefore, without any real increase in the holdings of financial assets, informal sector households are ill-equipped to manage the volatility in their incomes and cannot really farm for liquidity by selling assets.

It is worth mentioning that gold and jewellery feature prominently among the physical assets held by Indian households. This is particularly true for rural households in the last two quintiles of income distribution—between 2003 and 2013, the share of gold and jewellery in physical assets increased from less than 10 per cent to almost 20 per cent among rural households in the bottom quintile of income distribution.

The importance of gold as a store of value and risk hedge becomes especially apparent in the aftermath of COVID-19, as borne out by the experience of Dvara SmartGold, which markets a 'phygital' gold-based micro-savings product to rural households in the form of a systematic investment plan. Dvara Research used administrative data sets from sales of Dvara SmartGold to analyse customer investment patterns before and after the outbreak of COVID-19.[18] In the pre-COVID months (October 2019 to February 2020), most customers consistently invested ₹250 per month (which was equivalent to 0.061 g of gold). During this period, the customer base grew at an average monthly rate of 150 per cent (approximately), showing a steady demand for a digital gold-based micro-savings product.[19]

In the months after COVID-19 forced lockdowns across India, a majority of customers, who were investing in a regular, disciplined manner before, briefly opted for the flexibility option, particularly in the months that coincided with the first phase of loan moratoriums announced by the Reserve Bank of India (March–May 2020). However, most customers who had skipped instalments during this period were able to meet their saving targets by investing additional instalments in subsequent months. This prima facie indicates that some segments of customers have shown a commitment to investing in this product even during an adversity as severe as the COVID-19 pandemic. The analysis also indicated that, prior to the pandemic, investors who owned a business, were salaried and had family members working abroad invested higher amounts than investors from other occupational backgrounds. However, post-pandemic, higher investments were made by wage labourers, gig-economy employees and agricultural workers, signalling that lower income segments may be looking to gold as a strategy for building precautionary savings for the future.

Lack of Health Insurance and Risk Protection Mechanisms

If we consider the most basic risk protection mechanisms, such as life insurance, health insurance and pensions (income during retirement), there remains a large gap in coverage in India. The data from the CPHS (as of December 2019) show that less than half of the informal sector workers have access to any of the aforementioned forms of risk protection. While there has been some increase in access to mortality and health risk protection through social insurance schemes, the proportion of the population vulnerable to economic shocks continues to be alarmingly high. Figure 3.5 provides the coverage

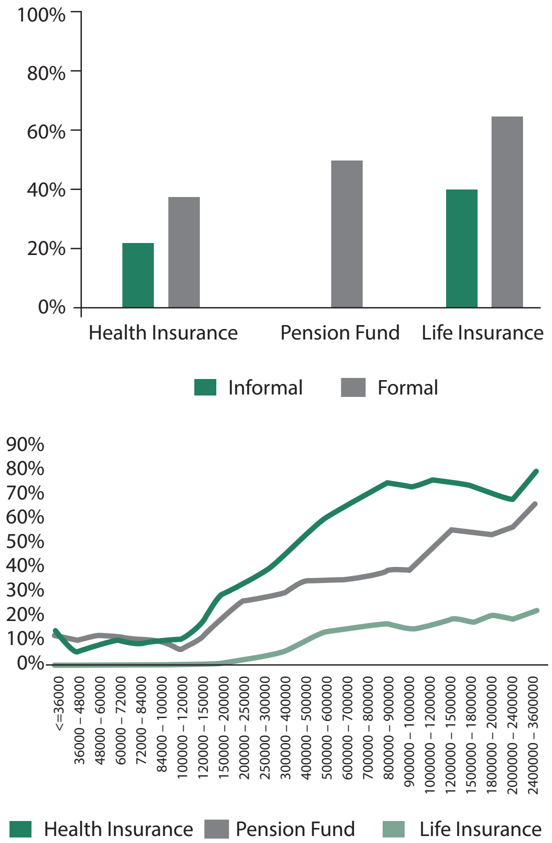

Figure 3.5: Access to Health Insurance of Informal Sector Workforce

Source: CMIE CPHS, December 2019.

of basic risk protection mechanisms (such as life insurance, health insurance and pensions) across the income distribution (right-hand panel) and across the formal and informal sectors (left-hand panel). It is evident that these products are not suitably available to low-income households.

Finally, risk protection mechanisms, such as life insurance and health insurance, are particularly relevant for informal sector workers, as these workers are often employed amid the most hazardous working conditions. The death of the primary income earner in an informal sector household, or serious injury to that earner, making it impossible for him/her to earn an income, are two of the most common reasons for such a household to slide into poverty. More than 75 per cent of all Indians are not covered by any form of life insurance, and an Indian is assured of only 8 per cent of what may be required to protect a family from financial shock following the death of an earning member.[20]

Coping Strategies during Lockdown

In most parts of the country, a complete lockdown was effective till June and, over the course of the next few months, different states gradually restarted their economic activity. In order to understand how households were coping with the effects of the lockdown, a few questions were added to the CMIE CPHS survey of May–August 2020.[21] Our survey uncovered, in accordance with the incidence of income losses, a sudden surge in the number of households with members actively looking for additional sources of income (EA) with more than 10 per cent of all households reporting so. Other coping strategies included borrowing in kind from social networks (BF), reducing consumption (CR) and using households savings (US) to manage liquidity crises. Figure 3.6 depicts these data across the income distribution for the months of April–July 2020 (the May wave of the survey would have asked questions about household experiences in April and so on).

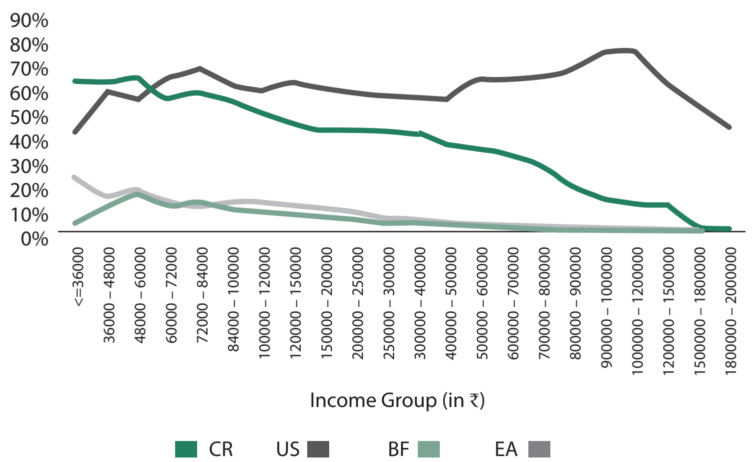

Figure 3.6: Coping Strategies Employed by Households along the Income Distribution

Source: CMIE CPHS, April–July 2020.

Figure 3.6 clearly illustrates the level of distress faced by low-income households, particularly during the pandemic. While the use of savings to tide over a crisis would be regarded as only appropriate, the widespread reduction in consumption among these households (with incidence rates of 60% or more) points to hardships that could well impose long-term costs on household health (and, therefore, household finances), as both quantity and quality of food intake were most likely compromised. Evidently, the worst month was April. Figure 3.7 compares the use of different types of coping strategies across either side of the lockdown (our survey questions also asked how households coped with liquidity shortages in the months of January–March). Here, the CR component is disaggregated into lesser expenditure on consumption per meal (LE) and reduced number of meals (RM).

The largest changes in household behaviour post lockdown was with respect to uses of LE and BF as coping strategies. We note that BF represents non-financial borrowing, and this stands to reason since the availability of financial lenders (whether formal or informal) was virtually zero during the month of April.

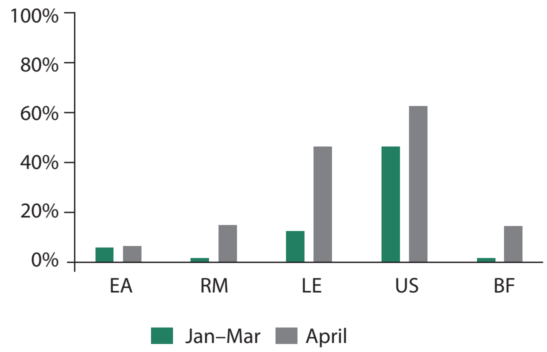

Figure 3.7: Use of Coping Strategies before and after Lockdown

Source: CMIE CPHS, January–April 2020.

Access to Essential Services and Special Schemes Announced

The announcement of a nationwide lockdown on 24 March 2020 was followed two days later by a slew of measures under the Pradhan Mantri Garib

Kalyan Yojana (PMGKY) to alleviate the anticipated financial hardships that the pandemic and lockdown would create for low-income households. These measures mostly took the form of direct benefit transfers (DBTs) of both cash and kind.[22]

On 14 May 2020, further welfare measures were announced.[23] The government also acknowledged the necessity of allowing certain 'essential services' to continue undisrupted during the lockdown periods, including banking facilities (BC agents) and shops (ration shops) that the poor were likely to use, in particular, to make use of the PMGKY scheme.

Here, we present some survey results from DVARA Research's work and from a large-scale survey conducted by Dalberg to understand if these welfare measures actually reached their intended beneficiaries, most of whom were informal sector workers and households.

In the months of April through July, Dvara Research partnered with 12 microfinance institutions (MFIs) to conduct surveys of 347 households, their customers, in 47 districts across nine states. Households were asked whether they were able to access essential services, especially banking, and whether they were able to avail the benefits promised by welfare schemes.

The survey tracked households every two weeks and was conducted in three waves: 23 April–7 May, 15–27 May and 19 June–6 July. Even though the sample size is small, we believe that the results from the survey are useful because of the way in which our survey questionnaire was able to identify the different reasons for beneficiary exclusion. These different reasons also provide a more nuanced perspective on the survey results, as we are able to understand why the numbers in a later round of the survey might wrongly indicate a worsening situation, given that the lockdown conditions had been alleviated. In a similar vein, our survey results allow us to differentiate our story about exclusion from Dalberg's story, even if the overall rates of exclusion identified by these two very differently sized surveys remain quite similar.

In Figure 3.8, we find that ration shops and *kirana* stores remained highly accessible even during the most stringent periods of lockdown (Rounds 1 and 2), but this was not true of banking facilities, which remained mostly unavailable even in early July, despite the fact that many of the cash transfer schemes were being administered through banking channels.

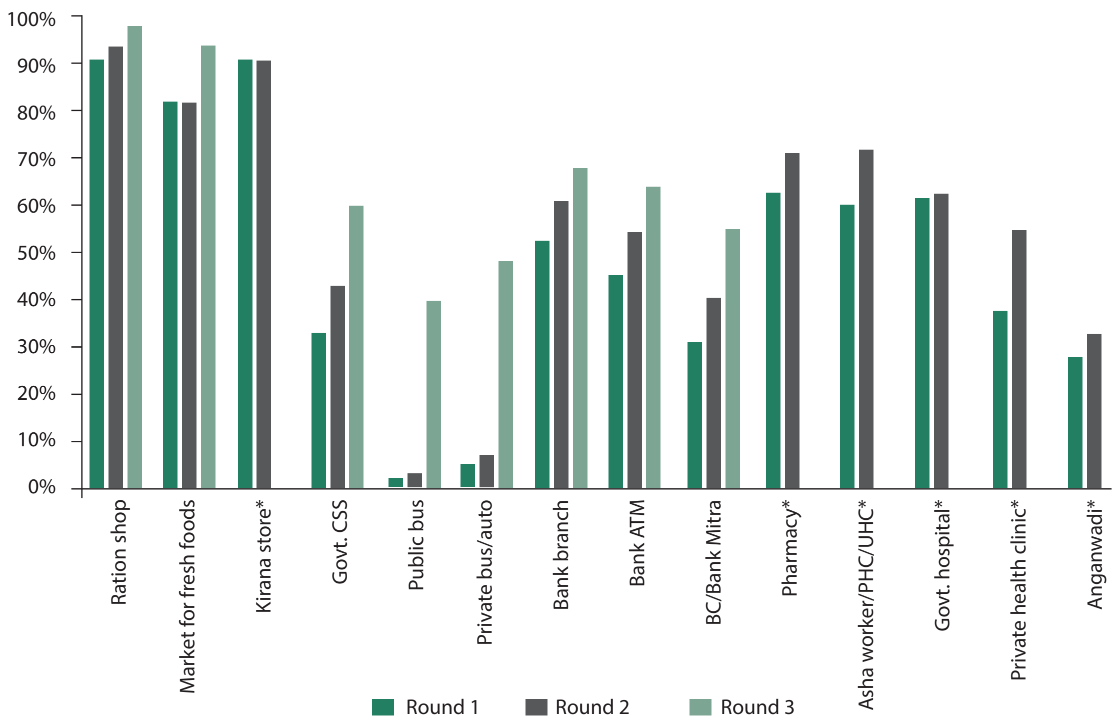

Figure 3.8: Access to Essential Services during Lockdown

Source: Dvara Research MFI Survey, April–June 2020.

Note: *Question posed only in Rounds 1 and 2.

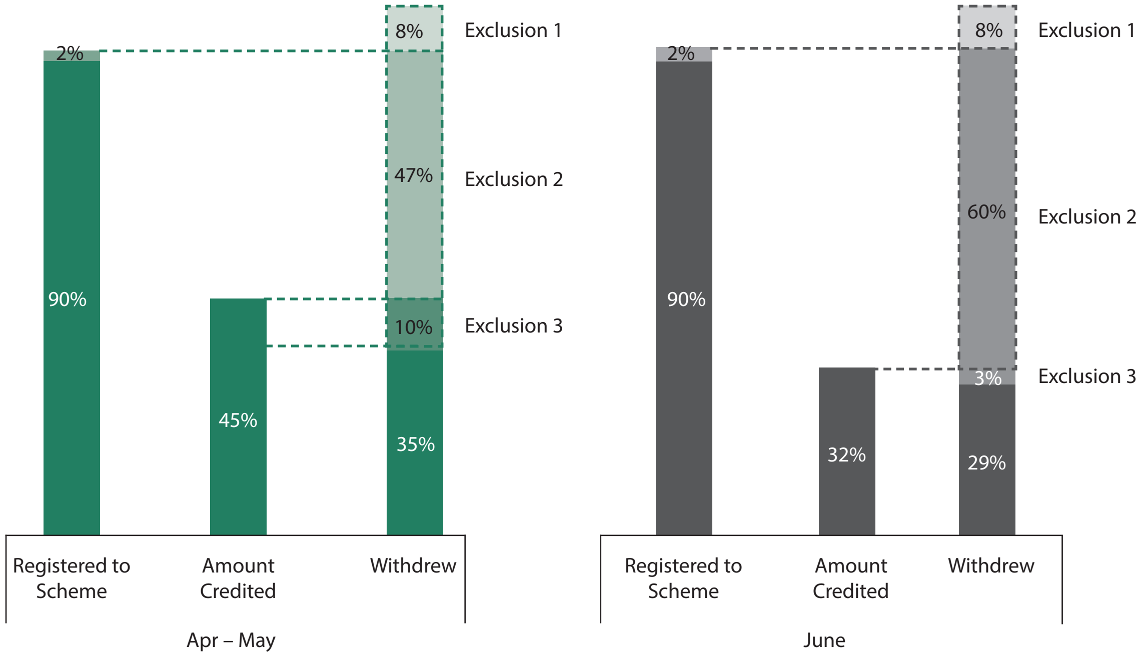

Figure 3.9: Exclusion in Cash Transfers during Lockdown

Source: Dvara Research MFI Survey, April–June 2020.

The situation of a beneficiary being excluded from cash transfers can, however, arise even if the banking facilities are accessible. Figure 3.9, again based on the MFI customer survey conducted by Dvara Research, presents data for cash transfers in April and May (Rounds 1 and 2 combined) against those in June for a balanced sample of 219 households participating in all three rounds. Here, the 2 per cent number refers to respondents who were not registered through regular channels but were offered ad hoc registrations by their respective states' exception-handling mechanisms and were therefore able to be included in the cash transfers programmes.

All of these households (2%) are therefore included in 45 per cent whose accounts were credited, and 35 per cent of those who were able to withdraw from their accounts in April–May. We notice from the left-hand panel of Figure 3.9 that 8 per cent of respondents were unable to make use of PMGKY (or any other) cash transfers in April–May; 47 per cent of respondents were registered but did not receive a credit into their accounts, while only 10 per cent of respondents were unable to withdraw from their accounts even after receiving a credit.

In fact, things may have worsened in June relative to previous months. But there are at least two other possible explanations for what we see: (a) the MFIs conducted the survey in June during the time of the month that it was convenient for them to do so and, therefore, it is possible that some households were surveyed early in the month and had not received the June transfer credited to their account by that time, (b) households needed to travel to their banks in order to even learn whether their accounts had been credited and, therefore, it is possible that the transfers in April and May were so small (relative to the cost of traveling to the bank) that many households did not even bother to make the journey.

Turning next to the Dalberg survey,[24] which covered 47,000 households across 15 states conducted in two rounds between 5 April 2020 and 3 June 2020, about 15 per cent of respondents in May were found not to be covered under any of the cash schemes announced by the government. This roughly compares to the 8 per cent exclusion of Type 1 identified by Dvara's survey (Figure 3.9), if one allows for the fact that Dvara's survey did not include West Bengal or Kerala, both of which according to the Dalberg survey were found to have much higher rates of exclusion due to lack of coverage (more than 20%) than states like Rajasthan (less than 3%) that were included by Dvara. With regard to the success of receiving cash transfers, the Dalberg survey recorded much more favourable numbers than the Dvara survey—in May, only 14 per cent of the covered households had not received any cash transfers.

It is not clear, however, from reading the Dalberg report if receipt of cash transfers is to be equated with households actually having the cash in their hands—most likely not because 43 per cent or respondents in May had still not withdrawn their cash receipts, so that the actual success rate of cash reaching the hands of beneficiaries was recorded at 48 per cent in May, not so much higher than the 35 per cent success rate recorded by the Dvara survey. There is, however, an important qualitative difference between the two numbers. The bulk of the exclusion identified by the Dalberg survey happened at the point of withdrawal, whereas the exclusion identified by the Dvara survey happened in equal parts at the point of crediting accounts and at the point of withdrawal from those accounts.

THE STATE OF SOCIAL SECURITY IN INDIA

In this section, we take up the question of what can be done to improve the state of social security in India. First, we take into consideration the existing framework for social security in India and ask what can be done to minimize the exclusion errors. Second, we take up the legal architecture supporting social protection in India and argue that it makes no specific allowance for social protection to the informal sector. It is a failure of the statutory omission, and this error has sought to be rectified by policymakers through the ad hoc introduction of various schemes. We show that the gaps in social protection for informal sector workers, of which several examples have already been cited earlier in this chapter, are to be primarily sourced in this maladapted structure, and we argue for its overhaul.

Minimizing Exclusion

Cash transfers through digitized modes have come to dominate social protection delivery systems across states in the country, especially in the wake of COVID-19. This is the new face of the DBTs, where cash entitlements under welfare schemes are transferred directly into the bank accounts of registered beneficiaries. Our assessment of the 'pipelines' that deliver these DBTs reveals a fundamental truth. India's social protection system is designed to reduce inclusion errors (i.e., benefits being delivered to an ineligible citizen) rather than exclusion errors (i.e., benefits not being delivered to an eligible citizen). The existing infrastructure instated under DBT has been built to tackle inclusion errors through its various and stringent identity verification protocols. Although some realized gains have resulted from the DBT system in the form of savings of administrative costs[25] and standardization of processes under welfare schemes, they are not without their own set of disadvantages. The problem is that mechanisms that seek to reduce inclusion errors may also result in exclusion of deserving recipients of welfare transfers.

There are various layers to these exclusionary mechanisms. The most fundamental exclusionary factor is the 'financial inclusion' prerequisite. The DBT system automatically precludes the unbanked and the underbanked since it relies upon the banking infrastructure to deliver cash. Some of the prerequisite design features for the DBT system to work seamlessly include end-to-end digitization of records, error-free seeding of Aadhaar with beneficiaries' bank accounts, efficient back-end processing of transfers in the banking system, responsive grievance redressal and a fully working cash-out architecture. These features continue to remain inadequate in many regions, especially those which lack basic electric or digital connectivity in the first place or those which are more likely to be populated by households in need of welfare transfers.

Dvara Research has developed a working framework to map points of exclusion across the various processes of the DBT system, namely targeting, enrolment, back-end processing and cash-out,[26] to understand the various forms of exclusion. The framework guides the exercise of the end-to-end tracing of documented and possible points of exclusion across the DBT cash flow mechanism. It highlights different factors that may cause deserving citizens to fall through cracks. These factors, albeit applicable universally for welfare beneficiaries across time frames, may get further exacerbated due to the pandemic and even more so for the informal sector as characterized in later section of this chapter.

> *First layer of exclusion:* The first point of exclusion within the DBT system is the targeting methodology for identifying beneficiaries. In the context of the DBT framework, although a few schemes allow for self-registration,[27] most of them depend on the below poverty line (BPL) and Socio-Economic Caste Census (SECC) lists for identifying beneficiaries. The reliability of proxy means testing, as seen in the case of identifying deprived households in SECC, has been called into question multiple times in the past. Although SECC is an improvement over the BPL approach, concerns related to its data have emerged.

Vested interest to overstate the extent of deprivation by respondents and the errors in enumeration leading to undercounting of the poorest sections are some of the major concerns associated with SECC (2011).[28] Lastly, SECC was conducted in 2011, almost 10 years ago and is therefore not up to date.

Second layer of exclusion: Given the targeted nature of most DBT schemes, the process of enrolment consists of stringent eligibility checks which require the beneficiary to submit a number of documents to prove his/her eligibility. Prospective beneficiaries have to incur significant costs, for instance, foregoing a day's wage, because they have had to make multiple visits to finish the enrolment process or to procure necessary documents. Second, given the digitized formats under DBT, database/spelling errors during the application processing stage might lead to the failure of validation checks during the onboarding of beneficiaries onto the public financial management system. Such errors may take an inordinately high time to get corrected, given the fragmentation of enrolment points under DBT.

Third layer of exclusion: Back-end processing involves the transfer of funds in the form of payment files from the relevant Ministry/ Department to beneficiary accounts via the National Payments Corporation of India's (NPCI's) digital infrastructure. Most DBT transactions rely on the digital infrastructure of the Aadhaar Payment Bridge (APB) and are routed using the Aadhaar-enabled Payment System (AePS).[30] This stage may be characterized by transaction failures, that is, failure of crediting a beneficiary's account, which may occur due to a variety of reasons. These include improper Aadhaar seeding, invalidity of account status (blocked/frozen/ dormant), pending know your customer (KYC), etc.

Fourth layer of exclusion: Assuming the beneficiary did not fall through any of the aforesaid fractures in the DBT pipeline and his/her account was credited successfully, he/ she may still face issues while withdrawing the benefit amount. This issue might sometimes be the very unavailability of a cash-out point (especially exacerbated during the COVID-19 lockdown) or even when cash-out facilities may be present, operational issues such as network failures, biometric failures and, in some cases, overcharging/fraud can interfere with proper last-mile delivery of DBTs.

Since the COVID-19 lockdown, many of these issues have been exacerbated and require immediate attention in order to provide timely relief to citizens whose livelihoods have been adversely affected. In Table 3.2, we provide broad recommendations that would help policymakers and service providers to

Table 3.2: Recommendations to eliminate exclusion in DBTs

DBT Process	Key Recommendations
Cash withdrawal	Increasing access point density (number of cash-out points per capita).
	Increase uptake of National Bank for Agriculture and Rural Development's (NABARD) PoS devices subsidy by rural and cooperative banks.
	Design alternative authentication protocols in case of device or network failure.
	Monitor access points and set up a complaints management system.
	Revise incentive structures in favour of individual agents.
Back-end mechanisms	Reporting of AePS transaction failures by NPCI and periodic auditing of DBT transactions at all banking points.
	Commission agents specifically with the task of correcting database errors.
Enrolment procedures	Increase the functional capacity of enrolment points to include record corrections in scheme databases, issuance of certificates required as proof of eligibility, corrections in Aadhaar details, etc.
Targeting methodologies	Adopt mixed identification strategies as in the case of PDS, where states have the discretion to develop additional categories of eligibility.
General	Accountability mechanisms must be instated for all entities involved in DBT—delivery, including CSCs and BC network managers. Social audits proposed[31] by Comptroller and Auditor General for PM Kisan and PM Ayushman Bharat must cover such functionaries in their scope.

Source: https://msme.gov.in/faq. Accessed on 24 July 2018.

close the gaps that beneficiaries might fall through in the welfare system. The recommendations in this table are drawn from our extensive research of exclusion in DBTs.

Structural Issues

The various statutes which deal with issues of social protection typically refer to the formal and informal sectors as organized and unorganized, respectively. In this section, therefore, we follow this usage as much as possible. These statutes point to a clear distinction between social security for workers in the organized sector and its absence (by omission) for all other workers in any specific terms. The Code on Social Security, 2020, provides that an establishment is in the organized sector if it has 10 or more employees.[32] This Code consolidates a number of earlier enactments, including the Employees' Provident Funds and Miscellaneous Provisions Act, 1952; the Employees State Insurance Act, 1948; the Payment of Gratuity Act, 1972, and several others.[33] These enactments provided specific benefits to employees in the organized sector but, as has already been described, this accounts for only a small part of the Indian workforce (additionally, because a large percentage of enterprises fall far short of the 10-person threshold).[34]

The Unorganised Workers' Social Security Act, 2008 (UWSSA), provided for the registration of unorganized workers, but did not make specific provision for social security measures.[35] Instead, Section 3 of the UWSSA provided that the central and state governments were to frame schemes for the benefit of informal sector workers on subjects such as life and disability coverage, maternity benefits, provident funds, old-age benefits and housing. The UWSSA did not provide for minimum benefit floors or any specific requirements for social security. While the UWSSA has been replaced by the Code on Social Security, 2020, Section 109 of the Code retains the language of Section 3, UWSSA. Thus, presently, there is no comprehensive set of social security measures for workers in the informal sector.[36]

In place of a statute or set of statutes, there are several ad hoc schemes in operation to provide social security for those outside formal employment, that is, for the general population (and informal workers are covered in so far as they are part of the general population). Several states also operate welfare schemes on several subjects.[37] The following features are common to schemes framed for the benefit of informal workers.

First, as has been noted already, schemes are rarely designed solely for workers as workers, but rather for any person outside the scope of organized sector employment. Any person who satisfies the income targeting criteria may receive benefits under the NSAP or JSY, for instance, while APY and PMSYM are available to any person who otherwise does not receive benefits in the formal sector.[38]

Second, while there are several schemes in operation, they do not form a comprehensive social security network. There are several important gaps in coverage. For instance, the Ayushman Bharat scheme provides insurance of ₹ 5 lakh per household for the bottom 40 per cent of India's households for in-patient hospital care.[39] It does not, however, address the disparity in the availability of secondary and tertiary care between states in India, nor does it address concerns that the sum assured is insufficient for certain kinds of illnesses.[40] Similarly, while there are several pension schemes available to persons outside formal employment, these provide very limited protection in old age. Pension amounts under the NSAP fall far short of the minimum per capita expenditure,[41] while those under the Atal Pension Yojana and PM Shram Yogi Maandhan are not indexed for inflation. There have been attempts to rationalize the present system of schemes by the Planning Commission[42] and the NITI Aayog,[43] but these efforts have concentrated on converging existing schemes and preventing replication, rather than providing comprehensive coverage against risks or income loss.[44]

Third, many schemes are made by executive order rather than by statute,[45] and are frequently withdrawn and then modified and reinstated.[46] While schemes such as the Ayushman Bharat Yojana and Atal Pension Yojana did provide for automatic migration from the older to the newer scheme, changes in schemes were not always to the advantage of beneficiaries. The Atal Pension Yojana, for instance, does not make use of the network of aggregators under the Swavalamban scheme.

The present system of social security is fragmented across multiple agencies and entities. Different ministries and departments are responsible for different schemes, and many of the schemes have overlapping functions. The lack of ownership is further complicated by the burdensome process of enrolment. Presently, beneficiaries are required to register separately into each scheme.[47] There have been some attempts to enable beneficiaries to register for schemes at the last mile, through CSCs and e-Seva Kendras.[48] While these provide the important service of registration, the burden still remains on the beneficiary to determine which schemes they are eligible for and to ensure that they meet the requirements of registration for them.[49]

There is an urgent need for comprehensive and universal social security, comprising a set of robust floor-level statutory provisions to be made available to all persons in India. The availability of social security measures should not depend on a person's status as a worker or on the type of employment.[50] There is also a need for clarity on the content on the benefits available to workers in the unorganized sector. Presently, there is little guidance on the content of the social safety net for unorganized sector workers. The ILO Recommendation No. 202 provides some guidance on the content of a minimum social security floor. Clause 4 calls for member nations to provide universal social security, while Clause 9 refers to benefits including basic income security and access to a defined set of goods and services for all.[51]

At the very least, social security in India must provide for inflation-adjusted income security to those in the informal sector, as well as access to health, disability, maternity, sickness and death benefits.[52] It is hoped that these measures will come into effect at the earliest.

NOTES AND REFERENCES

1 It is important to start with a caveat. The definition of the 'informal sector' in India is not fixed or constant, even across different official pronouncements. For a full discussion of this issue, see Anupama Kumar, *Designing a Universal and Comprehensive Social Security Floor for Informal Sector Workers* (Dvara Research Policy Brief, 2020). Available at https://www.dvara.com/research/wp-content/uploads/2020/03/Designing-a-Universal-and-Comprehensive-Social-Security-Floor-for-Informal-Sector-Workers.pdf (accessed on 23 November 2020). Given the proliferation of definitions, we will not work with a single definition of the informal sector in this chapter, but rather use multiple overlapping definitions on the basis of the data that we are sourcing to make our arguments, and we will appropriately clarify these definitions as and when they appear.

2 Amit Basole and Vidya Chandy, *Micro Enterprises in India: A Multidimensional Analysis* (Bangalore: GAME and Azim Premji University, 2019). Available at https://cse.azimpremjiuniversity.edu.in/wpcontent/uploads/2019/10/GAME_APU_Microenterprises_In_India_Report_Oct_2019.pdf (accessed on 23 November 2020).

3 Santosh Mehrotra, *Informal Employment Trends in the Indian Economy: Persistent Informality, but Growing Positive Development* (Geneva: ILO, 2019).

4 For Table 3.1, the informal sector consists of all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than 10 total workers.

5 Government of India, *Periodic Labour Force Survey 2017–18, India* (2019). Available at http://www.mospi.gov.in/sites/default/files/publication_reports/Annual%20Report%2C%20PLFS%202017-18_31052019.pdf (accessed on 23 November 2020).

6 World Bank, *South Asia Economic Focus Fall 2020* (2020). Available at https://doi.org/10.1596/978-1-4648-1640-6 (accessed on 23 November 2020).

7 Daryl Collins, Jonathan Morduch, Stuart Rutherford, and Orlanda Ruthven, *Portfolios of the Poor: How the World´s Poor Live on $2 a Day* (Princeton, NJ: Princeton University Press, 2009).

8 This is based on Dvara Research's with the CMIE CPHS data, which distinguishes between formal and informal sectors using the occupational categories present in the CPHS. Households are categorized as informal if their primary occupation is one that does not provide a regular salaried income. For more details, see under household groups here (https://consumerpyramidsdx.cmie.com/kommon/bin/sr.php?kall=wkb [accessed on 23 November 2020]). Presumably, the World Bank (2020) analysis cited in the last paragraph of the first section also uses a similar definition to distinguish between the two categories, since it also works with the CMIE CPHS data.

9 Anand Sahasranaman and Nishanth Kumar, *Income Distribution and Inequality in India: 2014–19* (2020). Available at https://arxiv.org/abs/2010.03602 (accessed on 23 November 2020). This chapter also works with the CMIE CPHS data and uses a similar definition of the informal sector as we do when we work with that data.

10 Marianne Bertrand, Kaushik Krishnan, and Heather Scofield, *How Are Indian Households Coping under the COVID-19 Lockdown?* (Chicago, IL: Chicago Booth, 2020). Available at https://www.chicagobooth.edu/research/rustandy/blog/2020/how-are-indian-households-coping-under-the-covid19-lockdown (accessed on 23 November 2020).

11 To take into account the effect of seasonality in income, especially for those employed in the informal sector, we compare the months of May in 2019 and 2020.

12 The poverty line estimate used here is the one defined for rural regions (₹ 972 per capita per month), which is lower than that for urban regions. Second, this number has not been inflation adjusted. These two qualifiers indicate that the actual transitions into poverty might be even greater than the ones shown in Figure 3.4.

[13] CMIE, *Unemployment Rate in India (Beta)* (2020). Available at https://unemploymentinindia.cmie.com/ (accessed on 23 November 2020).

[14] Ignacio Mas, *Money Resolutions, A Sketchbook* (Washington, DC: CGAP, 2015). Available at https://www.cgap.org/research/publication/money-resolutions-sketchbook (accessed on 23 November 2020).

[15] Cristian Badarinza, Vimal Balasubramaniam, and Tarun Ramadorai, 'The Indian Household Financing Landscape', *India Policy Forum* 13, no. 1 (2017): 1–71. Available at https://econpapers.repec.org/article/ncancaerj/v_3a13_3ay_3a2017_3ai_3a2017-1_3ap_3a1-71.htm (accessed on 23 November 2020).

[16] Nishanth Kumar, Vaishnavi Prathap, Asmita Chatterjee, and Misha Sharma, *A Tale of Two Balance Sheets* (2020; Unpublished).

[17] C. Vishwanath and Rakshith S. Ponnathpur, *An AIDIS Analysis: Evolution of Physical and Financial Asset Portfolios between 1993 and 2013* (Dvara Research Blog, 2020). Available at https://www.dvara.com/blog/2020/08/18/an-aidis-analysis-evolution-of-physical-and-financial-asset-portfolios-between-1993-and-2013/ (accessed on 23 November 2020).

[18] Monami Dasgupta and Rakshith Ponnathpur, *Savings in Gold by Low-Income Households: An Empirical Study* (to be published on the Dvara Research Blog 2020).

[19] The very high growth rate is partly accounted for by the fact that Dvara SmartGold only began its operations in October 2019, so the base is quite small.

[20] Aparajita Singh, *988 Mn Indians Do Not Have Life Insurance. Those Who Do, Are Insured For 7.8% of What's Needed to Cover Financial Shock* (India Spend, 2019). Available at https://www.indiaspend.com/988-mn-indians-do-not-have-life-insurance-those-who-do-are-insured-for-7-8-of-whats-needed-to-cover-financial-shock/ (accessed on 23 November 2020).

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Small Finance Banks: Delivering on the Mandate

R. Bhaskaran

4

INTRODUCTION

Financial inclusion, as noted in the 2019 National Strategy for Financial Inclusion,

> *is increasingly being recognized as a key driver of economic growth and poverty alleviation the world over. Access to formal finance can boost job creation, reduce vulnerability to economic shocks and increase investments in human capital. Without adequate access to formal financial services, individuals and firms need to rely on their own limited resources or rely on costly informal sources of finance to meet their financial needs and pursue growth opportunities. At a macro level, greater financial inclusion can support sustainable and inclusive socio-economic growth for all.*[1]

Financial inclusion is therefore an important programme for our country with multiple objectives, namely (a) reaching savings, credit and insurance products to the hitherto unreached population, (b) making transaction banking reach the nook and corner of the country and (c) spreading financial literacy among the target populace so that they may take informed financial decisions that will give them tangible benefits of the financial inclusion measures.

Although the term 'financial inclusion' is relatively new, the objectives under it have been pursued by governments for a long time now. It is also well recognized, given India's vast area and large population to be covered, that ensuring the availability of financial services at the last mile would require a sufficient number of bank branches/banking outlets that are close to the targeted populace, along with appropriate financial products and technological solutions to ensure ease of access. That is why India has adopted a multi-agency and multichannel approach in banking and finance. As a result, a very large financial infrastructure has been built over the years, consisting of banks (public sector undertaking [PSU] banks, private banks, foreign banks, regional rural banks [RRBs], local area banks (LABs), urban cooperative banks [UCBs] and rural cooperative banks), financial institutions (National Bank for Agriculture and Rural Development [NABARD], Industrial Finance Corporation of India, Small Industries Development Bank of India, Exim Bank and specialized financial institutions such as Rural Electrification Corporation (REC) and Power Finance Corporation (PFC)), non-banking financial institutions (loan companies, leasing companies, investment companies and microfinance companies), primary dealers, forex dealers, asset recovery companies, stock exchanges (equity and commodity), insurance companies (both life and general), mutual fund asset management companies, etc.

It should be noted that despite such a variety of institutions, it is the banks, and more specifically the commercial banks, that play a predominant role in the financial market and in financial inclusion. Thanks to technological innovations in recent years, this has been further facilitated by many new banking channels (Table 4.1) that have been introduced, coupled with substantial changes in payment and settlement systems and transaction banking. The combination of mobile, net banking and e-wallets has revolutionized the transaction banking system, making online banking a household affair. This has resulted in a manifold increase in banking access for all sections of the population. Technology, thus,

Table 4.1: Payment System Infrastructure: India 2020 (Million)

Number of cards	902.70
Of which: Credit cards	57.29
Of which: Debit cards	845.41
Prepaid payment instruments	1,900.81
Wallets	1,755.36
ATMs	0.23
Micro-ATMs	0.30
Point of sale (POS) terminals	5.04
Bharat QR	2.11

Source: Table 43, Payment System Indicators, RBI Bulletin June 2020.

has played an important role in increasing financial inclusion.

However, financial inclusion cannot be achieved merely through the availability of banks and technology. It requires specific efforts, appropriate products and focus on the non-banked population. It is for this reason that banks have been asked by the government and regulatory authorities to open accounts for all. As a result, between 2011 and 2020,[2] nearly 526 million bank accounts were opened, leading to a strong growth in the number of new savings accounts, most of which were excluded. It should be added that small loans have been issued by non-banking finance companies-microfinance institutions (NBFC-MFIs; NBFCs functioning in the microfinance sector). However, these loans, which are credit inclusion in nature, are not reckoned as part of the financial inclusion data. These NBFCs have consistently demonstrated their keen interest in financing vulnerable sections of the population. This was, possibly, an important reason for allowing NBFCs, including NBFC-MFIs, to apply for approval to function as small finance banks (SFBs). It should be added here that barring Capital Small Finance Bank, which was previously operating as a LAB, the rest of the SFBs were either NBFCs or NBFC-MFIs prior to becoming a bank. Indeed, all of them had demonstrated their ability to work with micro-credit borrowers. It is observed that as of March 2019,[3] the SFBs had 12.18 million loan accounts and 7.36 million deposit accounts as their contribution to financial inclusion. The fact that they were comfortable working with and continuing to work with this vulnerable section of the population after becoming an SFB gives one hope of increased financial inclusion due to their efforts in future.

The idea of SFB can be traced back to the recommendations of an internal group of the Reserve Bank of India (RBI; 2013) which in their 'Banking Structure in India—The Way Forward'[4] suggested that SFBs could be established. At that point of time, about one-third of the adult population was still excluded, and financial inclusion was around 40 per cent. This internal report of the RBI had the benefit of Dr Raghuram Rajan Committee report 'A Hundred Small Steps' (report of the committee on financial sector reforms) which observed that 'the poor need efficiency, innovation, and value for money' and suggested a new paradigm because the large bank-led, public-sector dominated, mandate-ridden, branch expansion-focused strategy did not deliver the expected level of financial inclusion and felt that inclusion for poor should come from motivated financiers with a low-cost structure and an ability to take quick decisions and who use minimum paperwork. The Committee observed that *like microfinance, they (i.e. banks) must see the poor as profitable*[5] and recommended the establishment of (a) private, (b) well-governed, (c) deposit-taking SFBs and (d) operating in a contiguous (small) area. The idea of SFB was also revisited in 2014 by the Committee on Comprehensive Financial Services for Small Businesses and Low Income Households set up by the RBI. It did not directly mention localized banks or banks dealing with small value loans but suggested a framework for *differentiated banking*. In a fortuitous turn of events, the Chairman of the Committee on Financial Sector Reforms, Dr Raghuram Rajan, became the governor of the RBI and the idea of SFB became a reality, with the term 'small finance' indicating not the size of the bank but the size of the loan or the economic status of the borrower to be targeted. In 2015, the RBI received 72 applications for the setting up of SFBs, of which 10 were approved for establishing SFBs. Eight of them were NBFC-MFIs, one NBFC and one LAB.

PAST EFFORTS ON PROVISION OF SMALL LOANS

The concept of banks being mandated to issue small-size or low-value loans is not new for India. There have been many initiatives and efforts in this direction in the past.

1. A few decades back, almost all banks were involved in the subsidy-linked credit programme, namely the Integrated Rural Development Programme, which was implemented all over India, where the loan amounts were normally less than ₹ 10,000. It is noteworthy that in the Integrated Rural Development Programme, subsidy and financing targets were always achieved or exceeded through

the successive five-year plan periods, but the impact was not as expected.

2. Rural cooperatives, which started in the early 20th century, were probably the first initiative in inclusion to finance rural people, more particularly agriculturists. After Independence, the number of cooperative banks and share of cooperative banks in banking credit continuously increased till the onset of the financial sector reforms in 1991. Since then, despite the presence of a large number of cooperative banks and societies, their share in the financial sector has reduced consistently. Currently, there are a large number of cooperative banks, but they are small in size and are not able to contribute more to financial inclusion. In fact, cooperative banks have become a cause of regulatory concern. Otherwise, the large network of primary agriculture credit societies and thrift and credit societies could have played a very useful role in the inclusion process.
3. In the commercial banking sector, RRBs (1975) and LABs (1996) were started with the objective of extending banking services, primarily credit, to a limited geographical area, that is, two or three contiguous districts, in the hope that their concentrated efforts will result in the depth of credit flow resulting in good economic progress in their area of operations. Also, to preclude these banks from pursuing other banking assets, they were given a higher mandate for serving the priority sector (PS).

   The RRB Act, 1976, defined their business as

   > *developing the rural economy by providing, for the purpose of development of agriculture, trade, commerce, industry and other productive activities in the rural areas, credit and other facilities, particularly to the small and marginal farmers, agricultural labourers, artisans and small entrepreneurs, and for matters connected therewith and incidental thereto.*

   However, RRBs, over a period of time, basically on account of high credit risk and losses incurred and the need to adopt human resource and management practices similar to those of sponsoring banks faced declining financial health which resulted in poor growth of the banks. In view of this, the business restrictions that were imposed initially were gradually eased and the area of operation expanded, both of which were aimed at increasing the viability of the banks. Merger among the RRBs was also attempted. As a result, the number of RRBs was reduced to 53 as on 31 March 2019 from the peak of 196. It is understood that, as there are a few RRBs still in loss, the number of banks could further go down to 45[6] by merging these banks.[7] It can be observed that despite having 20,024 branches, long years of existence and a liberal fund/credit support from sponsor banks and NABARD, these banks contribute only about 14 per cent of the total agricultural loans. Their contribution[8] to the overall credit business (including cooperatives) and overall business (percentage of total assets) in the country, as of March 2019,[9] was a mere 2.70 per cent and 3.20 per cent, respectively.
4. LAB was another initiative in this direction. LABs had almost similar objectives like RRBs and a PS target of 40 per cent. Although five LABs were licensed (1996), only four of them commenced operations and were functioning until one of them, namely Capital Local Area Bank, got converted into an SFB in 2017. In retrospect, it is evident that one of the constraints faced by these banks was the limited area of operations. That they were very inadequately capitalized and had never been scheduled added to their woes. Their share in overall banking and credit and banking operations in the country is negligible.

RRBs, in the first two decades of existence, and LABs had limitations in the form of a restricted area of operations as their activities were confined to two or three contiguous districts. In fact, in 'A Hundred Small Steps',[10] the committee also recommended a limited and contiguous area of operations for SFBs as well but, at the time of licensing, this condition was removed.

FEATURES OF SMALL FINANCE BANKS

SFBs have been licensed to carry out the following banking activities[11]:

1. Offering banking services such as deposits, loans and advances, and remittances to (mainly) unserved and underserved sections of the population, such as small business units, small and marginal farmers, micro and small industries, and entities in the unorganized sector.
2. Undertake distribution of mutual fund units, insurance policies/products, pension products, etc., with prior approval of the RBI and after complying with the requirements of the concerned sectoral regulator for dealing with such products. The SFBs were not to commit their own funds to these activities.

3. Authorized dealers (Category II) in foreign exchange for their clients' requirements.

Further, it has been stipulated that these banks:

1. Should have a minimum paid-up equity capital of ₹ 100 crore (1 billion).[12]
2. Will be subject to all prudential norms and regulations (of the RBI) applicable to commercial banks, including the requirement of maintenance of the cash reserve ratio and statutory liquidity ratio.
3. Will be required to issue 75 per cent of their adjusted net bank credit (ANBC) to the PS. Of this, 40 per cent should be as per the norms applicable to commercial banks.
4. Should ensure that at least 50 per cent of the credit portfolio is of loans and advances of size/amount less than ₹ 25 lakh.

An SFB can set up branches anywhere in India (no geographical restrictions) and should be responsive to local needs wherever it operates. Also, it is expected that an SFB will open 25 per cent of its branches in rural areas. It is not allowed to set up subsidiaries to undertake non-banking financial services activities.

Table 4.2: Market Share (%) of Various Banking Groups in Overall Banking Business: 2018–2019[13]

Item	PSU Banks	Private Banks	SFBs	RRBs	UCBs
Capital and reserves	43.81	40.29	1.01	2.55	3.76
Deposits	61.44	27.29	0.40	3.15	3.51
Borrowing	42.91	43.68	1.57	3.32	0.30
Investments	57.44	25.92	0.37	4.78	3.34
Loans & advances	57.58	32.33	0.68	2.62	2.94
Total assets	57.19	29.28	0.56	3.13	3.37

Source: RBI database.

It is evident from the previous paragraph that SFBs have certain restrictions and limitations on their credit function, but not on deposits and remittances. Credit inclusion will automatically ensure the opening of deposit accounts and allow transactions through debit cards, etc.

PERFORMANCE OF SMALL FINANCE BANKS

Total 10 SFBs have been licensed by the RBI. During 2016–2017, six SFBs were established. Four banks were established in 2017–2018. As of March 2020, these banks have been operating for three to four years and all of them have completed at least three years of operation. As of March 2019, they contributed 0.56 per cent of the total banking business in the country (Table 4.2).

DEPOSITS

SFBs are new to the deposit business. Almost immediately after beginning operations, they started opening deposit accounts, more particularly savings bank (SB) account for all their borrowers. Most of these accounts were basic savings accounts with very low balances. As such, there were 7.6[14] million deposit accounts (₹ 375 billion) with them as of March 2019, of which 7.5 million accounts (₹ 166 billion) were from individuals.[15] Deposits from others were ₹ 209 billion. Possibly their borrowers had accounts with other banks. Yet opening these accounts is indeed a big contribution to financial inclusion. It is noteworthy that the deposit amount from others is high and that for the SFB sector as a whole, current account saving account (CASA) was on the lower side compared to other commercial banks and RRBs, whereas the percentage of term

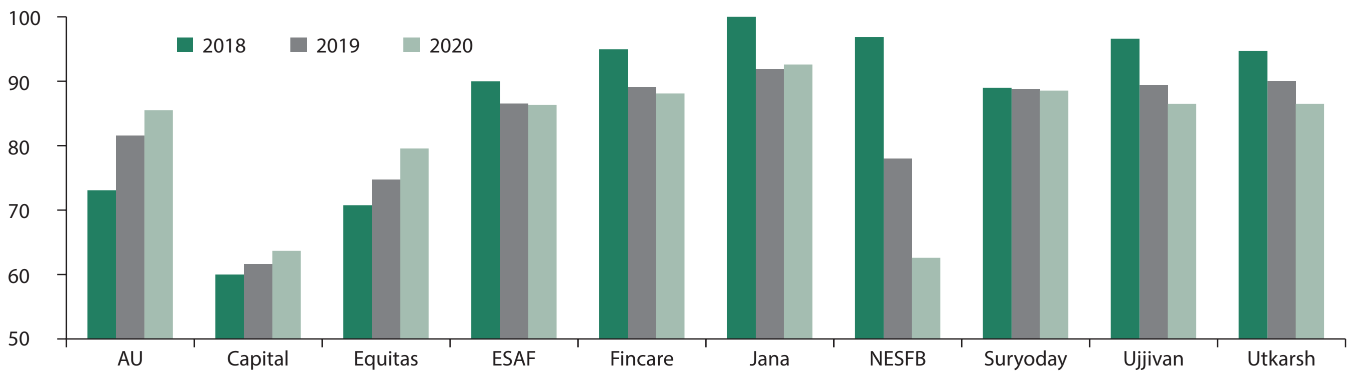

Figure 4.1: Term Deposits as Percentage of Total Deposits with SFBs

Source: Balance sheet of SFBs for the three years, analysis by the author.

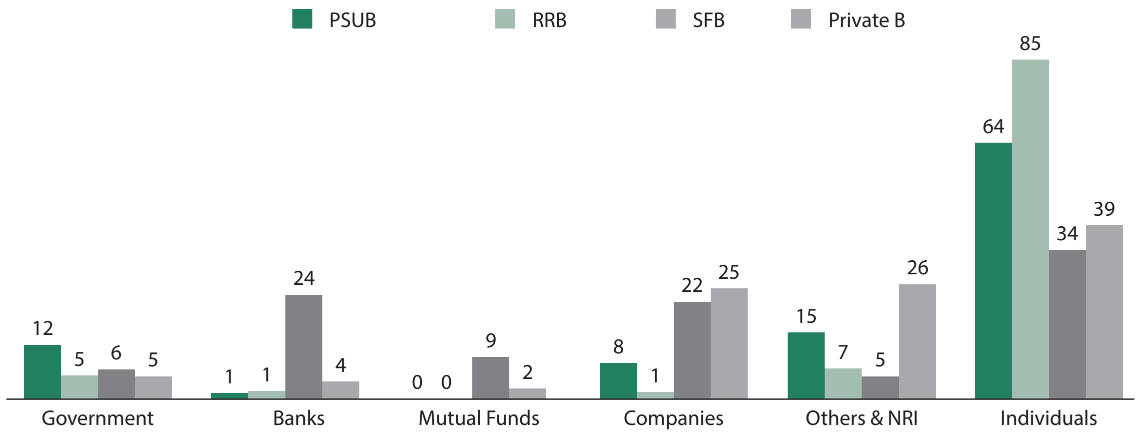

Figure 4.2: Sources of Deposits as Percentage of Total Deposits (March 2019)

Source: RBI, ownership of deposits with scheduled commercial banks, bank group-wise, March 2019

deposits was higher. Among the SFBs, Capital Small Finance Bank and North East Small Finance Bank had CASA of more than 35 per cent during the financial year 2019–2020. It is observed that the share of term deposits to total deposits is high with most SFBs (Figure 4.1). Right from the beginning, these banks have made efforts to increase deposits. Apparently, the title 'SFBs' has not impacted the mobilization of deposits as much as it was initially apprehended. As a result, deposits of SFBS increased by 31 per cent during 2019–2020 over the previous year. The growth rate in deposits recorded by these banks was higher than that recorded by other commercial banks during the period 2018–2019 and 2019–2020.

According to the latest available data, the sources of deposits of SFBs (Figure 4.2) are varied and the dependence on bulk deposits from banks and companies is high. Further, deposits from individuals are rather low compared to deposits from companies and banks (46% of term deposits as of March 2019). The maturity pattern of deposits as of March 2019 (Table 4.3) shows that the share of short-term deposits, that is, deposits maturing within 6 months is high (22.5%) as against 7.12 per cent in the case of commercial banks. Most of these seem to be bulk deposits from banks and companies. Bulk deposits are generally more expensive, and, in times of tight liquidity, the renewal of these deposits could be difficult. As per RBI guidelines, SFBs have to maintain liquidity coverage ratio at 100 per cent with effect from January 2019. Two issues, namely the current practice of SFBs offering higher rate of interest (ROI) on their deposit and the recent increase in the deposit insurance limit from ₹ 1 lakh to ₹ 5 lakh per account will, it is hoped, result in further increase in the deposits held with them.

SFBs offer higher ROI on savings deposits and term deposits. As bulk deposits will be more costly

Table 4.3: Maturity Pattern of Term Deposits—Percentage to Total Deposits (March 2019)

	PSU	RRB	SFB
Less than 91 days	4.80	1.73	11.24
<91 days and > than 6 months	2.32	2.11	11.31
<6 months and > than 1 year	7.58	13.63	9.31
<1 year and > 3 years	60.65	56.05	63.15
<3 years and > 5 years	7.94	12.01	4.03
5 years and above	16.71	14.46	0.97

Source: RBI, maturity pattern of term deposits.

and available for a much shorter duration, banks will offer a higher rate to individuals. Further, it is seen that about 28 per cent of the resources are in the form of borrowings which are in the form of bonds. SFBs are taking steps to reduce their borrowings and increasing their deposits. It is observed that between 2017 and 2020, the borrowings by SFBs as a percentage of total assets reduced to 28 per cent as of March 2020 (data for 10 banks) from 57.4 per cent as of March 2017 (data for 7 banks).

LOANS AND ADVANCES

The role of SFBs in credit inclusion, which is an important part of financial inclusion, is impressive. It is seen that in terms of loans outstanding, SFBs (Figure 4.3) had a market share of 0.6 per cent[16] in total loan outstanding and 5.2 per cent in the number of total loan accounts. This compares with 2.9 per cent of market share of RRBs in total loan outstanding and 11 per cent in the total number of loan accounts.

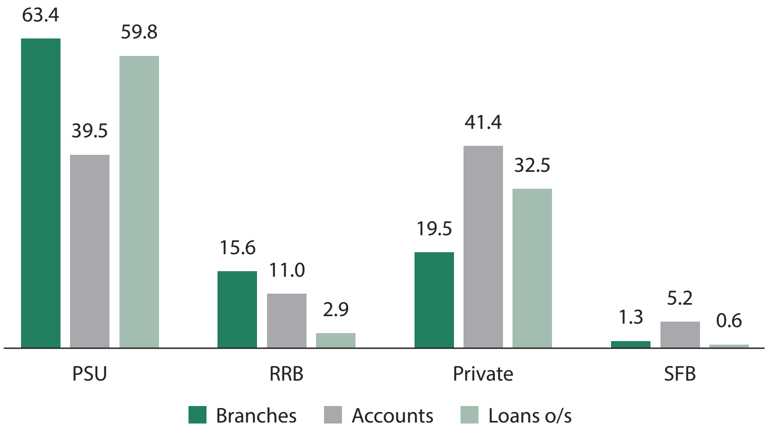

Figure 4.3: Market Share of Banking Groups in Total Credit Outstanding as of March 2019 (%)

Source: Developed by the author on the basis of data published by the RBI on branches of commercial banks and loans and advances.

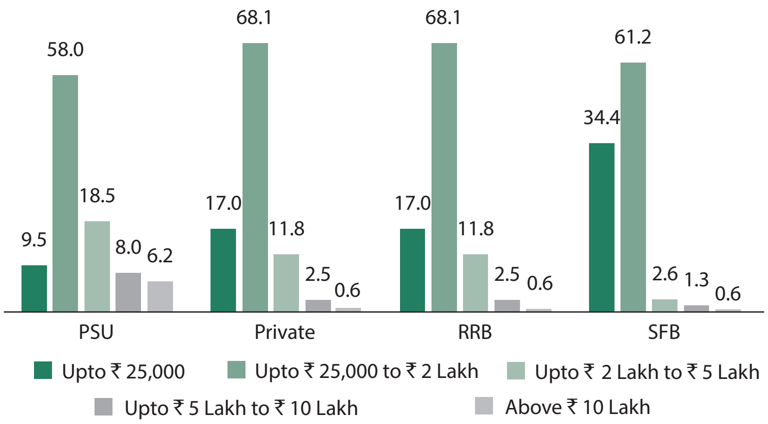

Figure 4.4: Percentage of Loan Accounts in Various Size Categories to Total Loan Accounts by Bank Group 2019

Source: Table 2.4 (RBI).

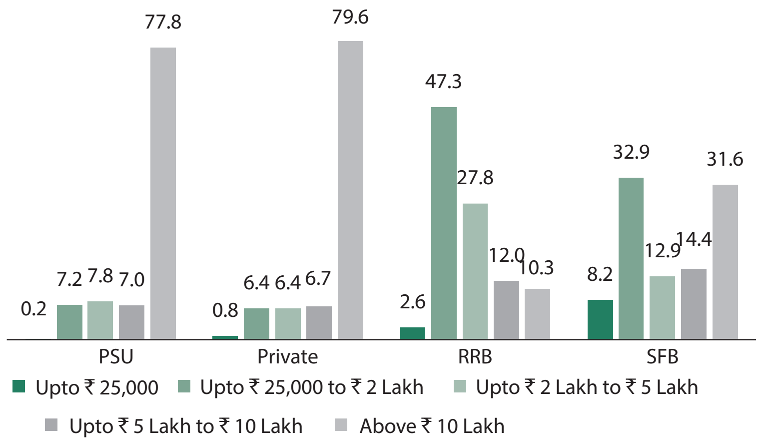

Figure 4.5: Percentage of Loan Outstanding by Size Class to Total Outstanding by Bank Group 2019

Source: Table 2.4 (RBI).

Although the average loan outstanding in the case of SFBs is considerably lower, the total number of SFB loan accounts is nearly half that of RRBs.

The main objective behind the establishment of SFBs was credit inclusion, as these banks had graduated from being NBFCs/LABs and had previously been involved in the disbursement of small loans. In this regard, it is observed (Figures 4.4, 4.5 and 4.7) that 95.6 per cent of the loan accounts of the SFBs (March 2019) were of the size 'less than ₹ 2 lakh', classified as small loans by the RBI, and the outstanding there was 41.1 per cent of the total loans outstanding of the SFBs (Figures 4.4 and 4.5).[17] Further, nearly 35 per cent of SFB loans were of size less than ₹ 25,000. Nearly 54 per cent of the loan outstanding was in the loan sizes of less than ₹ 5 lakh. This was contributed for by over 98 per cent of the total loan accounts of the SFBs, with a balance of 46 per cent being less than 2 per cent of the loan accounts. In comparison, RRBs had nearly 97 per cent of their total loan accounts and 77.7 per cent of their total outstanding in less than ₹ 5 lakh size loans. Nevertheless, as per the RBI data on bank group-wise outstanding credit according to the size of the credit limit, it was the PSU banks that continued to have a larger volume of credit outstanding in the smallest loan size up to ₹ 25,000, as they accounted for 35 per cent of these loans in the country as against 6.6 per cent by SFBs.

As of now, the main focus of SFBs is on small loan accounts. It is also seen that the average loan amount with SFBs was ₹ 65,945 as of March 2019 (Table 4.4). For the SFB sector as a whole, the average loan size ranged between ₹ 43,624 for agriculture and ₹ 135,700 for transport operators, which was much lower than the average for PSUs and private banks. From Table

Table 4.4: Average Loan Size (₹) by Purpose and Bank Group as of March 2019

Purpose	PSU	Private	SFB
Agriculture	176,703	124,582	43,624
Industry	14,951,997	3,300,943	62,053
Transport operators	1,750,000	928,450	135,700
Professionals	2,219,738	1,167,590	59,429
Personal loans	719,137	241,800	109,172
Trade	1,656,399	648,622	96,465
Finance	17,228,159	43,484,380	57,227
Others	112,5267	730,336	144,604
Overall	878,601	471,855	65,945

Source: RBI database.

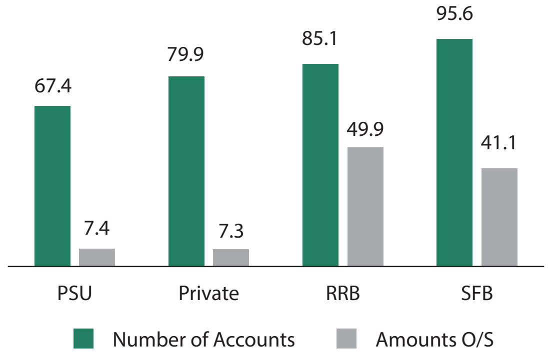

Figure 4.6: Share of Small Borrowal Accounts in Total Number of Accounts Bank Groups (%) as of March 2019

Source: RBI, data analysed by the author.

4.4, it is evident that SFBs focus on the lower end of the spectrum and issue much smaller sized loans on the average as compared to other banks.

SFBs have been mandated to provide 75 per cent of their ANBC in the form of loans and advances to the PS. Within this, they must comply with the norms applicable for commercial banks, that is, for 40 per cent of the PS loans, and the remaining can be the choice of SFBs. SFBs have comfortably achieved the mandated PS lending targets in all the three years up to March 2019 (Table 4.5). It is however seen

Table 4.5: Priority Sector Achievement—SFBs (%) as of March 2019

	2016–2017[18]	2017–2018	2018–2019[19]
Agriculture and allied	25.7	20.1	23.7
MSME	34.2	31	36.7
Education	0.8	0	0
Housing	2.6	2.1	2.7
Others	30.2	23.4	11.5
Overall PS %	93.4	76.7	74.6

Source: RBI, Distribution of Outstanding Advances of Scheduled Commercial Banks to Priority Sector. The PS percentage as per the RBI data of SFBs would work out to 117.57 per cent. We have shown 75 per cent which is their target and is well achieved.

Notes:
1. Education loans of private and SFBs are less than 1 per cent of their ANBC.
2. Overall PSU banks had 41.8 per cent and private banks had 43.9 per cent achievement under PS during 2018–2019.

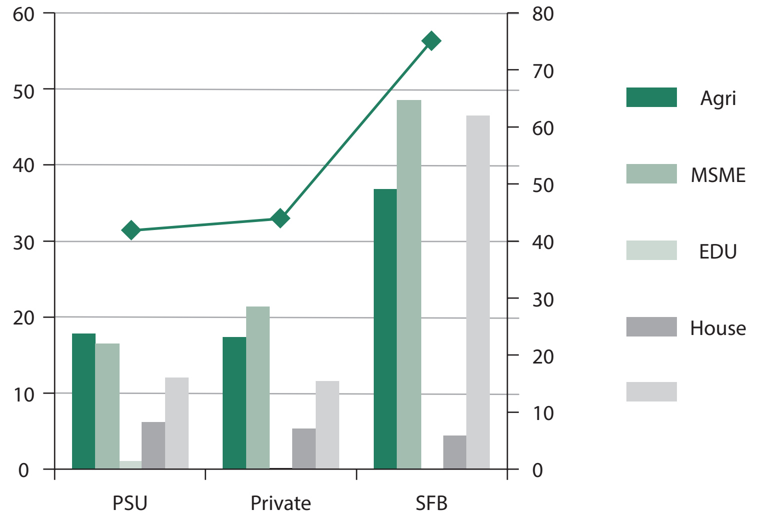

Figure 4.7: Purpose-wise and Overall Priority Sector Achievement in Percentage to ANBC of Bank Groups March 2019

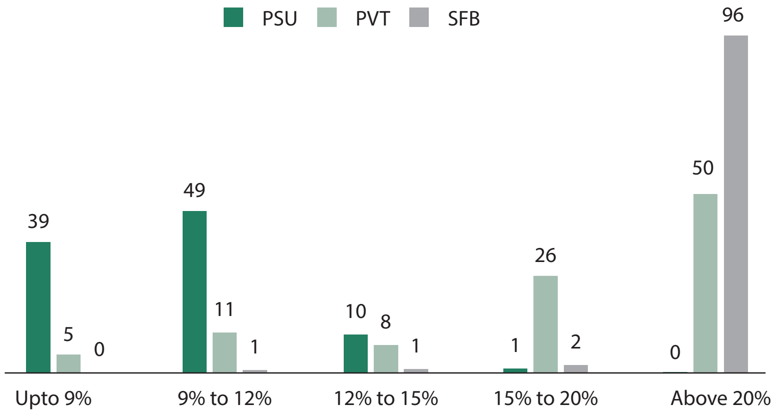

Figure 4.8a: ROI-wise Number of Accounts as Percentage of Total Accounts (as of March 2019)

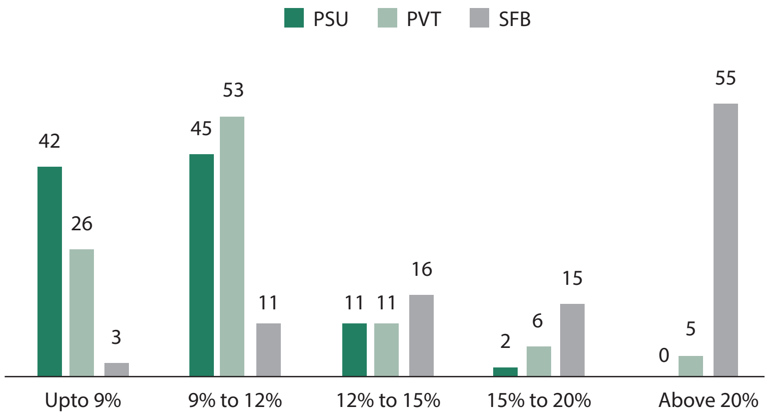

Figure 4.8b: ROI-wise Outstanding Percentage to Total Outstanding

Source: RBI, derived from bank group and interest rate range-wise classification of outstanding advances of commercial banks as of 2019.

that, as they grow, other PS loans increased and the PS percentage, which was higher in 2016–2017, gradually fell to the mandated level.

Loans constitute 68 per cent of the total assets of SFBs as of March 2020. The majority of these loans are term loans for a period of less than three years repayable in equated monthly instalments (EMIs). Micro-loans (group loans) have equated weekly instalments (EWIs). The ROI charged by the banks for micro/group loans is in excess of 20 per cent (Figures 4.8a and 4.8b). They also charge processing fees.

Barring Capital Small Finance Bank, which as a LAB had previously issued agriculture loans and continues to do so, all others have ventured into agricultural loans and kisan credit card advances only recently. As banks diversify their loan portfolios and have different types of loans, the period of loans and the method of repayment could vary further.

BUSINESS MIX AND VOLUMES

The number of SFBs as of March 2017 was 7 and 10 since March 2018. It is seen that though the overall business mix of the SFBs as of 31 March 2020 (Table 4.6 and Figure 4.9) is somewhat similar to that of other commercial banks, there are noticeable differences in terms of higher capital outlay (capital to total assets at 11.84%), higher share of loans (70.6% of total assets) and that the credit portfolio is made up of a larger number of small borrowal accounts. The percentage of borrowing (27.73%) was also higher than other banks. Share of Investments (including SLR investments) with SFBs (17.4 % of total assets) was lower than that of other commercial banks.

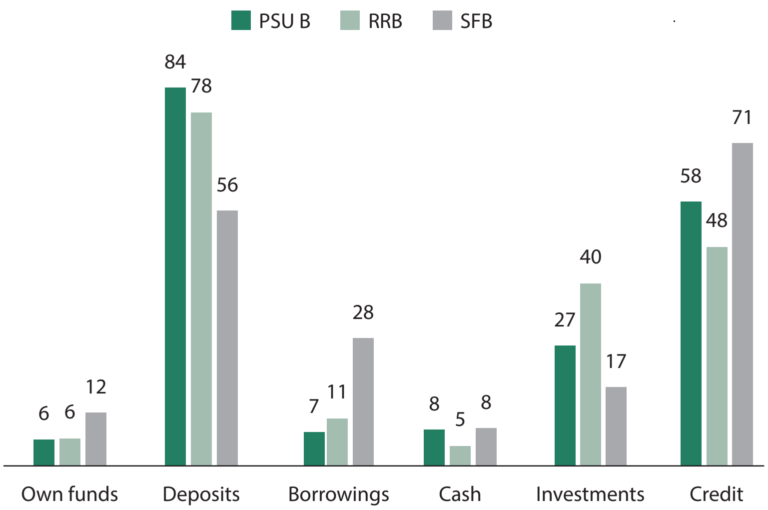

Figure 4.9: Business Mix of Different Bank Groups (as % of Total Assets) as of 31 March 2019

Source: RBI report on trends and progress of banking in India.

Table 4.6: Balance Sheet Data of SFBs (₹ Billion)

As of 31 March	2017	2018	2019	2020
Capital	56	97	117	150
Deposits	50	265	557	729
Borrowings	159	309	278	368
Other liabilities	12	29	37	80
Cash and balances	9	22	36	51
Investments and deposits	84	179	219	329
Advances	168	469	699	905
Others	16	30	35	42
Total assets	**277**	**700**	**989**	**1327**

Source: Derived from the balance sheets of SFBs.

As of March 2020, these banks had total assets of ₹ 1,327 billion including deposits of ₹ 729 billion and advances of ₹ 905 billion.

INCOME AND PROFITABILITY

The main source of SFB income is interest income. On the expenses front, interest and operations expenses are somewhat similar in volume (Table 4.7). Provisioning was high in the last two years, possibly on the account of the impact of demonetization and other reasons. It is noteworthy that as of March

Table 4.7: Income and Expenditure (Rs Billion)

	2016–2017[18]	2017–2018	2018–2019	2019–2020[19]
1. Income (i + ii)	20.8	94.5	132.4	192.2
i. Interest income	17.9	84.2	118.2	169.5
ii. Other income	2.9	10.3	14.2	22.7
2. Expenditure (i + ii + iii)	19.4	115.7	136.3	167.8
i. Interest expenses	8.8	43.1	57.1	79.2
ii. Operating expenses	8.9	47.1	57.3	71.5
of which staff expenses	4.9	24.1	29.6	NA
iii. Provisions and contingencies	1.7	25.5	21.9	17.1
4. Operating profit	3.1	3.9	18.0	42.1
5. Net profit/loss	1.4	–20.2	–3.9	25.0

Source: RBI database.

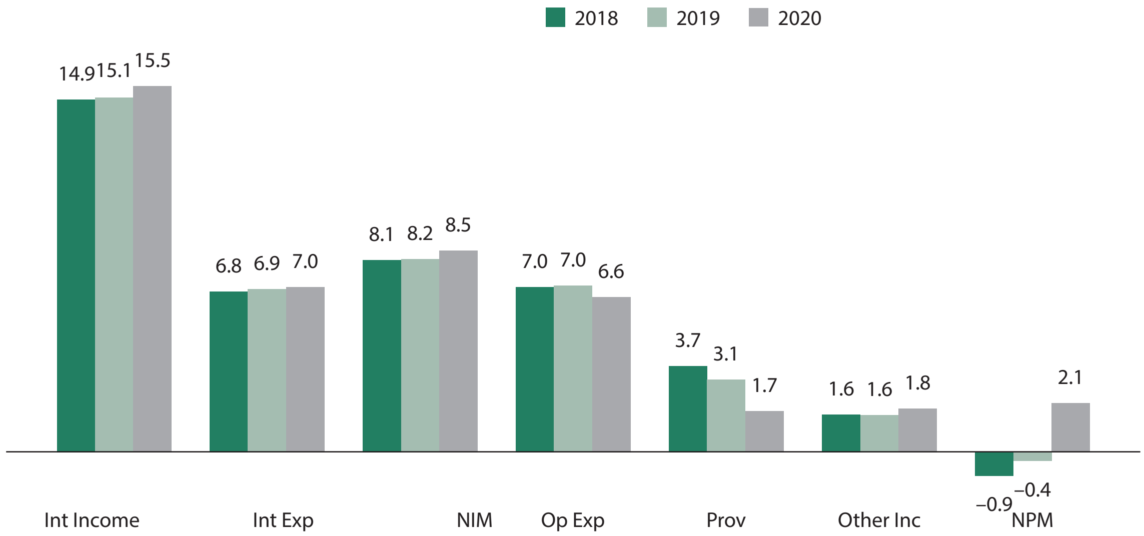

Figure 4.10: SFBs—Margins as Percentage to Total Assets (March to 2018 to March 2020)

Source: Profit and loss accounts of the SFBs for the three years.

2018, two banks and one bank as of March 2019 had incurred net loss. This has impacted the overall profitability of the sector. Nine out of ten banks had earned profit in 2018–2019. Generally, the cost of operations and the cost-to-income ratios of the SFBs are higher than other commercial banks.

The net interest margin (NIM), the difference between the interest earned by banks and the interest paid on funds, of the SFB sector is high (Figure 4.10). At the same time, the cost of establishment being high, the cost-to-income ratio is also high. In the last three years, the amount of provisioning has also been high. The sector as a whole had reported a net loss in 2018–2019. However, the profit margin as of March 2020[20] was 2.1 per cent.

The NIM of the SFBs as of March 2019 (Figure 4.10) was higher than PSU banks, private banks and RRBs. During 2019–2020, the highest NIM among SFBs was 11.0 per cent (Figure 4.11). Barring small finance bank (AU) (5.1%) and Capital (3.6%), all other SFBs had NIM in excess of 8 per cent. The highest operational margin was 7.12 per cent in the case of Suryoday. It is observed that income other than interest income of SFBs has a critical contribution to profitability. In a few banks, it is observed that the other income is more than the net profit. Other income includes processing fees, insurance commission, etc. As these banks grow and the volume of business stabilizes, these ratios could be in line with other banks.

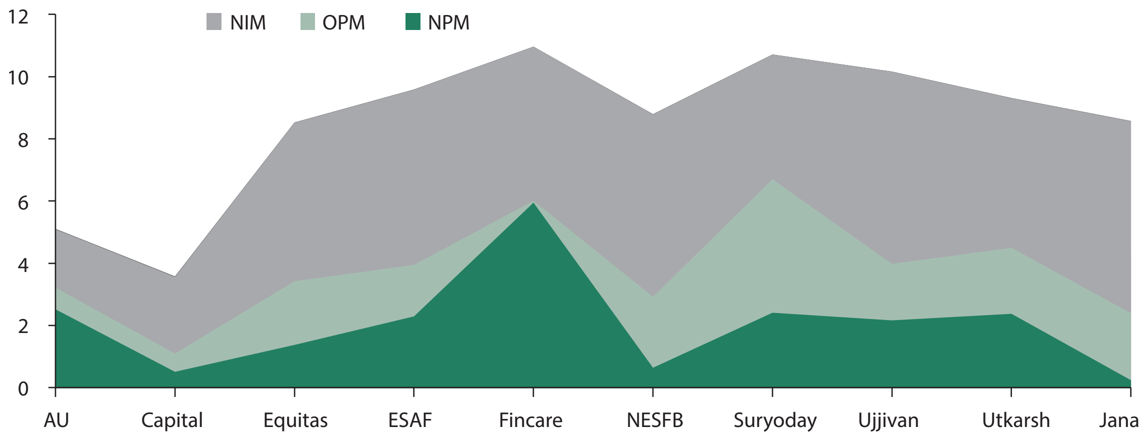

Figure 4.11: Net Interest Margin, Operating Margin and Net Profit Margin: 2019–2020

Source: Annual report and/or financial statements of SFBs from their websites.

The SFB sector has been affected by demonetization-related credit defaults and cash flow issues, as well as by high defaults in Micro Units Development and Refinance Agency Bank (MUDRA) loans. As such provisioning (Table 4.8) has been higher in the last three years, it is apprehended that the impact of the COVID-19 lockdown on these banks could be high.

Table 4.8: Provisioning as Percentage of Total Assets

	AU	Capital	Equitas	ESAF	Fincare	Jana	NESFB	Suryoday	Ujjivan	Utkarsh
2017–2018	2	0.5	1.7	1.3	8.3	12	0.2	3.2	3.5	3.9
2018–2019	1.3	0.4	1.5	2.4	1.5	14.3	1.6	4.2	0.9	2.5
2019–2020	0.7	0.6	2	1.6	0	2.1	2.1	4.3	1.8	2.1

Source: Annual reports and Basel III returns of SFBs from their website.

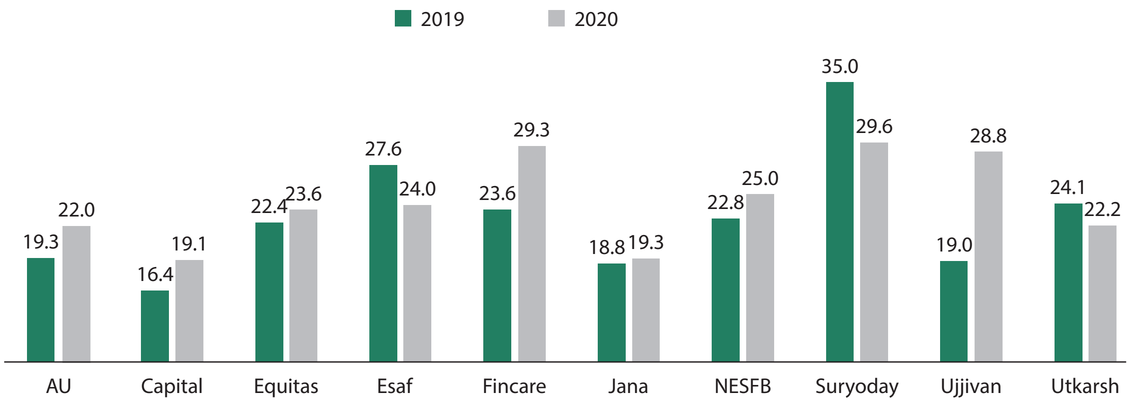

Figure 4.12: Capital Adequacy Ratio of SFBs

The average capital adequacy ratio of these banks was 24 per cent as of March 2020 and ranged from 16.40 per cent (Capital) to 29.60 per cent (Suryoday) against the stipulated 15 per cent (Figure 4.12).

A higher capital ratio maintained by these banks denotes a lower level of leverage. Obviously, these banks could have a higher leverage ratio and achieve a larger volume of business. At the same time, as it would be difficult to raise capital as needed, it is better for banks to maintain a higher capital to risk-weighted assets ratio (CRAR) during the initial period to support growth. As such, these banks will be able to record a higher growth rate in the next few years and will not be constrained by the want of capital. It is likely that the required capital to total asset ratio of SFBs will be, till the regulation changes, higher than other banks. Also, given the losses suffered by one or two banks, the regulator may not be in a hurry to reduce CRAR even though these banks are not systemically important. It must be added that when they applied for a license, these banks were aware of a higher CRAR being stipulated for them.

It is observed that within three years of existence, SFBs have, on an average, higher business volumes than most of the district central cooperative banks, UCBs and RRBs. The average size of SFBs as of March 2019 was ₹ 98.6 billion as against ₹ 99.24 billion for RRBs and ₹ 52.76 billion in the case of scheduled UCBs (average size was ₹ 3.38 billion for all UCBs). The size of the SFB varies across the board (Table 4.9).

Table 4.9: Size-wise Classification of Small Finance Banks

Size of the Bank	Number of Banks	Share in Total Business
Less than ₹ 50 billion	1	2
₹ 50–75 billion	3	13
₹ 75–100 billion	2	14
Above ₹100 billion	4	71

Source: Developed by author on the basis of balance sheet information of SFBs.

It is seen that four banks, as of March 2020, accounted for 71 per cent of the business of all SFBs

Table 4.10: Market Share (%) of Individual SFBs on Total SFB Business

	AU	Equitas	Ujjivan	Jana	ESAF	Utkarsh	NE	Suryoday	Capital	Fincare
2018	27	19	14	14	7	6	2	3	5	3
2019	33	16	14	10	7	6	2	4	4	4
2020	32	15	14	11	7	7	2	4	4	5

Source: Derived from the balance sheet information of all SFBs.

and within that one bank had nearly a third of the business. The market share of individual SFBs over the years is shown in Table 4.10.

The SFBs have recorded impressive growth rates in the last three years. In view of the almost negligible growth of the banking industry during 2019–2020, the overall growth of SFB at 41 per cent in 2018–2019 and 34 per cent in 2019–2020 is impressive (Table 4.11).

Table 4.11: Growth Rate (%) of Small Finance Banks

	2018	2019	2020
Number of banks	7	10	10
Capital	72	21	28
Deposits	430	110	31
Borrowings	94	–10	32
Other liabilities	142	28	116
Cash & balances	144	64	42
Investments	113	22	50
Advances	179	49	29
Others	88	17	20
Total assets	153	41	34

Source: Developed from annual report of SFBs.

Thus, the overall growth rate of total assets of the SFB sector during 2019–2020 was 34 per cent. The growth rate of individual banks ranged from 17 per cent to 71 per cent during 2019–2020 (Figure 4.13).

It is important to note that the SFBs have been recording consistent growth over the last three–four years (Figure 4.14). They are also opening a number of branches across the country.

SMALL FINANCE BANKS: UNIQUE FEATURES AND OUTSTANDING ISSUES

Five chief executive officers (CEOs) of SFBs were approached to seek their views on issues that constrain them, concern them or are a source of satisfaction for them. Some of the highlights or emerging issues are as follows:

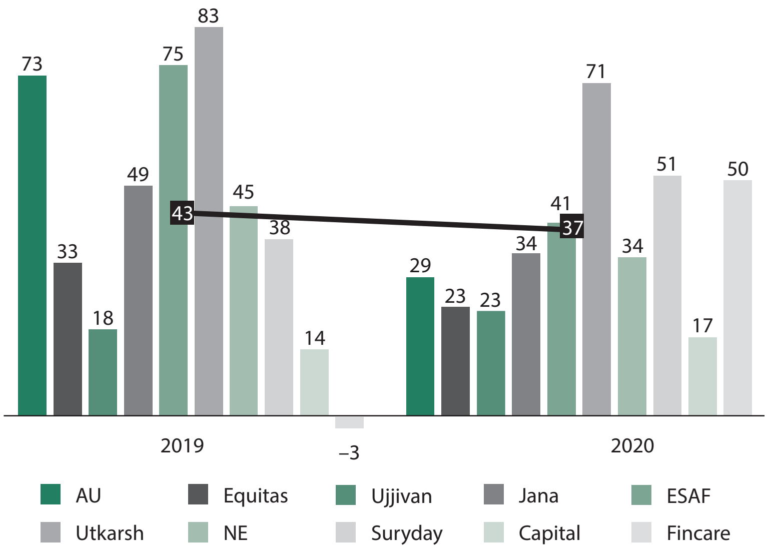

Figure 4.13: Growth Rate (%) of Total Assets of SFBs: 2019 and 2020

Source: Annual report of SFBs.

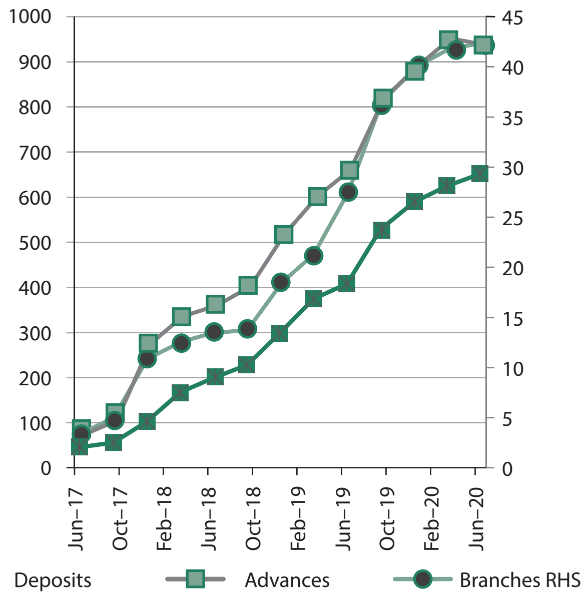

Figure 4.14[21]: Growth in Business of SFBs June 2017 to June 2020

Source: RBI, quarterly data of deposits and credit of commercial banks.

1. It is a source of immense satisfaction that customers of SFBs get equal, if not better, treatment than the high net worth individuals get from bigger commercial banks. Not only do the vulnerable sections of the population get access to banking, they also get access to multiple bank products such as savings, credit, debit card, insurance and facility to receive government subsidies (direct benefit transfer) in their accounts. SFBs provide at least five products for each customer, whereas in the case of NBFCs, they are limited to two products, namely credit and insurance. Added to this, SFBs also undertake financial literacy efforts and also offer mobile banking apps, Internet banking, quick response (QR) code, etc. These products are gaining acceptance among the customers of the SFB which will help in moving towards cashless transactions and society. It is also observed that there are many loan products developed with the focus on the customers of the bank. For example, banks offer products such as toilet loan and school fees loans that are unique and very reasonably priced and carry social messages as well.
2. It is a matter of concern that SFBs, given that the majority of their loans, more particularly micro-loans, are without collateral, will be affected by anything that disturbs the cash flow of borrowers. Events such as demonetization and COVID-19 lockdown[22] have resulted in immediate delinquency/credit risk accompanied by liquidity stress. However, the CEOs of some of the banks point out that these kinds of events cannot be wished away but need to be managed. As such, SFBs are trying to move most of the transactions online such that the impact of such events on the performance of the banks will be very limited.
3. SFBs have recorded very good overall growth and also demonstrated good performance in terms of financial inclusion and profitability. This is evidenced by the fact that as of March 2019, nearly 95.6 per cent of their loan accounts were less than ₹ 2 lakh in the size group. Also, the majority of these loans were term loans with EMI/EWI-based repayment. This indicates the structuring of loans to suit borrowers' cash flow, allowing for ease of payment and keeping regular and close contact with borrowers. This is a remarkable achievement, given that all small borrowers may not have a credit score, and often their documentation could be deficient. It is praiseworthy that these banks have been able to adhere to know your customer and other guidelines despite the issues faced by customers. It is observed that group loans are collateral-free, whereas other loans are secured. Banks scrupulously follow intense supervision and close customer contact to maintain the quality of these loans. It is observed that these banks have found ways to finance the vulnerable sections of the population while maintaining a high percentage of standard assets.
4. SFBs have, so far, demonstrated their capacity to raise capital. As such, most of them have CRAR at levels higher than those stipulated by the RBI. In this connection, it is worth mentioning that as group loans and small loans collateral free and guarantees, if any, like Credit Guarantee Fund for Micro Units-MUDRA has some first loss clause and further the insurance cover varies between 50 per cent and 75 per cent.[23] A newspaper article pointed out that one of the SFBs[24] had lost heavily on MUDRA loans. In this connection, it is a best practice observed in this sector that banks do provisioning in advance and proactively. Also, banks were able to raise capital from initial investors to maintain CRAR and financial viability.
5. A scrutiny of interest rates mentioned by SFBs on their websites shows rates as high as 30 per cent per annum, even when loans are secured and are for business purposes. In addition, these banks charge some fees which make cost of borrowing very high. As such, the rates of interest charged by these banks are high given the economic status of the target population. The Malegam Committee had, for MFIs, recommended an interest rate cap of about 24 per cent per annum.[25] This interest may be justified from the perspective of the lenders, though the SFBs cannot charge as high a rate as an NBFC, since they have been allowed to mobilize deposits at low rates of interest. But whether these levels of interest rates are appropriate from the borrower's perspective has to be studied and decided by the sector.
6. All these banks have started with a high quotient of banking technology in their endeavour to reach banking services efficiently and effectively to their clients. Discussions with the CEOs reveal that, going forward, the use of technology will be a major strength of the SFBs.
7. During discussions with the CEOs of the SFBs, it emerged that all these banks have an ambition to become a universal bank but will continue to focus on financial inclusion. They will try to

increase the number of financial products used by their customers. In view of this, they have started offering multiple loan products to their customers. Banks are endeavouring to graduate some of the micro-loan borrowers to loans for affordable housing, small SMEs, etc., and in the process help to push up their economic status.

The extant regulatory norms are part of the licensing conditions and therefore cannot be termed as a constraint by the SFBs. It must be added that unlike other commercial and cooperative banks which after years of existence under a liberal regulatory system had suddenly come under a set of tough norms to comply with, these banks have been right from the beginning complying with the regulatory norms as prescribed. Demonetization and COVID-19 both affected the cash flow of the business of their borrowers and, in turn, the repayment performance. There is an opinion that the higher than requisite CRAR has helped the banks in managing these risks. In fact, within a short span of four years, these banks have dealt with two big risk events. Total provisioning, as a percentage of loan outstanding of these banks, during 2018–2019 and 2019–2020 was rather high. Two banks had ended with loss in 2017–2018 and one bank had incurred loss in 2018–2019. Clearly, these losses were credit-related, showing the risk of the sector. In any event, all the SFBs together account for less than 1 per cent of the total business of the Indian banking sector. It is in this connection that the sector has to study the differential regulation and enquire if it is appropriate/proportional regulation as well. Some of the issues that need a healthy debate are as follows:

1. Most banks feel that the CRAR requirement can be complied with presently, but hope that as they grow, the ratio will be brought on par with that of other private commercial banks. However, as these banks are not systemically important and are in their early stage, will not keeping CRAR comparatively high impact their ability to leverage funds and hasten their growth?
2. Currently, the NPA norms are uniform across all borrowers except farmers who have taken crop loans. From the borrower's perspective, given that all of them are from the bottom of the pyramid, are these norms appropriate because these are small loans and these borrowers routinely face cash flow issues?
3. Strangely, though the SFBs are covered by Basel II norms, the RBI has asked them to comply with quarterly disclosure norms. It is therefore apparent that the cost of compliance will be bit high and that the norms will be difficult to comply with. It is hoped that some of these norms will be revised with the passage of time.

REFERENCES

[1] Available at https://rbidocs.rbi.org.in/rdocs/content/pdfs/NSFIREPORT100119.pdf (accessed on 15 December 2020).

[2] Based on the number of BSBD accounts indicated (in Table IV.6) by the RBI in its Annual Report 2020.

[3] RBI Data.

[4] Department of Banking Operations and Development (DBOD) & and Department of Economic and Policy Research (DEPR), August 2013.

[5] The RBI in its 'Report on Trends and Progress in Banking' observes that during 2018–2019 NBFCs had NIM around 10 per cent and return on equity of around 20 per cent and that 'for NBFCs-MFI, profitability improved considerably', while other NBFCs had lower profits.

[6] As per Cabinet Committee on Economic Affairs, there were 45 RRBs. Available at https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1608097 (accessed on 16 December 2020).

[7] Most of the small loans are, due to regulatory norms, collateral free and, as such, recovering these loans through legal system is almost impossible. Also, many borrowers had no capacity to repay. There is no credit guarantee for such loans and therefore the merger of RRBs and having large-size banks seems to be the only way to manage the credit risk of small loans.

[8] 'While the balance sheet of RRBs is only 3.3 per cent that of SCBs, their agriculture lending constitutes 14.8% of SCB's lending to the sector'. RBI, Report on Trends and Progress of Banking in India (New Delhi: RBI, 2019).

[9] Authors estimate based on the balance sheet data of commercial banks, RRBs, UCBs and SFBs.

[10] Planning Commission, A Hundred Small Steps Report of the Committee on Financial Sector Reforms (New Delhi: Government of India, 2009).

[11] To widen financial inclusion, the RBI has issued differentiated banking license, namely SFBs and payments banks in 2015. The objective of setting up of SFBs was to further financial inclusion by provision of a savings vehicle and supply of credit to small business units, small and marginal farmers, micro- and small industries and other unorganized sector entities through high-technology, low-cost operations. Available at https://rbidocs.rbi.org.in/rdocs/content/

pdfs/NSFIREPORT100119.pdf (accessed on 15 December 2020).

12 In the new guidelines, the minimum capital has been increased to ₹ 200 crore. RBI/2019-20/196. DOR. NBD. No. 44/16.13.218/2019-20 (28 March 2020).

13 All data used in this chapter are from RBI database on banking and annual reports of the 10 banks as of March 2019. The percentage analysis and conclusions have been worked out by the author.

14 The number of loan accounts as of March 2019 was 12.18 million, possibly showing that some borrowers had multiple limits/loan accounts.

15 RBI, Bank Group-wise Deposits of Scheduled Commercial Banks (New Delhi: RBI, 2019).

16 Data source is taken from the RBI. The small difference in percentage between Table 4.1 and Figure 4.6 is due to difference in source of information.

17 Data source RBI.

18 For seven SFBs.

19 Bank annual report.

20 From the annual report and financial statements worked out by the author.

21 Quarterly data from RBI as of June 2020.

22 SFBs are showing elevated signs of risk as asset quality deteriorated post demonetization in November. As a grouping, SFBs have the highest risk numbers. According to data compiled by CRIF High Mark Credit Information Services, a credit bureau, the portfolio at risk for 30 days has increased 10.56 per cent at the end of March compared to 2.99 per cent three months earlier.

23 In the case of MUDRA, '**guarantee cover**' means maximum cover available per portfolio, based on the amount in default, in respect of the credit facility extended by the lending institution. The first 5 per cent of the amount in default will be borne by the eligible lending institution. The amount in default over and above 5 per cent (if applicable) will be settled by the fund to the extent of 50 per cent on pro rata basis, subject to the receipt of an auditors' certificate confirming eligible claim amount.

24 A little-known SFB from Bengaluru has accumulated ₹ 2,193 crore worth loan defaults under MUDRA Yojana, a programme which provides collateral-free loans to small businesses. Jana Small Finance Bank which got banking licence from the RBI just two years ago accounts for more than 12 per cent of the total defaults under the MUDRA scheme, just behind India's largest lender SBI. Loans under MUDRA scheme have seen a spike in defaults in recent times. According to the latest official data, the total non-performing assets (NPAs) under the scheme have touched ₹ 17,651 crore. Source: *Financial Express* (23 July 2019).

25 The Committee had stated

"We would, therefore, recommend that there should be a 'margin cap' of 10% in respect of MFIs which have an outstanding loan portfolio at the beginning of the year of ₹ 100 Crore and a 'margin cap' of 12% in respect of MFIs which have an outstanding loan portfolio at the beginning of the year of an amount not exceeding ₹ 100 Crore. There should also be a cap of 24% on individual loans".

Available at https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/YHMR190111.pdf (accessed on 15 December 2020).

Digital Financial Inclusion: Approaching the Point of Inflection

Samir Bali

5

OVERVIEW

With the advent of new technologies over the last several years, the landscape of the financial services sector has undergone significant changes and the access to financial services has increased in fundamental ways both in the international and the Indian markets. India has distinctive strengths in this regard having created an enabling infrastructure in terms of technology as well as a facilitating framework in the shape of the roll out of India Stack which includes Aadhaar, eKYC, eSign and DigiLocker. With Unified Payments Interface (UPI) transactions gaining ground, Open Credit Enablement Network (OCEN) recently launched and Digital Health Mission in the offing, the Indian digital transaction space is set up for rapid growth. During the current pandemic and the associated lockdown as well as distancing measures, these technology trends have had a more pronounced impact and have created new opportunities for digital financial inclusion (DFI).

A recent report of the Steering Committee on Fintech (Department of Economic Affairs 2019) details the various areas of technology that have the potential to revolutionize the financial services landscape. These can be broadly classified as:

1. Data-focused technologies such as analytics, artificial intelligence and machine learning, sensor-based technologies and biometrics, etc., that provide insights into the customers making the offerings relevant to the target markets
2. Infrastructure-based technologies such as cloud, open application programming interfaces (APIs) and creation of platforms that enhance the ease of use
3. Operational excellence aspects of robotic process automation, chatbots and distributed ledger technology
4. Front-end interfaces that improve the user experience, provide gamification tools and deploy augmented and virtual reality to improve the customer journey

At the same time, there are several key issues that had started emerging even earlier that have now become more pronounced and relevant for the policymakers as well as the market participants. This chapter analyses the key policy and market initiatives in the past year and the implications of these for the increased penetration of financial services in the hitherto excluded segments of the population in India. It goes on to highlight the key issues that need to be addressed for a rapid expansion of DFI in India.

An International Monetary Fund (IMF; 2020) study points out that globally 1.7 billion people have no access to a bank account and small- and medium-sized enterprises that provide employment to more than 60 per cent of workers struggle to access finance. The key reasons for their exclusion include poor education and awareness, lack of valid identification documents, geographic challenges making cost-efficient access to them through traditional channels difficult, high cost of the financial products and the lack of data and credit history. In this environment, fintech, supported by the emergence of the appropriate technology and access infrastructure, creates significant opportunities for improving access to the excluded sectors.

Financial inclusion has been pursued as a conscious strategy for the last several years. The growth of fintech, or the deployment of technological innovations, is one of the most significant developments in the past decade. Fintech comprises of technology-based businesses that compete against, enable and/or collaborate with the existing financial institutions. As the fintech revolution takes shape, there are several new emerging trends that enable full financial inclusion. These include the following (World Bank Group 2016):

- Disintermediation and disaggregation of the value chain which manifests itself through the entry of a new class of institutions with more tailored and efficient products, thus disintermediating the role of the banks and with the value chain itself getting transformed through partnerships and outsourcing with each player focusing on a smaller, more specific set of functions.
- APIs and the opening up of platforms, thus enabling the new market players to overlay new features and functionalities to existing digital programmes or platforms
- Use of alternative information—developing digital alternative to traditional means of authentication for account opening, data used for credit decisioning, etc.
- Customization—involving the use of digital technologies to more efficiently design targeted products for the underserved markets

As a study by Dvara Research (2020) suggests, 'technology and internet-driven business models in financial services have seen rapid growth riding on initiatives of the Government and the RBI and aided by the enabling infrastructure created by the government including Unified Payments Interface (UPI), AePS platform for enabling biometric authentication for financial transactions, GSTN for small business invoice records, Bharat Broadband Network for creation of the National Optical Fiber Network (NOFN) for connectivity, Aadhaar pay for merchant payments, Common Service Centre (CSC) 2.0 scheme, and DigiLocker for paperless governance, among others. These initiatives are at varying stages of implementation but collectively represent a powerful digital infrastructure on which providers can further innovate.

'Digital financial inclusion could, in fact, play an important role in mitigating the economic impact of the COVID 19 crisis and helping the recovery, provided pre-conditions for accelerating digital services exist' (International Monetary Fund 2020). The study goes on to point out that the ability of fintech to assist the recovery

> *will likely depend on (a) the extent of DFI at the onset of the COVID 19 crisis, (b) the ability to quickly scale up DFI, (c) pre-existing regulatory and supervisory gaps that could amplify risks, and (d) fintech sector's resilience and changes in its landscape during the economic downturn.*

It would, thus, be useful to assess the performance of the Indian financial services sector on these parameters to assess the future direction of the inclusion initiatives.

COVID-19 IMPACT ON FINANCIAL INCLUSION

Despite the significant negative impact on the gross domestic product (GDP) and the debilitating influence on lives and livelihoods, it would be wrong to suggest that all the efforts on financial inclusion over the last several years have come to naught. Viewed through another prism, the pandemic presents certain key opportunities for financial inclusion.

This has presented itself in the form of enablement of cashless and contact-free transactions as well as a more concerted effort from the various market players to deploy effective technology to access hitherto untapped markets. In India, this has taken the form of simpler products, digital and digitally enabled modes of access and renewed efforts towards product and process literacy.

Simultaneously, fintech has played an important role in mitigating the impact of COVID-19 by facilitating access to finance at remote locations and aiding the effective deployment of government measures like direct transfer of benefits to the poor. There were severe challenges posed by the large-scale migration of the labour from the urban the rural areas where there were inadequate business and financing opportunities, requiring a rapid ramping up of these services. Fintech may, in fact, result in greater inclusivity in financial services post the recovery from the pandemic. This could take the form of both the urban and the rural poor having better access to financial services and, in some measures, lessening the gender divides that currently plague the access to these services.

An interesting by-product of the pandemic, and the digital initiatives related to onboarding, could interestingly be a significantly greater diversity and inclusion of the women who were the most impacted by the traditional KYC norms of the financial institutions. Women's financial inclusion across the Alliance for Financial Inclusion network internationally is also being given a fresh impetus through the Financial Inclusion Data Working Group, which recently launched the Guideline Note on Sex-disaggregated Data Report Templates. This provides a detailed methodology to segment financial data on access, usage and quality by sex in a systematic and regular manner.

COVID-19 may also, interestingly, have an impact on the financial services market landscape. The last few years have seen a proliferation of fintech players in the Indian market, albeit predominantly focused on the payments and lending space. The smaller of these and those with inadequate access to funding could get hit by the drop in the number and volume of the transactions, thus leading to some measure of consolidation in this sector. This, in turn, may reduce access to some parts of the market as the larger players focus on the more profitable of the fintech market segments.

The favourable impact of the pandemic on financial inclusion could also be tempered by the lower purchasing power of the target segments and, hence, an impact on their ability to afford the infrastructure in terms of mobile phones and internet connections. A recent report, for example, highlighted the issue of the shrinkage of mobile users in India in recent times. While this may be a temporary phenomenon caused by the mass migration, it may have important ramifications on the access to financial services (Kumar 2020).

DIGITAL TRENDS IN VARIOUS AREAS OF FINANCIAL INCLUSION

This section seeks to analyse the various digital initiatives that have been taken in the current year in financial inclusion space in India. Policymakers and financial services players have been active in several areas such as payments, lending, insurance and wealth management, and there are some clear trends that emerge for the future use of technology and digital initiatives in all these areas. Fintech is fundamentally changing the delivery models of financial services to the low-income urban as well as rural populations and to the small and medium enterprises. With the development of digital tools that can be accessed from computers and mobile phones, the traditional models built on face-to-face contact are in the process of getting transformed. There are also a new set of intermediaries and enablers that are creating a space for themselves as they position themselves to provide services to the incumbent financial services players as well as to the customers.

In terms of the areas of focus within financial services, as a recent IMF study points out, 'in most countries, fintech for financial inclusion started with "spend" and is fast moving to "lend"' (International Monetary Fund 2020). This is equally true of the market in India as well. Till very recently, the digital thrust has been focused on the payments space besides, of course, providing an account access to the customers. It is only relatively recently that the other areas of credit, insurance, pensions and wealth management have come into sharper focus. The trends in these various areas, both in terms of the market participants' initiatives and the relevant regulatory and policy initiatives, have been analysed in greater detail in the section that follows.

Salient Policy Initiatives

The current year saw several policy initiatives and committee reports with some forward-looking suggestions to supplement the various measures launched in the earlier years. The salient among them included the following.

Report of the Steering Committee on Fintech-related Issues, Department of Economic Affairs, Ministry of Finance: This committee examined the Indian and international trends in fintech and the potential opportunities for deepening of such initiatives. It also examined the salient principles for DFI and suggested various measures—both policy and technology related—that can enhance this in India. The key recommendations in this respect were covered in Chapter 3 of the report and are included in Annexure I of this chapter.

The National Strategy for Financial Inclusion (NSFI), 2019–2024, and the National Strategy for Financial Education 2020–2025, Creating a Financially Aware and Empowered India: Both these reports contain important imperatives for the digital inclusion space.

The Insurance Regulatory and Development Authority of India (IRDAI) Committee on Microinsurance has a section that is focused on the technology and process initiatives to enhance microinsurance penetration levels, and the more recent **IRDAI Report of the Committee on Standalone Microinsurance Entity** besides recommending several entity structure, product and pricing related changes suggests the use of end-to-end digital technology for transparency, accountability and monitoring. It calls for the creation of a common

IT platform for all microinsurance companies on the lines of the IT platform in place for mutual funds to reduce transaction costs and bring greater transparency and regulatory oversight.

In its annual report released in August 2020, the Reserve Bank of India (RBI) highlighted that all SLBC/UTLBC convener banks were advised in August 2019 to set up a subcommittee on digital payments. It will endeavour to encourage digitization of payments and enhance financial inclusion through digitization in their respective states/UTs by undertaking initiatives such as: (a) mapping of financial institutions and streamlining of bank accounts for facilitating direct benefit transfer; (b) identification of shadow areas and realignment of banking correspondents; (c) dedicated financial literacy initiatives to promote digital payments; (d) leveraging of reach and technical expertise of payments, banks to cover the gap of provision of basic banking facilities; (e) monitoring of person-to-person points, debit card floats, point of sale (POS) positioning to enhance effectiveness of digital financial architecture; (f) ensuring availability of adequate digital infrastructure at all wholesale grain mandis (wholesale markets) and village haats so as to introduce digital transactions for the benefit of the rural customers and (g) monitoring of government-to-merchant, government-to-person, person-to-government and merchant-to-government transactions. The subcommittee will assess levels of digitization and find solutions to increase penetration.

The current year also saw the launch of OCEN to connect the lenders to the marketplaces which in turn finance their members. OCEN, it is reported, will be launched through an app called 'SAHAY'; close to 30 customer facing entities across segments of tax and filing, payment gateways, agri-tech companies, etc., are looking to become loan service providers and adopt this protocol. The merchants would be able to sign up and get instant loans from the lending partner bank and non-banking financial companies by providing GST ID number and their bank details. This will enable enhanced access to funding for the excluded segments such as small businesses and street vendors.

Two new initiatives that are being explored by the government are 'Project Kashi' and 'KYC Setu'. The first seeks to build a platform for providing small-ticket loans to farmers, labourers and other low-income families using the direct benefit transfer data and other available information such as demographics and microfinance institution (MFI) loan history. Kashi—Cash over Internet—will create a network of top lenders on the Jan Dhan network to create a direct benefit transfer-based digital lending service. KYC Setu is an integrated 'Know Your Customer' data-sharing protocol through which customers need not verify their KYC credentials repeatedly. It was reported that NITI Aayog has developed prototypes for these.

DFI Trends by Business Areas

Payments

Digital payments have been the most prevalent financial services instrument in India. As the report of the Steering Committee on Fintech (Department of Economic Affairs 2019), which submitted its recommendations in January 2020, points out, companies such as Paytm, MobiKwik, Citrus and PayU have taken huge strides in integrating payment processing into the web applications. Besides, the introduction of UPI has provided a further impetus to the payments sector in India (Table 5.1).

Table 5.1: Retail Payments Statistics on NPCI Platforms

Total Financial + Non-financial Transactions		
	Volume (in Mn)	Value (in Bn)
2015–2616	6,389.66	85,271.12
2016–2017	8,648.10	96,626.07
2017–2018	12,817.18	113,552.76
2018–2019	20,045.56	136,719.23
2019–2020	31,658.40	160,923.65

Source: NPCI, https://www.npci.org.in/statistics (accessed on 22 December 2020).

The convenience and safety of the usage, coupled with the fact that this mode allowed access to financial services even during the lockdown and the distancing norms, have given a further impetus to this during the current pandemic. UPI transactions for the month of November (Table 5.2) grew to 2.2 billion with a total value of 3.90 trillion. Immediate Payment Service (IMPS) has also touched an all-time high in this year and the Bharat Bill Payment System as well as FASTag have seen a big jump in the transaction counts as well as values. An expanding universe of players as well as a change in the customer preference to contactless payments have contributed to the recent rapid expansion in these transactions.

Table 5.2: UPI Journey in 2020

	Transaction Count (Billion)	Transaction Value (₹ Trillion)
January	1.30	2.16
February	1.32	2.22
March	1.24	2.06
April	0.99	1.51
May	1.23	2.18
June	1.33	2.61
July	1.49	2.90
August	1.61	2.98
September	1.80	3.29
October	2.07	3.86
November	2.20	3.90

Source: NPCI, https://www.npci.org.in/statistics (accessed on 22 December 2020).

According to data recently released in December 2020 by National Payments Corporation of India (NPCI), the lion's share of the UPI market is with the payment apps Google Pay and PhonePe (Table 5.3) who together have more than 82 per cent of the market by volume and more than 86 per cent by value. This share is likely, however, got impacted by the entry of new payers like WhatsApp and the 30 per cent cap (of total volume) imposed by NPCI on the third-party applications. This cap has been criticized for stifling the competition and because it may have some anti-consumer impact. A volume-based cap may compel the app providers to limit the number of transactions or to stop further enrolment which may restrict UPI use. On balance, however, it is felt that this move is in the right direction since it is aimed at managing the concentration risk from a handful of players dominating the UPI market.

Table 5.3: UPI Applications Snapshot (November 2020)

	Volume (Million)	Value (₹ Crore)
Google Pay	960.02	161,418.19
PhonePe	868.40	175,453.85
Paytm Payments Bank	260.09	28,986.93
Amazon Pay	37.15	3,524.51
BHIM	23.56	7,472.20
WhatsApp	0.31	13.87

Source: Panda (2020).

The increase in the UPI transaction volumes has, however, led to an increase in the failed payments with the failure rate being as high as 3 per cent in the case of some banks. This is also putting significant pressure on NPCI as well as the banks to upgrade the technology in the banks to handle the higher volumes that have become the norm.

The payment space saw another leap forward this year with the real-time gross settlement transactions also having been made available 24/7. National Electronic Fund Transfer and IMPS transactions were already available round the clock. This is a salient step in enhancing the ease of transactions and the customer experience. Another innovation this year has been the introduction of interoperability of the banking apps—ICICI bank has announced the opening of its banking app, iMobile Pay, to all customers and not just its account holders. While Axis Bank has already had this service, others like the State Bank of India (SBI) and HDFC Bank have announced their intention to launch similar services. This would enhance the ease of access to payments and other products for several of the banking customers who do not have these services available through their primary banks.

RBI has also eased the process of QR code-based transactions by making QR codes interoperable and prohibiting the use of proprietary QR codes by any of the payment system operators. This will dispense with the need for the customers to maintain different apps, thus enhancing convenience and customer experience and allowing the payment ecosystem to scale up more efficiently.

At the same time, the playing field may get levelled to an extent in favour of card transactions with the RBI decision to increase the limit of contactless payments without PIN from ₹2,000 to ₹5,000. With the consumer preference seeing a strong shift towards digital payments, this move will allow card players to effectively compete with the QR-based payment players.

Players are targeting the small traders and the Tier 2 and Tier 3 cities with digital payment services and credit schemes. PhonePe for Business app, for example, seeks to provide offline merchants with digital services such as receipts and reconciliation and the digital *kirana* (small neighbourhood grocery store) platform of Amazon, Smart Stores, allows the *kirana* stores to set up a digital storefront facilitating UPI-based transactions as well as instalment-based purchases.

The market is also seeing the pure play payments players diversifying into other areas in financial services—Paytm, for example, has upped its game in the general insurance space by acquiring a stake in Raheja QBE and PhonePe is actively targeting the insurance and wealth management space through sachet-based insurance and SIP products. It is also preparing aggressive plans to enter the rural markets and has aggressively recruited sales force as it implements its financial inclusion plans. WhatsApp has also announced its plans to roll out health insurance and micro-pension in partnership with SBI General and HDFC Pension Management, respectively. All these moves are set to significantly expand the DFI space.

The digital payments space is, thus, interestingly poised. The growth in the space is likely to come from the increasing penetration with offline retail merchants, especially in the cities beyond Tier 2. New technologies will further allow the merchants to offer secure personalized solutions, thus fundamentally altering the customer purchase experience and increasing the digital penetration.

Lending and Credit

As the need for credit among the poor households and the small businesses increased during the pandemic due to the lockdown and the associated impact on their income sources, this set of instruments has come into sharper focus. The share of the small-ticket personal loans has anyway jumped quite substantially in the last few years as the new-age lenders target the digitally savvy customers with limited credit history.

The key barrier to the widespread availability of the credit products for financial inclusion lies both on the institutional structure of the traditional financial services players and on the specific issues of lack of data on which to base the credit decision. While the first of these is being addressed through the entry of new fintech players as intermediaries, the increased penetration of the payment instruments has played a facilitating role in providing access to some data that could be used for the credit decisioning. There are also several technology initiatives based on artificial intelligence (AI) and machine learning (ML) and enhanced use of analytics models that are also being deployed to generate alternative data for the algorithms that increasingly drive the credit decisions. Entities such as CreditVidya and Capital Float extended the use of their solutions to use the cash flow and transaction data including information accessed through SMSes, etc., to facilitate the credit decision process.

Fintech also has a big role to play in the MSME sector. This sector, as the report of the Steering Committee on Fintech (Department of Economic Affairs 2019) brings out, contributes nearly 8 per cent of the country's GDP, 45 per cent of the manufacturing output, 40 per cent of the exports and provides the largest share of employment after agriculture. The sector has traditionally been underserved by the financial institutions and the fintech players can make a huge impact in the sector. The MSME sector requires knowledge-based lending and a significant customer connect and understanding. The use of new-generation technologies and digital initiatives can assist in various areas across sales, upsell as well as collections in this segment.

The various use cases that the report of the Steering Committee on Fintech goes on to highlight for the MSME sector include:

- Flow-based unsecured lending
- Peer-to-peer lending and crowdfunding
- Integration of Goods and Services Tax Network and TReDS
- Blockchain as public infrastructure for digital verification of identities
- Smart contracts for sale invoice discounting, etc.

The year saw several new launches targeted at the MSME sector; U GRO Capital launched unsecured loans on its Sanjeevani platform, SOLV launched a credit card with Standard Chartered Bank for the MSMEs to meet ongoing business expenses and Instamojo introduced a loan product for the segment (Hindu BusinessLine 2020). An innovative channel for credit that got further thrust during the last year has been the use of card POS machines as agents for loans. It is estimated that almost 20 per cent of all the digital transactions in India were converted into 'pay later' schemes (Bhalla 2020). There are several players such as Vivifi, Pine Labs and LazyPay which are competing for this market segment.

COVID-19 has also, however, caused further stress in banking deductions based on standing instructions. Macquarie, in a recent report, has indicated, based on NPCI data, that bounce rates among the National Automated Clearing House (NACH) debit transactions have gone up to 41 per cent by volume and about 34 per cent by value as against 31 per cent and 25 per cent in February 2020.

Insurance and Pensions

India has been at the forefront of the worldwide initiatives on insurance for the underserved sections of the population. It was among the first to come out with microinsurance regulations and in the space of the last two years has seen two separate sets of committees under the aegis of the IRDAI deliberating first on enhancement to the microinsurance products and processes and then on the need for stand-alone microinsurance players that would focus on this segment like MFIs did in the case of credit.

The first of these, that is, the Committee on Microinsurance, which submitted its report in August 2019, has suggested the use of eKYC and digital signatures besides some changes in the distribution as well as outsourcing norms in respect to the microinsurance products (IRDAI 2020a). These would supplement the efforts on simplification of the insurance products and proposal forms. This would facilitate greater access to customers and superior services in respect to the health, livestock and crop insurances and increase their penetration levels.

The second committee takes cognizance of the increased need for insurance in the COVID-19 pandemic and suggests several measures including the setting up of a new set of entities focused purely on the microinsurance market (IRDAI 2020b). It goes on to add that the efficient functioning at low costs that ought to be the hallmark of these entities can be facilitated through creation of a separate technology company that provides services to all these players.

In the current year, while the schemes with direct government intervention—the Pradhan Mantri Jeevan Jyoti Bima Yojana (one-year pure term life cover), the Pradhan Mantri Suraksha Bima Yojana (one-year cover for accidental death and disability), the Pradhan Mantri Jan Arogya Yojana/Ayushman Bharat Yojana (health insurance) and the Pradhan Mantri Fasal Bima Yojana (crop insurance)—have continued to grow, there have been several new developments in terms of the technology led enablement of customer acquisition and claims processing by new fintech players in the market.

The health insurance space has seen some innovative models where organizations such as DHAN Foundation and Uplift have created communities of their customers to provide mutual insurance products to them. These models also focus on the wellness and preventive aspects and empower the groups to take decisions on devising the product features, enrolment as well as claim settlement. The success of these models and the need to scale these up has been recognized by the IRDAI Committee that has recommended setting up of stand-alone microinsurance organizations. Another interesting model is that of SureClaim that, besides assistance in the health insurance claim, also assists in arranging for short-term credit in the form of medical loans. Innovation also continues in the automobile and property insurance space, where besides the digital intermediaries such as Policybazaar and Coverfox, other players like Toffee are offering sachet-based innovative products that are more relevant and affordable for the hitherto uninsured.

COVID-19 could actually result in an increased penetration insurance in the traditionally underinsured segments. It has resulted in significant enhancement of the awareness of insurance covers, especially health and term life insurance. IRDAI has also taken several measures to enhance the trust levels of the customers through the introduction of standardized health insurance products such as Arogya Sanjeevani, Corona Kavach and Corona Rakshak in health insurance with a standard term life product—Saral Jeevan Bima—likely to be introduced soon.

The pandemic and the lockdown have also led to all the insurance players going digital in terms of accessing the customers, either directly or through digital enablement of the intermediaries. Digital initiatives also gained ground in terms of issuance of policies which moved substantially to online issuance, and in claims where the cashless schemes in health insurance and some of the smaller claims in automobile, crop and asset insurances saw the use of new technologies like drones for surveys and use of AI and ML for automated settlement of claims.

Fintech can play an important role in the pensions space as well. An Organisation for Economic Co-operation and Development report on pensions and technology has suggested that in the international markets, fintech applications are increasing the access to pension products to a wider customer base and at the same time increasing the efficiency of the operation of the pension schemes through risk management applications, automation of investment processes and facilitation of regulatory compliance (Department of Economic Affairs 2019). There is a scope for adopting these and other global practices in the Indian pensions landscape as well.

Mutual Funds and Wealth Management

The retail investor participation in the stock market saw a clear uptrend in the current year where the investors, due to the lockdown and hence the availability of time, decided to directly participate in the stock market. The number of individual investor accounts rose 20 per cent from the start of the year to 24 m in July, according to Central Depository Services Limited. Players like Zerodha with a digital trading platform accessible on the smartphones of the investors contributed substantially to this trend. Brokerages like Upstox reported a large percentage of their growth coming from the below 35 years age segment in Tier 2 and Tier 3 cities.

The mutual fund sector has also been seeing a significant increase in the retail participation. While the share of the individual investors came down to 51.5 per cent in November 2020 (from 53.17% in November 2019), this seems to have been largely due to the much higher institutional participation. The equity-oriented mutual fund schemes still derive 88 per cent of their assets from the individual investors and the value of assets held by individual investors in mutual funds increased from ₹14.47 lakh crore in November 2019 to ₹15.37 lakh crore in November 2020, an increase of 6.21 per cent (AMFI 2020).

The low-income households have not, however, fully participated in this growth. They continue to invest in the low return products from the traditional financial institutions and in physical assets such as real estate and gold. There is need for a strong digital awareness programme that gets this section of the population to participate in a wider range of financial instruments.

There are some fintech initiatives that are emerging to address this market as they offer a range of financial planning and wealth management services. Kaleidofin, for example, offers a goal-based savings solution along with an insurance bundling and has seen a significant uptake among the first-time users. It has developed an innovative channel with extensive use of digital technology solutions through tapping the better ones among the existing users of the platform who have been trained to act as its intermediaries.

Trade Finance

Invoice trading is another nascent but growing area of fintech application in India. It provides support to MSMEs that are often handicapped in their working capital management and cash flows due to delayed payments. Recently launched fintech companies are providing platforms to such MSMEs to sell their invoices or other receivables at a discount to take care of their working capital needs (Department of Economic Affairs 2019).

TReDS, the institutional mechanism created by RBI for facilitating the financing of trade receivables of MSMEs, for example, has the potential to handle a throughput of ₹1 lakh crore with all the three companies—RXIL, A.TReDS and M1xchnage—combined; it currently handles transaction volume of around ₹15,000 crores (Mathew 2020).

This space has seen some innovative ventures like Jai Kisan being launched in India in recent times that use AI and ML as well as blockchain technologies to verify the credit worthiness, on the one hand, and to verify the invoices, on the other.

Market Model

Interplay between the Incumbents and the New Entrants

Besides the initiatives across the various product areas, there have been some innovative development that cut across areas. As the fintech market matures, there's an interesting interplay that is emerging between the incumbent financial services players and the new entrants into the market. The new entrants, while disrupting the business models of the incumbents, are also playing a complementary role where there is gap in the product or customer access of the traditional players. This complementarity is also evident in the traditional markets where the new fintech players are providing process and technology platforms to the existing players to improve their efficiency. An example of these is the positioning that WhatsApp has sought to take in India in terms of facilitation of the banks' processes before it launched its own UPI-linked payment product.

There have also been several initiatives launched under the aegis of the World Bank that have seen success in making the market models more efficient. The initiatives started through the National Rural Livelihoods Mission and then the SHG–bank linkage are now focused on digitization of the payments systems, digitization of the processes including digital bookkeeping which have seen some success. The 'agripreneur' model being implemented in Bihar seeks to digitize the entire value chain.

NPCI has recently allowed small finance and payment banks as well as fintechs to participate as its shareholders. This broad-basing of the shareholding stems from RBI instructions as well as a likely move to pre-empt the competition from the recently approved New Umbrella Entity, the entities associated with which are expected to bring in further innovation into the digital payment landscape.

There is also a nascent trend towards the emergence of competition between the traditional players and the new entrants. In the international markets, pureplay digital banks compete for the existing customers and the new breed of fintech lenders compete with the microfinance players as well as the small banks. Studies have suggested that 'the efficiency of the traditional providers also matters. More inefficient banking systems (with higher overhead costs to total assets) are associated with more DFI' (International Monetary Fund 2020). These trends are beginning to impact the Indian market as well.

Process Innovation

A mere digitalization of the existing processes without making them more efficient, while it helps increase the formalization process, does not enhance the customer experience and the efficiency of the players. Digital initiatives have helped in fundamentally transforming the processes; the year saw several process innovations being introduced in the various areas of financial services—WhatsApp-based banking services with its AI-driven conversational banking, AI–natural language processing-based services offering transactions through Amazon Echo and other Alexa-enabled devices, and the use of Bots for onboarding of customers and for the post-sales services made the customers' purchase process more streamlined. These initiatives will also begin to impact the underserved by making the availability of financial services more ubiquitous and easier to access directly or through intermediaries having the required technology infrastructure. Technology players such as Mihup and Floatbot can also be leveraged to offer vernacular-based voice bot and chatbots for providing sales, collections services as well as other customer services in the hinterland.

Besides these, AI was deployed for using various data points for credit scoring in data-sparse situations, use of online underwriting processes led to reduction in the time for underwriting, technology was deployed to assist with superior financial management and the use of blockchain technologies was initiated to reduce fraud. In another innovative digital initiative, ICICI Bank has started using satellite images of farmlands to help assess farmers' credit worthiness.

Several lenders started deploying AI-based early warning systems that will give the warning signals on a dynamic basis based on information collected from various internal and external sources to assist in initiating timely corrective action.

All these initiatives are also beginning to impact the traditionally under-penetrated segments' participation in in the financial services ecosystem. The efforts to rebuild the rural economy through provision of the last-mile linkage—creation of ecosystems and communities to take care of the sorting, warehousing, transportation as well as the financing requirements—are being holistically addressed through a better appreciation obtained with the use of new technologies.

KEY ISSUES AND CHALLENGES

As the preceding sections have demonstrated, there is a clear trend towards digitalization of the various areas of financial inclusion which has been furthered by the COVID-19 pandemic and the resultant lockdown in India. This is quite consistent with the trends that have been seen in the international markets as well. DFI is also associated with benefits to the economy in terms of higher GDP growth through the formalization of a large, hitherto excluded segment of the population. As a recent IMF study points out,

> *[T]he countries with higher digital financial inclusion will find it relatively easier to (a) ensure continued access to financial services, including by maintaining credit flows to households and businesses while keeping people safe; (b) deliver government support effectively and securely; and (c) support consumption, innovation, and hence productivity through digital economy developments. (International Monetary Fund 2020)*

At the same time, there are concerns of unequal access to infrastructure and an inadequate understanding of the new products and technologies. In fact, the new application areas of technology such as big data and analytics may lead to further exclusion of some segments where data sources are limited.

The future growth of the digital initiatives and their continued success in the post-pandemic economic environment is thus clearly predicated on the initiatives that the regulators and the market players take in respect to some key areas. These relate to (a) the growth of the appropriate infrastructure for the digital initiatives to be launched and to thrive in, (b) financial literacy including process literacy for the target customer segments, (c) measures to ensure gender equality in their ability to access the digital platforms and (d) appropriate regulatory and policy initiatives to address the grievances and customer-protection concerns that will necessarily arise in the initial stages of the establishment of the digital financial ecosystem. All these will also, in the Indian context, need to be coordinated across the various stakeholders. These various areas as well as the imperatives in these for the success of the DFI initiatives are elaborated as follows.

Infrastructure

India is extremely well positioned in terms of the overall technology infrastructure with the fast adoption of Aadhaar and the availability of India Stack, thus facilitating potential usage in delivering national services (benefit transfer, health care, pensions, etc.) and digital financial services. However, an evaluation of the policy measures for financial inclusion would necessarily need to take into account the access to infrastructure like mobile phones and the internet for the end customers of the financial institutions. A failure to do so, or a move to unaided digital access, could, in fact, be counterproductive and lead to greater financial exclusion of large parts of the market. Initiatives to digitally enable the intermediaries who in turn reach out to the end users both for onboarding and transactions could be one way of mitigating this risk till adequate infrastructure access is ensured.

Financial literacy

The consensus view among the various market participants is that while there have been huge strides in terms of enhancing the product literacy, thus resulting in greater awareness at least of the banking products, the target segments actually need significantly more process literacy. It is the inadequacy of these measures that leads to their inability to independently access and transact. Efforts are needed, therefore, to create literacy programmes that focus on technology and process awareness through initiatives like demo tools as well as gamification. DigiVAARTA launched by the Ministry of Electronics and Information Technology as a digital financial literacy tool is a case in point. The initiative from the World Bank to create Financial Literacy Community Resource Persons seeks to provide centralized training to identified resources who can then take on the responsibility of spreading awareness and financial literacy in the remote areas.

As RBI's (2020) NSFI suggests, 'emphasis is now on to increase the financial awareness among various vulnerable groups in the society … who require handholding'. As a part of the action plan for this area, it goes on to suggest the following measures: '(a) develop financial literacy modules through the National Centre for Financial Education that cover financial services in the form of audio–video content/booklets, etc. These modules should be with specific target audience orientation (e.g., children, young adults, women, new workers/entrepreneurs, senior citizens, etc.) and (b) focus on process literacy along with concept literacy which empowers the customers to understand not only what the product is about but also helps them how to use the product by using technology-led digital kiosks, mobile apps, etc.'

The importance of financial literacy as a prerequisite for financial inclusion, especially when it is digital, is also highlighted in the National Strategy for Financial Education 2020–2025 (RBI et al. 2020), a paper where all the regulators—RBI, Securities and Exchange Board of India, IRDAI and Pension Fund Regulatory and Development Authority—have evolved a roadmap jointly with the National Centre for Financial Education. In its chapter on policy design, the document highlights the various components of financial education as follows: (a) basic financial education consisting of the fundamental tenets of financial well-being, this acts as a foundation for sector-specific and process education; (b) sector-specific financial education focusing on 'what' of the financial services and the contents covering awareness on 'dos and don'ts', rights and responsibilities, safe usage of digital financial services and how to approach the grievance redressal authority and (c) process education which is crucial to ensure that the knowledge translates into behaviour; these contents are to be developed in the form of easy-to-understand audio/video, animated posters, etc. It also suggests that the channels for the financial education be expanded to include newer modes such as social media platforms, community radios, technology kiosks and chatbots.

Gender equality of access

An obvious concern is that women may have poorer access to appropriate infrastructure like mobile phones and could also lag behind in terms of financial and digital literacy. The policies would also need to take into account the other cultural and social issues that may block women's access to financial services, especially those related to creation of financial assets such as mutual funds and pension accounts.

Policy and regulatory initiatives

There is also a need to focus on the areas that could potentially impact the trust associated with the financial services product. Any adverse experiences of the users either in terms of rampant errors in being able to access and transact, transaction fraud, cybersecurity issues and, to a certain extent, data privacy can result in a significant setback to the inclusion initiatives. A NACH bounce, for example, has the same penalty for a normal as well as a Jan Dhan account; this causes significant distress to the small account holders.

The NSFI 2019–2024 goes on to suggest, in this context, the need to

> *(a) develop a robust customer grievance portal/mobile app which acts as a common interface for lodging, tracking, and redressal status of the grievances; (b) operationalize a common toll free helpline which offers response to the*

queries pertaining to customer grievances across banking, securities, insurance and pensions sectors; and (c) develop a portal to facilitate inter-regulatory coordination for redressal of customer grievances.

Technology adoption by the regulators needs to be encouraged for improving the regulatory processes (RegTech) and for the supervision of the market (SupTech). While it is imperative, for example, to create a monitoring mechanism for the fintechs that are not directly regulated, the supervision and regulation measures would need, at the same time, to ensure that innovation in the sector is not thwarted by over-regulation. The recent moves by RBI as well as IRDAI to create and nurture innovation hubs and regulatory sandboxes that can test new financial innovations in a well-designed supervisory framework are indeed steps in the right direction.

Effective coordination and progress monitoring: The NSFI paper highlights the importance of this area: 'there needs to be a focused and continuous coordination between the key stakeholders viz. the government, the regulators, financial services providers, telecom service regulators, skill training institutes, etc.' Towards making the data collection process for the evaluation of the progress of financial inclusion, it suggests the various areas of data capture (across access, usage and quality) as also the need for 'the integration of data among all the financial sector regulators should be presented in the form of a digital MIS dashboard that can be analysed granularly so as to understand the issues hampering financial inclusion at the grassroots level'.

Thus, for the promise of DFI to be realized with the resultant beneficial impact in terms of reduced income inequalities, and a sustained democratization of financial services through greater access to the formal sector products—payment transactions, credit, insurance, pensions, wealth management, etc.—to be realized, the forces of digitalization among the established financial services players and the new fintech and insurtech entrants need to be nurtured with the right policy and awareness programmes from the government, regulators as well as the industry participants themselves.

APPENDIX 5.1:
Report of the Steering Committee on Fintech-related Issues

Summary of Recommendations—Chapter 3: Fintech for Financial Inclusion

1.	Fintech for lending by cooperatives and other financial institutions	The Committee noted that currently the credit bureau records for farmer loans or Kisan Credit Card Schemes, largely given by the cooperative sector although commercial banks' share is also significant in terms of total exposure, are not collected in any central registry. This leads to a situation of non-availability for credit history for small and marginal farmers leading to denial of credit to them and possible over-leveraging. The Committee notes that some fintech companies, CreditMantri, CreditVidya, Samunnati, to name a few, are using AI and ML to create alternate lending data score, a vital requirement for fulfilling the financial inclusion agenda. The Government of India in 2017–2018 Budget provided an allocation of ₹1,900 crore over three years support to National Bank for Agriculture and Rural Development (NABARD) for computerization and integration of all 63,000 functional PACS with the Core Banking System of District Central Cooperative Banks. This presents a great opportunity to infuse fintech. *NABARD should take immediate steps to create a credit registry for farmers with special thrust for use of fintech along with core banking solutions by agri-financial institutions, especially cooperative financial institutions, for credit scoring, default analytics, predictive crop analytics, repayment, monitoring fraud control and improving efficiency in credit services.*
2.	Leveraging fintech in agri-insurance/PMFBY	As per the current Pradhan Mantri Fasal Bima Yojana (PMFBY) guidelines, only financial institutions such as commercial banks, co-operative banks and regional rural banks are eligible as implementing agencies to cover borrowers under PMFBY. The guidelines also state that the loanee farmers will be covered only through banks/financial institutions, whereas non-loanee farmers shall be covered through banks and/or insurance intermediaries. This keeps NBFC lenders, most of which leverage on fintech, outside the claim settlement process, enhancing risk of default by borrowers. Consequently, NBFC firms that have lent seasonal agricultural operations loans are forced to cover their farmers as non-loanee farmers and need an IRDAI licence to become an insurance intermediary. There is need to extend the concept of loanee farmers to include credit advanced by fintech-based NBFC lenders. *Fintech firms may be provided with a supportive regulatory climate to participate in agri-credit and insurance markets effectively, given that the demand for agri-credit and insurance far outstrips the existing supply. Insurance premium payments (for national as well as private insurers) should be accepted through mobile and other digital modes to enable speedy and hassle-free coverage, especially during short cultivation seasons.*
3.	Fintech in microinsurance and employees insurance	*Deployment of fintech in microinsurance enrolment, claims management, subscriber information, etc., will enable cost reduction and exponential growth in coverage. The Committee recommends that Employees' State Insurance Corporation, Employees' Provident Fund Organisation and PSE insurance companies must deploy fintech in the front-end and back-end processes to reduce risks, widen coverage, enhance subscriber confidence and support seamless claims management.*
4.	Fintech in micro-pension and EPFO	The Committee notes that only 7.4 per cent of the working age population in India is covered under a pension programme. That compares with 65 per cent for Germany and 31 per cent for Brazil, another major emerging market economy. The Committee recommends that use of fintech in micro-pension schemes such as the Atal Pension Yojana, Employees' Provident Fund (EPF) and other retail schemes can enable reduction of administrative costs, create greater customer traction and make way for significantly higher enrolment levels and competition. Harnessing fintech would enable monthly contributions to be paid in several instalments over each month, making it possible for daily-wage earners. Even for non-micro-pension subscribers, fintech can help in personalization through a dashboard, investment options, integration with other rewards platforms and advanced analytics. *The Committee recommends creating a common digital platform for all micro-pension schemes and government pension schemes, including EPF, through which pension subscribers can subscribe to specific schemes seamlessly and reduce access barriers by allowing payments through various modes such as Jan Dhan Yojana accounts, debit card, credit card, internet banking, mobile wallets, etc.*

5.	Fintech adoption in MUDRA	Revising the refinancing criteria for digital lenders at competitive rates through MUDRA (revising margin caps for small-ticket MSME loans) and SIDBI (relaxation of profitability requirements) are required to be considered. Currently, commercial banks, regional rural banks and scheduled cooperative banks are eligible to avail of refinance support from MUDRA for financing microenterprise activities. *The MUDRA programme needs to open up credit supply channels through non-banking fintech credit companies, besides mandating use of fintech by all players to enable ease of delivery of services like AI/ML-based credit scoring system for applicants leading to reduced risks and costs of lending.*
6.	Common fintech platform for small saving schemes	Small savings schemes, as 8 products, are being distributed through a large network of distribution agencies, that is, 154,000 post office spread all over the country, nearly 8,000 branches of the nationalized banks. *In order to expand the reach of small savings schemes, provide ease of access and transactions to consumers, reduce risk of frauds, enable trading in secondary markets, etc., the Committee also recommends that all small savings products, which are neither accessible online nor available in demat form, should be brought on a common online platform in demat form. For vulnerable groups and weaker sections who are neither digitally nor financially literate, a combination of both human interface and technological application may be effective.*
7.	Fintech in public sector bank education loans	Education loan disbursals climbed 9.25 per cent in FY18 to touch a portfolio size of ₹82,600 crore as of March 2018, with share of commercial banks declining from 90 per cent to 83 per cent and non-performing assets (NPAs rising to 8.15 per cent. NBFCs aided by fintech have begun to play a small but increasing role. The Vidya Lakhsmi portal has enabled a single-window electronic platform integrating access to educational loans from all commercial banks. *The Committee recommends use of fintech by public sector commercial banks to enhance credit scoring, follow-up of repayments, predictive analytics, etc., so as to enable reduction of NPAs in this space.*

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Microfinance Mainstreamed: Challenge, Response and Respectability

Alok Prasad

6

Poverty is not the result of rapacious financiers exploiting the poor. It has more to do with the lack of financial institutions.

—*Niall Ferguson*

OVERVIEW: THE JOURNEY OF A DECADE

On 15 October 2010, the 'Andhra Pradesh Microfinance Institutions (Regulation of Moneylending) Ordinance' was promulgated. Almost overnight, this ill-conceived state law brought the rapidly growing, pan-India microfinance industry to its knees. Fast forward to 2020. Prime Minister Shri Modi, in his address to the UN General Assembly on 26 September, chose to make a reference to microfinance and how it helps women. This encapsulates the rather tempestuous, decadal journey of microfinance in India.

Microfinance, or more specifically, micro-credit (both terms tend to be used interchangeably) began with the self-image of, well-nigh, being the silver bullet for dealing with the global problem of poverty alleviation. From a heady start, full of hope and promise, it turned controversial as it began to attract profit-oriented capital. And, for a relatively modest-sized industry in financial terms (currently around 1.17% of GDP in India), it went through more than its fair share of vicissitudes. In turn, it is feted, demonized, confused with informal sector players/moneylenders, regarded with suspicion, accepted as an integral component of the national financial architecture and, finally, respected for its achievements.

Looking at its chequered history in India, the turning point for the industry was the initial public offering (IPO) of SKS Microfinance in August 2010. Till then, microfinance companies were viewed quite benignly by policymakers and had been lightly regulated. Conversion from the 'not-for-profit' NGO format to the 'for-profit' companies in the non-banking financial company (NBFC) format had increasingly become the norm. The 'for-profit' model was attracting significant amounts of commercial capital, and microfinance companies in the NBFC format were expanding almost exponentially. Then came the precipitous fall. Practically within months of the IPO, price gouging and profiteering from the poor became industry descriptors. Growth halted, capital became scarce and the future looked dark. Focused intervention by the Reserve Bank of India (RBI), entrepreneurial resilience and the robust multi-stakeholder engagement model of the two industry bodies, MicroFinance Institutions Network (MFIN) and Sa-Dhan, ensured the revival of the industry within a fairly short span of time.

From a decadal perspective, the leitmotif of the industry has been one of mainstreaming and maturing, but at the cost of mission drift.

Looking holistically at the activity of microfinance, its full-scale integration into the national financial system has been a significant achievement. Commercial banks (including the SHG–Bank linkage programme [SHG-BLP]), small finance banks (SFBs) and the NBFC-MFIs are seen as the three pillars on which the government and RBI agenda for financial inclusion stands.

The interplay and initiatives of each of these categories of players are the warp and woof of the microfinance narrative, which will be commented upon in this chapter. Since this publication has separate chapters for each category of institutions, the focus will, of course, be on non-bank players, specifically NBFC-MFIs.

Broadly speaking, the areas covered in this chapter will be the macro-operating environment in the year under review (FY 2020), significant industry developments, overall industry performance and trends, regulatory issues, key risks and a forward-looking prognosis. In this context, it is important to note that the principal data sources for the microfinance companies are the two industry bodies, MFIN and Sa-Dhan. While MFIN data are NBFC-MFIs centric, Sa-Dhan covers a larger universe of players. Both organizations use self-reported and audited data from their member institutions. This is supplemented by the industry-level data provided by credit information companies (CICs). Over the years, data collection has improved. However, given the considerable churn in the industry, with significant players becoming banks, SFBs, business correspondents or even getting acquired, the number of institutions in each category has been changing. Resultantly, a strict comparison of the data points from different sources and for different years is not possible. However, the overall trend lines as depicted in the various figures are accurate and reflective of the state of the industry.

The progression of the industry across a few key metrics may be seen from the various figures. Apart from the impressive growth of the industry, what stands out is that the dominance of the NBFC-MFI has ended and the commercial banks are occupying the centre stage. The entry of the SFBs is another significant element. This, essentially, means that the activity of micro-credit has become increasingly mainstream and that the market share of non-banks is likely to continue to shrink. In this context, the issue of regulatory arbitrage, which will be discussed later, between banks and non-banks assumes even greater criticality.

Some of the long-term industry trends can be seen from Figures 6.1–6.6.

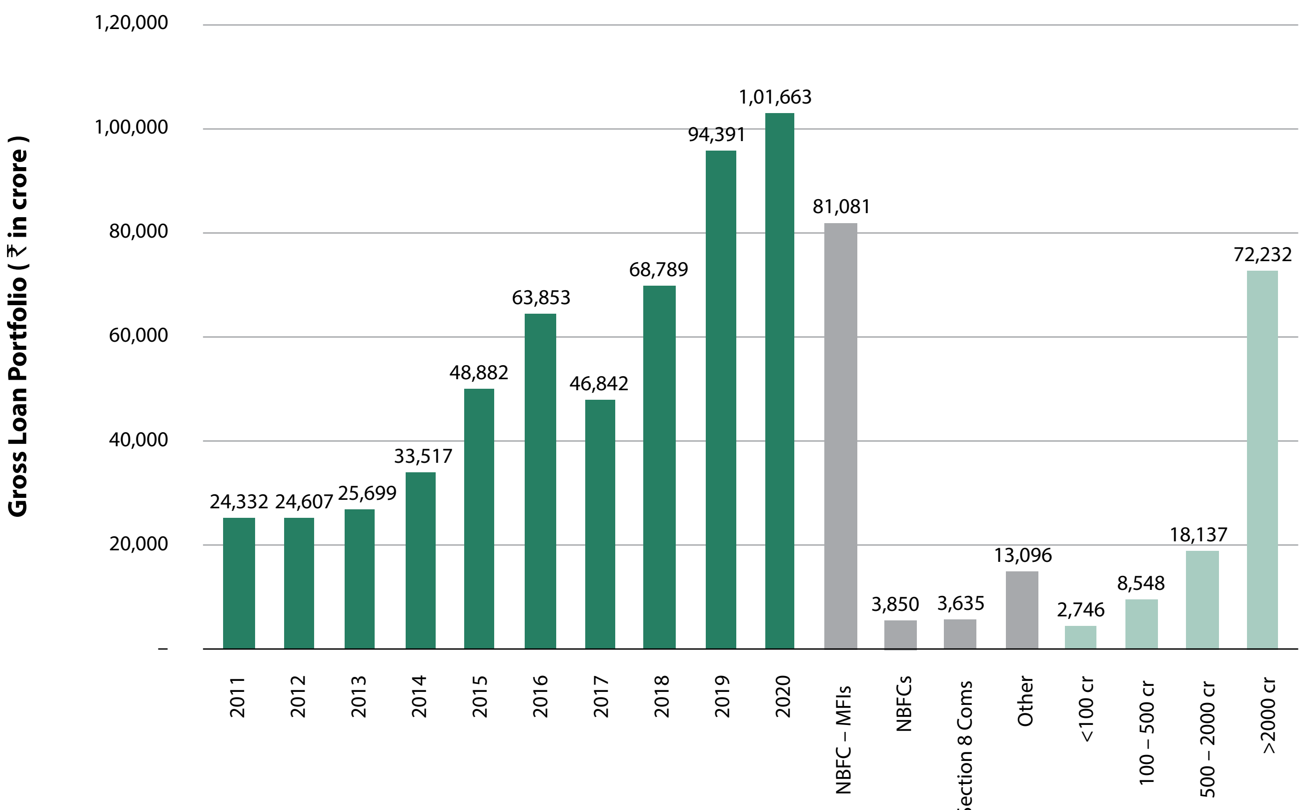


Figure 6.1: Gross Loan Portfolio (GLP; ₹ in Crore): Yearly Trends and Category-wise Break-up for 2020[4]

Source: Sa-Dhan BMR 2020.

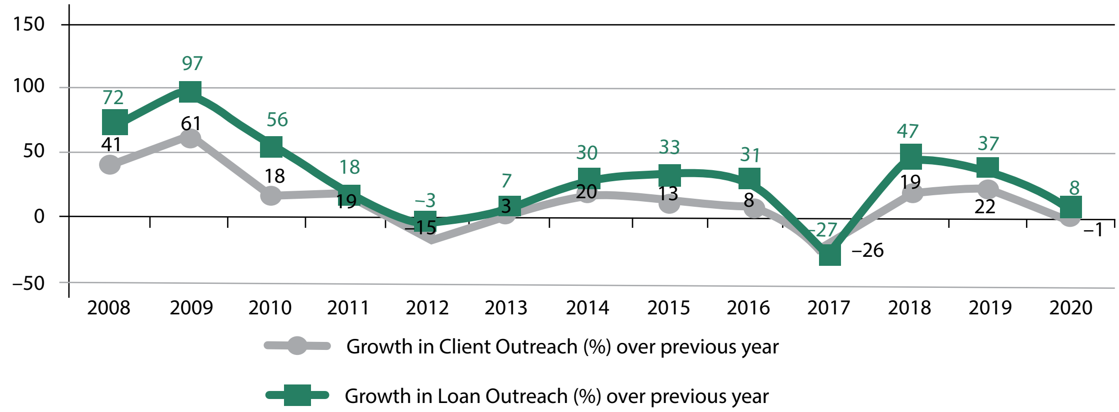


Figure 6.2: Growth Fluctuations in Outreach and Loan Outstandings

Source: Sa-Dhan BMR 2020.

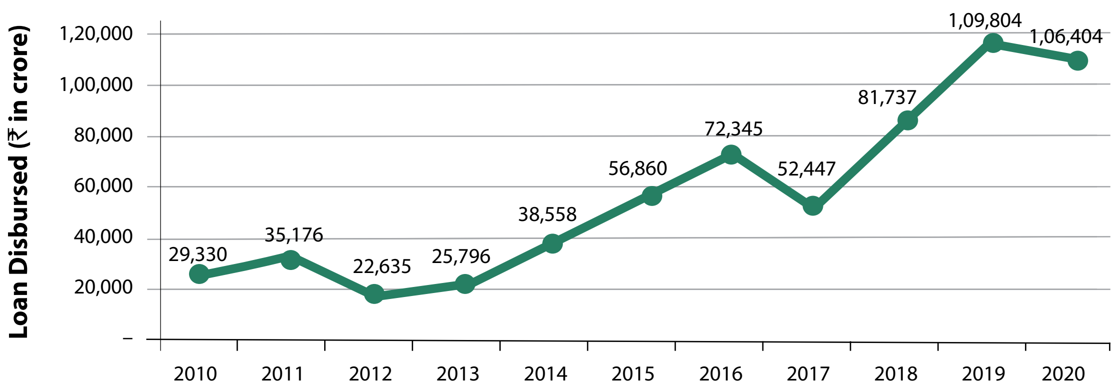


Figure 6.3: Loan Disbursements

Source: Sa-Dhan BMR 2020.

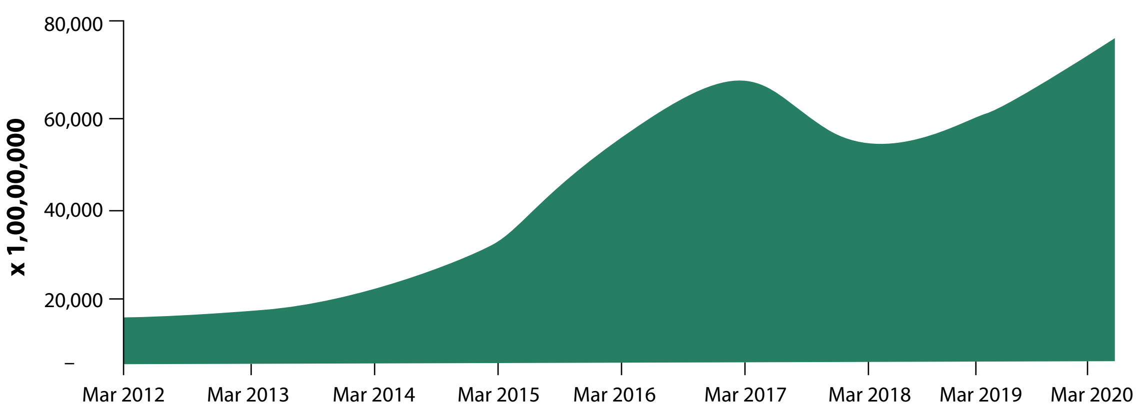


Figure 6.4: Gross Loan Portfolio[2]

Source: MFIN data.

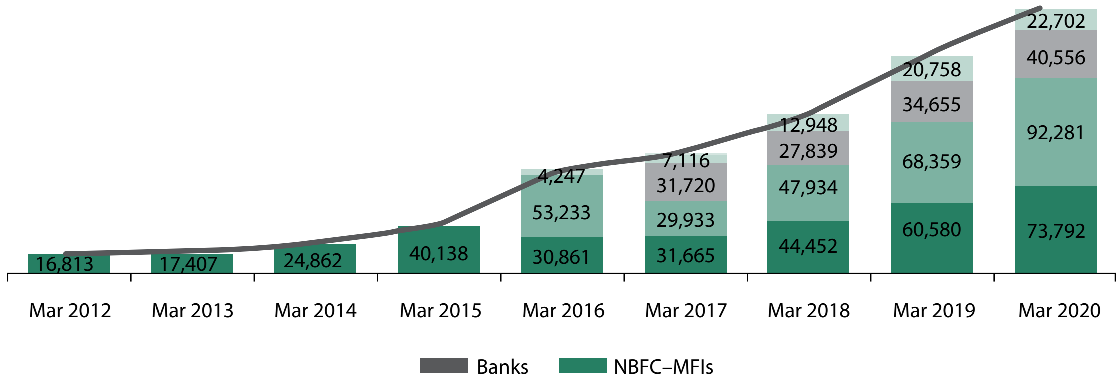


Figure 6.5: Micro-credit Portfolio[2]

Source: MFIN data.

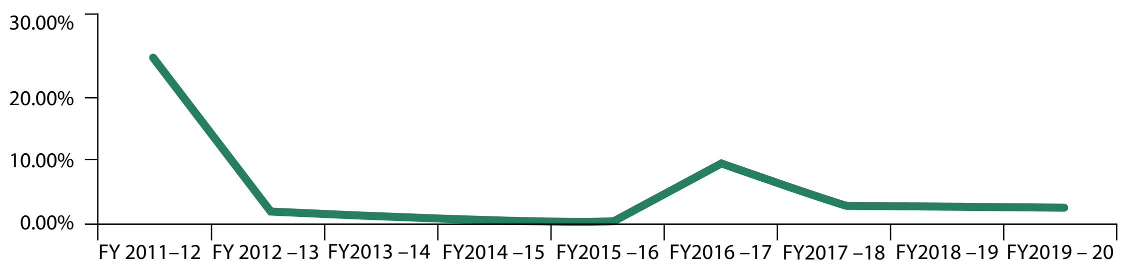


Figure 6.6: Portfolio at Risk (PAR) > 30 Days[2]

Source: MFIN data.

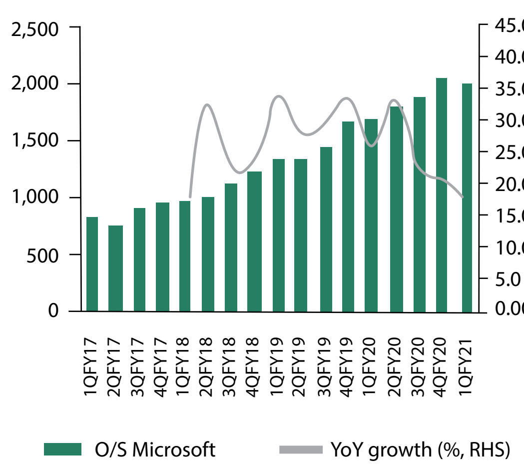


Figure 6.7: Micro-credit Growth Trends[6]

Source: MFIN, HDFC Securities Institutional Equities Research (HSIE) .

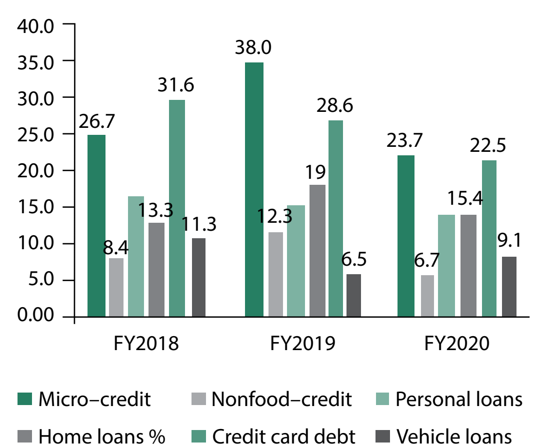


Figure 6.8: Growth Trends—Micro-credit versus Other Credit Segments

Source: MFIN, RBI, and HSIE Research.

The nearer term growth trends and a comparison with other retail lending businesses/non-food credit may be seen from Figures 6.7 and 6.8.

Looking at both the decadal trend and the near-term status, what stands out are the high portfolio growth rates and high repayment rates, barring episodic events like the Andhra crisis of 2010 or the demonetization policy measure of November 2016.

MACRO-OPERATING ENVIRONMENT AND MARKET LANDSCAPE

In FY 2020, the Indian economy further slowed down with multiple factors weighing on the growth impulse, including a contraction in private consumption, a drag on gross fixed investments, a decline in manufacturing activity/capacity utilization and the banking system under significant stress.

The RBI made four consecutive cuts in its policy rates before holding the rate in October 2019. However, to support economic growth, it returned to a more accommodative stance in February 2020. Notwithstanding RBI's supportive policy measures, monetary transmission remained weak and the overall credit growth of scheduled commercial banks (SCBs) was anaemic—dropping to 6.4 per cent compared to 13.1 per cent in March 2019.

Other factors such as the Punjab and Maharashtra Co-operative Bank failure and the Yes Bank crisis contributed to the overall negative sentiment. After many years, even the issue of confidence in the stability of the banking system entered the public discourse. On the positive side, bad loan resolutions under the Insolvency and Bankruptcy Code (IBC) framework began to get some traction.

For the NBFC sector, the overhang of the Infrastructure Leasing & Financial Services (IL&FS) meltdown in September 2018, followed by the Dewan Housing Finance Corporation Ltd (DHFL) fiasco, continued well into FY 2020. This, essentially, translated into a flight to safety for banks, high levels of risk aversion among all categories of lenders, a liquidity squeeze (particularly impacting smaller NBFCs/NBFC-MFIs), depressed ratings and a heightened focus on governance coupled with greater supervisory scrutiny by the regulators.

It is noteworthy that there was a sharp spike in the NBFC certificate of registration (CoR) cancelled by the RBI in FY 2019. Comparative numbers are 1,851 CoRs cancelled in FY 2019, while only 224 cancelled in FY 2018 (Figure 6.9).

As far as NBFC-MFIs are concerned, while the companies registered with the RBI went up to a total of 97 in March 2020, there was a downward trend in new registrations.

RBI. No. of New NBFC-MFI Registrations
FY 2018 = 17
FY 2019 = 09
FY 2020 = 05

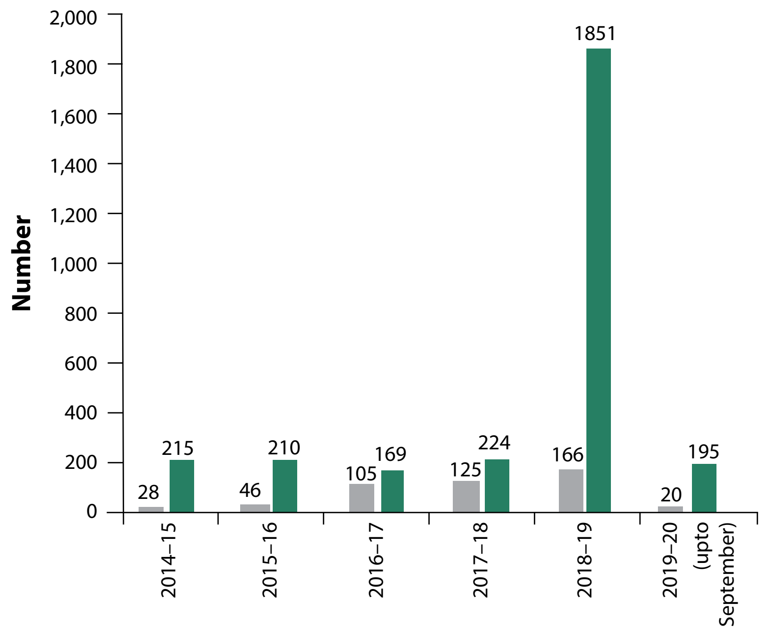


Figure 6.9: Registrations and Cancellations of CoR of NBFCs[3]

Source: RBI Report on Trends and Progress of Banking in India 2018–19.

The challenges and uncertainties notwithstanding, the microfinance industry stayed on the growth path during FY 2020. However, competitive pressures, combined with liquidity issues and idiosyncratic risks, made for an uncertain future, particularly for smaller players. In addition, the resurfacing of political risk, even though largely localized, set alarm bells ringing. In this context, the problems faced by some of the industry players in Assam (more on that later) were significant. Also, natural calamities, perhaps driven by the global phenomenon of climate change, also emerged as a growing risk factor. Among the noteworthy extreme weather events in the year under review were the heavy floods in Kerala, Karnataka, Maharashtra and Gujarat, Cyclone Fani, which hit Odisha, and both floods and a heatwave in Bihar.

In sum, external episodic events have acquired a certain pattern of regularity and are, therefore, integral to the operating risks the industry now faces. A secular rise in credit costs is a consequence that all microfinance players have to increasingly reckon with.

From a competitive standpoint, the growing market share of commercial banks plus SFBs is a trend that is unlikely to reverse itself. For commercial banks, the stabilization and deepening of the business correspondent model, acquisitions such as Bharat Financial Inclusion Ltd (BFIL) by

IndusInd Bank and Bandhan Bank's continued focus on its legacy of microfinance business have been key growth drivers. For the SFBs, it is an aspect of their core business strategy. For NBFC-MFIs, the stark reality is that the days of 'lazy lending' (a term coined by Dr Rakesh Mohan, ex-deputy governor, RBI) based on the old-style joint liability group (JLG) model are coming to an end. Perforce, future growth will, in large measure, have to come from widening and deepening their market presence, product innovation, greater adoption of technology and, hopefully, changes in the current regulatory regime.

The broadly adverse market circumstances also made investors more cautious. Valuations trending downwards, promoter's expectations getting tempered and the flow of deals slowing down were inevitable outcomes. Two of the planned IPOs by NBFC-MFIs for FY 2020 got shelved. Spandana Sphoorty Financial Ltd chose to go ahead with its IPO, but the market response was muted with the issue being oversubscribed just 1.05 times.

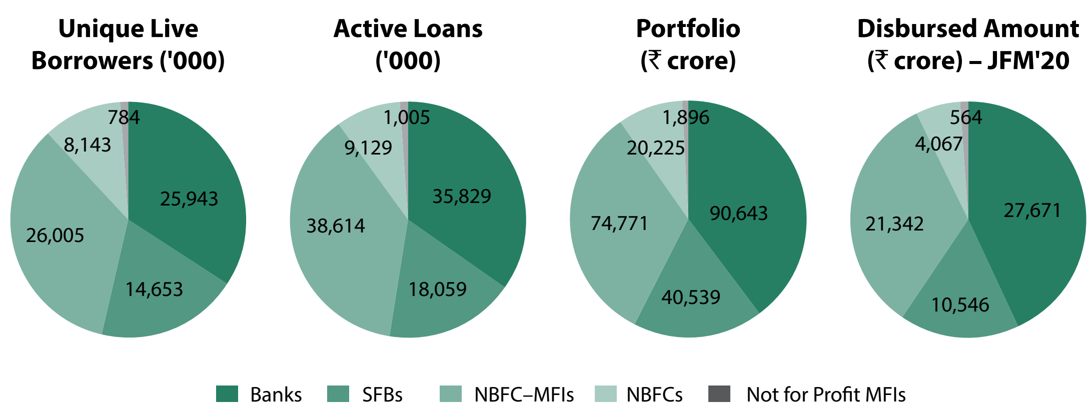
On the positive side, the greater interest shown by domestic investors, the introduction of innovative debt instruments such as the 'Multi Originator Securitisation' (MOSEC) by Northern Arc and the overall greater integration with the capital markets were some of the significant signs of progress.

Another important development which the larger NBFC-MFIs specifically had to contend with during the year was the shift to Indian accounting standards (AS). While the impact of its balance sheet varied across institutions, the shift itself was quite burdensome.

INDUSTRY DEVELOPMENTS AND PERFORMANCE

Like the curate's egg, the performance of the microfinance industry during FY 2020 was good in parts. During the previous fiscal period, at the balance sheet level, the impact of demonetization had been fully absorbed by microfinance companies. Thus, the industry entered FY 2020 with the demonetization-related losses written off and capitalized adequately.

For starters, Figure 6.10 gives a snapshot of the industry across a range of key metrics.



Snapshot as on 31 March 2020	Banks	SFBs	NBFC–MFIs	NBFCs	Not–for–Profit MFIs	Total Industry
Unique Live Borrowers ('000)	25,943	14,653	26,005	8,143	784	75,528
Active Loans ('000)	35,829	18,059	38,614	9,129	1,005	1,02,636
Portfolio (₹ crore)	90,643	40,539	74,771	20,225	1,896	2,28,074
Disbursed Amount (₹ crore) – JFM'20	27,671	10,546	21,342	4,067	564	64,190
Average Ticket Size (₹)– JFM'20	41,171	34,638	30,240	38,191	27,253	35,474
30+ Delinquency (POS)	1.54%	1.57%	1.89%	2.91%	0.32%	1.77%
90+ Delinquency (POS)	0.67%	0.67%	1.07%	1.55%	0.14%	0.87%

Figure 6.10: Microfinance Industry Snapshot as on 31 March 2020[5]

Source: SIDBI-Equifax Microfinance Pulse Vol. VI (Sep 2020).

Gross Loan Portfolio

At an aggregate level, the GLP of the industry grew to ₹ 230,165 crore—a healthy 28 per cent over the previous fiscal year (Figure 6.11). Disaggregating this by categories of lenders, commercial banks had the largest share at 40 per cent, followed by NBFC-MFIs at 33 per cent and SFBs at 17 per cent. Looking at the year-on-year growth, the NBFC-MFIs were in the lead with 38 per cent growth followed by SFBs at 34 per cent and commercial banks at 24 per cent. Interestingly, the not-for-profit MFIs grew by 39 per cent, even though their market share was a miniscule 1 per cent. The robust growth shown by both the industry and the NBFC-MFIs in particular clearly demonstrated that demand from microfinance clients remained strong. That said, the growth momentum appeared to be slowing, and the industry was no longer witnessing the supranormal GLP growth, as was the case a few years earlier.

Disbursements

The trends in disbursement by different categories of institutions, both in terms of value and volume of loans, while broadly tracking GLP numbers, show some interesting variations. In terms of loan volume (number of loans), the year-on-year growth for commercial banks, NBFCs and NBFC-MFIs was marginally negative. In terms of market share, the rankings mirrored the GLP rankings.

Looking at the disbursements in value terms, the market share of commercial banks at 49 per cent was significantly higher than the 40 per cent share in GLP terms. For the NBFC-MFIs with a market share of 30 per cent and SFBs at 15 per cent, the numbers were close to their GLP market share. This underscores the fact that the growth of commercial banks is being driven by their propensity to make higher ticket loans, particularly in the past few years.

The muted year-on-year growth of 1 per cent in value terms and the negative growth in terms of loan volumes reinforces the fact that the growth momentum of the industry is slowing and the rates of new customer acquisition are falling.

Until recently, the NBFC-MFIs occupied the centre stage of microfinance activities in the country. Commercial banks have now overtaken them, primarily as an outcome of Bandhan Bank's growth and the acquisition of BFIL by IndusInd Bank. In the NBFC-MFI category, the dominance of the major players is growing, with over 97 per cent of the portfolio being held by the top 23 companies (Figure 6.12).

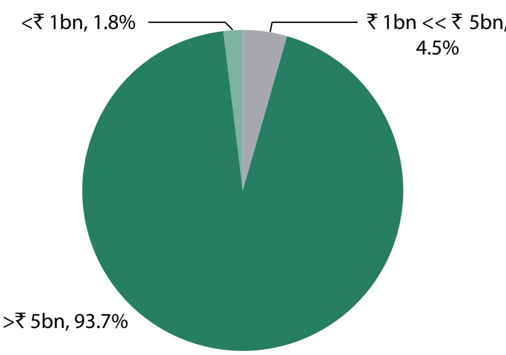


Figure 6.12: Share of Different-sized NBFCs in Total NBFC-MFI Micro-credit

Source: Sa-Dhan and HSIE Research.

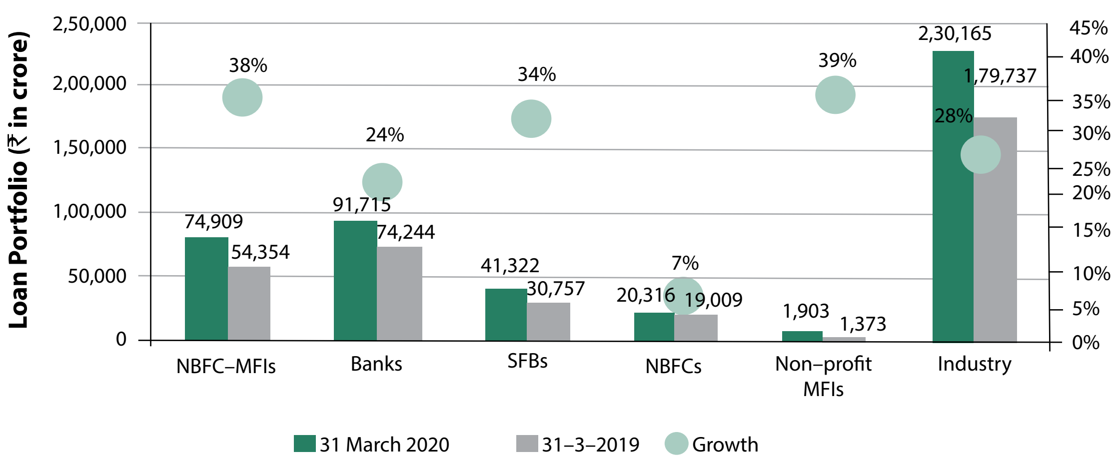


Figure 6.11: Portfolio Outstanding across Lenders

Source: Sa-Dhan BMR 2020 (based on Equifax data).

A more detailed representation of the GLP and the disbursements is provided in Table 6.1.

Table 6.1: Industry GLP and Disbursements

Indicators	Type of Lender	No. of Lenders	As on 31 March 2020	Market Share (%)	No. of Lenders	As on 31 March 2019	Market Share (%)	Year-on-year Growth (%)	Change in Market Share
Loan outstanding (₹ in crore)	NBFC-MFIs	86	74,909	33	81	54,354	30	38	↑
	Banks	13	91,715	40	13	74,244	41	24	↓
	SFBs	8	41,322	17	8	30,757	17	34	
	NBFCs	50	20,316	9	34	19,009	11	7	↓
	Non-profit MFIs	27	1,903	1	12	1,373	1	39	
Total	**Industry**	**184**	**230,165**	**100**	**148**	**179,737**	**100**	**28**	
Disbursement volume (no. of loans): April 2019 to March 2020 (Rs in lakh)	NBFC–MFIs	85	270	37	74	328	37	–5	
	Banks	13	286	41	13	199	39	–7	↑
	SFBs	8	113	16	8	103	16	0	
	NBFCs	30	48	5	21	54	7	–21	↓
	Non-profit MFIs	27	8	1	8	8	1	0	
Total	Industry	163	725	100	134	692	100	–7	
Disbursement value: April 2019 to March 2020 (Rs in crore)	NBFC-MFIs	85	77,612	30	74	84,918	31	1	↓
	Banks	13	116,546	49	13	82,549	46	3	↑
	SFBs	8	38,676	15	8	31,597	15	6	
	NBFCs	30	17,086	5	21	17,572	7	–15	↓
	Non-profit MFIs	27	2,178	1	8	2,060	1	–6	
Total	**Industry**	**163**	**252,098**	**100**	**134**	**218,696**	**100**	**1**	

Source: Sa-Dhan BMR 2020 (based on Equifax data).

From a geographic standpoint, the top 10 states account for over 80 per cent of the industry portfolio. The state-wise GLP (top 10) and the year-on-year growth may be seen from Figure 6.13.

Figure 6.13: Top 10 States—Portfolio Outstanding as on March 2019 and March 2020

Portfolio Outstanding (₹ crore)

Top 10 States	March 2019	March 2020	Year-on-year Growth %
Tamil Nadu	24,611	32,399	32%
West Bengal	26,987	30,873	14%
Bihar	18,036	26,163	45%
Karnataka	15,294	19,015	24%
Maharashtra	12,420	16,353	32%
Uttar Pradesh	10,812	15,224	41%
Madhya Pradesh	9,905	13,277	34%
Odisha	11,412	12,838	12%
Assam	12,021	11,310	-6%
Kerala	6,972	9,378	35%

- Top 10 states contribute more than 80% to Pan–India Portfolio in March 2019 and March 2020
- Tamil Nadu has moved to 1st position with 32% of year-on-year growth from March 2019 to March 2020
- Bihar grew 45% year-on-year over March 2019 followed by Uttar Pradesh at 41%
- Among the top 10 states, higher year-on-year growth registered in the live borrower base of a state is accompanied by higher portfolio growth of the state in the same period, with a few exceptions

Source: SIDBI-Equifax Microfinance Pulse Vol. VI (Sep 2020

The region-wise break-up of the loan portfolio can be seen from Figure 6.14. The historical dominance of the southern region remains unchanged. Also, interestingly, some revival of micro-lending is now being witnessed in Andhra Pradesh and Telangana. This, of course, is a bank-led phenomenon since NBFC-MFIs remain constrained by the Andhra legislation of October 2010.

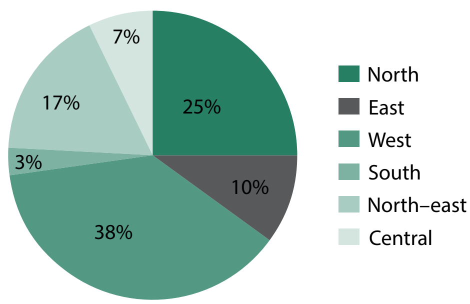


Figure 6.14: Region-wise Loan Portfolio

Source: Sa-Dhan BMR 2020.

The district-wise portfolio outstanding can be seen from Figure 6.15. As is evident, on a pan-India basis, even though a high percentage of districts are covered by the lenders, the overall extent of microfinance activity is quite patchy.

RURAL–URBAN SHARE

A key element of microfinance has been its rural centricity. However, looking at the decadal trends, given the very rapid growth of some of the urban-focused NBFC-MFIs, the years 2014 to 2016 witnessed the urban share overtaking the rural areas. This got reversed by 2017 and, by March 2020, the rural share touched a historic high of 77 per cent. This is, in part, attributable to NBFC-MFIs moving into newer geographies.

Figures 6.16 and 6.17 can be seen for the long-term trends and the current status.

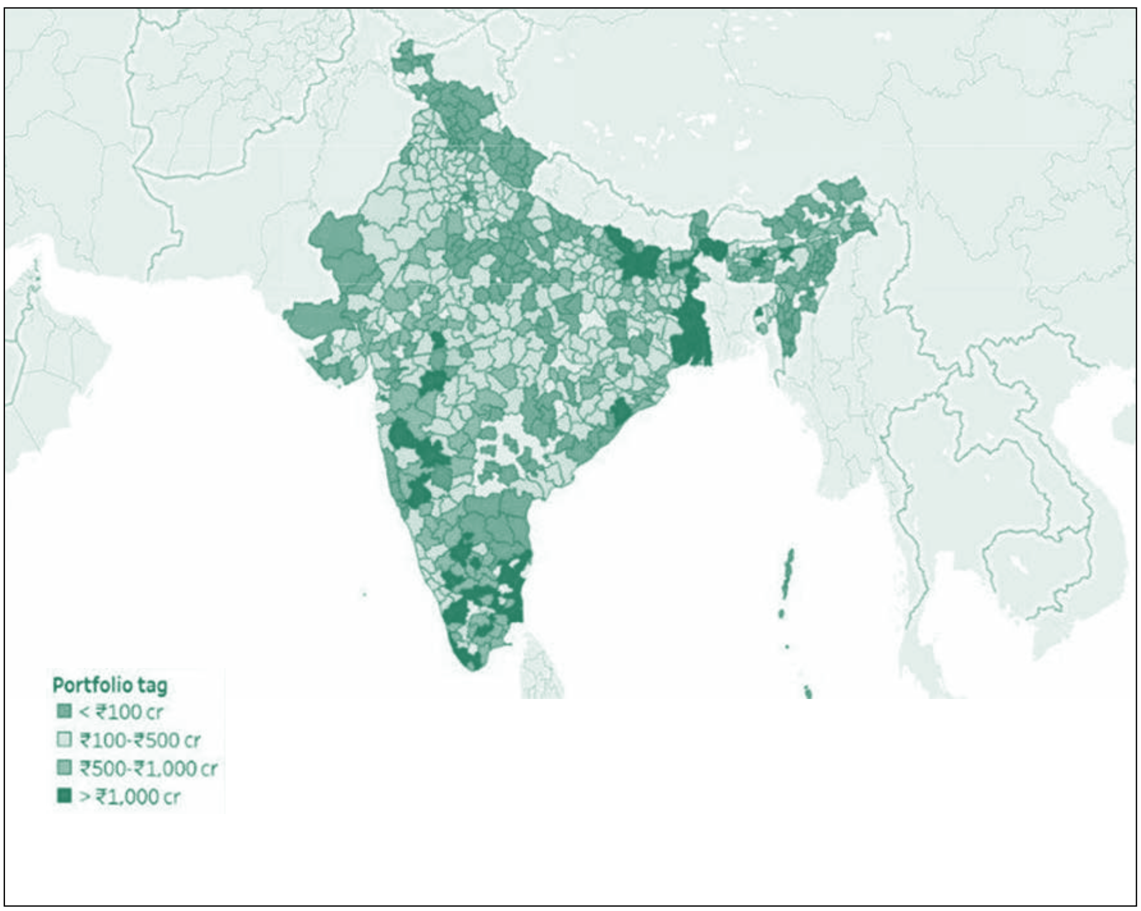


Figure 6.15: District-wise Portfolio Outstanding

Source: Sa-Dhan BMR 2020.

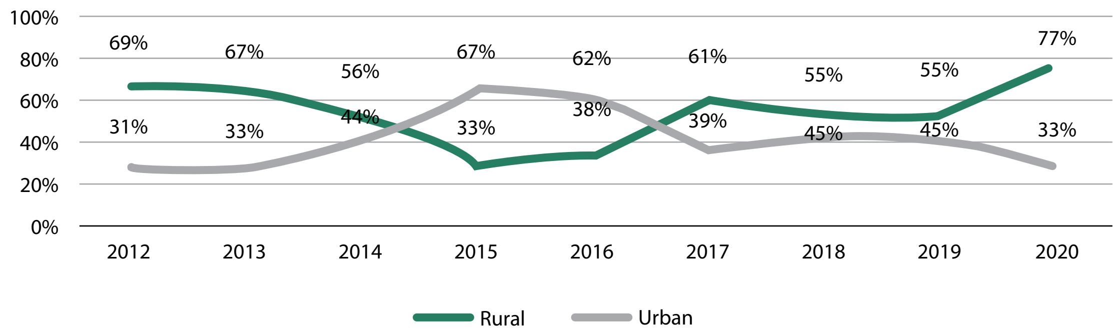


Figure 6.16: Long-term Trends in Rural–Urban Share

Source: Sa-Dhan BMR 2020.

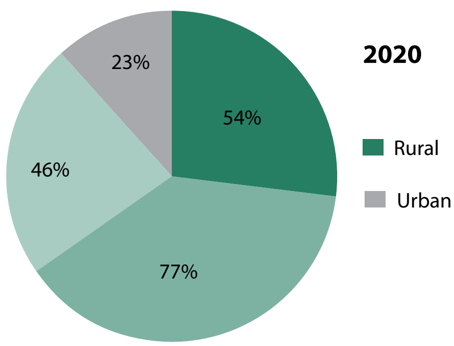


Figure 6.17: Current Status in Rural–Urban Share

Source: Sa- Dhan BMR 2020.

Loan Usage

Conceptually, microfinance loans should be for productive purposes, leading to income generation. However, the regulatory norms applicable to NBFC-MFIs (RBI's Master Circular of 1 July 2015) provide for a degree of flexibility and require that income generation loans are 'not less than 50% of the total loans given by the NBFC-MFI'. Notwithstanding the regulatory flexibility, in practice, the loans given are largely for income generation. The end-use monitoring is, of course, rarely done. In any event, as has been observed for many years, some percentage of the borrowed amounts is used for consumption purposes or for the smoothening of cash flows.

As can be seen from Figure 6.18, over the past 5 years, loans for the generation of income have tended to be over 85 per cent of the total microfinance portfolio of lenders.

A break-up of the income generation loans by purpose can be seen from Figure 6.19. Not surprisingly, agriculture and trading/small business are the predominant activities for which loans have been taken.

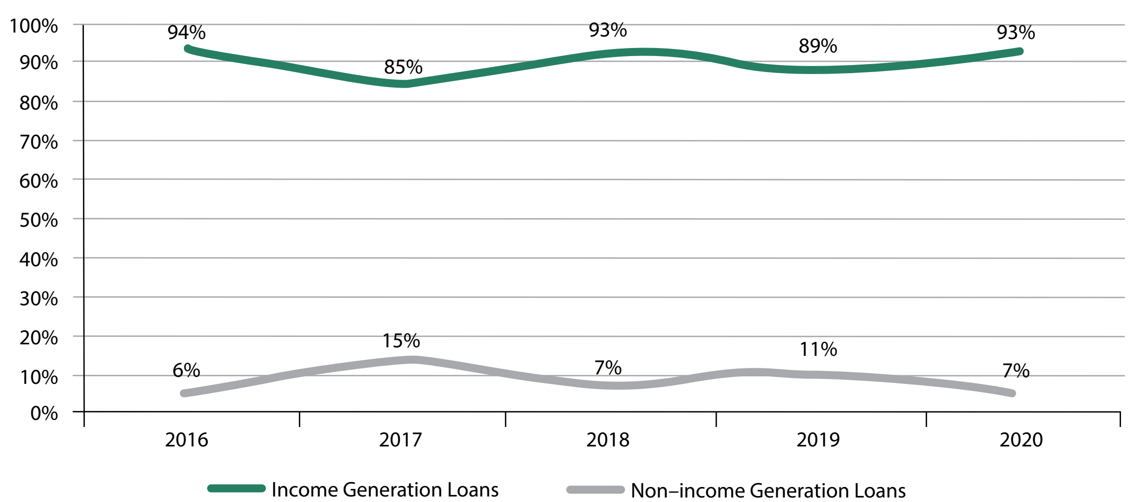


Figure 6.18: Share of Income Generation/Non-income Generation Loans

Source: Sa-Dhan BMR 2020.

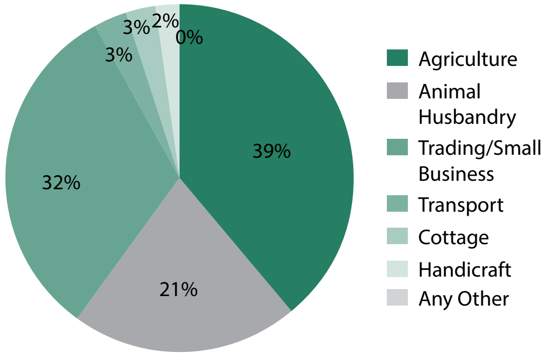


Figure 6.19: Income Generation Loans by Purpose (March 2020)

Source: Sa–Dhan BMR 2020.

In the non-income generation category, the lending has largely been for housing, water and sanitation, and education—aggregating to 83 per cent. In comparison, loans for consumption purposes are 9 per cent only. This clearly suggests that, broadly, borrowers tend to act responsibly and take loans for asset creation or for building social capital (Figure 6.20).

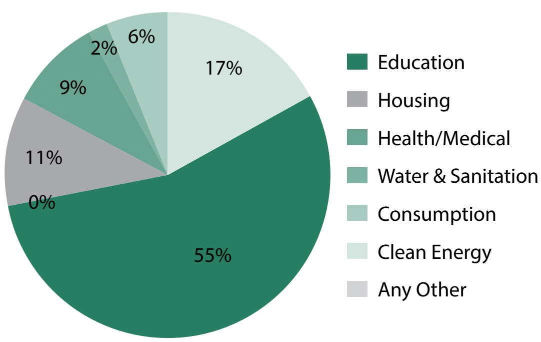


Figure 6.20: Non–income Generation Loans by Purpose (March 2020)

Source: Sa–Dhan BMR 2020.

Ticket Size Trends

A principal concern of the microfinance industry worldwide has been the risk of over-leveraging clients—who are not only highly vulnerable but, typically, barely literate and have a very limited understanding of the risk dynamics of borrowing larger amounts. From a lender's standpoint, making a larger loan to an existing borrower is an attractive proposition by which the loan book can grow fast without the cost of new client acquisition. It is noteworthy that even though the RBI had initially fixed a limit of ₹ 50,000 for lending by NBFC-MFIs, which was raised to ₹ 1 lakh in 2015 and further raised to ₹ 1.25 lakh in November 2019, the industry's average loan size remained at sub ₹ 50,000 levels. It may also be pointed out that even when the RBI increased the loan limit to ₹ 1 lakh in 2015, MFIN members agreed to an internal cap of ₹ 60,000. This shows the focus of the segment and the overall risk averseness of specialized microfinance lenders. That said, as can be seen from Figure 6.21, over the last 10 years, the average loan size for NBFC-MFIs (disbursement) has almost tripled.

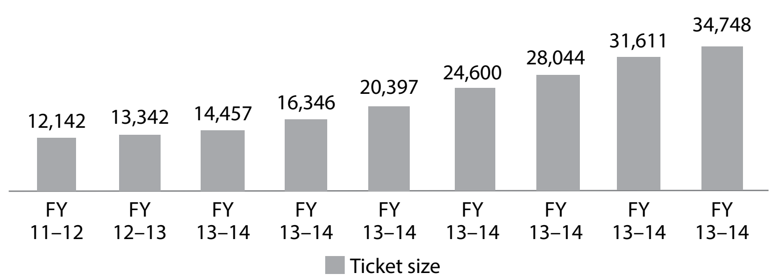


Figure 6.21: Ticket Sized (Loan Disbursed per Account ₹)

Source: MFIN Micrometers.

A ticket size comparison across all categories of lenders for FY 2019 and FY 2020 can be seen from Figure 6.22.

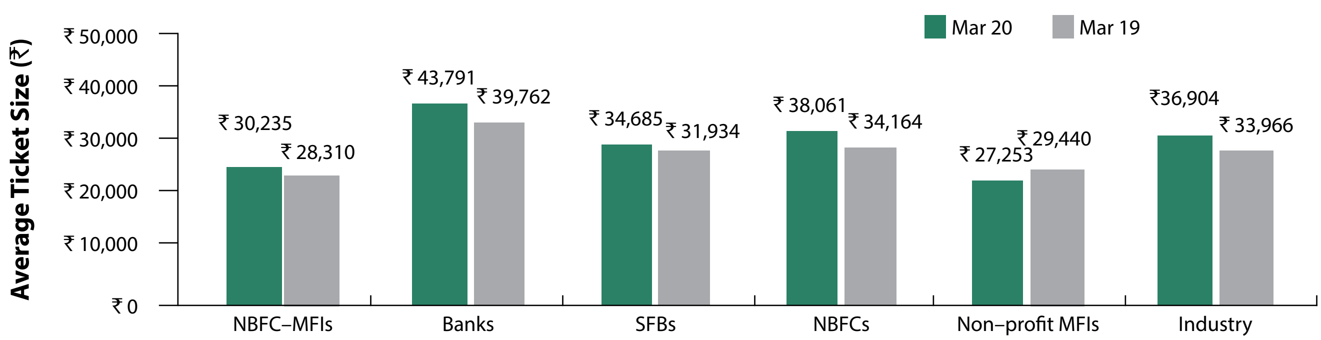


Figure 6.22: Average Ticket Size—Total Industry and Lender-wise Break-up

Source: Sa-Dhan BMR 2020.

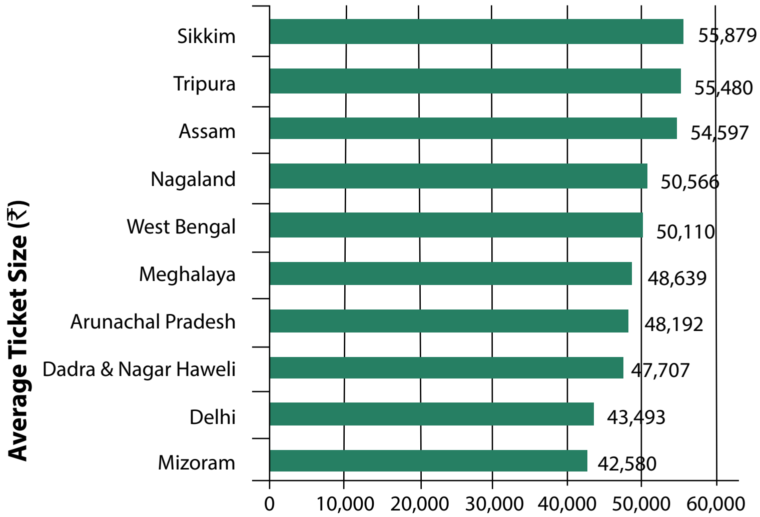


Figure 6.23: Average Ticket Size—Top 10 States/UTs

Source: Sa-Dhan BMR 2020.

Interestingly, the average loan size of non-specialized microfinance lenders, namely commercial banks and generic NBFCs, is the highest followed by the SFBs. The NBFC-MFIs appear to be taking a more calibrated approach with, arguably, a lower risk appetite.

Given the fact that commercial banks have the largest market share and do not have regulatory restrictions imposed on NBFC-MFIs, the trend of making larger loans could become a cause of concern. In this context, MFIN and Sa-Dhan putting in place the Code for Responsible Lending (CRL) covering all categories of lenders is a very welcome initiative.

Figure 6.23 lists the top 10 states/UTs by loan size. What stands out is that the north-eastern states (7 of the 8 sisters) plus West Bengal find a place in such listing. In particular, the two major states of West Bengal and Assam are areas of concern. The 2019 crisis in Assam and the anecdotal reports of over-leveraging of microfinance clients in West Bengal highlight the need for a more cautious approach and the risks of making larger loans to low-income clients.

Branch Network and Outreach

By the end of FY 2020, out of a total of 726 districts in India, microfinance lenders had a presence in 626 districts across 37 states and UTs, with an impressive 86 per cent coverage in terms of district-level operations. Not surprisingly, the banks were in the lead with a presence in all the 626 districts, followed by NBFC-MFIs in 606 districts and SFBs in 599 districts (Figure 6.24).

The NBFC-MFIs (MFIN members) had a total branch network of 14,275 branches and an employee headcount of 1.16 lakh, of which 73,694 were loan officers directly connecting with the clients. In terms of percentage increase over the previous year, the branch network grew by 22 per cent, employee count by 25 per cent and loan officers by 29 per cent.

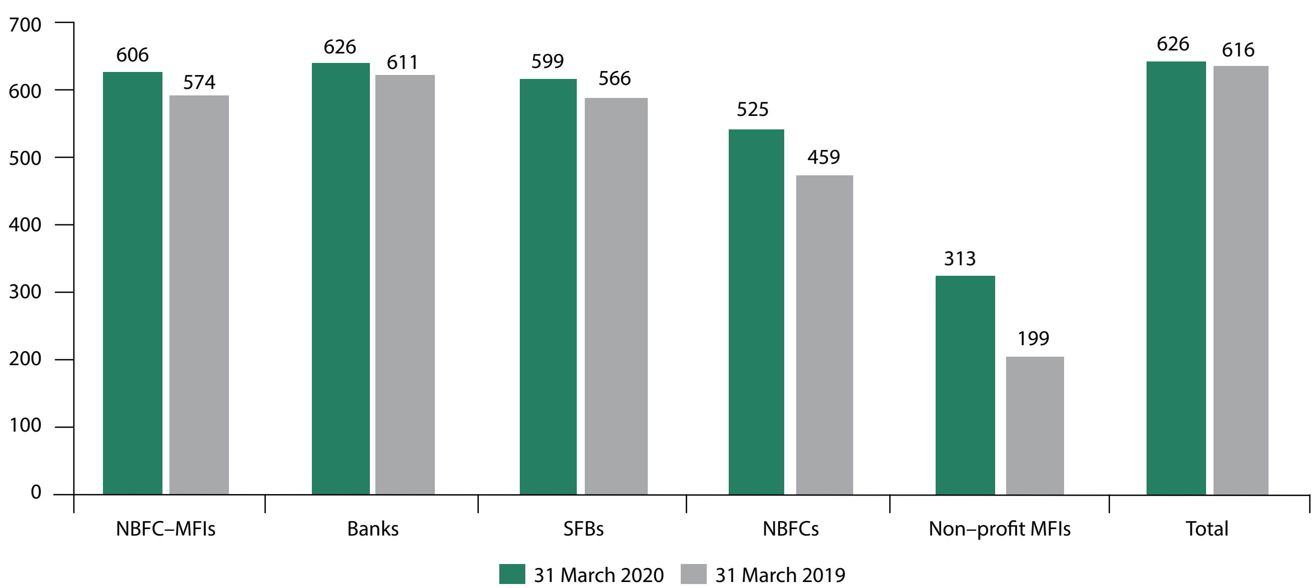


Figure 6.24: District-level Coverage of Different Categories of Lenders

Source: Sa-Dhan BMR 2020.

The district-wise penetration may be seen from Figure 6.25.

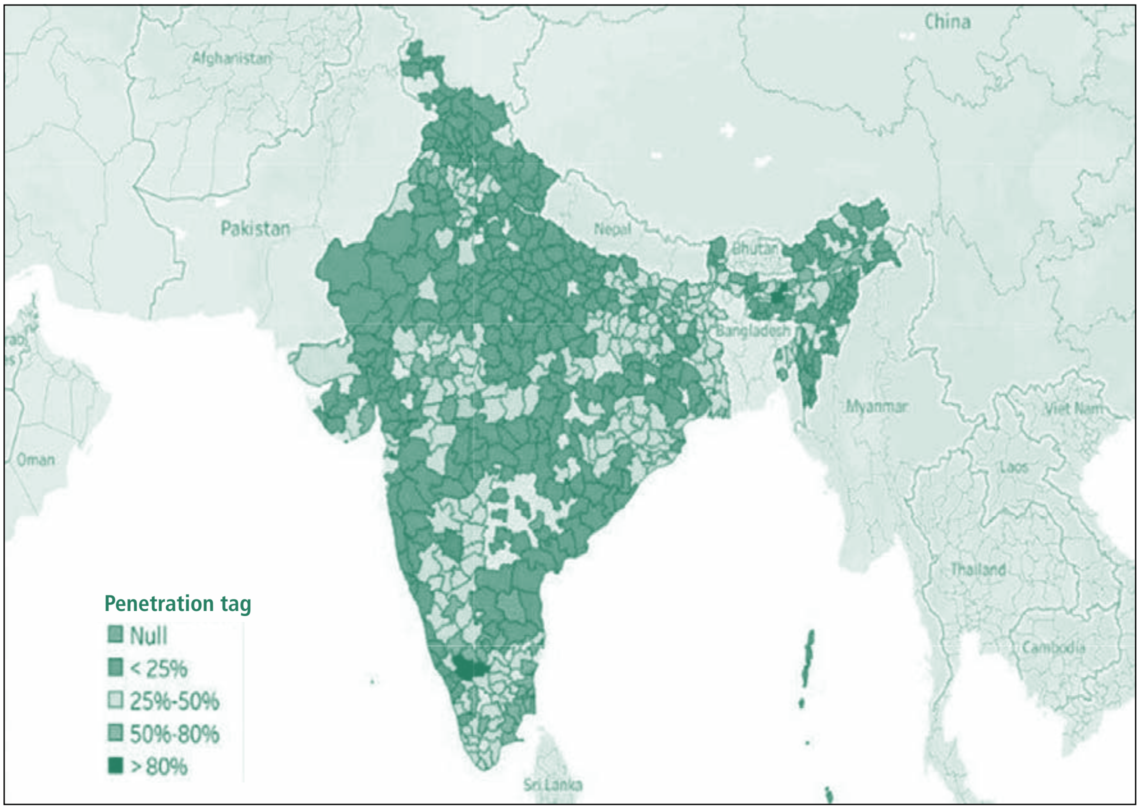


Figure 6.25: District-wise Penetration

Source: Sa-Dhan BMR 2020.

The state-wise distribution of micro-credit may be seen from Figure 6.26. The high concentration of business is evident from the fact that over 82 per cent of the portfolio is in the top 10 states. West Bengal's share at 14.5 per cent is the highest with Tamil Nadu close second at 13.7 per cent.

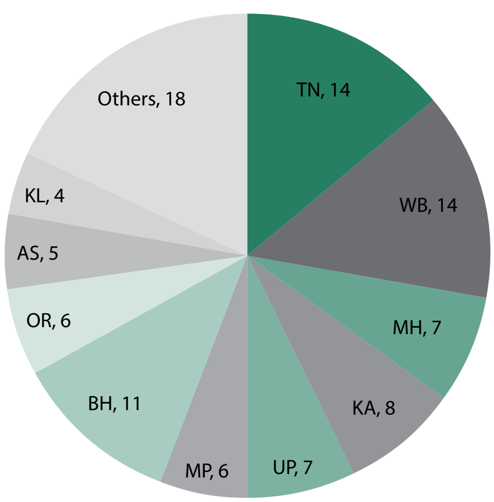


Figure 6.26: State-wise Distribution of Micro-credit (FY 2020)

Source: MFIN and HSIE Research.

PORTFOLIO QUALITY

A striking aspect of microfinance lending has been the inherent robustness of the business model and the low levels of delinquency. Looking at some of the past credit negative events, such as the Andhra crisis of 2010 or the demonetization announcement of November 2016, while the levels of delinquency spiked with a considerable deterioration in the quality of existing portfolios, the loans originated post the event tended to perform well. Thus, from a long-term perspective, microfinance repayment rates were seen hovering around the 98 per cent+ levels.

More recently, and particularly from the time of the demonetization event, there has been a secular decline in repayment rates. At this stage, it is somewhat difficult to pinpoint the specific drivers

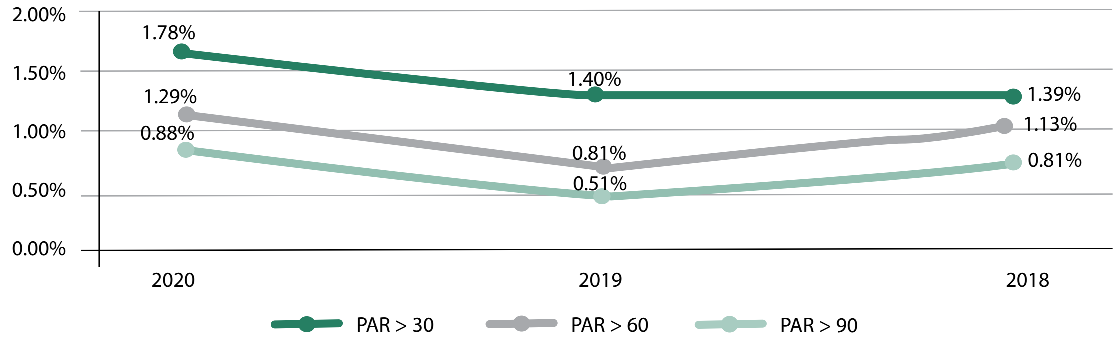


Figure 6.27: Industry Portfolio Quality

Source: Sa-Dhan BMR 2020.

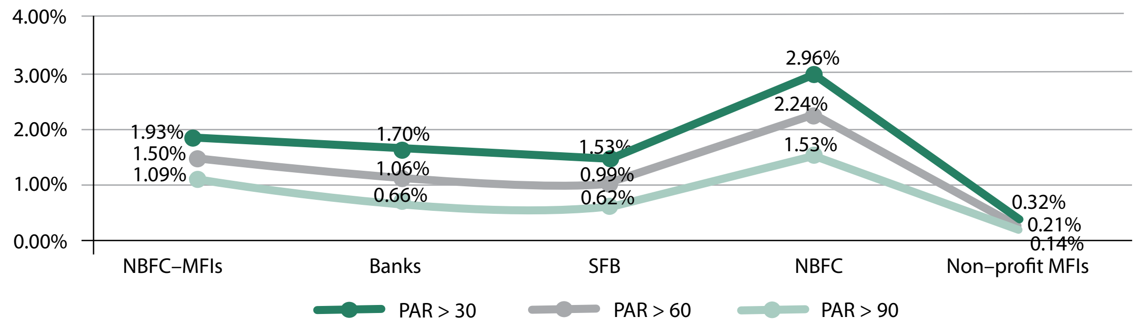


Figure 6.28: Lender-wise Portfolio Quality (March 2020)

Source: Sa-Dhan BMR 2020.

of this emerging trend. However, arguably, greater levels of penetration, concentration of players in certain geographies, dilution of the high-touch model and more frequent adverse weather events could be some of the causative factors. While the levels at which delinquencies may stabilize in the future are to be seen, it is reasonably clear that microfinance lenders will have to live with the new reality of higher portfolio at risk (PAR) levels.

The overall trends in portfolio quality and the lender-wise position may be seen from Figures 6.27 and 6.28.

As can be seen from Figure 6.28, the portfolio quality of NBFCs is the worst of all lenders followed by NBFC-MFIs, banks and SFBs. Not surprisingly, portfolios, albeit small, of not-for-profit MFIs are performing significantly better than all other lenders. This can be attributed to their geographical focus, lower ticket sizes and greater client centricity.

As a point of comparison, the non-performing asset (NPA) levels under the SHG-BLP remain significantly higher than the lending done by all categories of lenders under the JLG format. National Bank for Agriculture and Rural Development's (NABARD) annual publication, the 'Status of Microfinance in India 2019–20', states that the 'NPAs under bank loans to SHGs as on 31st March were 4.92% compared to 5.2% as on 31.03.19.'

In parallel with the trend of rising delinquencies, there is an increase in write-off levels. The NBFCs in particular have been writing off more aggressively, while the banks appear to be taking a more measured approach.

Table 6.2 provides the lender-wise write-offs over the past 3 years. While higher write-offs in 2018 can be explained as demonetization overhangs, the sharp rise in 2020 is suggestive of more fundamental portfolio issues. During FY 2021, further portfolio

Table 6.2: Lender-wise Write-offs

Lender Type	2020 (%)	2019 (%)	2018 (%)
NBFC-MFIs	1.47	0.29	0.68
Banks	0.16	0.09	0.01
SFBs	1.22	0.77	4.10
NBFCs	6.01	2.39	1.16
Non-profit MFIs	0.92	0.54	0.56
Overall	**1.33**	**0.52**	**0.89**

Source: Sa-Dhan BMR 2020.

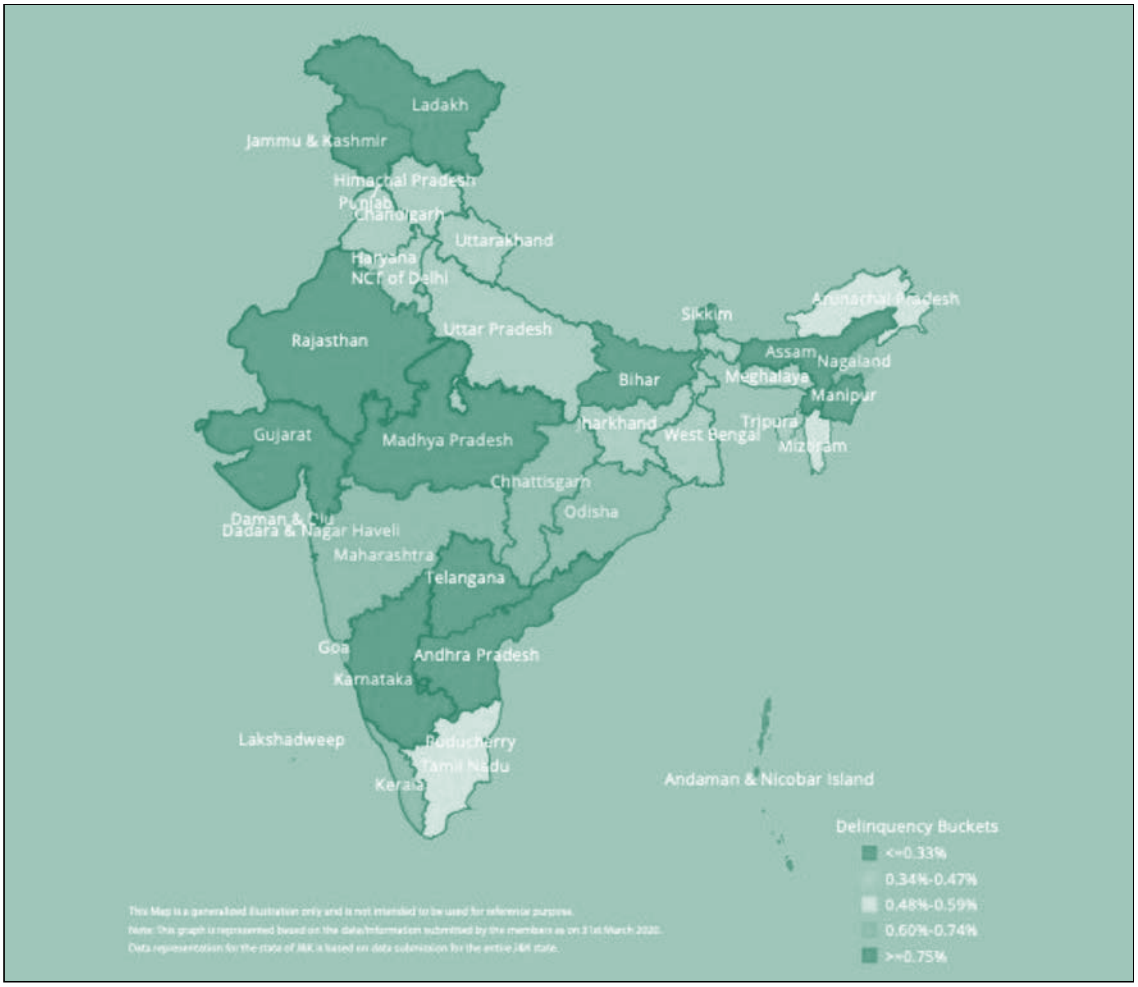


Figure 6.29: SIDBI-Eqiufax Microfinance Pulse Vol. VI (Sep 2020) [4].

Source: Sa-Dhan BMR 2020.

stress can be expected on account of the COVID-19 impact on clients.

The state/UT delinquency levels (90+) can be seen from Figure 6.29.

Details of the 30+ delinquency by state/UT are provided in Annexure 6.2.

PROFITABILITY RATIOS

Notwithstanding the margin and price caps prescribed by the RBI, microfinance has remained a fairly profitable business for the NBFC-MFIs, particularly for larger institutions which have the scale effect. In the case of commercial banks and SFBs, the absence of margin/price caps has allowed them to price loans at levels not dissimilar to MFIs. This makes microfinance business a particularly attractive proposition for them, notwithstanding their higher operating costs.

Be it the entrepreneur, the investor or the market, the key financial indicators that drive interest in a business are return on asset (RoA) and return on equity (RoE). Looking at RoA first, microfinance businesses generally tended to have higher RoAs as compared to other retail lenders. In the past, a few microfinance companies reported RoAs as high as 5 per cent plus. Ignoring the outliers, the industry RoAs have drifted downwards and, broadly, stabilized in the 3–4 per cent band. The large NBFC-MFIs (GLP over ₹ 500 crore) have had higher RoAs. The small companies (GLP under ₹ 100 crore) have had lower RoAs, notwithstanding the higher margins allowed to them by the RBI. Interestingly, in FY 2018, smaller players did better than large- and medium-sized companies.

Well-run retail lending businesses of commercial banks typically deliver RoAs in the range of 1.5–2.5 per cent. The microfinance business with RoA generally higher by about a percentage point is offering superior returns which, at least in part, explains the growing presence of commercial banks in the microfinance sector.

On a year-on-year basis, the industry RoEs have broadly tracked the industry RoAs. While the extent of leverage is a key element in determining the RoEs, it is again the large players that have significantly higher RoEs. That said, the industry RoEs have been at sub 20 per cent levels, a relatively modest return for investors.

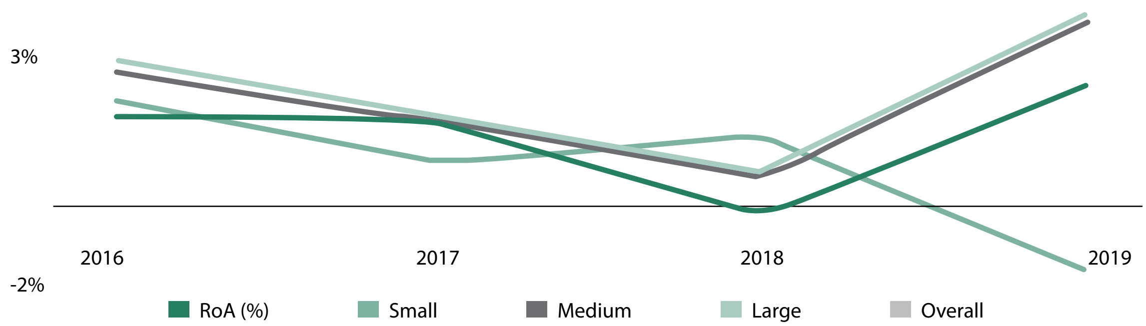


Figure 6.30: NBFC-MFIs—RoA

Source: MFIN data.

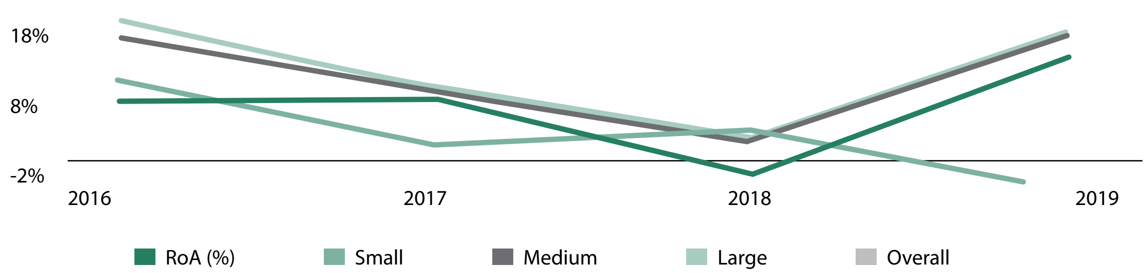


Figure 6.31: NBFC-MFIs—RoE

Note: Small MFIs = GLP below ₹ 100 crore; medium MFIs = GLP between ₹ 100 crore and ₹ 500 crore; large MFIs = GLP over ₹ 500 crore.

Source: MFIN data.

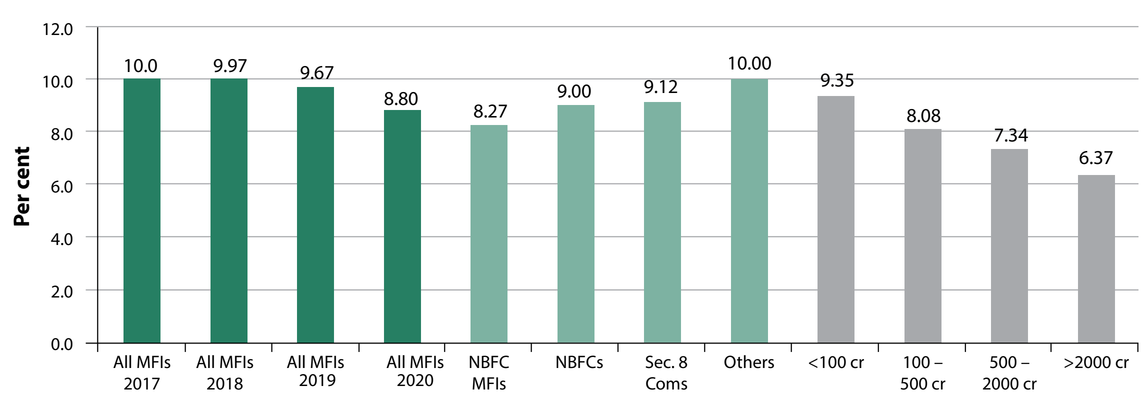


Figure 6.32: Operating Expense Ratios 2020

Source: Sa-Dhan BMR 2020.

The RoAs and RoEs across the three categories of NBFC-MFIs for the years 2016 to 2019 can be seen from Figures 6.30 and 6.31.

The operating expense ratios across institutional categories can be seen from Figure 6.32. The better ratios of the larger NBFC-MFIs once again demonstrate the benefits of scale.

CAPITAL ADEQUACY

An enduring feature of the microfinance industry has been its capacity to attract equity capital. Hence, notwithstanding rapid growth, capital adequacy ratios tended to stay well within the regulatory limits. As can be seen from Tables 6.3–6.4 and Figure 6.33, irrespective of institutional category or size, debt–equity ratios stayed at prudent levels. From the standpoint of systemic stability, this is indeed a matter of comfort. In comparison, CRAR of NBFCs in general has been at around 20 per cent (19.5% as of Sep 2019).[1]

Table 6.3: NBFC-MFIs CRAR

CRAR (%)	2016	2017	2018	2019
Small	29.02	20.66	39.11	30.90
Medium	24.82	31.98	25.68	21.89
Large	22.82	29.41	24.29	25.74
Overall	**24.61**	**29.82**	**27.05**	**25.43**

Source: MFIN Data.

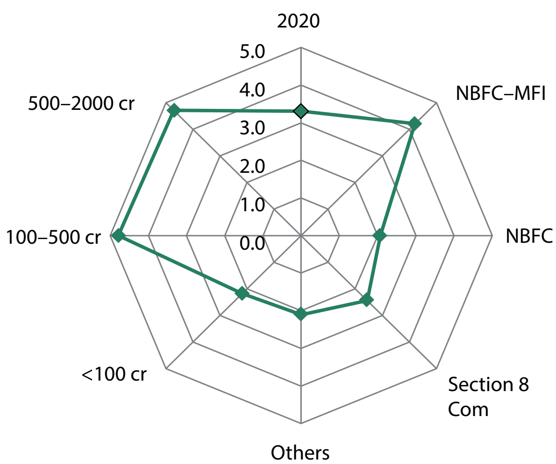


Figure 6.33: Debt Equity across Lender Categories 2020

Source: Sa-Dhan BMR 2020.

Table 6.4: GLP Growth: NBFC-MFIs

Median for 2020	3.3
NBFC-MFI	4.2
NBFC	2.1
Section 8 Com	2.4
Others	2.1
<100 crore	2.2
100–500 crore	4.8
>500–2000 crore	4.7
>2,000 crore	3.8

Source: Sa-Dhan BMR 2020.

INTEREST RATES

The pricing of loans has been among the most sensitive and contentious aspects of microfinance. RBI's regulatory framework of December 2011 for the NBFC-MFIs put the pricing issue largely to rest. However, the optics of lenders charging over 20 per cent for small loans to 'bottom of the pyramid' borrowers is an adverse factor that the industry has had to continually battle.

Given the gross margin caps that NBFC-MFIs have to adhere to, the final pricing for clients becomes a function of the all-in cost of the funds (COFs). The primary source of funding for the industry are commercial banks. Thus, in effect, the pricing of the term loans extended by commercial banks to NBFC-MFIs is what determines the pricing for the end clients. Ironically, while loan pricing by NBFC-MFIs is tightly regulated, commercial banks and SFBs which, on an aggregate basis, now have around a 70 per cent market share, are free to price their retail microfinance loans as they wish. This regulatory arbitrage is a matter of some concern and will be commented upon in detail later.

Looking at the pricing trends over the past 4 years, the flatness of the pricing graph is quite striking. This, among other things, is indicative of poor monetary transmission. It is also indicative of the fact that the pricing of loans by commercial banks to NBFC-MFIs is relatively high and not reflective of the performance of such loans. Not surprisingly, the COFsfor smaller NBFC-MFIs is even higher, as can be seen from Table 6.5 and Figure 6.34. In the final analysis, microfinance clients end up bearing the burden of commercial banks higher pricing, whether they borrow directly from them (commercial banks) or from MFIs.

While full pricing data of different categories of lenders have not been analysed, the impression is that commercial banks and SFBs tend to price their loans at levels broadly similar to NBFC-MFIs. The view is supported by Figure 6.35 giving the pricing of the two listed NBFC-MFIs, two listed SFBs and Bandhan Bank.

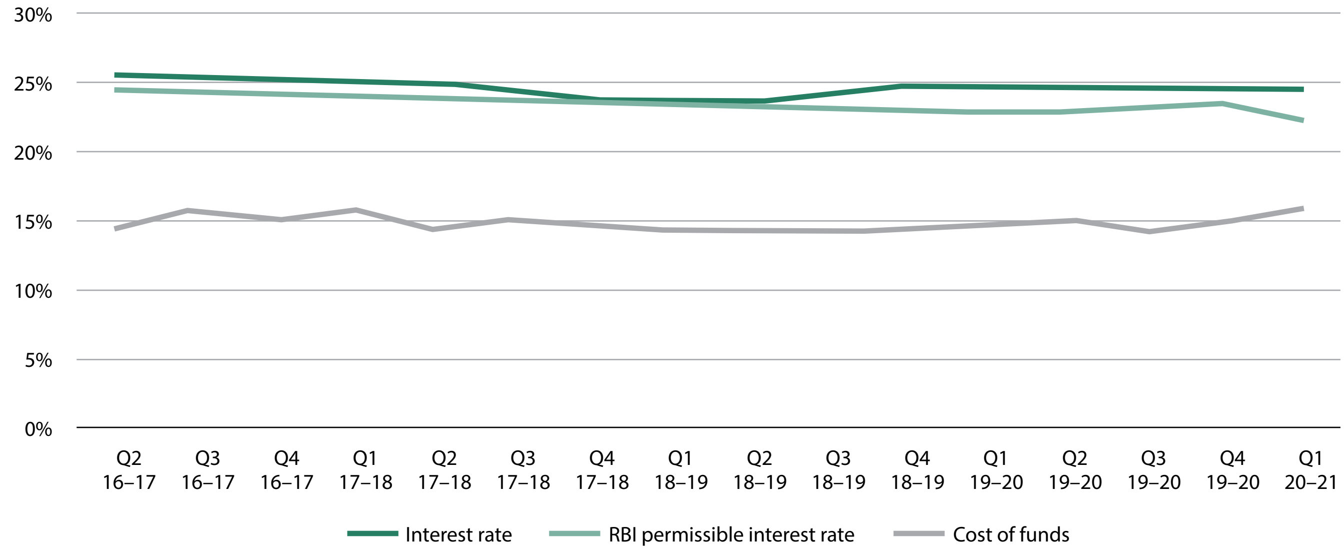


Figure 6.34: Cost of Funds and Interest Rates (NBFC-MFIs)

Source: MFIN data.

Table 6.5: RoI by Institution Size (NBFC-MFIs)

Quarter	Size	Average Cost of Funds (COF) (%)	Rate of Interest Charged to Clients (%)
Q4 FY 2016–2017	All	14.82	24.77
Q4 FY 2016–2017	Large	14.10	23.75
Q4 FY 2016–2017	Medium	15.41	25.29
Q4 FY 2016–2017	Small	14.76	25.67
Q4 FY 2017–2018	All	14.30	24.01
Q4 FY 2017–2018	Large	12.91	23.72
Q4 FY 2017–2018	Medium	15.45	24.24
Q4 FY 2017–2018	Small	15.23	24.36
Q4 FY 2018–2019	All	14.16	24.93
Q4 FY 2018–2019	Large	12.98	25.28
Q4 FY 2018–2019	Medium	15.00	24.67
Q4 FY 2018–2019	Small	15.06	24.66
Q4 FY 2019–2020	All	14.46	24.00
Q4 FY 2019–2020	Large	13.32	21.74
Q4 FY 2019–2020	Medium	15.19	25.04
Q4 FY 2019–2020	Small	15.50	24.00

Note: Small MFIs = GLP below ₹ 100 crore; medium MFIs = GLP between ₹ 100 crore and ₹ 500 crore; large MFIs = GLP over ₹ 500 crore.

Source: MFIN Data.

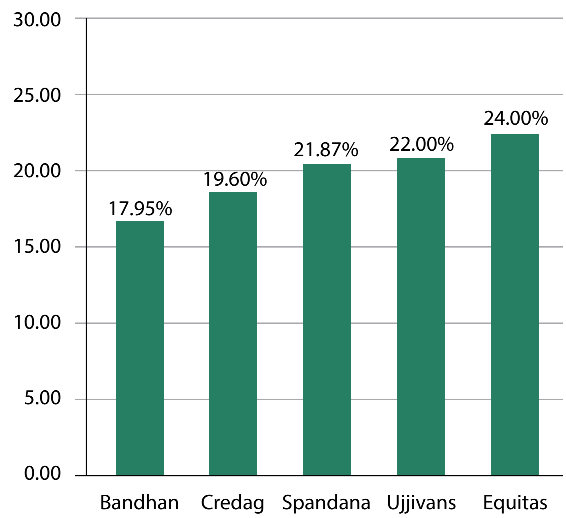


Figure 6.35: Rate of Interest Charged by Various Micro-lenders

Source: Companies and HSIE Research.

INSTITUTIONAL RATINGS

portfolios have historically performed well, barring externally driven episodic events, the rating agencies have tended to take a somewhat conservative view of the industry. This, arguably, has been on account of residual perceptions of political risk and the fact that the portfolios are entirely unsecured. Even the large, well-established institutions of sufficient vintage have not received a rating above 'A'. And the smaller players stay clustered at the 'BB' levels.

Table 6.6: Ratings Received by NBFC-MFIs

Quarter	Rating Scale (Band)	Small	Medium	Large	Overall
Q4 FY 2019–2020	A (Adequate safety)	0	0	12	12
Q4 FY 2019–2020	BBB (moderate safety)	1	15	9	25
Q4 FY 2019–2020	BB (moderate risk)	6	1	0	7
Q4 FY 2019–2020	Below or unrated	4	1	0	5
Q4 FY 2018–2019	A (adequate safety)	3	1	11	15
Q4 FY 2018–2019	BBB (moderate safety)	1	11	8	20
Q4 FY 2018–2019	BB (moderate risk)	4	3	0	7
Q4 FY 2018–2019	Not reported	6	1	4	11
Q4 FY 2017–2018	A (adequate safety)	0	0	8	8
Q4 FY 2017–2018	BBB (moderate safety)	0	11	9	20
Q4 FY 2017–2018	BB (moderate risk)	4	2	1	7
Q4 FY 2017–2018	Not reported	9	2	1	12

Source: MFIN Data.

The ratings received by NBFC-MFIs, as per the available data, can be seen from Table 6.6.

As per MFIN data, out of the 54 reporting NBFC-MFIs for FY 2020, while 76 per cent of the institutions were in the BBB and above rating categories, 24 per cent were below investment grade.

Funding

For a variety of reasons, the providers of capital, both debt and equity, have viewed the microfinance industry quite positively. This has fuelled the impressive growth that the industry has seen for the past many years. The NBFC-MFIs have, of course, been the primary beneficiaries of the capital inflows. The priority sector lending (PSL) benefit which the commercial banks got for the term loans made to the NBFC-MFIs encouraged the development of a partnership model combining the funding strength of banks with the distribution capabilities of microfinance companies. Until last year, this benefit was available only for the term loans made to the NBFC-MFIs. From 2019, even the term loans to other NBFCs for on-lending to the priority sector categories qualify for the PSL benefit. The impact, if any, of this regulatory change on fund flows to the NBFC-MFIs is not visible as of now.

The very high dependence on funding from commercial banks remains a continuing reality for the industry. Funding from development finance institutions (DFIs), and particularly the entry of NABARD as a funder to the NBFC-MFIs, is a significant positive both from the standpoint of a systemic stability and also the COFs.

Sources of debt funding by type of instrument, amounts outstanding and funding to various categories of institutions can be seen from Figures 6.36–6.38.

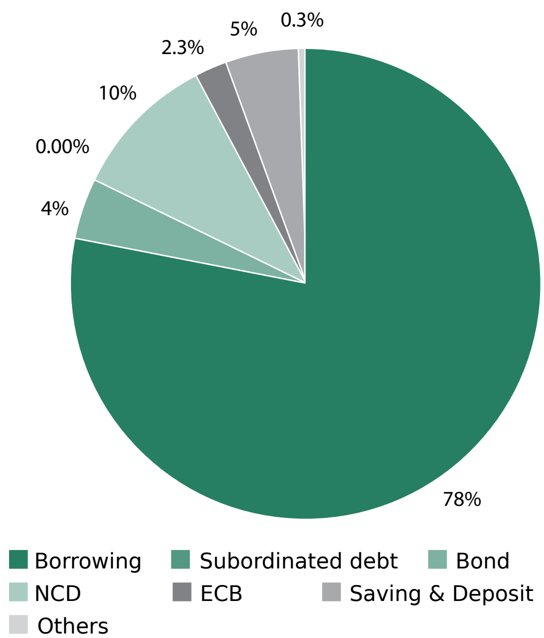


Figure 6.36: Sources of Funding Based on Instrument Types

Source: Sa-Dhan BMR 2020.

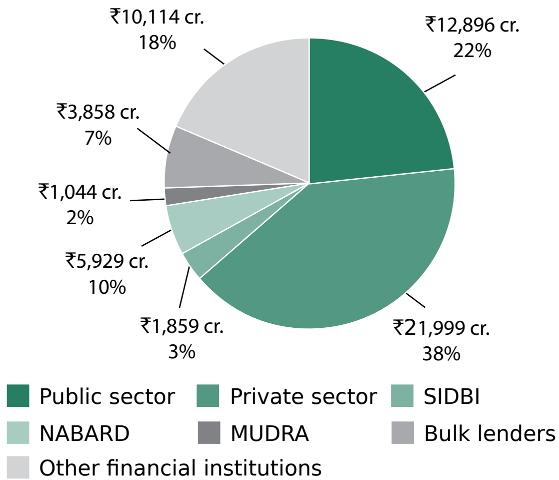


Figure 6.37: Source-wise Amount Outstanding

Source: Sa-Dhan BMR 2020.

As stated earlier, commercial banks have been the dominant funders for the industry. However, while this is true in absolute terms, an analysis of funding by size of the company reveals that smaller players have had to depend more on non-bank sources. In fact, over the last 4 years, bank funding for the small NBFC-MFIs has been below 15 per cent. Even for medium-sized players, the share of bank funding has been steadily dropping. This clearly demonstrates the increasing risk averseness of the banks. In other words, liquidity challenges for smaller players have been growing. Both in terms of availability of funding and pricing, small institutions are in a disadvantaged position, which is likely to worsen in the post COVID-19 world.

The percentage share of bank versus non-bank borrowings can be seen from Figure 6.39.

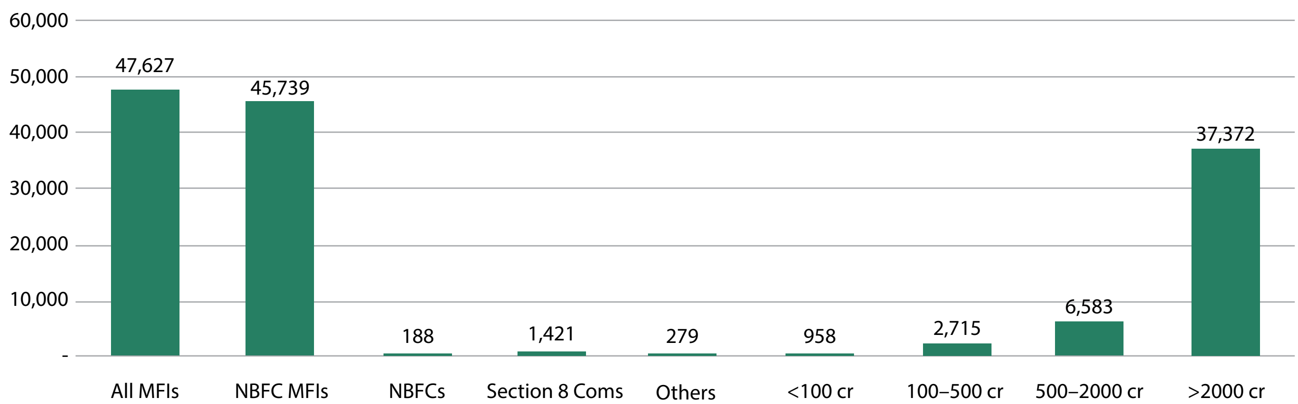


Figure 6.38: Debt Funds Received during the Year by Category of Institutions

Source: Sa Dhan-BMR 2020.

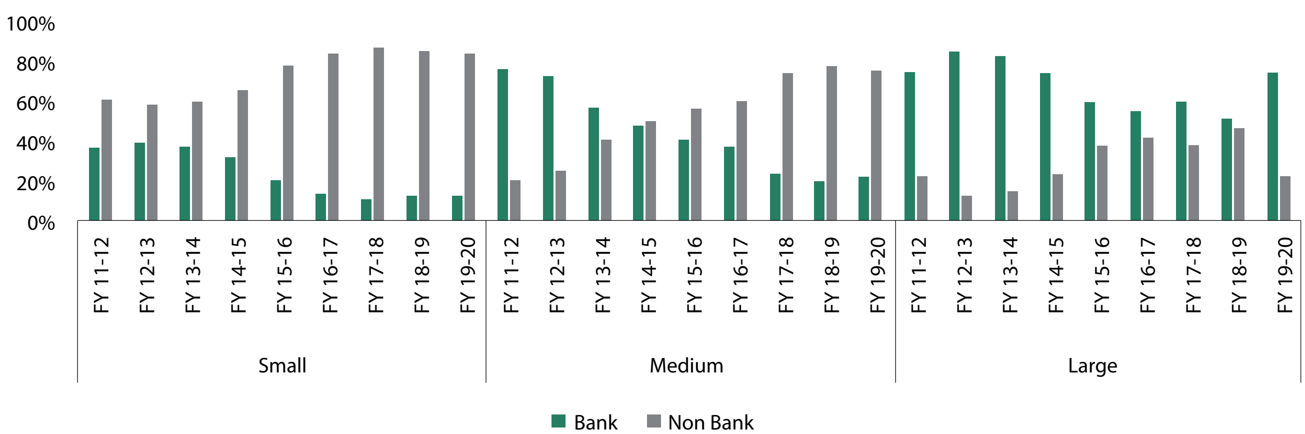


Figure 6.39: NBFC-MFIs: Bank versus Non-bank Borrowing (%)

Source: MFIN Data.

The steady increase in securitization transactions by NBFC-MFIs is a positive trend that allows for better balance sheet management and increased profitability. As can be seen from Figure 6.40, the securitization transactions in FY 2020 reached an impressive level of ₹ 33,477 crore.

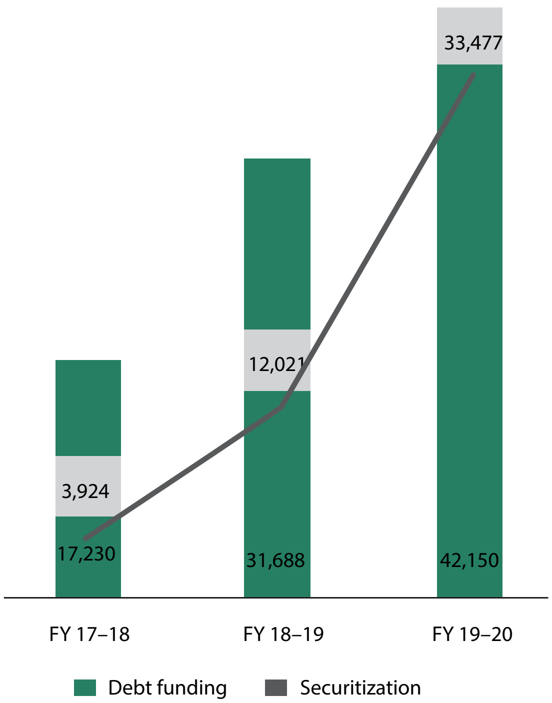


Figure 6.40: Debt Funding and Securitization (₹ Crore)

Source: MFIN data.

Looking at the equity inflows into the industry, cumulatively, a total of ₹ 1,690 crore was raised during FY 2020. In addition, it was the IPO by Spandana Sphoorty Financial Ltd for ₹ 1,200 crore. The large NBFC-MFIs continued to be the primary drivers of equity transactions, with the top 10 companies garnering 91 per cent of inflows. From a broader market perspective, it is clear that the dominance of larger players is growing. Equally, smaller players are struggling with some of them facing existentialist issues. The impact of COVID-19 too is likely to widen the gap between large and small players.

Another noteworthy aspect is the relatively modest price to book value (PBV) multiples at which the NBFC-MFIs have been raising fresh equity. While PBV ratios can and do vary considerably, the industry appears to be entering a phase of diminished investor interest.

The tepid investor response to the Spandana IPO and the decision of two other NBFC-MFIs to not go ahead with the IPOs despite Securities and Exchange Board of India approvals for their draft red herring prospectus (DRHP) having been obtained is reflective of both the overall state of the capital markets in FY 2020 and also the gap between promoter expectations and market perceptions.

The equity deals over the last 4 years and the indicative PBV ratios are detailed in Annexure 6.3.

The equity raises by different categories of players and the top 10 companies can be seen from Figures 6.41 and 6.42.

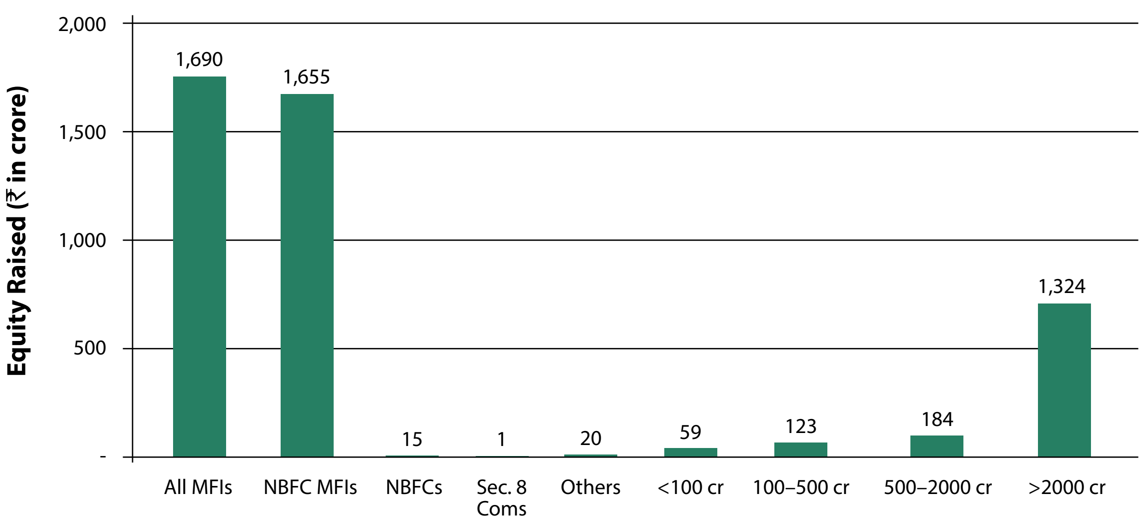
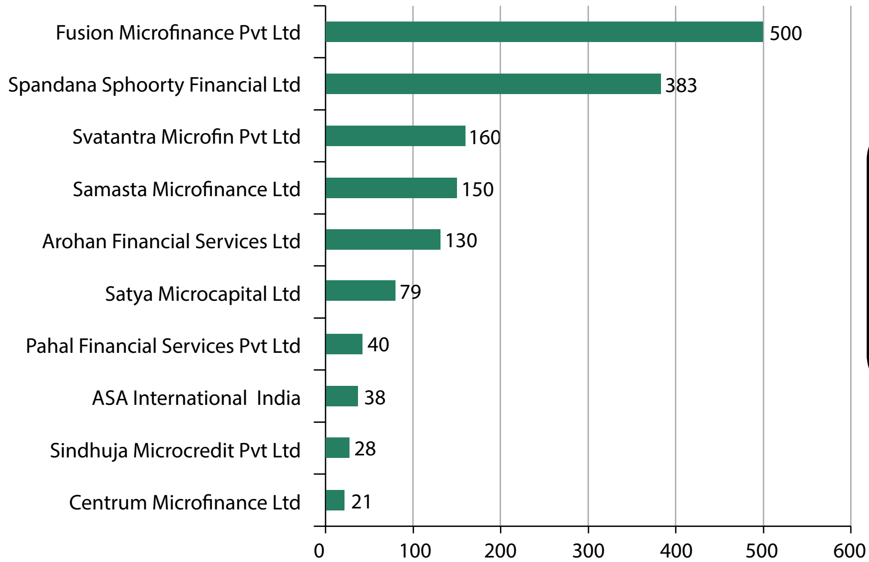


Figure 6.41: Equity Raised by MFIs—Category-wise

Source: Sa-Dhan BMR 2020.



Top 10 MFIs raised ₹1,539 crore which is 91% and top 5 MFIs raised ₹1,323 crore which is 78% of sector's total.

Figure 6.42: Equity Raises—Top 10 MFIs

Source: Sa-Dhan BMR 2020

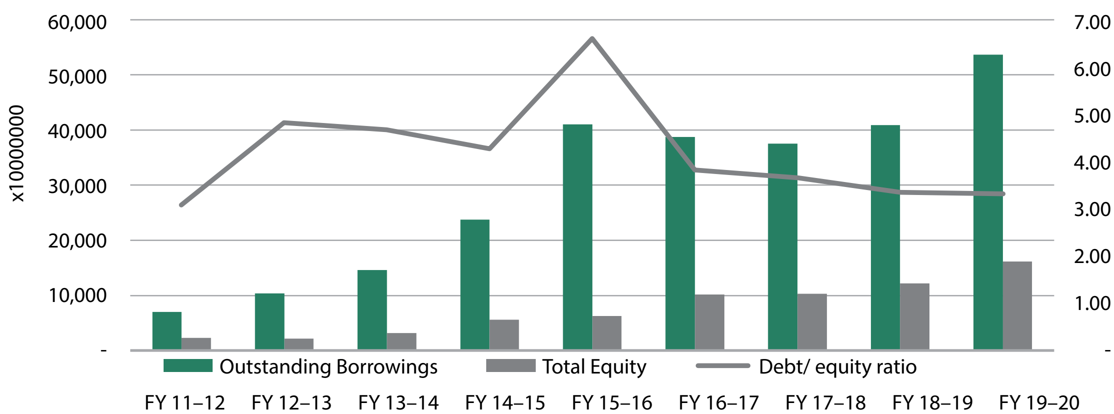


Figure 6.43: NBFC-MFIs: Borrowings and Equity (₹ Crore)

Source: MFIN data.

Figure 6.43 shows the decadal status (since FY 2012) of funding and the debt–equity ratios for NBFC-MFIs.

The break-up between equity raised from domestic and foreign sources (NBFC-MFIs only) can be seen from Figure 6.44.

EFFICIENCY METRICS AND ATTRITION

The microfinance business has traditionally been a high-touch activity with a large field force. While there has been a continuing thrust towards technology adoption and the equipping of staff with modern, handheld devices, this has hitherto not resulted in significant productivity gains. As per MFIN data, for the reporting NBFC-MFIs, the

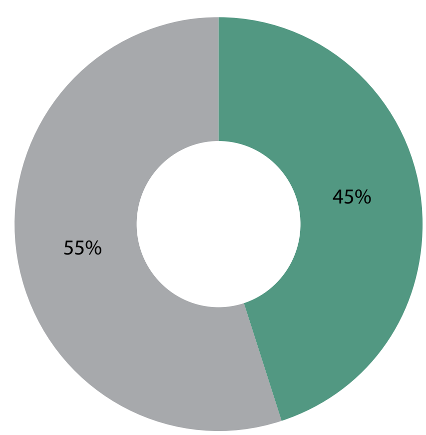


Figure 6.44: Break-up of Equity

Source: MFIN data.

average number of clients per loan officer in March 2012 was 489. As of March 2020, the number was 437. Similarly, the average number of clients per branch in 2012 was 2,119 compared to 2,257 as of March 2020. Hence, given the inherent dynamics of a high-touch operating model, the field-level productivity has, over the years, remained quite static.

A comparison on the basis of the size of the institutions shows material differences between smaller and larger players. As of March 2020, in the small NBFC-MFI category, the average number of clients per loan officer was only 239 compared to 452 of the large institutions. Similarly, the GLP per loan officer for the small NBFC-MFIs was ₹ 0.4 crore compared to ₹ 1.1 crore for large institutions.

Figure 6.45 shows the productivity ratios across different categories of NBFC-MFIs by size.

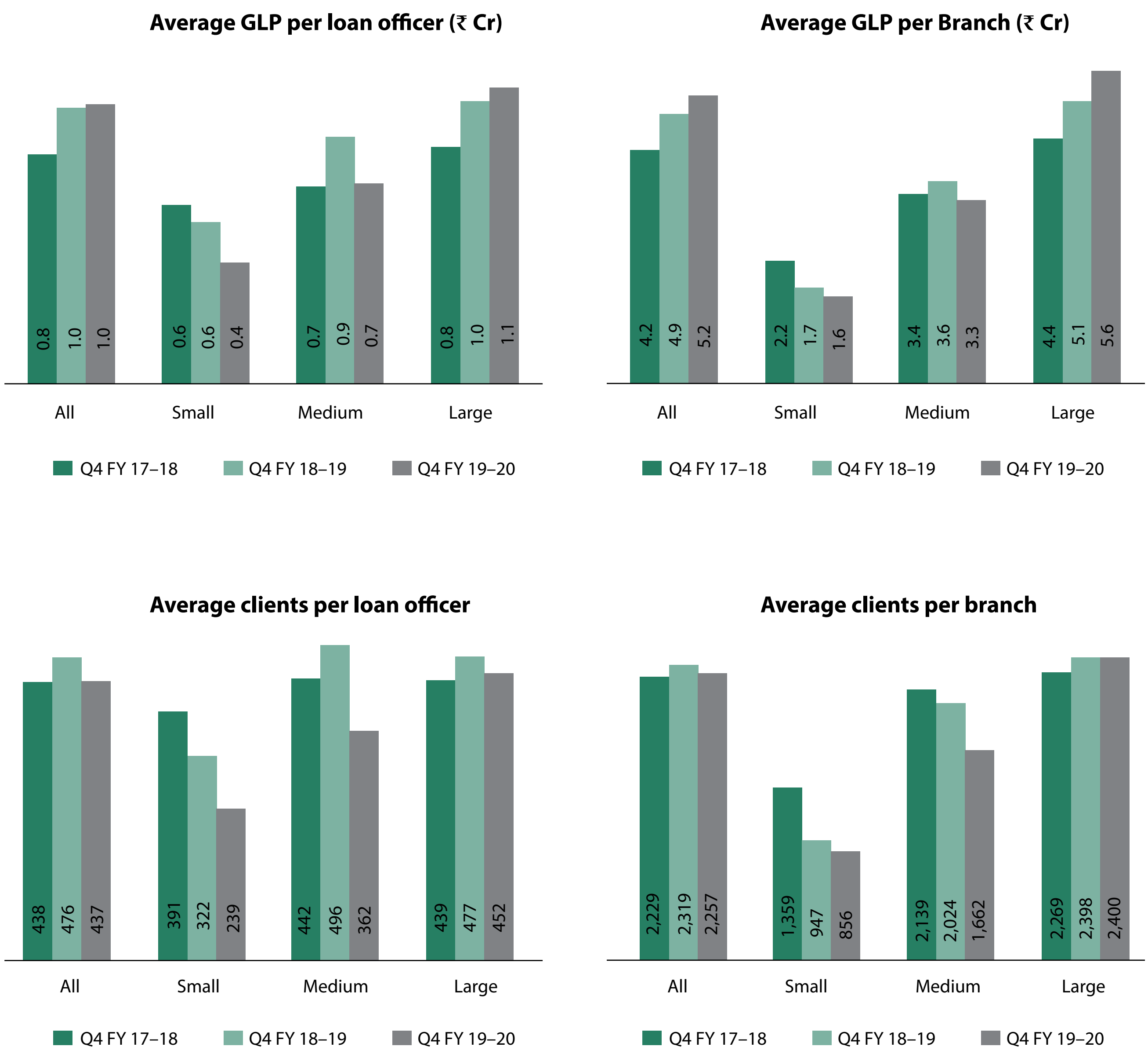


Figure 6.45: Productivity Ratios across Different Categories of NBFC-MFIs by Size

Source: MFIN data.

Note: Small MFIs = GLP below ₹ 100 crore; medium MFIs = GLP between ₹ 100 crore and ₹ 500 crore; large MFIs = GLP over ₹ 500 crore.

From a productivity standpoint, another material aspect is that of staff attrition. This has been a continuing problem for the industry and the overall attrition rate during the period March 2018 to March 2019 was as high as 59 per cent (NBFC-MFIs, as per MFIN data). For field officers, the attrition rate was even higher, that is, 64 per cent. Not surprisingly, the rate of attrition varies considerably depending on the size of the institutions. Small institutions, in particular, face large staff retention challenges.

High attrition rates have significant implications for the industry since they impact productivity, profitability and quality of customer connect.

TECHNOLOGY ADOPTION—ISSUES & CHALLENGES

The launch of Jan-Dhan Yojana in 2014 and the adoption of the Jan Dhan-Aadhaar-Mobile (JAM) trinity as the forward-looking model for deepening financial inclusion brought about a paradigm shift in the use of technology by the full range of financial services providers. Fintech and digital lending have become the buzzwords. What is clear is that disruptive changes are starting to take place. These changes, an emerging reality, have large implications for the operating models of microfinance institutions. The key challenge is how best to adopt and integrate new technologies into what has hitherto been a high-touch model.

The depersonalization of lending and the consequent weakening of the customer connect carries large risks. The Centre for the Study of Financial Innovation's 'Banana Skins Survey' of 2018 quite pointedly states that the headline message is that 'the wave of new technology sweeping through the financial services market is seen as much the *greatest risk* to the financial inclusion business.' And, as we have already seen in the past, inadequately thought through efforts at large-scale technology adoption by some microfinance players had unsatisfactory outcomes.

As things stand, overall, the microfinance industry has taken a relatively cautious and step-by-step approach to technology adoption. Largely, it is still seen as a cost rather than a tool that can lead to enhanced efficiencies and better controls. Nonetheless, be it loan origination, underwriting, disbursals, monitoring or back-end operations, technology has entered into the operational frameworks of all microfinance institutions. The use of mobile phone applications and tablets has become de rigueur, particularly for larger players. Among the more interesting and forward-looking technical adoption measures have been chatbots, robotic process automation, optical character recognition, geotagging and mobile apps for interfacing with the clients.

From a core operational standpoint, a fundamental shift that has taken place is that of cashless disbursements. With the demonetization event of November 2016 as the trigger point, the industry moved quickly towards opening of bank accounts for clients and disbursing loans directly into the accounts.

The position of cashless disbursements by different categories of institutions can be seen in Table 6.7.

Table 6.7: Cashless Disbursement—Institution Category-wise FY 2020

Category	Total Disbursement (₹ in Crore) during FY 2019–2020	Cashless Disbursement (₹ in Crore) during FY 2019–2020	Percentage
All MFIs	106,403	73,064	69
NBFC-MFIs	86,385	64,690	75
NBFCs	3,902	3,837	98
Sec. 8 Companies	4,039	3,670	91
Others (society, trust and cooperative)	12,077	867	7
GLP < ₹100 crore	3,325	2,573	77
GLP between ₹100 and ₹500 crore	10,300	8,701	84
GLP between ₹500 and ₹2,000 crore	21,312	14,431	68
GLP > ₹2,000 crore	71,465	47,359	66

Source: Sa-Dhan BMR 2020.

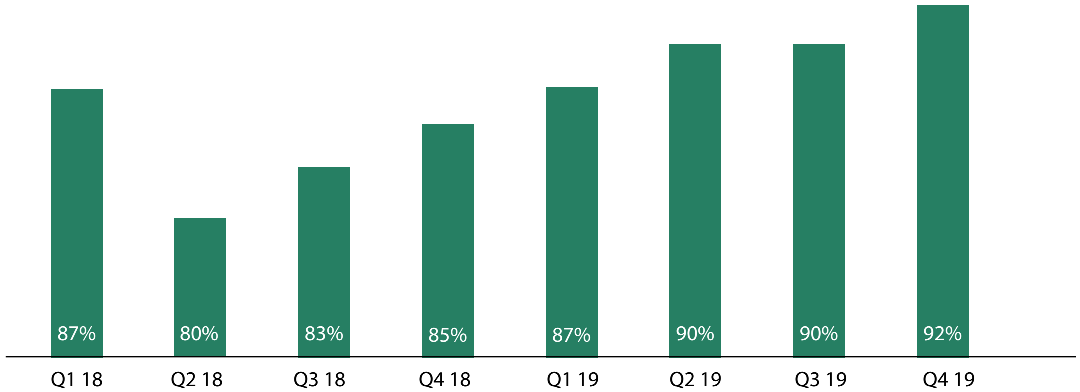


Figure 6.46: Cashless Disbursement (%)

Source: MFIN data.

It may be pointed out that NBFC-MFIs reporting to MFIN show significantly higher levels of cashless disbursements—92 per cent as of Q4 of 2019. The status in this regard from Q1 of 2018 to Q4 of 2019 can be seen from Figure 6.46.

Cashless collection is the next logical step forward for the industry. The COVID-19 pandemic and the resultant difficulties in meeting clients have given a fillip to this initiative. A number of solutions are being experimented with by the industry players. The Bharat Bill Payment System, Aadhaar-based payment systems, unified payments interface and national automated clearing house are the various platforms in this regard. In any event, the digital payments ecosystem is rapidly evolving, including the entry of multinational giants such as WhatsApp and Google. The fast-changing payments landscape will, hopefully, give the industry more low-cost options and more convenience to clients.

At this stage, hard data on cashless collections are not available. However, anecdotally, it is understood that, at present, collections through digital modes are in the 7–10 per cent range.

A cash-lite model covering both disbursements and collections will result in significant reductions in operating costs. The inevitable downside will be some weakening of the customer connect. Perhaps 'phygital' may be the optimal solution.

REGULATORY ENVIRONMENT AND ISSUES

The current regulatory framework for the NBFC-MFIs is essentially based on the recommendations contained in the Malegam Committee's Report (MCR), which dates back to 2010. While much has changed since then, it must be said that the MCR framework has served the industry well. The relatively rapid revival of the NBFC-MFIs from the traumatic times of the Andhra crisis can be directly attributed to the legitimacy provided by the tightly defined and, arguably, quite restrictive regulations. The rigidity of the regulations—which was necessary in the aftermath of the Andhra crisis—is now acting as an impediment to the industry's growth and stymieing innovation. It is noteworthy that since December 2011, when the RBI put in place detailed regulations, the only substantive changes that have taken place have been the loan size limits and the income criterion of the borrowers.

As things stand now, commercial banks/SFBs have about 70 per cent of the market share of microfinance. This represents a systemic shift in market realities. For the NBFC-MFIs, this shift brings to the fore a new set of challenges. And, for the RBI, it raises the large issue of the *regulatory arbitrage* between NBFC-MFIs and commercial banks/SFBs. The former are subject to the strict 'qualifying assets' criterion of 85 per cent. The latter are not trammelled by similar restrictions.

From a public policy perspective, tightly regulating just one class of lenders—whose market share is shrinking—while leaving the others effectively unregulated (in the context of microfinance) defeats the stated intent of having the regulations. A comprehensive relook at the NBFC-MFIs regulations and providing a level playing field for all players is thus the need of the hour. The RBI is cognizant of this issue and the shift from entity- to activity-based regulation is an ongoing debate. In this context, the recent statement of Shri Rajeshwar Rao, deputy governor, RBI (Speech at the National E-Summit on NBFCs, 6 November 2020), is strongly suggestive of a forward-looking policy thrust.

> *…Today we are in a situation where the regulatory rigour is applicable to only a small part of the microfinance sector. There is a need to re-prioritise the regulatory tools in the microfinance sector so that our regulations are activity-based rather than entity based. After all, the core of microfinance regulation lies in customer/consumer protection.*

The other key element of the changing regulatory environment is the increasing concern of regulators towards large, systemically important NBFCs. It can be said that for many years, the RBI, not unlike many regulators, globally, has viewed non-banks with a somewhat jaundiced eye. The recent IL&FS crisis, closely followed by the collapse of DHFL, has heightened concerns, more so given the deepening level of interconnectedness between all financial sector players and the fragilities inherent in the NBFC business model.

While the NBFC-MFIs represent a small fraction of the financial sector, they have over the past decade enjoyed a disproportionate share of regulatory attention. This has, essentially, been a function of the large, politically sensitive, client base of the industry and the perceived role of the industry in promoting financial inclusion. With a diminishing share of the microfinance market and a limited number of large players, it is likely that the industry's claim to the minds of policymakers and regulators will be reduced. In other words, even as microfinance gets greater recognition and attention, the role and systemic importance of NBFC-MFIs is reducing. It is indeed quite clear that the document of the RBI, 'National Strategy for Financial Inclusion, 2019–24', released in January 2020 does not even make a passing reference to the role played by NBFC-MFIs in promoting financial inclusion.

From RBI's standpoint, it appears that the road map for the industry is that at least the larger players should make progress towards the SFB format. And, thereafter, mature SFBs could possibly become universal banks. The granting of a universal banking license to Bandhan Bank and 8 out of the 10 SFB licenses to NBFC-MFIs shows this thinking. With SFB licensing put under the 'on-tap' regime from December 2019, as well as raising the capital requirement to ₹ 200 crore, the direction in which larger industry players should move is clear. To successfully make the transition is the now the challenge.

In the short-term, the most critical regulatory issue which the NBFC-MFIs are facing is the 85 per cent threshold for 'qualifying assets'. This high bar is a debilitating drawback. Product diversification and innovation—which are critical for any industry's continuing success—become extremely difficult when practically every element of product design and the customer segments are tightly defined by the regulations. The industry's representations for the reduction of 85 per cent of qualifying assets to, say, 65–70 per cent levels have, hitherto, got stonewalled. Nonetheless, this regulatory change remains high on the agenda of the two industry associations.

From the standpoint of fair pricing for clients, the caps of 10 per cent and 12 per cent gross margin and the 2.75 multiple of the base rate of the five largest commercial banks have been quite effective. However, for smaller institutions, which are largely dependent on high-cost borrowings from NBFCs, the formula is squeezing the margins and causing stress. Representations to the RBI for the widening of the basket to include SFBs have not yet received a favourable response. This, coupled with the overall liquidity challenges being faced by smaller players, is creating sustainability issues for them (smaller players).

Apart from the macro-issues, the industry also has a number of operational-level requests from the regulator. Critically, there is a need to further strengthen the ecosystem of the Credit Bureau. In this context, the key requirements are as follows:

1. Submission of micro-credit data to the microfinance segment of the CICs by all lenders
2. Submission of self-help group (SHG) data to CICs
3. Participation of not-for-profit lenders in the credit bureau system
4. Use of Aadhaar by providers of micro-credit and the CICs
5. Changes in the uniform credit reporting format

The industry has represented to the RBI on all of the aforementioned points. However, progress in addressing these issues remains tardy. In particular, data on the level of individual borrower from SHGs is critical for having a full credit profile of microfinance clients and preventing over-indebtedness. While the RBI has issued directions on this, NABARD has been slow to take matters forward.

Another connected aspect is the submission of data to the central KYC registry. Till now, the data upload to the registry is quite limited. Among other things, this is on account of the cost of uploading, which is considered too high. Hence, this useful and important initiative is not getting much traction.

Self-regulatory organization (SRO):

To supplement its direct regulatory oversight, the RBI chose to adopt the SRO model for the NBFC-MFIs. This was the last of the recommendation of the MCR to be implemented and the SRO guidelines were finally released in November 2013. A bold regulatory initiative, it was almost a leap of faith in industry leadership. That said, the RBI did not make SRO membership mandatory, but stated that 'the membership of NBFC-MFIs in the industry association/SRO will be seen by the trade, borrowers and lenders as a mark of confidence and removal from membership will be seen as having an adverse impact on the reputation of such removed NBFC-MFI.' The guidelines also stated that, '………NBFC-MFIs are encouraged to voluntarily become members of at least one SRO.' The core responsibilities specified for an SRO were:

- Nominate a compliance officer who will report directly to the RBI and keep the RBI posted on all developments in the sector.
- Inform the RBI of the violations by members.
- Provide periodic information/data.

In June 2014, MFIN was accorded the SRO status by the RBI, the first industry body in the financial sector to receive such a recognition. And later, in February 2015, Sa-Dhan too was given the SRO status. This gave the NBFC-MFIs a choice in terms of SRO membership. It also meant that the not-for-profit players, who were only members of Sa-Dhan, would be subject to some degree of indirect regulatory discipline and supervision.

While the recognition of the two SROs was largely welcomed by the microfinance industry and other stakeholders, there was also, at a conceptual level, a degree of scepticism. To quote Willem Buiter (external member of the Bank of England's Monetary Policy Committee from 1997 to 2000 and, more recently, chief economist of Citigroup), 'Self-regulation stands in relation to regulation the way self-importance stands in relation to importance.' While the feeling of 'self-importance' may have been a connected outcome, the SRO model has worked well for both the regulator and the industry.

Gaining the trust and confidence of a regulator is never easy. But, overtime, this has been largely achieved by both SROs. Regular consultations and interaction, including MFIN being a standing invitee for the RBI governor's pre-monetary policy meetings (from 2014), is an operating framework that has been stabilized. The SRO status has also enabled MFIN and Sa-Dhan to act as a credible interlocutor for the industry, be it the central government, the state governments or the full range of government authorities. For industry data and feedback on the ground realities, the RBI increasingly looks to the SROs—which in itself is an achievement. In turn, the SROs provide guidance and clarity to members on regulatory issues.

Both SROs have created reasonably robust organizational structures for dealing with enforcement and redressal of customer grievances. MFIN, in fact, has also established a multilingual call centre for customer complaints. And the loan passbooks of member institutions carry the phone numbers of the call centre.

Field surveys and investigations are conducted from time to time, and whistle-blowing is encouraged. Training, financial literacy programmes and the development of credit tools for members are some of the noteworthy areas supported by the SROs. Data collection and analysis has become a key competency with MFIN's quarterly Micrometers and Sa-Dhan's annual publication, Bharat Microfinance Report, being used by both market analysts and policymakers.

From the standpoint of customer protection, a large initiative undertaken by the SROs in 2019 was the launch of the CRL. The CRL attempts to harmonize micro-lending across all categories of lenders, almost as a proxy for regulatory intervention. Specifically, it enjoins the signatory institutions to

- Not be a fourth lender to a microfinance client (in effect, there is a limit of three lenders across all categories of lenders)
- Not breach the total lending limit of ₹ 1.25 lakh
- Submit data to the CICs on a weekly basis
- Not lend to a client who has a NPA account (dpd [days past due] > 90+ and loan outstanding > ₹ 1,000.00)

A CRL Steering Committee has been set up under the chairmanship of Shri H. R. Khan, former deputy governor, RBI, which is to provide the necessary direction for this initiative. To quote Shri Khan:

> *Given the vulnerabilities and volatile income levels of low-income households whom the sector serves it becomes critical to ensure that they are treated fairly and transparently and offered products which are suitable and serviceable with reference to their credit needs, level of leverage, repayment capacity and speedy grievances redressal mechanism. This has been underscored by repeated disruptions the sector has faced from Andhra to Assam.*

> *Fair and honest dealings with the micro-finance customers who are often financially not literate and saving them from the scourge of excessive indebtedness therefore has to be motto of all the players in this space. Here the Code for Responsible Lending (CRL) assumes great significance as the Code strives to bring all the categories of players in microfinance sector to follow a common framework of responsible lending and be subjected to scrutiny of compliance with the Code on an ongoing basis.*

The adherence to the CRL is monitored by the SROs. Currently, based on the data from Equifax, a Quarterly Adherence Report (QAR) is being prepared by MFIN. A CRL scorecard has been adopted on the basis of which the signatory institutions are rated. It is indeed heartening to see from the QARs that adherence to the CRL is at very high levels. Of course, not all players in the microfinance sector have accepted the CRL. As of July 2020, a total of 111 institutions, including 8 SFBs, have signed up. The representation of commercial banks is low. Hence, it is work in progress. It is the expectation that CRL will gain even wider acceptance as non-signatories start seeing it from the broader perspective of what is good and right for clients and the industry.

The thrust of the initiatives and activities of both SROs has been client protection and being a bridge between the regulator and the industry. What started as a regulatory 'experiment' 5 years ago has amply proved its worth so much so that the RBI is now considering the adoption of the SRO model for other segments of the financial sector.

EMERGING TRENDS, CHALLENGES AND PROGNOSIS

The NBFC-MFIs have come a long way from the troubled times dating back to October 2010. The industry has matured. It has been recognized by all stakeholders for its role in improving access to finance, has acquired an impressive client base and has been well integrated into the financial system. In this context, some of the recent observations of Dr Viral Acharya, former deputy governor, RBI, are insightful and indicative of the thinking at a policy level. In an article he wrote for the *Financial Times* (23 September 2019), he stated, '……these underserved Indians are square pegs: the banking system a round hole….' He further stated that 'as a Central Banker I wondered if we could "sachetise" finance to lift people out of poverty.' More recently, in September 2020, he talked about the 'democratization of credit' and that the weaker public sector banks should focus on 'sachetization' of lending similar to the business models of microfinance institutions or SFBs. In effect, at a very basic level, the legitimacy and the utility of the microfinance model is receiving heightened recognition.

What is obvious is that the credit needs of large segments of the economy, particularly the informal sectors, are not being met by commercial banks. The credit-to-GDP ratio at just 55.7 per cent (compared to 208.7% of China) is very low. In the policy discourse, a continuing theme is how to connect the informal sector/MSME borrowers to the formal sector lenders. Microfinance lenders competencies and reach, particularly in rural/semi-urban markets, make them well suited to meet the credit needs of unserved and underserved segments. Hence, defining micro-credit too narrowly, setting low value limits and putting the industry under a regulatory straitjacket is antithetical to the policy goals of widening and deepening the availability of credit from formal sector lenders. It is noteworthy that the stillborn 'Micro Finance Institutions (Development and Regulation) Bill' of 2012 defined micro-credit facilities as involving an 'amount not exceeding in aggregate five lakh rupees for each individual and for such special purposes, as may be specified by the Reserve Bank from time to time, such higher amount, not exceeding ten lakh rupees, as may be prescribed….' It is this wider definition that will allow the industry to move to the next stage of growth and contribute more substantively to the formalization of the economy.

For the present, the NBFC-MFI industry is confronted with contradictory trends. While it has become large, stable, well respected and still growing at a healthy rate, its systemic importance is declining. The competitive pressures from commercial banks and SFBs are growing. The time-tested JLG model of lending is moving towards obsolescence. Credit costs are inching upwards, and historical ~99 per cent repayment rates are no longer the case. The smaller players are facing both liquidity and COFs issues, and the gap between them and the larger players is widening. Fintech players are exploring the unserved/underserved market spaces and, potentially, becoming a disruptive force. The recent investment by the Flipkart co-founder, Sachin Bansal, in Chaitanya India Fin Credit Pvt Ltd and, thereafter, the application made to the RBI for a universal banking license portends the shape of things to come.

Another risk factor that the industry continues to grapple with, even if episodically, is that of politically motivated disruptions. While, overall,

Box 6.1: Assam Imbroglio

For the microfinance industry, Assam is the sixth largest state in GLP terms. From August 2019, in several districts of north Assam, repayment issues surfaced. And all categories of lenders were affected with age-old allegations of high interest rates, over-leveraging of clients, aggressive market practices and coercive recovery practices being levelled against them. While what exactly triggered events can be matter of speculation, a closer examination of issues once again brings out the vulnerability of the industry to local-level forces. In this context, the following points are noteworthy:

Overall slowdown in the economy and floods, perhaps a broad sub-context to underlying borrower-level stress and subsequent repayment issues.

Industry data for the state pointing to the fact of a highly saturated market (more than 40% potential low-income households covered). And coupled with that almost the highest loan outstanding per customer of all states in the country. Reports from the state also strongly indicated that over-lending and that too for consumption purposes was becoming quite rampant. In this regard, tea garden workers in north Assam seem to have been the most vulnerable category of borrowers.

The issue of regulatory arbitrage coming to the fore since the largest provider of micro-credit in the state—a commercial bank—was not required to follow the norms applicable to NBFC-MFIs. And that lender followed its own uniquely different approach to industry standards, with the average loan ticket sizes being considerably higher than that of the industry.

Finally, the political context—non-repayment/loan waiver—turning into an electoral agenda for local-level politicians.

As events unfolded, the industry responded quickly by engaging local trade unions, media, administration, customers and other stakeholders. Under the MFIN/Sa-Dhan umbrella, all lenders agreed to a total indebtedness cap of ₹ 1 lakh, and ₹ 50,000/₹ 30,000 for tea garden workers with multiple and single source of income, respectively. They also agreed to discount/waive the accrued interest if customers were to resume repayments. An intense dialogue with the state government and involvement of the RBI ensured that a full-blown crisis got averted. However, extraneous factors such as the National Register of Citizens (NRC) listing-related agitations in November/December and then the lockdown in March 2020 led to continued instability.

The total industry exposure to the state is around ₹ 12,500 crore. As things stand, about one-third of the portfolio, across all categories of lenders, appears to be at risk. The PAR trends in the state up to December 2019 can be seen from Figure 6.47 .

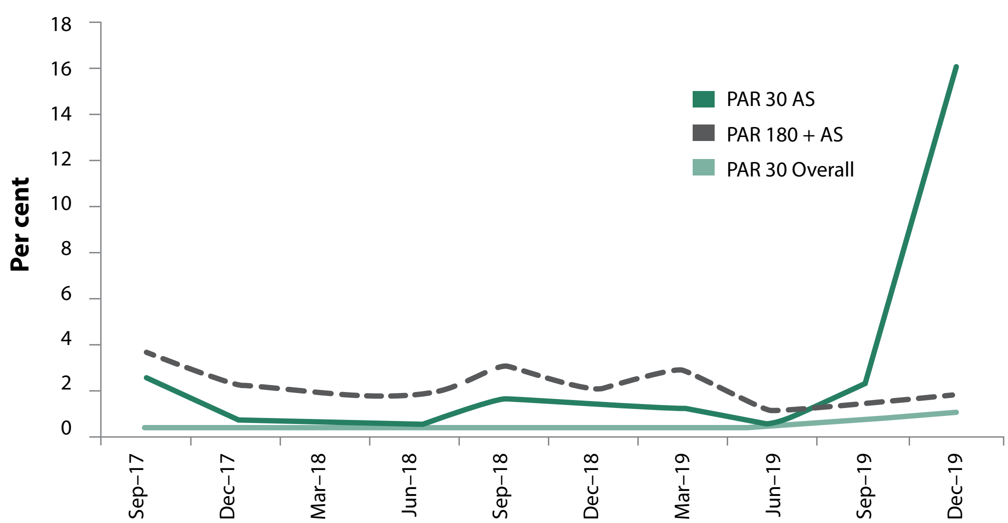


Figure 6.47: PAR Trends in Assam

Source: RBI, CRIF Highmark, and HSIE Research.

the political risks have largely got mitigated by the framework of regulations, the Assam crisis of 2019 (Box 6.1) and some of the local-level disruptions in Karnataka, Maharashtra and Odisha underscore the reality of our political economy. They also highlight the fact that the 'poor' fall into what can be described as contested spaces. The politicians see them as a vote bank; the microfinance lenders see them as clients and the clients themselves would like to have beneficial relationships with both. Situations of client-level stress, whatever the reasons may be, tend to get exploited by politicians. Over the years, through industry associations, both at national and state levels, a robust capacity to deal with local-level issues has been built. But the tensions intrinsic to our political economy are unlikely to go away.

A mention may also be made of the personal bankruptcy provisions and the 'Fresh Start' formulation under the IBC. While the intent of the Code is indeed very positive, taken forward without appropriate safeguards, it has adverse implications the industry.

Looking ahead, arguably, the NBFC-MFIs are at the cusp of great opportunities and significant market risks. To paraphrase Shakespeare, there is a time and tide in the affairs of people and enterprises. The promoters of enterprises in the microfinance industry have been high on entrepreneurship, but less so on innovation. In a rapidly changing operating environment, responsiveness and innovation are the necessary ingredients of success. While the industry may hope for favourable regulatory changes, hope is not a strategy. The larger players have the scale, the market heft and the regulatory road map for growth. For smaller players, the challenges are very daunting. And the impact of the COVID-19 pandemic has worsened matters. The co-origination guidelines announced by the RBI and the business correspondent model are possible opportunities. That said, for both the not-for-profit MFIs and the small NBFC-MFIs, the future looks quite bleak.

In the ultimate analysis, the relevance the industry has is a function of how the clients value its products and services. From the lens of client satisfaction, broadly, the industry has done well. Apart from all the past studies and literature on the subject, a recent large sample survey undertaken by Microsave amply brings out the generally positive impact of micro-credit on the lives of clients (Box 6.2).

The renowned British historian Arnold J. Toynbee in his seminal work, *A Study of History,* propounded the 'challenge and response' hypothesis to explain the rise and fall of civilizations. The challenge and response hypothesis has almost universal applicability. For the microfinance industry, future success lies in how well they respond to the ongoing challenges before them.

Box 6.2: Clients Perspectives

Microfinance is an activity which was rooted in idealism; in a passion to improve the lives of the poor; in an effort to combine business principles with social good.

Notwithstanding the stellar growth of the micro-lending in India, what has remained contentious is how beneficial it has been for the clients. This, of course, is a hotly debated subject, globally. Abhijeet Banerjee, Zinmann and Dean Karlan writing in the American Economic Journal (Jan 2015, Vol 1/ No1) stated, '….we note a consistent pattern of modestly positive but not transformative effects….' While this is almost intuitive, for the microfinance practitioners in particular, reinforcement of the belief that their efforts are indeed benefiting the clients holds great value.

With a view to forming a broad view on how sustained availability of micro-credit may have impacted the lives of borrowers, a survey and study supported by MicroSave Consulting and five lenders (4 NBFC-MFIs and 1 SFB) was carried out in Aug- October, 2020. The survey covered over 10,000 clients across 11 states. Only mature borrowers, (3rd cycle or above) with a clean credit record were interviewed. From a methodological standpoint, care was taken to obviate the risks of selection bias.

The key conclusions of the study are summarised below:

1. 85% of the respondents had a bank account of which 71% believed that association with MFIs has helped them in usage of the accounts.
2. 76% of the respondents reported that MFI loans have led to an increase in income.
3. An overwhelming majority of clients felt that standard of living and general well-being has been positively Influenced by their association with MFIs.
4. From a social standpoint, improved social bonding, improved confidence and greater respect within the family represent the major changes for the clients.

APPENDIX 6.1:
State /UT-wise Loan Portfolio Outstanding (₹ in Crore) across All Lenders

State	March 2020	Share (%)	March 2019	Share (%)	Growth (%)
Tamil Nadu	32,531	14.13	26,750	14.88	21.61
West Bengal	31,533	13.70	25,818	14.36	22.14
Bihar	26,351	11.45	18,255	10.16	44.35
Karnataka	19,083	8.29	15,554	8.65	22.69
Maharashtra	16,728	7.27	12,475	6.94	34.09
Uttar Pradesh	15,419	6.70	10,989	6.11	40.31
Madhya Pradesh	13,378	5.81	10,198	5.67	31.18
Odisha	12,872	5.59	11,132	6.19	15.63
Assam	11,433	4.97	11,412	6.35	0.18
Kerala	9,384	4.08	6,941	3.86	35.20
Rajasthan	9,365	4.07	6,517	3.63	43.70
Gujarat	6,627	2.88	5,202	2.89	27.41
Jharkhand	5,257	2.28	3,773	2.10	39.33
Punjab	4,569	1.99	3,279	1.82	39.35
Chhattisgarh	4,206	1.83	3,359	1.87	25.22
Haryana	3,981	1.73	2,835	1.58	40.42
Tripura	2,608	1.13	2,271	1.26	14.86
Uttarakhand	1,156	0.50	905	0.50	27.72
Andhra Pradesh	954	0.41	401	0.22	137.71
Delhi	610	0.27	507	0.28	20.42
Pondicherry	492	0.21	377	0.21	30.41
Others	470	0.20	25	0.01	1751.53
Telangana	323	0.14	135	0.08	138.78
Meghalaya	149	0.06	129	0.07	15.46
Sikkim	133	0.06	105	0.06	26.89
Goa	128	0.06	122	0.07	4.81
Manipur	128	0.06	69	0.04	84.97
Mizoram	77	0.03	44	0.02	73.95
Himachal Pradesh	66	0.03	42	0.02	56.36
Nagaland	60	0.03	46	0.03	29.33
Chandigarh	28	0.01	21	0.01	31.41
Dadra & Nagar Haveli	22	0.01	18	0.01	20.81
Arunachal Pradesh	20	0.01	13	0.01	52.37
Jammu & Kashmir	16	0.01	11	0.01	51.91
Daman & Diu	6	0.00	4	0.00	36.01
Andaman & Nicobar Islands	5	0.00	1	0.00	528.83
Lakshadweep	0	0.00	0	0.00	–100.00
Total	**230,165**		**179,737**		**28**

Source: Sa-Dhan BMR 2020.

APPENDIX 6.2:
State/UT-wise Delinquency

		30+ Delinquency % by Value					
S. No.	**States/UTs**	**Industry**	**NBFC-MFIs**	**Banks**	**SFBs**	**NBFCs**	**NFPs**
1	Assam	13.90	21.21	9.76	15.43	31.20	
2	Others	7.26	5.46	8.53	5.95	26.31	0.00
3	Karnataka	3.16	3.51	3.45	1.18	4.07	0.00
4	Kerala	1.28	2.19	1.41	0.36	2.16	0.00
5	Meghalaya	1.50	2.06	0.66	3.27		
6	Delhi	1.30	1.98	1.15	1.08	3.92	
7	Telangana	0.54	1.80	0.31	0.01	1.09	
8	Dadra & Nagar Haveli	0.73	1.58	0.60	0.33	1.24	
9	Goa	1.21	1.56	1.00	0.15	0.00	0.00
10	Mizoram	1.19	1.47	0.55	4.43		
11	Gujarat	1.64	1.32	1.56	1.52	2.98	1.84
12	Tamil Nadu	1.19	1.25	0.56	1.06	2.04	1.64
13	Madhya Pradesh	1.41	1.24	0.91	1.73	3.41	1.43
14	Pondicherry	0.69	1.23	0.33	0.48	0.99	0.00
15	Uttarakhand	0.98	1.23	0.57	1.00	2.79	0.00
16	Odisha	1.38	1.21	1.27	1.44	3.27	0.00
17	Chhattisgarh	1.37	1.18	0.98	1.80	2.87	0.27
18	Tripura	0.85	1.00	0.66	0.37	8.62	0.00
19	Maharashtra	1.15	0.93	0.74	1.98	1.96	1.05
20	Chandigarh	2.83	0.85	2.21	0.28	24.95	
21	Uttar Pradesh	0.73	0.84	0.56	0.69	2.07	0.12
22	West Bengal	0.70	0.80	0.68	0.68	0.77	0.23
23	Jharkhand	0.83	0.79	0.76	0.58	3.01	0.01
24	Jammu & Kashmir	2.24	0.65	26.14	0.00	0.00	
25	Rajasthan	0.59	0.61	0.34	0.58	1.66	0.01
26	Himachal Pradesh	1.32	0.59	2.55	0.08	6.64	0.00
27	Haryana	0.75	0.55	0.61	0.48	2.98	0.23
28	Andaman & Nicobar Islands	0.57	0.45	1.10	10.90		
29	Andhra Pradesh	0.53	0.41	2.66	0.11	0.47	0.00
30	Punjab	0.95	0.39	0.69	0.55	6.01	0.00
31	Bihar	0.30	0.30	0.31	0.31	0.27	0.02
32	Sikkim	2.70	0.27	2.73	3.39		
33	Manipur	0.87	0.11	0.38	8.70	0.00	
34	Arunachal Pradesh	1.32	0.10	6.22	1.11		
35	Nagaland	1.69	0.01	2.02	0.03		0.00
36	Daman & Diu	0.19	0.00	0.45	0.05	0.00	

Source: Sa-Dhan BMR 2020.

APPENDIX 6.3:
Microfinance Equity Deals—FY 2018 to FY 2020

S. No.	Company	Type of deals	Investors	Transaction Date	Amount Invested (₹ Cr)	P/B Pre–money
1.	Fusion	PE	Warburg Pincus, Creation	Dec–19	500.0	2.8x*
2.	Svasti Microfinance	PE	NMI	Oct–19	71.0	2.42x
3.	Sub–K	PE	Maj Invest	Oct–19	75.0	NA
4.	Dvara KGFS	PE	NMI	Sep–19	70.0	NA
5.	Chaitanya	PE	Sachin Bansal	Sep–19	739.0	2.50x
6.	Spandana	IPO	IPO	Aug–19	1,200.0	2.50x
7.	Sindhuja	PE	Carpedium	Apr–19	28.0	NA
8.	Svasti	PE	NMI, Adar Poonawalla	Feb–19	34.0	2.25x
9.	Annapurna	PE	ADB	Jan–19	137.0	2.42x
10.	Fusion	PE	Warburg Pincus	Dec–18	520.0	2.7x*
11.	Janaklayan	PE	SIDBI Ventures	Nov–18	25.0	1.80x
12.	Satya Microcapital	PE	Gojo & Company	Aug–18	43.0	2.5–2.7
13.	Belstar	PE	Maj Invest	Jul–18	200.0	3.00x
14.	Sambandh	PE	Base of Pyramid Asia Pte Ltd	Jul–18	17.2	1.80x
15.	Village Financials	PE	Capital First	Jul–18	15.0	2.29x
16.	Annapurna Finance	PE	Oman India Joint Investment Fund	Jun–18	155.0	2.37x
17.	Arohan Capital	PE	TR Capital	Mar–18	107.2	NA
18.	Village Financials	PE	Param Capital	Mar–18	25.0	2.29x
19.	Saggraha	PE	SIDBI VC	Mar–18	10.0	NA
20.	SVCL	PE	ICICI Prudential	Mar–18	35.0	4.50x
21.	Satya Microcapital	PE	Dia–Vikas	Oct–17	16.0	2.60x
22.	Bharat Fin	MA	Indus Ind Bank	Oct–17		6.40x
23.	Annapurna	PE	Bamboo Capital, BIO, Oika Credit	Jul–17	61.0	2.37x
24.	Madura	Strategi	AVT Group	Jun–17	30.0	2.15x
25.	M–Power	Strategi	India Nivesh	Mar–17	25.7	1.67x
26.	Arohan	PE	Tano Capital, Maj Invest, Aavishkaar Venture Management	May–17	100.0	2.50x
27.	Satin	PE	ADB	Apr–17	64.3	2.36x

Source: Lok Capital/Unitus

*denotes approximate value

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SHG–Bank Linkage Programme: Heading towards Third Decade

Girija Srinivasan

7

INTRODUCTION

The self-help group (SHG)–bank linkage programme (SBLP), initiated in 1992, is now almost three decades old and rightly considered as the world's largest microfinance programme with a reach of 124 million households.[1] Policy support from the Reserve Bank of India (RBI) and the National Bank for Agriculture and Rural Development (NABARD) in financing SHGs has been innovative in terms of (a) acceptance of informal groups as clients of banks for both deposit and credit linkage, (b) collateral-free lending for microfinance and finally (c) banks being permitted to lend to groups without specific purpose/activity.

This policy support has enabled 10 million SHGs to have savings linkages with banks. Credit linkages vary across states and regions, but persistently only half of the SHGs have loans outstanding (OS). The low credit linkage ratio in some of the high-poverty states, such as Uttar Pradesh (UP), Madhya Pradesh (MP), Rajasthan and also in the north-eastern states, continues to be a challenge.

The National Rural Livelihoods Mission (NRLM), commenced in 2013, has continued to expand into the villages and gram panchayats (GPs) under its intensive coverage strategy. With emphasis on building model cluster-level federations (CLFs), the NRLM is putting in place the community institution framework that will provide lasting services to members. Enterprising members of SHGs with over a decade of membership need larger enterprise loans, but banks are yet to develop products and processes to meet demand.

Although the country and the world at large are yet to come to terms with the COVID-19 pandemic, the SHGs and their federations, ubiquitous in almost every village, have extended support to the poor and needy, spontaneously imbibing and demonstrating the principles of 'self-help'.

This chapter analyses the overall progress made in SBLP, initiatives of the NABARD, the progress made by the NRLM and civil society organizations (CSOs), the opportunities and constraints in financing the livelihoods and enterprises of SHG members and the key measures needed for further strengthening the movement.

OVERALL PROGRESS AND PERFORMANCE

A detailed analysis of the trends of the SBLP for last three years is given in this section. Some aspects of the progress of SBLP are given in Table 7.1.

Savings-linked SHGs: As of 31 March 2020, 10.24 million SHGs were linked to banks for savings. The number of SHGs has continued to grow during the year, albeit at a much slower pace than in the previous year. Compared to growth of 14.52 per cent during 2018–2019, growth was only 2.29 per cent during 2019–2020. During the year, 469,617 SHGs opened savings accounts, whereas 240,357 closed their accounts. The incremental increase in the number of groups was 0.22 million and the NRLM's share was 0.21 million, while the growth of SHGs during the year was almost entirely under the NRLM.

Over the past three years, there is a distinct shift in the proportion of the NRLM groups to total groups from 41 per cent in 2017–2018 to 58 per cent in 2019–2020. The National Urban Livelihood Mission (NULM), in comparison, has been slow to take off and has 4.69 per cent share in total groups. The number of exclusive women groups forms 86.22 per cent of SHGs across India. Thus, the SHG movement has the characteristics of being predominantly rural,

Table 7.1: The Progress of SBLP during Last Three Years (Number of Groups in Million and Amount in ₹ Million)

		2017–2018		2018–2019		2019–2020	
SHG savings with banks as on 31 March	Total SHG no.	8.74 (1.95%)	1,959.21 (21.59%)	10.01 (14.52%)	2,332.448 (19.05%)	10.24 (2.29%)	2,615.20 (12.12%)
	All women SHGs	7.39 (0.94%)	1,749.78 (22.51%)	8.53 (15.44%)	2,047.35 (17.01%)	8.83 (3.53%)	2,332.05 (13.91%)
	Percentage of Women	84.51	89.31	85.19	87.78	86.22	89.17
	Of which NRLM/ (Swarnjayanthi Gram Swarozgar Yojana) SGSY	4.18 (11.76%)	1,043.40 (38.15%)	5.58 (33.37%)	1,286.71 (23.32%)	5.78 (3.75%)	1,431.27 (11.23%)
	% of NRLM/SGSY groups to total	47.85	53.26	55.72	55.17	56.52	54.73
	Of which NULM/ SJSRY	0.42 (–22.10%)	135.08 (19.87%)	0.43 (3.29%)	161.44 (19.52%)	0.46 (6.83%)	152.35 (–5.63%)
	% of NULM/SJSRY groups to total	4.86	6.89	4.38	6.92	4.58	5.83
Loans disbursed to SHGs during the year	Total no. of SHGs extended loans	2.26 (19.13%)	4,718.58 (21.67%)	2.69 (19.33%)	5,831.76 (23.59%)	3.14 (16.60%)	7,765.93 (33.17%)
	All women SHGs	2.07 (20.92%)	4,455.87 (23.42%)	2.36 (13.98%)	5,325.40 (19.51%)	2.88 (21.95%)	7,329.75 (37.64%)
	Percentage of women groups	91.78	94.43	87.66	91.32	91.67	94.38
	Of which NRLM/SGSY	1.27 (43.41%)	2,505.51 (44.52%)	1.64 (29.84%)	3,339.89 (33.30%)	2.04 (24.26%)	5,218.37 (56.24%)
	% of NRLM/SGSY groups to total	56.2	53.1	61.12	57.27	65.13	67.20
	Of which NULM/SJSRY	0.10 (0.17%)	242.40 (–9.41%)	0.12 (21.70%)	341.958 (41.07%)	0.15 (23.26%)	340.62 (–0.39%)
	% of NULM/SJSRY groups to total	4.71	5.14	4.78	5.86	5.05	4.39
Loans OS against SHGs as on 31 March	Total no. of SHGs linked	5.02 (3.55%)	7,559.84 (22.76%)	5.07 (1.14%)	8,709.81 (15.21%)	5.67 (11.82%)	10,807.50 (24.08%)
	No. of all women SHGs linked	4.54 (6.20%)	7,040.17 (24.73%)	4.46 (–1.93%)	7,923.19 (12.54%)	5.11 (14.59%)	10,062.07 (27.00%)
	Percentage of women SHGs	90.62	93.13	87.87	90.97	90.05	93.10
	Of which NRLM/SGSY	2.79 (12.13%)	3,822.52 (27.44%)	3.28 (17.62%)	5,432.09 (42.11%)	3.68 (12.30%)	6,771.70 (24.66%)
	% of NRLM/SGSY groups to total	55.63	50.56	64.7	62.37	64.98	62.66
	Of which NULM/SJSRY	0.29 (–8.58%)	535.06 (29.45%)	0.22 (–22.41%)	411.07 (–23.17%)	0.26 (18.67%)	546.68 (32.99%)
	% of NULM/SJSRY groups to total	5.79	7.08	4.43	4.72	4.70	5.06

Source: NABARD (2020).
Note: Figures in parentheses indicate increase/decrease over the previous year.

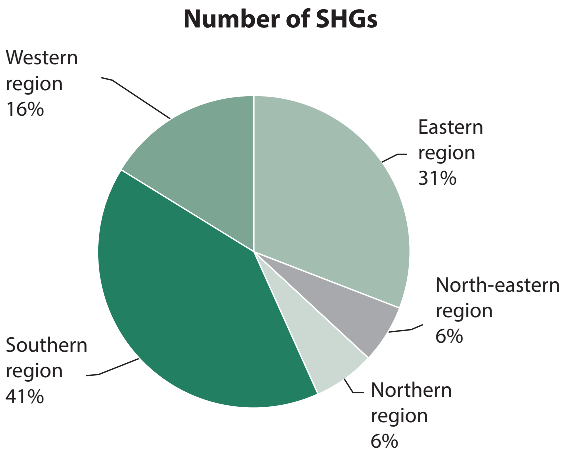
women-centric and deeply penetrated interior villages. Agency-wise, state-level and regional-level particulars are given in Annexure 7.1

During 2019–2020, the eastern and central regions substantially contributed to the growth of the SHGs, followed by the western and north-eastern regions; the southern region showed negative growth. Maharashtra (8%), West Bengal (6%) and Andhra Pradesh (AP; 6%) were the top three states in growth in absolute number of groups. All these three states appeared fairly saturated, especially AP, in terms of the coverage of poor households. In all, eight states and the union territories (UTs) posted negative growth in the number of groups (more old groups disintegrated than the number of new groups formed). Tamil Nadu and Karnataka top the negative growth in the number of groups and in terms of percentage of negative growth, Manipur (–51%), Pondicherry (–22%) and Tamil Nadu (–18%) were the top three states.

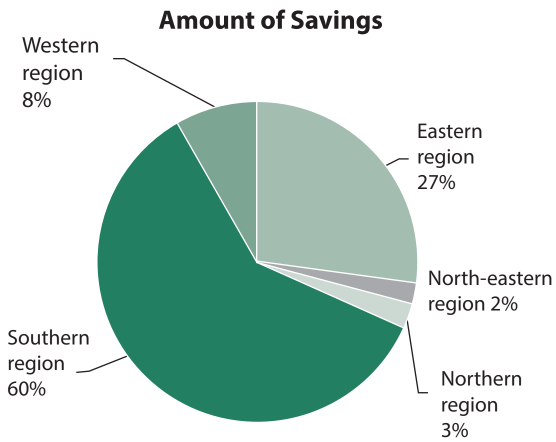
Savings at bank: Members save a fixed amount on a periodic basis as compulsory savings and very few programmes have introduced flexibility for the withdrawal of savings within groups. For ease of accounting, the usual practice is to have compulsory savings only. After inter-lending the group funds, the SHGs keep a minimum of cash in their cash box for emergency situations and deposit the balance in their savings accounts in banks. The bank deposit is idle cash and has a minimum interest rate. There have been few efforts from banks and SHG promoters to design savings products for SHG members, such as recurring deposit and fixed deposit, or purpose-oriented savings such as festivals, pilgrimages and education. Overall, banks seem to base their appraisal and monitoring on loan management and loan recoveries rather than encouraging groups to improve their savings per member. Banks, while increasing their loan sizes, are also encouraging large deposits at banks as lien.

Savings in banks has grown from ₹ 233 billion in 2018–2019 to ₹ 261 billion as of 31 March 2020. Although the number of savings groups increased by only 2 per cent, the savings amount has grown by 12.12 per cent during 2019–2020 as compared to 2018–2019. However, the pace of growth of savings has been slowing down. From 21.5 per cent in 2017–2018, 19 per cent in 2018–2019, the yearly growth rate of savings at bank has decreased to 12.12 per cent for 2019–2020. Although women groups constitute 86 per cent, their share in savings at bank is 89 per cent. The NRLM groups account for 56 per cent of the groups, their share in savings at bank is 54 per cent.

Northern and western regions showed a negative increase in the total savings of the groups in the banks. As many as nine states and UTs also registered a negative increase in total savings. As depicted in Figure 7.1, the southern region accounts for 1,135,083 groups, that is, 41 per cent of the groups mobilizing ₹ 147 billion, about 60 per cent of the total SHG savings. This is predominantly due to the maturity of the programme in the southern states, where the groups have larger savings. All other regions contribute a lower share of total savings as compared to their total share in number of SHGs.



Source: NABARD (2020).



Source: NABARD (2020).

Figure 7.1: Savings at Bank of SHGs in 2019–2020

The average savings per SHG have steadily increased from ₹ 18,787 in 2016–2017 to ₹ 25,530 in 2019–2020. Compared to the previous year, except for the northern region, all regions have seen an increase in average savings per group; the northern region saw a decline of 9 per cent. The southern region has a high savings share of ₹ 39,847 per group, which is 56 percentage point higher than the national average. All other regions have savings lower than the national average.

The state-wise review shows a mixed trend. Two-thirds of states and UTs showed an increase in average savings per group, whereas one-third showed a decline as compared to 2018–2019. AP and Telangana have very high savings per group at bank at ₹ 72,445 and ₹ 58,423, respectively. Since the state governments have a zero-interest bank loan scheme, the groups have been trying to maximize the loan offtake from the banks. Banks have been encouraging groups to deposit their savings as a risk mitigation strategy to support large bank loans. Taking into account the high savings at the bank, the groups seem to have minimal internal lending. A study by Andhra Pradesh Mahila Abhivruddhi Society (APMAS) on mature SHGs of Telangana[2] found that the ratio between the funds in SHG savings bank accounts and the loan OS to banks is 1:5 or 20 per cent. The study found that there was limited internal lending, high dependency on moneylenders for small and emergency needs, but the groups had access to large volumes of loans in repeat doses since they had savings deposited in banks.

A cause for concern is huge jump in savings per group in Puducherry, Tamil Nadu and Kerala, registering an increase of 141 per cent, 61 per cent and 56 per cent, respectively. The increase in savings at bank in the southern states needs deeper study and analysis considering the facts that (a) in spite of a substantial drop in the number of groups in both Puducherry and Tamil Nadu, the states experienced a high growth in savings at bank, (b) internal lending practices of groups in AP and Telangana showed a decline and (c) larger savings in banks also showcased a lack of trust among members to lend and preference to keep idle funds at bank.

Daman and Diu, and Goa also have high savings at banks—almost double that of the national average. Such savings have registered an increase of 156 per cent and 82 per cent, respectively, over 2018–2019. The north-eastern states of Meghalaya, Mizoram and Nagaland have also shown an increase in savings of more than 40 per cent.

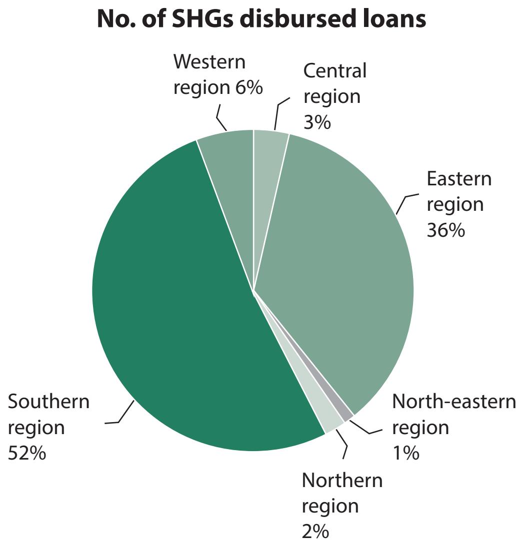
Loan disbursements: The amount of loans disbursed to groups showed a significant growth of 33 per cent during 2019–2020 as compared to the previous year to reach a volume of ₹ 776,593 million. Fresh loans were disbursed to 3,146,002 SHGs during 2019–2020 with a growth rate of 16 per cent year on year. Fresh disbursements have been consistently increasing over the previous three years, as can be seen from Table 7.1. The volume of loan growth has been 22 per cent and 24 per cent for the previous two years.

There has been a consistent growth in the number of groups receiving fresh loans as well; the growth rate being 19 per cent in each of the previous two years. Total 64 per cent of the groups financed during the year and 67 per cent of the loan amount disbursed were to the NRLM-affiliated/promoted groups. The growth rate has been substantial under the NRLM, with year-on-year growth of 26 per cent in the number of groups and 56 per cent in the volume of loans. During 2019–2020, 30.7 per cent of all SHGs and 35.3 per cent of the NRLM SHGs were financed. This is higher than last two years' figures of 26 per cent and 27 per cent for 2017–2018 and 2018–2019, respectively.

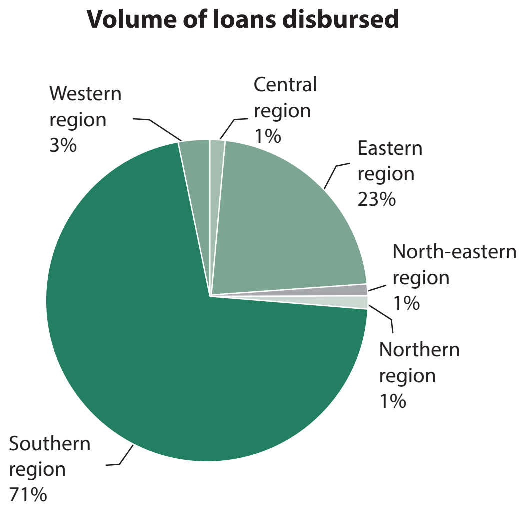
The average loan amount per group in 2019–2020 has been ₹ 0.25 million, registering a 14 per cent rise compared to the previous year. This increase is substantial, considering the previous two years' growth of 2 per cent. Since substantial numbers of groups practise equal distribution of loans among members, with an average of 12 members, the loan amount translates to ₹ 20,570 per member. In contrast, the average per member loan that MFIs disbursed is ₹ 27,754.[3]

According to NABARD Chairman Dr G. R. Chintala, in order to have a meaningful livelihood, the average investment needed is ₹ 50,000 and hence the banks have to increase the loan size for SHGs by at least two and a half times. It is a matter of concern that in as many as six states and UTs (MP, UP, Uttarakhand, Jharkhand, Punjab and Chandigarh), the average loan disbursed was less than ₹ 100,000 during the year. Three out of four states in the central region face this issue. All these states and UTs have a high level of bad loans—around 25 per cent of OS loans. To mitigate risks, banks should be cautious in lending. The State Level Bankers' Committees (SLBCs) have to analyse the reasons and guide the banks on how to address this issue.

Region- and state-wise analysis: The shares of different regions in the number of SHGs receiving loans and the volume of loans disbursed are given in Figure 7.2. The state-wise figures are given in Annexure 7.2. The southern region had a lion's share in terms of the number of SHGs financed and also the volume of loans financed during the year. While the southern region had a share of 52 per cent of the total number of groups financed, in terms of volume of loans, their share was 71 per cent. All other regions had a lower share in the volume of loans financed vis-a-vis their share in the number of groups financed. The southern and eastern regions account for 88 per cent of the groups and 94 per cent of the volume of loans disbursed during the year. The other four regions have a share of only 6 per cent, making the loan disbursement heavily skewed.



Source: NABARD (2020).



Source: NABARD (2020).

Figure 7.2: Regional Spread of Loans Disbursed in 2019–2020

In terms of number of groups financed, the national growth rate has been 16 per cent. The north-eastern (39%), central (30%), eastern (24%) and western regions (18%) registered higher growth than the national average. Growth in the southern region has been 11 per cent. State-wise analysis shows that 11 states had growth rates higher than the national average. On a very low base, Meghalaya and Arunachal Pradesh registered growth rates of 745 per cent and 297 per cent, respectively. As many as 27 per cent (10 out of 36) of the states and UTs showed a negative growth in 2019–2020, with Gujarat topping the list with a negative growth of 34 per cent.

Regarding the volume of loans, all regions have registered a higher growth rate than the national growth rate of 33 per cent. Only the southern region has registered a lower growth rate of 28 per cent. The north-eastern, eastern and central regions have posted an impressive increase year on year. Only four states and UTs have seen a negative growth in the volume of loans. As compared to negative growth in numbers, the negative growth in volumes in percentage terms is much lower.

In Telangana, West Bengal, AP and Karnataka, more than 50 per cent of existing groups received bank loans during the year. The range varies from 64 per cent in Telangana to 52 per cent in Karnataka. In 29 out of 36 states and UTs, less than 30 per cent of existing groups have been disbursed loans during the year. The north-eastern and central regions have a poor record, with less than 10 per cent of existing groups being disbursed loans.

Loans OS: As of 31 March 2020, 5,677,071 SHGs have OS loans of ₹ 1.08 trillion. The number of groups with OS loans has increased by 11.8 per cent during 2019–2020, as compared to a very small increase of 1.1 per cent last year. Of this growth, 47 per cent has come from the southern states of Kerala, AP and Karnataka, substantially contributing to the increase in numbers. The total loan OS has increased by 24 per cent for 2019–2020 as compared to 15 per cent last year. Total 64 per cent of the growth is from the southern region. The share of the NRLM is 65 per cent of groups with loans and 63 per cent of loan amount OS.

Overall, 55.4 per cent of SHGs with bank accounts have an OS loan as of 31 March 2020. In a way, this metric showcases the extent of active groups as groups with only savings accounts can be dormant. It is a matter of concern that this indicator has been almost stagnant for several years. In 2018, 57 per cent of the groups had an OS loan, which dipped to 50.7 per cent in 2019 but rose to 55.4 per cent in 2020. Except for the southern region, all other regions have seen a declining trend in the past three years.

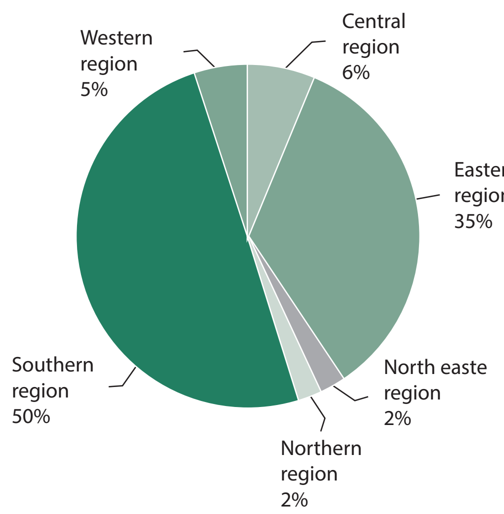
Average loan OS per group: The average loan OS per group is ₹ 190,371 in 2019–2020, registering a growth of 10 per cent over the previous year. As many as 26 out of 36 states and UTs have an average loan OS less than the national figure. Region-wise, only the southern region is well above the national average, with per group loan OS of ₹ 275,906 and central region has the least amount at ₹ 63,503.

Credit multiplier: The credit multiplier is an indicator which gives the ratio of loans OS of banks at SHGs and savings of SHGs with banks. This indicator showcases banker's interest and trust in SHG lending. The credit multiplier increased to 4.13 in 2019–2020 from 3.73 in 2018–2019. Except for the central region, all regions have registered a rise in the credit multiplier during the year. The southern region leads with a credit multiple of 5.29, followed by the eastern region with 3.43. The central region has the least ratio of 1.31. In 24 out of 36 states and UTs, the credit multiplier has declined from 2017–2018. All states in the western and central regions show a decline.

Loan disbursements and thus loans OS of banks have not kept pace with the mobilization of savings at SHGs. SHG savings at banks have been buoyed by multiple factors, such as banks insisting that savings must be routed through bank accounts before internal lending, savings kept as a lien for larger loans, the NRLM disbursing revolving funds (RFs) to group accounts, low credit absorption of groups in some regions and also savings mobilization drive by some programmes. The persistent issue of overdues in some regions and states is also another reason why groups are not able to leverage higher volumes of loans from banks. The case in point in the central region where non-performing assets (NPAs) are high and loan disbursements to groups are low on all metrics. In 16 states and UTs during 2019–2020, the fresh loans disbursed were lower than the savings of groups in banks.

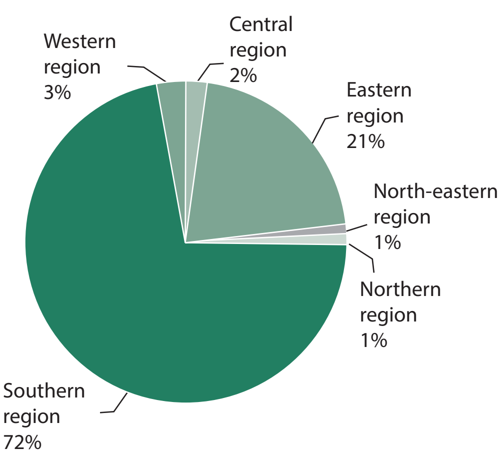
Region- and state-wise analysis: Agency-wise, state-level and regional-level particulars are given in Annexure 7.3. The share of different states in the number of groups with loan OS and the amount of loan OS is given in Figure 7.3 and follows the same trend as for other metrics. The southern region accounted for 50 per cent of the number of groups, which was same as last year. The share of the eastern region increased from 33.3 per cent last year to 35 per cent. Compared to last year, the share of other regions decreased marginally. In terms of loan OS, the southern region has a lion's share 72 per cent, a marginal decrease from 73.8 per cent last year. Share of the eastern region increased from 19 per cent to 21 per cent and the other regions show a marginal difference. While the central and north-eastern regions have shown growth in both metrics this year, as compared to the negative growth in the number of groups last year, the region still has to catch up with other regions on other metrics, such as the average loan OS per group and the percentage of groups with loan OS.

No. of SHGs with OS loan



Source: NABARD (2020).

Loans amount OS



Source: NABARD (2020).

Figure 7.3. Regional Spread of Loans OS

State-wise analysis shows that AP is leading in both the number of groups with loan OS (865,916) and the amount of loan OS (₹ 302 billion). In terms of the number of groups, West Bengal is a close second with more than 824,118 SHGs with credit linkage. The other three states of Bihar, Karnataka and Telangana have over 600,000 SHGs that have a current loan OS. In terms of loan OS, AP is followed

Table 7.2: Agency-wise Status of SHG BLP in 2019–2020 (Numbers in Million and Amount in ₹ Billion)

	Total Savings of SHGs with Banks as on 31 March 2020		Loans Disbursed to SHGs by Banks during 2019–2020		Bank Loans OS to SHGs as on 31 March 2020		NPAs as on 31 March 2020	
Category of agency	No. of SHG	Savings amount	No. of SHG	Loans disbursed	No. of SHG	Loan OS	Amount of gross NPA	NPA (%)
Commercial banks	5.47	1.56	1.80	4.84	3.29	7.12	0.36	5.06
% Share	53.44	59.89	57.09	62.36	58.03	65.89	67.74	
RRBs	3.26	0.78	1.09	2.43	1.85	3.03	0.13	4.37
% Share	31.84	29.87	34.77	31.2	32.57	28.06	24.9	
Cooperative banks	1.51	0.27	0.26	0.50	0.54	0.65	0.04	5.99
% Share	14.72	10.24	8.14	6.43	9.39	6.05	7.36	
Total	**10.24**	**2.61**	**3.15**	**7.77**	**5.68**	**10.8**	**0.53**	**4.92**

Source: NABARD (2020).

by Telangana and Karnataka. It is likely that West Bengal will emerge among the top three states next year.

Agency-wise analysis: Commercial banks, both public and private sector, regional rural banks (RRBs) and district central cooperative banks (DCCBs) are major agencies providing financial services to SHGs. Table 7.2 shows the overall performance of SBLP by various agencies. Table 7.3 shows the average savings, loans disbursed and loan OS per SHG for the last two years.

Savings: Out of 10.24 million SHGs with savings bank accounts with banks, nearly 53 per cent saved with commercial banks as of March 2020. There is a marginal decrease in the number of SHGs (3,081) with commercial banks during the year. Commercial banks accounted for about 60 per cent of savings OS, with an amount of ₹ 156 billion, and there has been an increase of 18 per cent in savings compared to last year. Their share in total savings of SHGs has increased from 57 per cent in the last year to 60 per cent in 2019–2020. The number of SHGs with savings accounts with RRBs was 3.26 million and the amount of savings is ₹ 78.11 billion as of March 2020. During the year, about 180,000 additional accounts were opened with RRBs, registering an increase of 6 per cent. The amount of savings with RRBs rose during the year. The share of RRBs in SHG accounts is 32 per cent, marginally up from 31 per cent in the previous year. In savings amount, their share is 30 per cent, a drop from 33 per cent last year. DCCBs added 48,755 SHGs during the year to reach 1.51 million accounts, thus registering 18 per cent increase during the year. Their share is 15 per cent of savings accounts.

The top five banks in terms of savings accounts are State Bank of India (SBI; 1,068,931 SHGs), Bank of Baroda (480,327 SHGs), Union Bank of India (454,319 SHGs), ICICI Bank (424,469 SHGs) and Central Bank of India (323,295 SHGs). In terms of

Table 7.3: Agency-wise Average Savings, Loan Disbursement and Loan OS (₹ per SHG)

	Average Savings of SHGs with Banks			Average Loans Disbursed to SHGs by Banks			Average OS Bank Loans against SHGs		
	2019–2020	2018–2019	Change %	2019–2020	2018–2019	Change %	2019–2020	2018–2019	Change %
Commercial banks	28,613	24,175	18.36	269,646	227,988	18.27	216,156	191,786	12.71
RRBs	23,947	24,986	–4.16	221,539	207,826	6.6	163,966	154,500	6.13
Cooperative banks	17,767	16,398	8.35	195,094	174,620	11.72	122,622	109,471	12.01
Total	**25,531**	**23,291**	**9.62**	**246,851**	**216,119**	**14.22**	**190,371**	**171,543**	**10.98**

Source: NABARD (2020).

Note: The averages are calculated. The percentage difference shown is for the year 2019–2020 over the previous year 2018–2019.

savings deposits, the SBI (₹ 33.94 billion), Andhra Bank (₹ 22 billion), Andhra Pradesh Grameena Vikas Bank (₹ 17.67 billion), Indian Bank (₹ 13. 71 billion) and Bank of Baroda (₹ 13.37 billion) are the top five mobilizers in 2019–2020.

Loans disbursements: Commercial banks have led the loan disbursement with substantial growth during the year. Commercial banks have disbursed ₹ 484.31 billion to 1,796,099 SHGs during the year and have a share of 57 per cent of the accounts and 62 per cent of the amount disbursed. Total 32 per cent of SHGs with savings accounts have been financed during the year by commercial banks with an average loan size of ₹ 0.27 million. Year-on-year growth is 18 per cent in terms of the number of SHGs and 40 per cent in terms of the loan amount. RRBs have disbursed loans to 152,970 during the year and the amount disbursed is ₹ 242 billion. The share of the RRBs is 34 per cent of the SHGs and 31 per cent of the amount with an average loan size of ₹ 0.22 million per SHG. There is a growth of 16 per cent in loan accounts and 23 per cent in loan amount. DCCBs are lagging behind, with 256,115 SHGs receiving loans of ₹ 49.96 billion. Total 8 per cent of SHG accounts and 6 per cent of the total loan amount disbursed are those of the DCCBs. While there has been a 4 per cent increase in the number of SHGs financed, 17 per cent growth has been achieved in the loan amount. Of the SHGs that have a savings bank account with them, commercial banks have lent to 33 per cent of the groups, RRBs to 34 per cent of the groups and DCCBs to only 17 per cent during the year. The per group loan disbursed in 2019–2020 is ₹ 269,645 by commercial banks, ₹ 221,538 by RRBs and ₹ 195,093 by DCCBs. Commercial banks increased their per group disbursement by 18 per cent, RRBs by 6 per cent and DCCBs by 12 per cent during the year.

In loan disbursements, the SBI is leading the pack with ₹ 183.05 billion, followed by Andhra Bank and Indian Bank with disbursements of ₹ 46.50 billion ₹ 40.85 billion, respectively. Canara Bank with ₹ 32.87 billion and Corporation Bank with ₹ 31.21 billion disbursement are the next two large lenders. SBI has lent to 47 per cent of the SHGs during the year. The disbursements of SBI for the current year are 266 per cent higher than last year's figure of ₹ 50.32 billion. Indian Bank has registered a growth of 4 per cent and Andhra Bank has negative growth. Loan disbursements by Corporation Bank has grown by 22 per cent and Canara Bank by 10 per cent over the last year. Bank of Baroda and Andhra Pradesh Grameena Vikas Bank are among the top five in terms of savings and have registered negative growth in loan disbursement of 65 per cent and 0.2 per cent, respectively. Bank of Baroda merged with Dena Bank and Vijaya Bank from April 2019, and hence it is a matter of concern that disbursements have declined in spite of consolidation.

Loans OS: Commercial banks led in the OS loan to SHGs as well with 3.29 million SHGs having an OS loan of ₹ 712 billion as of 31 March 2020 with a growth rate of 13 per cent in the number of SHGs and 28 per cent in the amount OS over the previous year. Commercial banks had a share of 58 per cent in the number of SHGs and 65 per cent in the amount OS. RRBs followed with a share of 32 per cent in the loan accounts and 28 per cent in the loan amount; 1.85 million SHGs with an OS loan of ₹ 303 billion were with RRBs during the year.

There has been a growth of 9 per cent in accounts and a 16 per cent increase in amount OS. Total 533,203 SHGs had loan OS to the tune of ₹ 65 billion with DCCBs. The growth rate is 10 per cent in loan accounts and 24 per cent in the amount OS compared to the last year. DCCBs have a share of 9 per cent in loan accounts OS and 6 per cent in the OS loan amount. The share of the institutions has remained more or less the same as last year as far as number of SHGs are concerned and commercial banks have increased their share by 2 per cent in the loan OS at the cost of RRBs.

The average loan OS per SHG is ₹ 216,156 for commercial banks, ₹ 163,966 for RRBs and ₹ 122,621 for DCCBs. Growth over the previous year was 12 per cent for both commercial banks and DCCBs and 6 per cent for RRBs. The credit multiplier, that is, the credit OS to savings at bank ratio is highest for commercial banks at 4.53, followed by RRBs at 3.88 and DCCBs at 2.44. The ratio of SHGs with OS loans to total SHGs is 60 per cent for commercial banks, 57 per cent for RRBs and 35 per cent for DCCBs. Low credit linkages with DCCBs are due to dormant accounts and/or poor performance of DCCBs which have to be addressed.

The top five banks with loan amount OS are SBI (₹ 226.38 billion), Andhra Bank (₹ 80. 91 billion), Indian Bank (₹ 51.94 billion), Canara Bank (₹ 41.46 billion) and Union Bank of India (₹ 35.89 billion).

To summarize, commercial banks have the major share in SHG savings and lending. During the year, RRBs added more savings accounts than others. Savings with commercial banks increased substantially by 18 per cent, probably due to the insistence of bankers and/or the preference of SHGs for depositing their savings with banks to avail larger loans. Loan disbursements have registered substantial growth during the year for all three sets of institutions

Table 7.4: Agency- and Region-wise NPAs

	Public Sector Commercial Banks		Private Sector Commercial Banks		RRBs		Cooperative Banks		Total	
Region	Gross NPAs against SHGs	NPA as % to loan OS	Gross NPAs against SHGs	NPA as % to loan OS	Gross NPAs against SHGs	NPA as % to loan OS	Gross NPAs against SHGs	NPA as % to loan OS	Gross NPAs against SHGs	NPA as % to loan OS
Central	3.12	29.26	0.27	23.88	2.03	19.91	0.26	42.96	5.68	25.15
Eastern	4.63	4.07	0.13	13.3	4.51	4.61	0.86	5.81	10.13	4.46
North-eastern	0.82	22.7	0.01	12.17	1.80	28.23	0.05	26.72	2.68	26.08
Northern	0.84	16.26	0.03	1.22	0.68	24	0.57	39.86	2.12	17.35
Southern	22.79	4.61	1.05	1.85	3.64	2	1.76	3.88	29.24	3.76
Western	1.97	15.72	0.38	3.61	0.59	14.24	0.42	13.76	3.36	11.07
Grand total	**34.17**	**5.34**	**1.87**	**2.59**	**13.25**	**4.37**	**3.92**	**5.99**	**53.21**	**4.92**

Source: NABARD (2020).

with commercial banks leading by 40 per cent growth year on year. The growth in loan OS during the year has also been robust for the institutions. DCCBs as a set of institutions are not performing well, though they have 14 per cent of the savings accounts of SHGs, and 6 per cent on loan amount disbursement and loan OS. Some of the commercial banks, such as Bank of Baroda and Union Bank of India, which are among the top five financial institutions in terms of savings accounts of SHGs, have been poor performers in their loan portfolio.

NPAs in SHG bank linkage: NPAs of banks for SHG loans as of 31 March 2020 amounted to ₹ 53,217 million and formed 4.92 per cent of loan OS to SHGs as shown in Table 7.4. There has been a marginal reduction of 0.28 per cent from 5.19 per cent last year. However, the area of concern is that the amount of gross NPAs increased by 17 per cent as compared to the last year; from ₹ 45,240 million as at the end of last year, the absolute amount of NPAs has risen to ₹ 53,210 million. Agency-wise, state-level and regional-level particulars are given in Annexure 7.4.

A summary of region-wise and agency-wise NPAs is given in Figure 7.4. The region-wise analysis shows that the southern region has 55 per cent share of the gross NPA, followed by the eastern region at 19 per cent. The central region, which has a share of 2 per cent in the total amount of loan OS, has a disproportionately high share in NPAs at 11 per cent.

All regions except the southern and eastern regions reported a higher rate than all India NPA rate of 4.92 per cent of the total loan OS. Figure 7.5 shows the year-wise performance of regions in NPA management for the past four years, out of which 2017–2018 was the worst year for all regions. For the last two years, the percentage of NPAs has been on the decline. As compared to last year, in all regions except the south, the percentage of NPAs declined. The southern region continued to perform well; however, the percentage of NPAs to loan OS increased marginally from 3.53 per cent last year to 3.76 per cent in 2019–2020 and the gross amount of NPAs increased by 9.78 per cent during the year, which is an area of concern. The eastern region registered a marginal decline of NPAs to loan OS from 5.19 per cent from 2018–2019 to 4.46 per cent during 2019–2020.

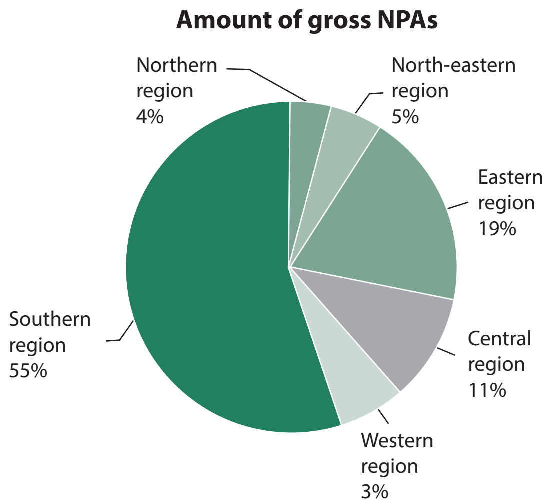


Figure 7.4: Regional Share of Gross NPA

Source: NABARD (2020).

However, NPAs in gross amounts have gone up by 18.31 per cent and are the worst performer in terms of the percentage increase in NPA amount. The north-eastern region, which has the worst performance, has managed to reduce the percentage of NPAs from 33 per cent in 2018–2019 to 26.08 per cent in 2019–2020. The region also reduced the gross amount of NPAs by 2 per cent during 2019–2020. The central region reduced the percentage of NPAs from 30.59 per cent in 2019–2020 to 25.15 per cent in 2019–2020. In gross amount of NPAs as well, the region managed to reduce the amount by 7.6 per cent, which is creditable performance. The other not-so-well performing region is the northern region, with percentage of NPAs at 17.35 per cent during 2019–2020. Although the region managed to reduce the NPAs by 3.39 per cent from last year, the gross amount of NPAs increased by 2.9 per cent year on year. The western region decreased the NPAs from 12.39 per cent in 2018–2019 to 11.07 per cent in 2019–2020, though the gross amount of NPAs increased by 9.78 per cent.

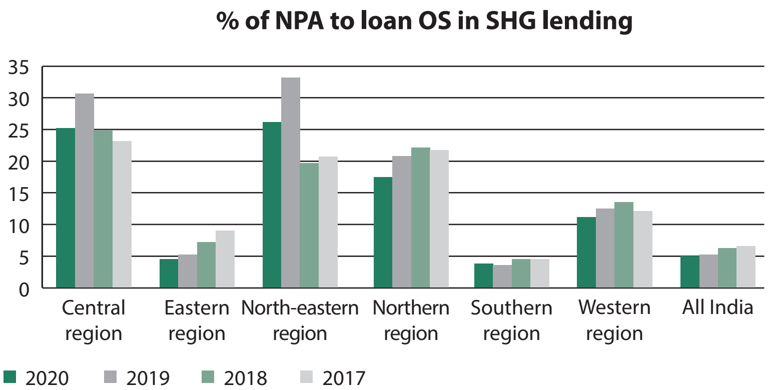


Figure 7.5: NPAs to Total Loan OS to SHGs[4]

Source: NABARD (2020).

Among the states and UTs, the NPA percentage decreased in 24 states and increased in 11; five of the six southern states registered an increase of about 1 per cent in NPAs to loan OS metric. In all the north-eastern states, the percentage of NPAs has decreased. States with high level of NPAs include UP (42.97%), Haryana (38.8%), Tripura (30.9%), Assam (27.9%), Uttarakhand (27.0%) and Arunachal Pradesh (24.3%). Only five states/UTs are performing well, with NPAs being less than 5 per cent of loan OS which can be considered a good performance indicator; 10 states/UT are in the 5–10 per cent range of NPA; 12 states/UT are in the 11–25 per cent range and 8 states/UTs have NPAs more than 25 per cent range.

All categories of banks have reduced their percentage of NPAs to the total loan OS during 2019–2020; more information is needed on whether this is on account of write-off or better recoveries. RRBs reduced their NPAs from 4.87 per cent in 2018–2019 to 4.37 per cent in 2019–2020 and cooperatives reduced from 6.69 per cent in 2018–2019 to 5.99 per cent in 2019–2020. Out of the total NPA amount of ₹ 53.22 billion, commercial banks accounted for two-thirds of the share at 68 per cent. The cause for concern is the increase of amount of NPAs by 24 per cent per cent over the previous year. The gross amount of NPAs in case of RRBs increased by 4 per cent and in cooperatives by 11 per cent.

Among the 18 public sector banks, Andhra Bank has the best portfolio performance of 1.55 per cent followed by Corporation Bank at 2 per cent and SBI at 2.57 per cent of NPAs. Among private sector banks, the three banks with a significant portfolio of banks, namely ICICI Bank, IDBI Bank and HDFC Bank, have a good portfolio quality with 3.35 per cent, 3.06 per cent and 0.44 per cent of NPAs, respectively. Some of the public sector banks have been merged since then.

Credit information sharing: The RBI had laid a road map for the credit data of individual SHG members to be shared with credit information companies so that individual-level indebtedness could be monitored. While technology-savvy private sector banks with centralized data management systems have been able to upload data, most other banks find the data entry of individual members to be an onerous task as they have to restructure their business processes. However, RBI will have to ensure compliance as there are states and pockets where the number of MFIs is operational and without credit referencing, SHG loans lead to multiple lending, over-indebtedness and resultant customer distress of SHG members.

PERFORMANCE OF ALTERNATE FINANCIAL INSTITUTIONS

There are very few MFIs and cooperative federations that have dedicated lending to SHGs. As per Sa-Dhan, only about 15 of their 215 member institutions are lending to SHGs. They are usually smaller MFIs and are more likely in the not-for-profit space. Being largely small and medium MFIs, these institutions have faced liquidity issues to raise loan funds during the year. SHG methodology reportedly is seen as a slow model, with lower efficiencies and profitability by rating agencies, which rate SHG lending MFIs lower than those

Box 7.1: Stree Nidhi's Financial Services to SHGs

Stree Nidhi Credit Cooperative Federation Ltd (Stree Nidhi) operating in Telangana and AP have continued to scale up their lending to SHGs acting as banking correspondent (BC) of banks as well as their own loan books. Specially set up to provide affordable credit to SHGs, Stree Nidhi makes optimum use of technology for delivering financial services with special features such as credit disbursement in 48 hours, specific allocation of credit limits to the poorest of the poor and digitization of all transactions. Product diversification, which is woefully lacking in mainstream banks, seems to be the hallmark of Stree Nidhi, Telangana, offering as many as nine loan products and has four savings deposit schemes for SHGs and their federations. The rate of interest charged by Stree Nidhi, Telangana, is at 11.5 per cent per annum and of the interest charged, 1.3 per cent is shared with the federations to meet their operational expenditure for monitoring and financially strengthening Stree Nidhi portfolio. Thus, effectively, Stree Nidhi, Telangana, charges only 10.3 per cent per annum, which is lower than the rate charged by the banks. The loan OS is ₹ 34 billion as of 31 March 2020 with cumulative recovery rate of 97 per cent.

Source: Note received from Streenidhi.

following the joint liability group (JLG) model. Political risks have also become a cyclical risk, where loan waivers are announced every 4 to 5 years for SHG loans. Another trend seen is lending to JLGs and also enterprise loans in addition to SHGs by MFIs such as Sanghamithra Rural Financial Services, Belstar Microfinance Services and NABARD Financial Services (NABFINS).

Other states are also considering setting up such dedicated financial services organizations. The NRLM has offered technical support of Stree Nidhi and financial incentives to replicate the model. States such as Bihar, Rajasthan and UP are in the advance stage of planning. Kudumbashree is considering to set up a financial institution essentially to offer more products to SHG members. Although banks are found to be very supportive to SBLP in the state, they are unable to offer additional products to support livelihoods, housing and education. A feasibility study for setting up the institution will be carried out in 2020–2021.

Performance under the NRLM

The NRLM has continued to make progress in SHG mobilization and bank linkages with its nationwide programme. The NRLM has initiated its intensive implementation in 204,608 GP (58% of GPs in the country) and 6,289 blocks (87% in the country) as of 15 August 2020.[5]

Deepening the institution building

As per the NRLM data, as of 15 August 2020, 71.3 million households were mobilized into 6.62 million SHGs. Out of 6.62 million SHGs, 3.78 million were formed after the launch of the NRLM, 0.53 million SHGs were dormant and revived by the NRLM, and 2.31 million SHGs were pre-NRLM functional. SHGs were further federated into 0.26 million village organizations (VOs) and 19,787 CLFs[6] to provide a range of services to SHGs and members. The VOs and CLFs are at different stages of development and their performance varies from block to block and state to state. The mission aims to cover all the blocks in the country by 2023–2024 to mobilize 90 million women in 7.8 million SHGs.

Table 7.5: Outreach and Institutions Formed under the NRLM

Particulars	18 March	19 March	20 March
Number of households mobilized	48,999,144	59,428,305	67,882,922
Number of SHGs formed	4,173,068	5,216,107	6,138,026
Number of VOs formed	231,527	296,333	356,316
Number of CLFs formed	20,458	27,318	31,781

Source: Data provided by the NRLM.

The outreach of number of households mobilized and the number of institutions mobilized are given in Table 7.5. As compared to the 21 per cent growth in households mobilized in 2019, during 2019–2020, the growth rate was 14 per cent. The number of SHGs formed also follow a similar trend. While the growth rate in the formation of VOs was steady at 20 per cent for both years, the growth rate of the CLFs formed during 2020 is at 16 per cent during 2019–2020, whereas it was doubled at 33 per cent during 2018–2019.

Model CLFs

The key initiative being taken up under institution building is setting up and strengthening of model CLFs, the learning ground and the demonstration sites for SRLMs. During 2020–2021, at least one model CLF per block under the National Rural Economic Transformation Project (NRETP) are to be in place. While saturation of households by mobilizing them into SHGs is a theme that will be followed by all model CLFs, four other themes are implemented in selected CLFs, which will include (a) financial inclusion interventions, namely digital transaction through business correspondents and provision of insurance services, (b) promotion of producer groups for livelihood deepening, (c) social inclusion, food nutrition health and wash and gender interventions and (d) Panchayat Raj Institutions (PRI) convergence interventions for improving access to entitlements, rights and services. Resource organizations such as Professional Assistance for Development Action (PRADAN), Chaitanya and the Centre for microFinance (CMF) have been engaged by the NRLM/SRLM to establish the select theme they specialize in.

With a clear intention on promoting sustainable CLFs within three years, key result areas have been arrived at by the NRLM. While at the central level, core aspects can be measured and monitored, each state should facilitate additional benchmarks to be achieved by federations on the basis of local context. Introducing flexibility and responsiveness to member needs will enable federations to be member-centric rather than top-down deliverer of services.

Moreover, the federations have to be groomed right from the first month of operation to be developed as independent bodies. The urge to centralize the implementation has to be avoided by both central and state management units. In some states, the state units are members of the CLF (special category members in cooperatives). In some states, the by-laws of the CLFs have been drafted or the process of decision-making has been built in such a way that the federations will have to take prior permission of the SRLM for strategic initiatives. While the necessary systems should be in place to ensure that the government funds provided to the federations are utilized well, in the long run the federations should be capacitated to take their own decisions.

Most SRLMs have not introduced any service charge that members pay for availing of services from CLF; sustainability is driven by the interest earned on the community investment fund (CIF). Payment of service charge will enable members to exercise better control over their staff and demand better services to improve their livelihoods. Each federation, on the basis of member needs, can devise policies on the services to be provided and the fees/charges to be collected so that federations deliver demand-driven services. Moreover, this will improve their ability to meet their costs, especially staff salaries, since high dependence on one source of income is risky.

An enabling legislative framework is needed for the organic growth of CLFs. In states where a self-reliant cooperative act has been passed, CLFs are registered as cooperatives and in others as societies and trusts. As societies, they can implement grant-based work, but this form is not suitable for lending or other business. With a critical mass of about 30,000 CLFs to be promoted under the programme, the NRLM needs to work on an appropriate and enabling legal framework for SHG federations.

Performance of the NRLM in SHG–bank linkage

Going by the NABARD data, as of 31 March 2020, 5.78 million SHGs are functional under the NRLM; the share of the NRLM/SGSY is 57 per cent of the savings-linked SHGs, 67 per cent of loan amount disbursed to SHGs and 62 per cent of loan OS to SHGs in 2019–2020. These figures for 2017–2018 were 47.8 per cent, 53 per cent and 50 per cent, respectively. There is 10 per cent increase in the share of the NRLM in savings-linked groups in the last two years. However, there is a wide gap between the data reported by the banks to NABARD and the data reflected in the management information system (MIS) reports of the NRLM as on 31 March 2020 as shown in Table 7.6.

Data variance between the NRLM and NABARD data sets

For the year 2019–2020, as the data shows in Table 7.6, there is only 1 per cent difference in the number of functional groups,[7] but there is 36 per cent variance in the amount of savings, 66 per cent variance in the number of groups with bank loans disbursement and OS, and 34 per cent in the amount of bank loan disbursed and 45 per cent in the amount of loan OS. Over the last three years, the Inclusive Finance India reports have extensively dealt with the possible causes of this variance.

For the country as a whole, there is a need to have standard metrics for reporting on SHG performance for policy and operational decision.[8] The analysis of outreach, financial performance of SHGs and lending performance of banks are very critical for resource allocation, deepening of financial services apart from course corrections. The large gap in data

Table 7.6: Data Variance in NABARD and the NRLM Data

Progress as of 31 March 2020	As per NABARD Data	As per the NRLM Data
Number of the NRLM SHGs with savings accounts with banks	5,789,266	5,146,853
Amount of savings of SHGs (₹ in lakhs)	1,431,269.72	2,257,038
Loans disbursed (no. of SHGs)	2,049,413	3,407,347
Amount of loans disbursed (₹ in lakhs)	5,218,372.58	7,026,155.25
Loan OS (number of SHGs)	3,689,046	6,130,968
Loan OS amount (₹ in lakhs)	6,771,707.17	9,879,011.20
NPA (amount)	243,641.08	458,919.99*
NPA in %	3.6	4.65*

Source: NABARD (2020).
Note: *The figures are for SGSY as well. Post launch of the NRLM, the NPAs in amount is reported to be 2.31 per cent.

between the two data sets is a matter of concern and, since the gap is large, it needs to be ironed out.

Efforts in bank linkages by the NRLM

The bank linkages have improved under the NRLM during the year and specific measures undertaken by the NRLM to improve SHG bank linkages are as follows: (a) three national-level consultations were held with senior management of public sector, private sector banks and RRBs to improve credit linkages; (b) the online loan application process has been launched to reduce transaction time and costs for both bankers and SHGs; protocols have been developed with about eight banks to generate online loan application which reduces data entry at branch level and reduces operational costs. SRLMs are putting in systems so that data are digitized and Aadhaar validated. However, the turnaround of the loan applications has to be monitored as SRLMs find that bankers are to improve the turnaround time for sanctions; (c) strengthening the community-based recovery mechanism to support banks in the recovery of loans and also to ensure repeat linkages. The constitution of branch-level committees to review the loan performance is reportedly increasing linkages and recoveries apart from the relationship building between the VOs/CLF and the bank branches and (d) strengthening the BC Sakhi network with the ultimate aim of one BC Sakhi per GP. More details on this initiative are provided later in the chapter.

The performance of the NRLM groups on selected metrics when compared to national-level performance shows that the NRLM groups are performing well on all key metrics as shown in Table 7.7.

Table 7.7: Performance of the NRLM Groups Compared with National Performance[9]

Particulars	National	NRLM
Average savings per group (₹)	25,530	24,722
Percentage of groups received loans during the year	30.7	35.3
Average size of loan disbursed per group (₹)	246,851	233,724
Percentage of groups with OS loan	55.4	63.7
Average size of loan OS per group (₹)	190,371	183,562

Source: NABARD (2020).

The 11 states of Bihar, West Bengal, Jharkhand, Odisha, MP, UP, Chhattisgarh, Rajasthan, Maharashtra, Gujarat and Assam, where more than 70 per cent of India's poor reside, are showing greater credit offtake. While the response from commercial banks has been varied, state missions have been working with RRBs to dispense credit to SHGs. In all these states, the number of SHG savings linked and credit linked with RRBs is much higher/almost equals to those of commercial banks. As per the NRLM, these states account for 27 per cent of the loan OS to SHGs as of 31 March 2020 as compared to about 10 per cent in 2013 when the NRLM was rolled out. However, the loan absorption capacity of members is an issue in many of these states; deeper work on livelihood enhancement will lead to better credit absorption for livelihoods, facilitating improvement in household income.

As per NABARD data for 2019–2020, the performance of Bihar and West Bengal in this cohort is exceptional; these states have mobilized 0.79 million SHGs and 1.03 million SHGs with savings accounts with banks. In Bihar, 75 per cent of SHGs with savings accounts and in West Bengal, 65 per cent of SHGs are under the NRLM. The efforts of the Bihar and West Bengal livelihood missions have resulted in mobilization/revival and strengthening of SHGs in states that have also built the confidence of banks to lend to SHGs. These two states are performing well on credit linkages. The per group loan disbursement at ₹ 181,843 and ₹ 154,384 during the year is also high compared to other states in the regions. In West Bengal, 66 per cent of SHGs and in Bihar 33 per cent of SHGs with savings accounts received loans during the year as compared to the all India figure of 30 per cent. The impressive achievement is 86 per cent of the groups with savings accounts in Bihar and 79 per cent in West Bengal have an OS loan as of 31 March 2020 as against the national average of 55.4 per cent. The NPA management has also been credible; West Bengal has 2.47 per cent of loan OS as NPA and Bihar at 4.28 per cent are lower than all India figure of 4.92 per cent. The cause of concern is increase in absolute amount of NPAs by 4 per cent in Bihar and 8 per cent in West Bengal during the year.

Comparatively, Maharashtra state, in the same cohort, with the highest number of SHGs in the country at 1.16 million, is not performing so well. Total 47 per cent of SHGs are those of SRLM. The average loan disbursement during the year is ₹ 134,873; 13 per cent of SHGs with bank accounts received loans during the year. Only 20 per cent of SHGs have an OS loan as of 31 March 2020. Total 11 per cent of OS loans are NPAs. The low loan coverage ratio both for disbursement and loans indicate high dormancy rates of SHGs and need for cleaning up of data by banks.

RF and CIF

RF of up to ₹ 15,000 is provided to eligible SHGs as a contribution to their corpus to augment loan funds. Cumulatively, ₹ 25.94 billion have been disbursed to 3,190,363 SHGs as RF as of 31 March 2020. In terms of coverage, 54 per cent of groups mobilized have received RF. During the year 2019–2020, 381,623 SHGs received RF of ₹ 5.48 billion with an average of ₹ 14,372 per SHG. The CIF is the corpus for the CLF in intensive blocks to be used for meeting the members' credit needs and/or to undertake the collective socio-economic activities. The CIF is routed to the SHGs through the cluster-level and the village-level federations. Cumulatively, 1,017,190 SHGs (17% of mobilized SHGs) have been provided CIF to the tune of ₹ 54.73 billion. The RF and the CIF disbursements for three years are shown in Table 7.8.

Table 7.8: RF and CIF Disbursed during Last Three Years

Details	2017–2018		2018–2019		2019–2020	
	No. of SHGs	Amount (₹ in billion)	No. of SHGs	Amount (₹ in billion)	No. of SHGs	Amount (₹ in billion)
RF	253,371	3.55	369,044	5.30	381,623	5.48
CIF	195,024	11.32	232,616	14.82	263,160	18.08

Source: F1a and F2a of fund disbursement reports of MIS of the NRLM.

Since the contributions of some states to these funds have not been consistent, the overall coverage has been lower than the target. Delays in disbursements are reported in some states. Information on the performance of these funds, especially on portfolio quality, is negligible. While CLFs have undergone trainings on loan sanction, financial management and internal controls are two key areas of capacity building identified by the governing body members of the CLFs. Since some of the CLFs now have a substantial corpus of ₹ 10 to ₹ 15 million, these trainings have to be prioritized.

Interest subvention

In order to reduce the effective cost of bank credit to women SHGs, Deendayal Antyodaya Yojana-National Rural Livelihood Mission (DAY-NRLM) provides interest subvention on loans to women SHGs, for a maximum loan of ₹ 300,000 per SHG. This is available across the country in two ways: (a) in 250 identified category I districts, banks lend at 7 per cent interest per annum and the SHGs get additional interest subvention of 3 per cent on prompt repayment, reducing the effective rate of interest to 4 per cent; (b) in the remaining category II districts, the funding for interest subvention is provided to the SRLMs from the allocation for DAY-NRLM. Banks charge the SHGs as per their respective lending norms and the difference between the lending rates and 7 per cent subject to a maximum limit of 5.5 per cent is subvented in the loan accounts of the SHGs by the SRLM. As per the annual report of Ministry of Rural Development for the year 2019–2020,[10] cumulatively, ₹ 41.64 billion has been disbursed as interest subvention in category I districts and ₹ 5.38 billion in category II districts.

The state-wise analysis shows that the five southern states of AP, Telangana, Karnataka, Kerala and Tamil Nadu have lion's share of 86 per cent in last three years. The share of AP and Telangana alone is 70 per cent on an average for last three years. Apart from the central scheme, both AP and Telangana states adopt 0 per cent interest policy and additional interest subvention is provided by the state governments. In the study by APMAS on mature SHGs in Telangana, most SHGs (98%) reported that the banks adjusted the amount to loan OS without any information to SHGs and, as a result, there is prepayment of loans, and recovery of overdues in case of default. Only about 38 per cent of member households started enterprise activities with SHG loans along with other sources. Ministry of Finance and the NRLM should revisit the interest subvention policy as to who benefits and also what is the impact of such policy on livelihoods of members.

Institutionalizing gender aspects under the NRLM

Supported by the Bill and Melinda Gates Foundation (BMGF), the Initiative for What Works to Advance Women and Girls in the Economy (IWWAGE), an initiative of Leveraging Evidence for Access and Development, KREA University, is providing technical assistance to the NRLM to institutionalize gender across all levels of the mission. Gender operational strategy has been prepared and will be operationalized during the current year. BMGF and IWWAGE are working with select NGO partners in four states (PRADAN in Jharkhand, Chaitanya in Chhattisgarh, Anandi in MP and Project Concern International [PCI] in Odisha) in piloting and developing scalable institutional models for SHG federations to serve as gender resource centres under SRLM. BMGF and the Ministry are collaborating with 3ie to generate rigorous evidence on the impacts of this large-scale programme on livelihood promotion and social mobilization. With the technical backstopping support by the BMGF, the NRLM should strengthen the institutional mandate for gender mainstreaming, backed by adequate human resources, budgetary allocations and, more importantly, strengthening the capacity of the VOs and federations to adopt an empowerment approach.

NABARD'S DEVELOPMENT ACTIVITIES

NABARD has continued to support civil society initiatives under the SBLP. Cumulatively, 4,445 NGOs have been supported to form 694,182 SHGs; 45 NGOs have been supported during the year. NABARD has also provided grants to RRBs, DCCBs and few federations to form SHGs. During 2019–2020, more than 3,500 training programmes have been conducted and about 2.22 lakh participants have been trained. These trainings encompass the training of bankers, trainers, government officials and NGOs. Exposure visits have also been organized. About 46,000 SHG members have been trained in financial literacy.

With a view to create livelihood options for SHGs, NABARD has been promoting Micro-Enterprise Development Programmes (MEDPs) and Livelihood and Enterprise Development Programmes (LEDPs) for the skill training of SHG members. During 2019–2020, 12,719 members were trained through the 425 MEDPs for enabling them to start micro-enterprises. Cumulatively, around 0.5 million SHG members have received such training. NABARD's LEDP envisages livelihood promotion in both farm and off-farm activities under project mode in clusters in contiguous villages. Under LEDP, intensive training for skill building, backward–forward linkages, handholding and escort support for credit linkage and end-to-end solutions to the SHG members are provided. Total 237 LEDPs involving 25,577 members were conducted during 2019–2020. Cumulatively, 89,127 SHG members have been supported through 783 LEDPs as on 31 March 2020. Responding to COVID-19 situation, NABARD has planned to support 1,000 LEDPs during 2020–2021, each covering 100–150 members with tie-up with an anchor bank for financing ₹ 50,000 loan to each member.

Civil Society Initiatives

Many CSOs that were active in SHG institution building space have diversified their activities to improve the livelihoods of farmers and have started forming and nurturing FPOs. There are two major reasons for this trend: natural progress towards deepening livelihood activities and limited funding available for SHG and federation building. While some base their livelihoods work on SHGs and federations, others work with the larger community as well.

Funding from foundations and companies with CSR obligations has been a major source of funding for many civil society players. However, with year-to-year fluctuations in profits, very few companies commit financing for long term of 3–5 years necessary for building sustainable SHGs, federations and FPOs. Moreover, some of these funders have ensured that the CSOs complement and leverage government funding by partnering with the SRLMs as seen in Box 7.2.

The NRLM/SRLMs have engaged the services of CSOs though with minimal numbers of CSOs. The engagement with civil society partners has been largely in the areas of model CLF building, in farm sector livelihoods promotion and under Start-up Village Entrepreneurship Programme (SVEP). Many current partnerships are in the nature of no-cost MOUs since government procurement norms are complex and few large foundations financially support CSOs to work with SRLMs. However, the NRLM/SRLMs will have to simplify procedures of engagement so that direct engagement with civil society partners is made feasible and their rich experience benefits the NRLM/SRLM initiatives. While many NGOs are partnering with the NRLM/SRLM, a few initiatives by these partners are outlined further.

Box 7.2: CSR Funding for SHG and Federation Building and Livelihoods

Ernst & Young Foundation, under its CSR mandate, has been supporting 10 partners in difficult and unreached geographies and mostly tribal areas. With focus on women empowerment and sustainable livelihoods, the foundation provides long-term support of 3–5 years to ensure that community institutions (federations/FPOs) achieve sustainability. High capacity partners who can converge and leverage government programmes are chosen. In all projects, the principle is to converge with SRLMs by partners signing non-financial MoUs with clear roles and responsibilities. On the basis of mutual agreement on the gaps to be bridged, project interventions are designed; through this process, the community institutions receive various grants and forge bank linkages. Partners target at least 60–65 per cent of population of a block, mostly with 1,000–1,200 SHGs/blocks, to have a critical strength to accelerate change processes. While the initial six months are spent in mobilizing/reviving SHGs, thereafter livelihood activities are initiated. Tested and validated production technologies are introduced so that scale-up can happen quickly. The foundation's staff spends time in the field with the partners, from designing the project proposal, designing training materials, conducting ToTs in field and helping partners to establish linkages with market players, research organizations, etc. The foundation's partners are currently working with 22,547 SHGs in eight states.

Source: Raja Chakraborti, Earnst and Young Foundation.

APMAS, a national resource organization promoting self-reliant community organizations, has been instrumental in developing standard operating procedures for the NRLM in developing model CLFs emphasizing on the design of protocols and systems for CLFs to be self-reliant organizations. In Bihar, APMAS works with the Bihar Rural Livelihoods Promotion Society in strengthening of 2,000 SHGs, 100 VOs and 6 CLFs to build models of self-reliant institutions. APMAS has facilitated the revival of the ENABLE network with 28 civil society partners for taking up issues related to SHG federations and FPOs at national level, an important development during the year.

CMF, Jaipur, has partnered with Rajasthan SRLM in developing model CLFs as well as in deepening livelihoods initiatives and, in 2019–2020, its technical support reached 130 federations under the World Bank's NRETP programme. CMF is also working with well-established cooperative federations to diversify loan products, especially for livelihood financing, solar energy solutions, etc.

The federations of SHGs are emerging as CSOs as an interesting development. Over the last decade, MAVIM[11] has built 365 sustainable community-managed resource centres (CMRCs), which are federations of SHGs with an average of 250 SHGs per CMRC. CMRCs are now acting as CSOs mobilizing resources from government and also CSR funds for implementing programmes. During 2019–2020, on average, each CMRC converged with the mainstream of pro-poor government schemes worth ₹ 5 million. Individual CMRCs also mobilized CSR funds from reputed companies for SHG formation and livelihood activities.

Improving Financial and Digital Inclusion

The financial inclusion agenda has been significantly achieved with almost all women members of the SHGs holding an individual account. Along with the opening of SHG bank account, individual accounts of members were also opened under the NRLM. Other large programmes, such as those of MAVIM, Hand in Hand, CMF and Chaitanya, also laid emphasis on women opening individual accounts. The NRLM and some of these programmes also invested in financial and digital literacy of women. Kalpana Sankar, CEO, Hand in Hand, mentions that only 28 per cent of women have access to smartphones and that improving access to smartphones can ensure digital financial inclusion and also improve their income through B2B marketing.

BC Sakhis—SHG Members as Last-mile Delivery Agents

Considering that in 2013–2014, NABARD and GIZ successfully implemented a pilot on SHG members as BC agents under the Rural Financial Institutions Programme, the scaling up of the pilot was limited. Some RRBs engaged SHG members as individual BC agents. However, the preference for banks has been to engage corporate BCs.

NRLM has been pushing for BC Sakhi model since last five years to improve usage of bank accounts opened under Jan Dan Yojana, to offer doorstep delivery of financial services for SHGs and to deepen insurance coverage other than under PMSBY/PMJJBY is limited. The BCs already recruited by financial institutions that do not reach remote locations, many rural BC agents being dormant and the BC network being male dominated, with only 8 per cent of BC agents being females, provide a case for developing a cadre of BC Sakhi. As on July 2020, 11,189 BC Sakhis were operational in 10,869 GPs across 18 states.

Three models of engagement of BC Sakhis have emerged: corporate BCs engaging SHG members being the dominant model, banks directly engaging SHG members as individual BCs and Odisha Livelihood Mission becoming the corporate BC of banks and deploying SHG members as agents. State missions have provided financial support through partial grants and low-cost credit through community institutions to meet the initial investment requirements of these bank Sakhis, for procurement of hardware devices and working capital to conduct initial transactions. Equipped with smartphones, tablets or laptops and biometric scanners, they provide basic banking services. The average number of transactions per month as of August 2020 is 154 and the average value per transaction is ₹ 3,047. The earnings of the BC Sakhis vary based on the value of the transactions.

A study by Centre for Digital Financial Inclusion (CDFI)[12] in 2019 shows that the common services provided by BC Sakhis were account opening, Aadhaar-enabled payment systems deposit and withdrawal, pensions, insurance, fund transfer and money transfer. Credit disbursements and recoveries were yet to be on board. Total 53 per cent of BC Sakhis surveyed did not conduct any SHG transactions. Connectivity problems (46%) and insufficient over draft (OD) (40%) are common concerns cited. An issue raised by the SHG members was that not all transactions are supported by the BC channel.

Most of the banks that SRLMs are working with have now enabled the dual authentication of SHG leaders in the biometric device. By making dual authentication possible, the authorized signatories of SHGs can carry out bulk of the bank transactions in their habitats. SBI has also developed an e-KYC product through the BC agent for opening savings account of SHGs and, thus, without going to the bank branch, the groups can open the accounts at BCs. Policy support is needed to scale this up since 28 per cent of the NRLM SHGs are yet to open savings bank accounts.

However, there should be more systematic efforts to ensure that SHG transactions are made through BC Sakhis, which can reduce transaction time and costs for SHGs and also improve business for BC Sakhis. This will also increase transparency at the group level and provide a way forward for the digitization of SHG-based transactions and the effective monitoring of SHGs. As per the World Bank's brief:

> *the current dual-authentication application of the BC platform works on the ON-US mode, which supports only intra-bank transactions. Very often the SHG group account is maintained at a different bank from the individual members, thereby restricting the quantum of digital SHG transactions that can be conducted. There is a need for NPCI to develop standard protocols for an OFF-US dual-authentication solution across its payment products spectrum.*

If SHG transactions are on boarded to BC Sakhis, SHG members will be in a position to build a credit/transaction history within the formal financial system, providing them with an opportunity to approach financial institutions directly to graduate to individual loans.

The CDFI study showed that BC Sakhis provided financial services to more women than men, and also had senior citizens and disabled as their clients. However, at an overall level, SHG-BCs received an average monthly commission of ₹ 2,013. This amount is much lower than the ₹. 4,000 being paid as an honorarium during the initial phase. While many BC Sakhis cite recognition as a reason for choosing to be in this profession, this may not be a very sound basis for the bank–BC relationship. Having engaged BCs, banks should work on a business case for BC Sakhi to make the agent useful in its business. By doing so, the bank will also ensure that BC has a viable livelihood. CMF, Jaipur, finds that BC agents need to be provided enterprise training on how to develop a customer base, market financial services, win the trust of customers by providing reliable services, etc.

There is general reluctance among public sector banks to expand BC agents. Many private sector financial institutions, including payment banks, are coming forward, but the key issue is that members and SHGs have accounts with PSBs, and for each transaction of servicing bank the PSB has to pay fees, and when transactions take place on a large scale, PSB banks will lose money. Transaction failures during COVID-19 times[13] show that the PSU IT system is unable to handle large volumes. The banking sector will need to strengthen back-end systems and technology to support the increased load of concurrent users on its network and provide uninterrupted access for customers.

While there is growing acceptance of the BC agent within the community, there is still scepticism while transacting on a digital platform. This calls for investment in digital financial literacy training to capacitate SHG members and their federations to transact through BC agents.

Instead of depending on corporate BCs to employ SHG women, the other alternative for the NRLM and also CSOs is to facilitate the engagement of federations as BCs of banks which, in turn, can engage SHG members as their agents. Banks have engaged SHG promoters such as Shri Kshetra Dharmasthala Rural Development Project (SKDRDP), Chaitanya Women's Integrated and Synergistic Empowerment (WISE) as full-fledged BCs, but not federations. Stree Nidhi, women's credit cooperative federation, operational in Telangana and AP, is acting as the BC of banks and engages SHG members as agents. By offering a full range of services, including the distribution of government social security schemes and SHG-related transactions, these agents are able to deliver financial services at the doorstep of members and reportedly earn an average of ₹ 15,000 per month.

Digitization of SHG Records

There are a number of initiatives undertaken to digitize SHG records by NABARD, NRLM, SRLMs and also other large programmes such as SKDRDP, MAVIM and Chaitanya. As per information available from NABARD, the implementation of the eShakti project is currently ongoing in 254 districts and, as of 31 March 2020, data pertaining to 6.54 lakh SHGs involving 72 lakh members in more than 98,000 villages have been onboarded to e-Shakti portal. Having commenced in 2015, the progress in terms of coverage is still low primarily because of the challenges being faced.

There is little convergence between the MISs of the NRLM/SRLMs and e-shakti. A study by IWWAGE in 2019[14] on major digitization initiatives concluded that 'NABARD's "e-Shakti" tool captures member-level financial data to provide higher granularity of data compared to most SRLM programmes, which allows for generation of alternate credit history and credit-worthiness indicators that can be leveraged to increase access to financial resources to groups and members.'

SRLMs and the NRLM are developing their own digitization platforms since they want customized solutions to their programmes. Although many SRLMs support e-Shakti by sharing data, this is seen as an additional work. A concern expressed is the lack of cross-verification of the data entered in e-Shakti. Moreover, e-Shakti does not have a module on federations, whereas the NRLM has a core strategy of federation building. In Tamil Nadu, the e-Shakti project is partnering with Tamilnadu Corporation For Development of Women for the integration of e-Shakti and eMathi portals, and the pilot in four districts could show the pathway for the integration of the NRLM data into the e-Shakti portal.

While NABARD mentions that forging tie-ups and collaboration with banks, NRLM/SRLMs and other organizations working with SHGs are underway to help avoid duplication of efforts and to optimize resources, this may not be an easy task. There are concerns around the ownership of the data, the actual usage of the data by bankers and other stakeholders, and the long-term sustainability of this initiative. If payment function can be integrated into e-Shakti and cash transactions between groups and members can be digitized, bookkeeping can be well integrated. This can add value to the members and also build the confidence of the bankers.

The NRLM has adopted a basic MIS for monitoring the programme wherein data related to SHGs, federations, funds released and bank loans are available. While the NRLM's interventions, especially fund infusion to community institutions, are monitored, there is little information on the institutions and how well they are performing. Similarly, the repayment performance and profitability of the institutions are not tracked. Many SRLMs have developed their own MIS systems and technology platforms with varying levels of efficiency. Not all data are in the system, and SRLMs also manage data outside the system in excel formats.

The NRLM is partnering with BMGF for putting the data stack, especially back-end data management, in place. Indian Software Product Industry RoundTable, which carried out the assessment of data management, is redesigning the NRLM's data systems and architecture along with CDFI. Protocols and applications are being developed and the results will be visible in the next two years. Digital ways to capture and represent data on SHG transactions and the NRLM's support activities are underway. The system will be robust to share data with banks. However, the digitization that is being planned for only SHGs and the digitization/ MIS requirements of VOs and federations are not being included under the current initiative.

Most of the programmes/projects do not take into consideration the information requirements of the SHGs and the information flow back to the SHGs is limited. Very few digitization efforts have actually reduced the drudgery of bookkeepers, since elaborate data are still manually maintained at the group level, and entry into software happens elsewhere on the basis of manual data collection. Against this background, the new initiative of the NRLM can be breaking new grounds since it is reported to be SHG centric, making data available to SHGs to measure their performance and improve transparency. Since all federations under the NRLM are acting as partial financial intermediaries managing the CIF, it is all the more necessary that strong monitoring is built in.

WISE, a resource organization promoted by Chaitanya in MP, has developed MicroLekha WISE for financially intermediating federations/ cooperatives of SHGs. With a tablet-based data entry, member-wise data are captured. WISE as a BC partner of Syndicate–Canara bank has enabled real-time transactions between the member and the bank as well as the member and the federation. Since savings and loan transactions between groups and federations are also digitized and the software is integrated with Tally ERP, accounting and cash management has become simpler and less risky. Manual bookkeeping is reinforced with digital transactions, as it instils greater confidence among branch managers and federation office-bearers since they cannot physically verify all SHG transactions. The bank loan applications, along with the grading sheet, are generated from the software. With the individual account being opened under the BC arrangement, members can access a range of financial services, the features of which are enabled in the system.

ENTERPRISE FINANCING TO SHG MEMBERS

With the programme achieving maturity in several regions with a vintage of more than 25 years, an evolving trend is the emergence of entrepreneurs from among SHG members. While the figures may vary from group to group, and from region to region, on average, about 20 per cent of members are emerging as entrepreneurs. In peri-urban areas, the percentage is likely to be higher, whereas in remote locations and tribal areas, it is likely to be smaller. These are usually poor/nearly poor women who have developed their confidence and risk-taking ability by taking several cycles of loans from SHGs. In most of these businesses, women participate either as sole owners and managers or as co-managers of family businesses. These women require larger enterprise loans not only for working capital but also for capital investments.

There was a clear strategic intent in 1992, when NABARD guided banks on SHG bank linkages, that eventually the members of SHGs will become individual customers of banks. However, this metric of how many women have become individual borrowers of banks is not measured or reported. There are no clear graduation pathways for these women. Field interactions with entrepreneurs as well as banks point to the difficulties that women face in accessing larger loans.

Banks are comfortable with SHG lending where repayments are assured because (a) the group as a whole is responsible for repayment, (b) these are generic loans without specific purpose and hence members are responsible to repay in spite of any (business) failures they may face, (c) these are usually short-term loans and (d) banks follow savings-to-credit ratio and thus the amount of credit is limited, though demand can be higher. To move to individual loans, there is hesitation among banks since (a) when women graduate from microfinance to individual enterprise finance, there is a higher risk of overdue since they lack access to business development services (BDS) and members can quote any business risk and failure for non-repayment of loans, (b) women lack collateral to offer as security, (c) not many enterprises keep clear accounts to assess the cash flows and (d) there is a risk of borrowing additional amounts from SHGs causing possibility of over leveraging.

Moreover, in many banks, especially private banks, there are separate verticals for SHG lending and enterprise financing. To move clients across verticals seems to be a herculean task, even with the availability of credit history within the bank. Banks, when pressed for enterprise loans, typically offer larger group loans, but not individual loans.

SHG lending modality is not proper fit for financing these entrepreneurs. The total funds available from savings and bank loans vis-a-vis demand from members are still inadequate. There are instances of cornering loans by few leaders and deprivation for others. Moreover, all members do not like to stand on the guarantee of a few large-sized loans. The enterprising members try to borrow from different sources, such as savings loan, SHG loan and federation loan, which leads to a delay in investments and also liquidity management issues. Those in need of large loans tend to borrow in the name of other members as well, which is not a good practice. The loan terms of the group loan, especially rate of interest and repayment term, are often the same for all members and hence the product fit is an issue.

NABARD has paved the way for larger loans for SHG members through JLG mode. NABARD guidance to banks states that a JLG from members of an SHG may be created. The members of JLG will continue to remain members of the SHGs and will continue to participate in the activities of SHGs as earlier. These JLGs are to be financed by the bank in accordance with the NABARD guidelines on JLGs already in vogue and such financing would be in addition to the loan/credit limit to the SHG. This methodology of making JLGs with SHG members with similar/different trades has picked up well, especially in states where the bankers have been concerned about the SHG portfolio quality. Loan amounts up to ₹ 100,000 have been provided collateral free through the JLG model. The repayments overall have been satisfactory as per bankers. Few innovative financial products have also emerged. However, the JLG methodology is also not satisfying the credit needs of entrepreneurs in need of larger loans.

Government programmes largely promote enterprises through grants and CIFs. The Government of Kerala's Kudumbashree has initiated the promotion of micro-enterprise among SHG members since 2010. There are a number of grants[15] that individual enterprises and group enterprises access apart from loans from SHGs. Mainstream enterprise financing products however has yet to emerge. SVEP of the NRLM has promoted 98,000 enterprises in 23 states as of 30 March 2020. About 60 per cent are women-owned and managed enterprises and the others are family-owned enterprises. The NRLM has provided ₹ 3,040 million as seed capital in the form of a community investment to facilitate the financing of enterprises. Bank finance has been minimal since funds are readily available from government schemes, the SHG members have little motivation to approach the banks. SVEP CIFs could be better leveraged for accessing bank loans through appropriate risk-sharing instruments.

Three projects being implemented/rolled out with external assistance from the World Bank (NRETP implemented through the NRLM and Tamil Nadu Rural Transformation Project, implemented by Tamil Nadu Women Development Corporation) and IFAD (Nav Tejaswini by MAVIM) can be game changers for enterprise promotion and financing of first-generation women entrepreneurs emerging from SHG membership. They focus on enterprise promotion through BDS and financial services. NRETP and NAV Tejaswini are considering the risk-sharing instrument of the first loss default guarantee to leverage loans for women enterprises. Business advisory services are part of the project design.

Business advisory services: Graduation from nano-enterprises (less than ₹ 100,000 investments) to micro-enterprises cannot be achieved by a mere increase in loan sizes. Bankers draw parallel to the investments made in SHG development by NABARD and state governments and suggest the

Box 7.3: Patient Capital Financing for Women Entrepreneurs by Post-Tsunami Sustainable Livelihoods Programme

PTSLP, an International Fund For Agricultural Development (IFAD)-funded project implemented by the Government of Tamil Nadu in 12 coastal districts of the state, has developed an innovative patient capital mechanism in partnership with NABFINS. The project has provided ₹ 70 million as patient capital facility to be managed by NABFINS. NABFINS has lent 70 per cent credit requirement at the prevailing rate of interest and 25 per cent is provided as patient capital at 4 per cent interest rate with a loan tenure of three years. The loan is structured in a way that the regular loan with a higher interest rate would be repaid first. As of 31 March 2020, 7,404 individual entrepreneurs were financed through the JLG methodology. They have been lent ₹ 368 million by NABFINS out of which ₹ 258 million is the loan from NABFINS and ₹ 92 million is the patient capital. The repayment rate is 97 and the NPA is at 3 per cent. The NPA has been predominantly due to the repeat cyclones and natural calamities that struck the region.

Source: Note from PTSLP.

need for a strong element of mentoring and BDS so that these enterprises have an orderly growth, failure rates are minimized and repayment of bank loans is on a better footing. Institutions offering quality BDS are few and focus on small- and medium-sized enterprises rather than micro- and nano-enterprises. Incubators for this segment are fewer.

The experiences of Hand in Hand India and WE HUB Telangana also demonstrate the requirement of a thorough screening for the selection of entrepreneurs to identify committed potential candidates who are then supported by business development training and mentoring. WE HUB is a Government of Telangana's initiative to foster women entrepreneurship by collaborating with industry leaders, providing incubation services and linking them to government schemes. The first cohort of its women entrepreneurship programme launched in 2019 offered several insights; of 3,500 women applicants, largely from SHGs, only 30 women were found to be aspiring entrepreneurs; the others were looking for a part-time supplemental income source.

Hand in Hand, with a mission to create 10 million jobs by 2025, is working with 2.5 million women in 17 states. Access to credit, along with need-based skill training and financial literacy training,[16] is the major strategy for enabling women to progress from the income generation activity to enterprises, but to move them to sustainable scalable enterprises, additional solutions were needed. Hand in Hand since 2016 has been partnering with IIT Chennai to provide high-quality classroom training in marketing, finance, legal, information technology and banking. Strict screening process has been followed. The faculty of IIT Chennai has connected the women to their alumni as mentors who provided post-training business advice and technical support for six months of post-training. About 76 per cent of the 300 women trained so far have scaled up vibrant, profitable micro-enterprises. The others continue their family-based businesses with better margins. The entire BDS is provided on a voluntary basis and, though the scale is small, this model can be emulated by other IITs and also business management schools.

For enterprise financing, the key issue is that most public sector banks follow traditional appraisal methods; there is need for more risk appetite to test out new appraisal techniques on the basis of alternate data analytics. Although in early days in NRETP, an application is being developed to screen potential borrowers for enterprises. IFC is carrying out a data gap assessment of the different data sets required for enterprise financing and how data gaps can be bridged from different sources. The loan application system with adequate data will then be developed under the project, which should be robust to fulfil the requirements of bankers.

Enterprise lending by non-banking financial companies: Some of the specialized SHG lending institutions are introducing enterprise financing products. Belstar NBFC MFI lends to micro-enterprises of SHG members (up to ₹ 200,000) with a repayment term of 36 months. Stree Nidhi, Telangana, has introduced a new loan product, Sowbhagya, for loans ranging from ₹ 100,000 to ₹ 300,000 per member with a repayment term of up to 60 months. This is over and above the SHG limits and within the allocated credit limits of the federations. To facilitate business planning and also credit assessment, Stree Nidhi has digitized about 100 enterprise profiles that can be downloaded by staff, and individual loans can be assessed quickly and also uploaded in the system. The bulk of the loans is thus sanctioned within 48 hours of the application. During 2019–2020, 546 members were disbursed loan of ₹ 89 million. Loan OS is ₹ 87 million with NPAs of 0 per cent.

Sanghamithra Rural Financial Services has invested in technology, disburses loans to individual borrowers in SHGs and tracks individual borrower's performance. This has enabled the institution to identify the enterprising members in the fourth/fifth loan cycle and to graduate them from SHG lending to individual loan of ₹ 1 lakh to 3 lakhs. The member can continue to save in the SHG but not allowed to borrow from the SHG. Out of ₹ 181 crores loans OS as of March 2020, ₹ 25 crores are enterprise loans to 530 enterprises. The portfolio is performing well with less than 1 per cent NPAs.

The government has launched many schemes under the Ministry of Micro, Small and Medium Enterprises. However, special efforts are needed by SHG promotion programmes to converge with schemes starting from registering women entrepreneurs on the Udyam portal. The formalization of enterprises with Aadhaar, PAN and GST numbers will pave the way for accessing schemes and also bank finance.

Social enterprises: The other trend that is seen is the setting up of social enterprises, which is usually a group enterprise by SHG members/federations that addresses member needs or a social cause and offers services at reasonable profits. These include enterprises such as cattle feed units, agri-input supplies, custom hiring centres, sanitary pad making, bakery units, flour mills and oil expeller units. MAVIM (365 social enterprises) and Hand in Hand (160 group enterprises) as well as some state rural livelihood missions have a rich experience in this. These are set up with partial/full grants and raise working capital from financial institutions.

Farmer producer organizations: For the last three years, mobilizing SHG members into farmer producer organizations has gained momentum. Two models of engagement are emerging; well-established federations of self-groups promoting FPOs with start-up funds for FPOs being routed through federations. In this model, federations have been deeply involved in the livelihood promotion, forming producer groups and facilitating extension services, market linkages, etc., and when this function has to be handed over to FPOs, the role transformation has to be carefully managed. The intention is to promote the strong ownership of a business institution by a social federation, to ensure that the interests of women and SHG members are well protected as FPOs expand membership to other members, including men who are not members of SHGs. Focused studies should be carried out on the pros and cons of federations of SHGs promoting business entities, and also good practices to be followed; in several states, especially in south and western regions, federations with over a decade of operational experience in livelihood space are promoting FPOs.

The second emerging model is the formation of producer groups and FPOs as stand-alone institutions. This is the predominant model under the NRLM where SHG federations are nascent and are still evolving and the formation of producer groups and FPOs are parallel efforts. There is a role clarity that SHG federations are involved in the social, financial and political empowerment of women and FPOs are being nurtured as business entities managed by technical and professional staff. NRETP focuses on building large format FPOs with more than 10,000 members so that adequate professional management of FPOs and economies of scale is possible. However, for transition from poverty-focused interventions so far to business promotion, SRLMs have to change the mindset of staff, build internal capacities and facilitate FPOs as business units. Since the project is time bound, the investment costs and the working capital needs of FPOs are to be fully funded out of grants. However, for scalability and also to improve accountability, bank loans should be raised.

IMPACT OF COVID-19 PANDEMIC ON SHGS

Community Response to COVID-19

The community response to the COVID-19-related pandemic has been phenomenal. SHG networks were involved in awareness generation, ensuring public health and hygiene, and providing food security. Being close to the community in the villages, SHGs and federations have taken spontaneous affirmative actions in helping the needy as several anecdotal evidence shows, and this has to be well documented. With a sudden and complete lockdown, sources of income dried up for many poorest households, and also people who depended on hotels and small eating outlets found it an issue. The NRLM reports that by July, about 12,000 community kitchens across 75 districts of three states, namely Jharkhand, Kerala and Odisha, had provided 57.2 million meals.[17] MAVIM, Maharashtra, sent an appeal that no one in the villages in which they operate should go hungry. Their SHG federations, the CMRCs, ensured the distribution of dry rations for the destitute and needy through their own means and also in convergence with the government programmes. Moreover, SHG members mobilized and contributed ₹ 1.5 million to the Chief Minister's Fund in spite of facing the economic downturn. Being local and also poor-sensitive institutions, SHGs and federations are able to identify and support the needy.

SHG programmes looking at avenues of economic opportunities taught women to make masks and other protective equipment from their home spaces. In many states, such as Rajasthan and Odisha, the local GPs commissioned these works through SHGs. Various categories of masks, including 2–3 ply woven and non-woven surgical masks, were made adhering to the instructions from the health departments of the states. The NRLM reports that 230 million masks and 529,000 protective equipments were produced by women. Some of these collectives have taken up the task of managing the quarantine centres in villages with reverse migration.[18] Similar large-scale efforts are reported by the Integrated Livelihood Support Project, Uttarakhand, MAVIM, etc.[19] In Bihar, Jharkhand, Nagaland and UP, the quarantine facilities were operated by the SHG network. Several NGOs, Hand in Hand, PRADAN, CMF, Chaitanya, Srijan, etc., having their operations in some of the poorest regions, have provided relief and also facilitated the community to avail government benefits.

Meetings of SHGs and federations were disrupted for 2–3 months in different locations, depending on the state's specific advice. This affected the savings mobilization and internal loan repayments. Groups, especially rural, have continued servicing their external loans, especially bank loans.

Bankers' Response to COVID-19

In respect of all term loans, the RBI has permitted all financial institutions to grant a moratorium of three months on payment of all instalments,[20] falling due between 1 March 2020 and 31 May 2020. Later on, the period was extended to 31 August. The repayment schedule for such loans, as well as the residual tenor, is shifted by three months after the moratorium period. Interest will continue to accrue on the OS portion of the term loans during the moratorium period. In respect of cash credit lending, institutions were permitted to defer the recovery of interest applied during the period. Accumulated accrued interest are to be recovered immediately after the completion of this period.

Following the direction from the RBI, all banks announced a moratorium on SHG loans. They educated the SHGs on the implications of interest to be paid. Bankers mention that in rural areas, depending on the region, 70–90 per cent of SHGs did not opt for a moratorium and continued to pay their instalments. Women from households dependent on certain sectors, such as tourism, catering and craft, faced severe disruptions to their cash flows and income, but overall such households are expected to be 10 per cent of total members. Although the finance minister announced collateral-free loans of ₹ 2 million per SHG as a post-COVID-19 revival measure, the RBI has not issued guidelines and the banks have also not offered this product.

Many banks also designed a loan product for COVID-19 emergency relief as per the guidance of the finance minister; a loan up to ₹ 5,000 per member based on certain performance criteria of the SHGs. Since SLBC meetings have not been held in most states, there are limited data in the public domain on loans extended to SHGs as COVID-19 emergency measures and moratoriums extended. Some states have also taken special initiatives. In Kerala, under a special COVID-19 relief scheme, Chief Minister Helping Hand, the banks have sanctioned loans to 200,078 SHGs amounting to ₹ 18 billion at 0 per cent rate of interest. While the banks will lend at 9 per cent, the Government of Kerala will provide interest subvention.

The impact of the pandemic brought to the fore the crucial role played by BC Sakhis, catering to the needs of vulnerable sections of society. With restrictions on movement, BC Sakhis ensured that rural households had access to cash, especially the entitlements announced through direct benefit transfer schemes. From 25 March to 31 July, about 6,934 BC Sakhis from 14 states have done 83.63 lakh transactions under the Pradhan Mantri Garib Kalyan Yojana, amounting to ₹ 184 billion. Moreover, under the Pradhan Mantri Jan Dhan Yojana, the DAY-NRLM scheme transferred ₹ 3.09 trillion benefitting 206 billion women account holders.[21]

IMPACT ASSESSMENT AND OTHER STUDIES

Cost effectiveness study: Despite an increasing body of research on the impact of SHGs on women's empowerment, wide gaps in understanding their costs and cost-effectiveness remain. An ongoing study by the Evidence Consortium on Women's Groups (ECWG) conducted an analysis of the costs and return on investment (ROI) of JEEViKA, the Bihar Rural Livelihoods Project.[22] The annual per-household expenditure for basic programme activities under the JEEViKA declined from $61.6 per member at the start of the programme in 2007, when the programme served fewer than 10,000 households, to $11.9 per member at the scaled-up level in 2016, when the programme reached more than 5 million households. Assuming that the benefits last for a year and the programme includes only basic SHG activities, every dollar invested in an average household under the JEEViKA returns $1.17 for that household largely from savings on interest on high-cost loans. The ROI increases to $4.89 in Bihar when the benefits last for 5 years. If community investment and livelihoods costs are added in addition to basic programme activities, JEEViKA takes 4 years to break even. Every dollar invested results in a return of $0.34 if the benefits last for 1 year, and $1.41 if the benefits last for 5 years.

Impact assessment: SKDRDP, which has mobilized 4 million women and men into SHGs for the last 25 years, commissioned an impact study in 2019 covering 3,750 customers who had been members of the Pragati Bandhu Groups and SHGs for different time periods.[23] More than 55 per cent of the sample had been part of different groups for more than 10 years. The results show that incomes had significantly increased for members across the board, regardless of the period of their membership. Those who were with the project for less than 10 years have reported an income growth of almost three times. Members that continued with the groups for 20 years or more multiplied their incomes seven times or more. SKDRDP had been able to double the income of one out of four members within five years without any conscious targeting, but providing comprehensive all-round support from inputs, technology, credit and, where possible, markets. Over the years, the growth rate has been sustained and seems to be on an irreversible growth path, and the member households have come out of the poverty line.

Businesses (such as trade and petty shops), dairy animals, plantations of areca nut and coconut are associated with a high income compounded annual growth rate compared to other activities. While trade and business produce high returns on account of rapid turnover, which can produce high incomes even with thin margins, the plantation crops have low current costs; and their investment costs are always historically low, the income generation period is very long and comparatively stable compared to other crops.

Members had a mix of farm and non-farm activities for generating their livelihood incomes. This seems to have been a carefully developed strategy over the years to avoid income shocks on account of sectoral factors. While some members had significant income from farm sector, only 36.5 per cent of the sample had income from farms in excess of 50 per cent of the total income. Similarly, less than 40 per cent members reported more than 50 per cent of their income arising from non-farm sector.

The level of savings of members with SHGs is low given the potential of the programme; the reason being the savings limits introduced at the beginning of the group formation exercise largely remain and have not been revised. Total 30 per cent of the sample had savings of less than ₹ 5,000; 42 per cent had savings of ₹ 5,000 to ₹ 10,000; 23 per cent saved ₹ 10,000 to ₹ 20,000 and 5 per cent had savings over ₹ 20,000.

The range of financial services offered ensured that both livelihood and the life cycle needs were fulfilled. Access to insurance and pension products of a wide variety further reduced risks and secured old age living. The loans provided by SKDRDP either from its own account or as an agent of a bank (BC) were prime movers in this livelihood improvement effort. With adequate capital, and continued availability for income activity expansion, new ventures, emerging consumption needs as well as house construction/repair members' livelihood activities flourished. The asset build-up noticed in most households is a clear sign of improving the quality of life.

Impact evaluation (IE) of National Rural Livelihoods Project (NRLP):[24] An IE of the NRLP funded by the World Bank under the aegis of the NRLM was carried out in 9 of India's poorest states utilizing a large study sample of over 27,527 households in 1,052 villages covering 4,742 SHGs. The average age of SHGs was 51.5 months. The positive results are as follows: (a) the project was socially inclusive with the selection of villages with a higher average percentage of SC/ST households, (b) 83 per cent of the chosen sample SHGs were functional, (c) financial linkages do not appear to be a major constraint with 70 per cent SHGs receiving RFs, 34 per cent receiving CIFs and 50 per cent had bank loans and (d) institutional linkages are strong, with 79 per cent SHGs being linked to VOs while 75 per cent were linked to CLFs. Such institutional linkages improved financial access, with a higher proportion of funds being used for productive purposes. The causes of concern include the following: (a) 68 per cent of SHGs only reported internal lending, (b) the average amount of loans to members was small at ₹ 5,466; 48 per cent of SHG loans were used for consumption purposes, while 19 per cent of loans were used for productive purposes and (c) SHGs' adherence to Panchasutra quality metrics is low with the average score of 2.5 (out of 5) and adherence to Panchasutra declines with age.

Significant results achieved by the programme include (a) the share of informal loans in SHG member households reduced by 20 per cent as a result of the programme; (b) statistically significant effect on household income; an additional two and a half years of membership in SHGs increases total household income by approximately ₹ 11,000 a year, an increase of approximately 19 per cent over the base amount of ₹ 57,000 per annum primarily driven by casual wage labour markets (₹ 8,000 on average), with a small percentage also reflecting increased income from the Mahatma Gandhi National Rural Employment Guarantee Act and (c) significant and positive impacts on the number of social schemes availed by households.

The evaluation concludes that, given the very low initial development in these states, the achievements of the project in bringing poor households together into groups, federating these groups and facilitating access to loans, and enhancing savings and incomes in rural areas are significant. However, no impacts of the programme on women's household decision-making was found. Creating opportunities and a system of support for less educated women to take on leadership roles may help promote women's empowerment. Investments in financial literacy and life skills trainings may be important steps forward to achieve this.

CONCLUSIONS

Although SBLP has been progressing in terms of outreach and volume of finance, progress is uneven and the quality of groups is inconsistent. National benchmarks need to be developed for key metrics and analysis can be done on the level of performance of states and regions. These metrics should be discussed in SLBC meetings and should also be reviewed by DFS, RBI, NABARD, etc. One such metric is the number of SHGs with savings accounts that have a current loan OS. States with a consistent low ratio of SHGs with bank loans need to clean up dormant SHGs from the databases along with proper closure of the accounts of such SHGs, including returning the savings of members through facilitation of promoting agencies. SLBCs should address this issue.

While SHG movement was originally driven by savings, due to the increasing emphasis of government policies on credit, the agenda of building savings and assets of the members has been sidelined. The drive for financial inclusion by government and civil society programmes has led to the opening of individual accounts for SHG members, especially women. With the finance minister announcing direct benefit transfer of ₹ 500 for three months into each woman SHG member's account under the NRLM as part of the COVID-19 relief measures, women's appreciation in not only holding the account but also keeping it active is expected to have increased. With emphasis on Bank Sakhi model, making doorstep delivery of services possible, there should be a campaign to increase savings of women in SHGs as well as in individual accounts. The federations should work with banks to devise special goal-oriented savings products for SHG members in order to improve their financial health and stability.

Regulation of federations that act as financial intermediaries (directly or indirectly) is a key aspect that has been neglected so far. The federations promoted under the NRLM channel substantial funds and carry out lending activities that require a suitable legal form with appropriate systems and compliance requirements. Stronger systems for loan monitoring and capacity building of both the governing body and the staff of the federations on financial management, internal controls and monitoring need to be prioritized.

In lines of cost-effectiveness study conducted on JEEViKA, a study that computes costs of implementing the NRLM and the benefits delivered to the SHGs is required. The study should estimate the income improvement achieved by the average SHG and the cost of delivering the NRLM services to the average SHG. This study can be conducted periodically following a panel methodology and can inform policy on how to structure the programme for better impacts.

There is negligible innovation in credit products offered by banks to SHGs. The cookie-cutter simple loan product and processes have to be revisited with an objective of supporting the livelihoods and enterprises of individual members through appropriate financing. It is not a matter of pride that enterprising women who have a vintage of more than 10–20 years in SHGs still need to depend on a group loan. NABARD should lead efforts with banks to develop loan products and processes for graduation of SHG members. Both government and civil society programmes should ensure the qualitative BDS for these enterprises to bolster the confidence of the bankeInstead of interest subvention and grants for setting up enterprises, government programmes should build the ecosystem for enterprises to thrive and grow, including forging of sustainable partnerships with the private sector.

While bank loan and other ecosystem improvements would continue to be a requirement, how long will the SHGs require interest subvention support? Should the government have a sunset clause on such subsidies for groups older than three years? The interest subsidy scheme is heavily skewed in favour of very few southern states. A fresh look is needed to assess whether such a scheme is needed for states where the programme has been well established for more than two decades. Interest subvention funds could be better utilized for livelihoods and enterprise interventions than augment members' income.

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APPENDIX 7.1:
Savings of SHGs with Banks—Region-wise/State-wise/Agency-wise Position as of 31 March 2020 (Amount in ₹ Million)

	Public Sector		Private Sector Commercial Banks		RRBs		Cooperative Banks		Total	
Region/State	Details of SHGs savings linked with bank		Details of SHGs savings linked with bank		Details of SHGs savings linked with bank		Details of SHGs savings linked with bank		Details of SHGs savings linked with bank	
	No. of SHGs	Savings amount	No. of SHGs	Savings amount	No. of SHGs	Savings amount	No. of SHGs	Savings amount	No. of SHGs	Savings amount
Chhattisgarh	104,155	2,086	2,542	62	113,935	1,088	13,461	120	234,093	3,356
MP	161,048	4,464	29,062	173	169,483	2,620	10,626	163	370,219	7,420
Uttarakhand	36,665	356	669	3	26,111	500	10,528	211	73,973	1,069
UP	156,307	3,377	6,416	16	283,694	1,668	10,381	215	456,798	5,276
Central region	**458,175**	**10,283**	**38,689**	**253**	**593,223**	**5,877**	**44,996**	**709**	**1,135,083**	**17,122**
Andaman & Nicobar	812	13	197	1		0	5,229	138	6,238	152
Bihar	365,239	8,199	6,352	124	426,349	3,980	33	0	797,973	12,303
Jharkhand	158,184	2,220	2,862	127	103,431	473	2,050	9	266,527	2,829
Odisha	368,422	9,234	25,841	152	216,844	5,595	92,300	3,132	703,407	18,114
West Bengal	539,039	12,139	8,662	82	297,319	14,929	191,965	5,888	1,036,985	33,036
Eastern region	**1,431,696**	**31,804**	**43,914**	**486**	**1,043,943**	**24,977**	**291,577**	**9,166**	**2,811,130**	**66,433**
Arunachal Pradesh	2,684	79	2	0	3,376	54	26,334	30	32,396	163
Assam	129,846	1,034	8,529	46	284,479	1,999	1,518	27	424,372	3,106
Manipur	5,143	43	42	2	2,005	6		0	7,190	51
Meghalaya	3,469	43	2	1	17,594	299		0	21,065	342
Mizoram	505	11	118	1	11,452	199	0	0	12,075	211
Nagaland	5,999	68	212	2	1,475	33		0	7,686	104
Sikkim	4,058	130	590	19		0	1,486	38	6,134	188
Tripura	10,593	159	720	19	34,668	472		0	45,981	650
North-east region	**162,297**	**1,568**	**10,215**	**89**	**355,049**	**3,061**	**29,338**	**95**	**556,899**	**4,814**
Chandigarh	5,537	66	360	2		0	46	1	5,943	69
Haryana	35,589	421	819	4	21,369	232	4,539	47	62,316	704
Himachal Pradesh	20,674	270	189	3	10,657	190	27,352	289	58,872	751
Jammu & Kashmir	2,225	19	3	0	2,896	57	929	3	6,053	79
New Delhi	3,458	95	67	21		0	254	7	3,779	123
Punjab	26,450	277	700	3	12,818	94	7,551	78	47,519	452
Rajasthan	108,651	1,546	54,182	321	138,161	1,363	91,646	547	392,640	3,777
Northern region	**202,584**	**2,694**	**56,320**	**354**	**185,901**	**1,936**	**132,317**	**971**	**577,122**	**5,955**
AP	697,871	51,779	2,018	119	219,836	14,667	16,106	1,232	935,831	67,797
Karnataka	346,923	4,232	68,323	4,262	201,109	1,716	258,181	4,933	874,536	15,144
Kerala	212,559	4,188	75,889	6,270	67,953	1,210	63,937	1,439	420,338	13,106

Lakshadweep UT	179	2	0	0		0		0	179	2
Puducherry	6,915	472	2,014	99	6,767	109	1,027	39	16,723	719
Tamil Nadu	372,673	8,034	228,326	5,600	93,572	819	177,958	2,540	872,529	16,993
Telangana	259,428	10,840	4,309	958	293,716	21,104	11,647	346	569,100	33,249
Southern region	**1,896,548**	**79,548**	**380,879**	**17,308**	**882,953**	**39,624**	**528,856**	**10,529**	**3,689,236**	**147,008**
Daman & Diu UT	28	1	0	0		0		0	28	1
Dadra & Nagar Haveli UT		0	12	0		0		0	12	0
Goa	4,940	186	379	90		0	3,825	145	9,144	421
Gujarat	175,032	2,296	18,154	164	60,058	757	36,888	348	290,132	3,566
Maharashtra	417,491	6,285	169,099	2,856	140,752	1,880	439,814	4,824	1,167,156	15,844
Western region	**604,872**	**9,124**	**187,644**	**3,110**	**200,810**	**2,637**	**480,527**	**5,316**	**1,473,853**	**20,188**
Total	**4,756,172**	**135,020**	**717,661**	**21,601**	**3,261,879**	**78,113**	**150,7611**	**26,786**	**1,024,3323**	**261,520**

Source: NABARD (2020).

APPENDIX 7.2:
Progress under SBLP—Bank Loans Disbursed during the Year 2020 by State/Region and Financing Agency (Amount in ₹ Million)

	Public Sector		**Private Sector Commercial Banks**		**RRBs**		**Cooperative Banks**		**Total**	
Region/State	Total loans disbursed during the year		Total loans disbursed during the year		Total loans disbursed during the year		Total loans disbursed during the year		Total loans disbursed during the year	
	No. of SHGs	Loans disbursed	No. of SHGs	Loans disbursed	No. of SHGs	Loans disbursed	No. of SHGs	Loans disbursed	No. of SHGs	Loans disbursed
Chhattisgarh	19,319	2,355	220	30	17,087	2,418	2,174	200	38,800	5,004
MP	17,176	1,310	5,310	855	25,795	1,157	107	4	48,388	3,326
Uttarakhand	2,161	169	64	6	2,339	134	1,782	109	6,346	418
UP	8,586	542	5	0	8,808	1,125	141	10	17,540	1,677
Central region	**47,242**	**4,376**	**5,599**	**891**	**54,029**	**4,835**	**4,204**	**323**	**111,074**	**10,425**
Andaman & Nicobar	21	4	10	4		0	227	49	258	57
Bihar	154,724	19,299	2,866	375	108,407	28,696		0	265,997	48,370
Jharkhand	33,839	3,059	243	7	23,352	1,971	181	20	57,615	5,057
Odisha	86,869	13,736	1,975	249	40,917	7,742	13,150	1,907	142,911	23,633
West Bengal	208,237	36,612	116	16	359,429	54,628	88,954	10,134	656,736	101,390
Eastern region	**483,690**	**72,709**	**5,210**	**651**	**532,105**	**93,037**	**102,512**	**12,110**	**1,123,517**	**178,508**
Arunachal Pradesh	27	5	0	0	132	16	962	93	1,121	113
Assam	13,523	1,761	55	8	14,265	2,513	962	93	28,805	4,374
Manipur	90	13	0	0	739	86	424	44	1,253	144
Meghalaya	101	11	0	0	1,860	282		0	1,961	293
Mizoram	69	13	0	0	1,183	191		0	1,252	204
Nagaland	299	40	0	0	23	9	0	0	322	48
Sikkim	705	118	1	0		0	52	7	758	125
Tripura	712	75	2	0	2,583	504		0	3,297	580
North-east region	**15,526**	**2,036**	**58**	**8**	**20,785**	**3,601**	**1,438**	**144**	**37,807**	**5,789**
Chandigarh	52	4	0	0		0	0	0	52	4
Haryana	6,471	702	3	0	2,548	334	137	8	9,159	1,044
Himachal Pradesh	2,106	295	2	0	1,001	195	2,401	415	5,510	905
Jammu & Kashmir	895	144	0	0	1,301	283	0	0	2,196	428
New Delhi	34	11	0	0		0	0	0	34	11
Punjab	1,537	133	2	0	859	49	102	10	2,500	193
Rajasthan	10,900	886	14,518	3,255	16,883	1,643	1,153	101	43,454	5,885

Northern region	**21,995**	**2,175**	**14,525**	**3,256**	**22,592**	**2,505**	**3,793**	**534**	**62,905**	**8,469**
AP	438,692	177,700	760	216	135,183	54,761	5,002	2,275	579,637	234,952
Karnataka	241,819	54,934	91,244	16,790	82,501	16,019	36,374	11,998	451,938	99,741
Kerala	40,020	15,449	23,499	9,367	9,801	4,478	5,294	2,548	78,614	31,842
Lakshadweep UT	5	1	0	0		0		0	5	1
Puducherry	1,023	333	241	90	746	318	45	30	2,055	771
Tamil Nadu	71,795	30,684	44,486	15,897	13,748	6,035	31,161	12,631	161,190	65,247
Telangana	153,248	59,931	2,816	915	200,090	52,148	6,888	2,922	363,042	115,916
Southern region	**946,602**	**339,031**	**16,3046**	**43,276**	**442,069**	**133,758**	**84,764**	**32,405**	**1,636,481**	**548,470**
Daman & Diu UT	0	0	0	0		0		0	0	0
Dadra & Nagar Haveli UT	0	0	0	0		0		0	0	0
Goa	422	140	241	98		0	69	31	732	269
Gujarat	3,832	331	3,338	531	3,946	1,878	884	144	12,000	2,884
Maharashtra	40,084	5,099	44,689	9,703	18,262	2,703	58,451	4,275	161,486	21,780
Western region	**44,338**	**5,570**	**48,268**	**10,332**	**22,208**	**4,581**	**59,404**	**4,450**	**174,218**	**24,933**
Total	**3,118,786**	**425,897**	**473,192**	**58,414**	**109,3788**	**242,316**	**256,115**	**49,966**	**3,146,002**	**776,593**

Source: NABARD (2020).

APPENDIX 7.3:
Progress under SBLP: Bank Loans OS by State/Region and Financing Agency as of 31 March 2020 (Amount in ₹ Million)

	Public Sector		Private Sector Commercial Banks		RRBs		Cooperative Banks		Total	
Region/State	Total bank loans OS against SHGs		Total bank loans OS against SHGs		Total bank loans OS against SHGs		Total bank loans OS against SHGs		Total bank loans OS against SHGs	
	No. of SHGs	Loans OS	No. of SHGs	Loans OS	No. of SHGs	Loans OS	No. of SHGs	Loans OS	No. of SHGs	Loans OS
Chhattisgarh	38,705	3,716	629	50	38,026	2,366	2,861	203	80,221	6,335
MP	52,767	3,243	8,712	801	43,345	2,479	1,031	54	105,855	6,577
Uttarakhand	4,607	418	303	13	6,375	223	5,069	234	16,354	888
UP	39,986	3,264	2,307	217	106,588	5,107	3,155	123	152,036	8,710
Central region	**136,065**	**10,642**	**11,951**	**1,080**	**194,334**	**10,174**	**12,116**	**614**	**354,466**	**22,510**
Andaman & Nicobar	44	7	157	35		0	962	102	1,163	145
Bihar	290,792	35,260	3,830	403	392,710	33,974	0	0	687,332	69,637
Jharkhand	70,572	5,236	829	53	40,977	2,857	145	25	112,523	8,171
Odisha	165,244	19,993	4,373	389	128,539	14,100	31,820	2,497	329,976	36,979
West Bengal	393,109	53,266	1,543	135	279,256	47,107	150,210	12,207	824,118	112,715
Eastern region	**919,761**	**113,761**	**10,732**	**1,015**	**841,482**	**98,039**	**183,137**	**14,831**	**1,955,112**	**227,646**
Arunachal Pradesh	224	17	0	0	187	17		0	411	33
Assam	35,223	3,126	1,178	103	61,210	4,617	3,713	140	101,324	7,986
Manipur	332	35	0	0	1,757	128	573	45	2,662	208
Meghalaya	195	19	1	0	3,332	248		0	3,528	268
Mizoram	155	21	2	0	2,475	298		0	2,632	319
Nagaland	672	83	35	1	137	40		0	844	124
Sikkim	1,079	135	313	12		0	78	6	1,470	153
Tripura	2,859	185	19	1	15,257	1,041		0	18,135	1,227
North-east region	**40,739**	**3,621**	**1,548**	**118**	**84,355**	**6,389**	**4,364**	**191**	**131,006**	**10,319**
Chandigarh	150	14	0	0		0		0	150	14
Haryana	9,334	833	222	5	6,451	670	1,141	56	17,148	1,564
Himachal Pradesh	4,159	524	27	3	3,493	413	5,384	609	13,063	1,549
Jammu & Kashmir	1,271	180	0	0	2,121	302	103	5	3,495	487
New Delhi	240	63	8	0		0	3	0	251	63
Punjab	3,175	1,123	26	3	2,861	141	1,255	66	7,317	1,334
Rajasthan	32,160	2,417	22,661	2,795	22,034	1,311	15,236	688	92,091	7,211
Northern region	**50,489**	**5,153**	**22,944**	**2,807**	**36,960**	**2,837**	**23,122**	**1,425**	**133,515**	**12,222**
AP	640,062	234,816	1,102	208	211,591	64,032	13,161	3,050	865,916	302,107
Karnataka	365,955	82,442	117,660	25,145	104,297	20,243	78,131	13,715	666,043	141,544

Kerala	124,084	33,196	69,490	13,716	19,691	5,388	77,444	7,922	290,709	60,222
Lakshadweep UT	9	1	0	0		0		0	9	1
Puducherry	3,744	612	839	170	1,919	401	676	149	7,178	1,332
Tamil Nadu	184,704	44,924	85,786	16,608	30,738	6,753	86,869	15,742	388,097	84,026
Telangana	298,385	97,997	4,231	956	281,331	84,847	16,964	4,710	600,911	188,510
Southern region	**1,616,943**	**493,988**	**279,108**	**56,803**	**649,567**	**181,663**	**273,245**	**45,288**	**2,818,863**	**777,743**
Daman & Diu UT	0	0	0	0		0		0	0	0
Dadra & Nagar Haveli UT	128	4	0	0		0		0	128	4
Goa	1,019	265	369	95		0	312	62	1,700	422
Gujarat	26,573	1,750	5,339	456	10,018	628	6,078	169	48,008	3,002
Maharashtra	94,638	10,516	76,297	10,084	32,509	3,480	30,829	2,802	234,273	26,882
Western region	**122,358**	**12,535**	**82,005**	**10,635**	**42,527**	**4,108**	**37,219**	**3,034**	**284,109**	**30,311**
Grand total	**2,886,355**	**639,700**	**408,288**	**72,458**	**1,849,225**	**303,210**	**533,203**	**65,382**	**5,677,071**	**108,0751**

Source: NABARD (2020).

APPENDIX 7.4:
NPA Levels of SHGs by State/Region and Financing Agency as of 31 March 2019 (Amount in ₹ Million)

	Public Sector		Private Sector Commercial Banks		RRBs		Cooperative Banks		Total	
Region/State	Amount of NPAs	NPA as % to total loans OS	Amount of NPAs	NPA as % to total loans OS	Amount of NPAs	NPA as % to total loans OS	Amount of NPAs	NPA as % to total loans OS	Amount of NPAs	NPA as % to total loans OS
Chhattisgarh	293	7.88	1	1.22	83	3.5	24	11.8	400	6.32
MP	827	25.5	38	4.73	381	15.39	31	58.29	1,278	19.43
Uttarakhand	113	27.07	7	53.42	26	11.67	94	40.02	240	27.00
UP	1,881	57.63	213	97.96	1,535	30.06	115	93.37	3,743	42.97
Central region	**3,114**	**29.26**	**258**	**23.88**	**2,025**	**19.91**	**264**	**42.96**	**5,661**	**25.15**
Andaman & Nicobar	1	13.17	2	4.27	0		9	9.13	12	8.13
Bihar	1,639	4.65	0	0.01	1,338	3.94	0	0	2,977	4.28
Jharkhand	385	7.36	36	67.37	113	3.96	2	7.86	536	6.56
Odisha	1,838	9.19	82	21.02	1,698	12.04	228	9.13	3,845	10.40
West Bengal	771	1.45	16	11.83	1,369	2.91	623	5.1	2,779	2.47
Eastern region	**4,634**	**4.07**	**135**	**13.3**	**4,518**	**4.61**	**862**	**5.81**	**10,150**	**4.46**
Arunachal Pradesh	8	48.14	0	0	0	0	0		8	24.27
Assam	687	21.98	14	13.9	1,476	31.96	50	35.91	2,227	27.89
Manipur	7	18.67	0	0	17	13.22	0		24	11.29
Meghalaya	3	14.59	0	0	11	4.45	0		14	5.19
Mizoram	3	12.2	0	0	26	8.77	0		29	8.99
Nagaland	6	7.23	0	3.15	2	4.02	0		8	6.16
Sikkim	2	1.38	0	0	0		1	14.28	3	1.81
Tripura	107	57.87	0	0.34	273	26.19	0		380	30.92
North-east region	**822**	**22.7**	**14**	**12.17**	**1,804**	**28.23**	**51**	**26.72**	**2,691**	**26.08**
Chandigarh	0	2.45	0	0	0		0		0	2.45
Haryana	180	21.6	2	43.25	382	57.05	42	75.85	607	38.79
Himachal Pradesh	50	9.63	0	0	28	6.73	65	10.64	143	9.23
Jammu & Kashmir	9	4.97	0	0	14	4.72	5	96.6	28	5.78
New Delhi	17	27.84	0	0	0		0		17	27.82
Punjab	139	12.4	0	0.6	19	13.52	27	41.04	186	13.92
Rajasthan	441	18.27	32	1.14	237	18.12	428	62.28	1,139	15.80
Northern region	**838**	**16.26**	**34**	**1.22**	**681**	**24**	**568**	**39.86**	**2,121**	**17.35**

AP	2,776	1.18	12	5.98	531	0.83	104	3.41	3,424	1.13
Karnataka	3,087	3.74	243	0.97	1,787	8.83	242	1.76	5,359	3.79
Kerala	1,635	4.92	142	1.04	87	1.61	310	3.91	2,173	3.61
Lakshadweep UT	0	13.49	0	0	0	0	0		0	13.49
Puducherry	158	25.79	0	0.08	35	8.78	34	22.96	227	17.07
Tamil Nadu	10,143	22.58	646	3.89	365	5.41	913	5.8	12,067	14.36
Telangana	4,994	5.1	6	0.62	833	0.98	153	3.25	5,986	3.18
Southern region	22,793	4.61	1,049	1.85	3,639	2	1,756	3.88	29,238	3.76
Daman & Diu UT	0		0		0		0		0	
Dadar & Nagar Haveli UT	0	8.55	0		0		0		0	8.55
Goa	14	5.32	0	0.2	0		153	3.25	168	39.66
Gujarat	167	9.53	33	7.21	129	20.51	42	24.68	370	12.33
Maharashtra	1,789	17.01	351	3.48	456	13.11	370	13.2	2,966	11.03
Western region	1,970	15.72	384	3.61	585	14.24	418	13.76	3,356	11.07
Grand total	**34,172**	**5.34**	**1,875**	**2.59**	**13,253**	**4.37**	**3,918**	**5.99**	**53,217**	**4.92**

Source: NABARD (2020).

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MSME Financing in India: Key to the 5 Trillion Economy

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Pankaj K Agarwal

8

INTRODUCTION

Micro, small and medium enterprises (MSMEs) are considered as the main drivers of economic growth in most emerging economies, providing a major source of non-agricultural employment and promoting entrepreneurship and innovation. The Indian MSMEs make up 90 per cent of all industrial enterprises, contributing 31 per cent of GDP, 45 per cent of total industrial value added and 48 per cent of merchandise exports in 2018–2019. The present political ambition of lifting India's GDP to $5 trillion by 2025 envisages the contribution of MSMEs to rise to 50 per cent by 2025.[1] The Indian MSME sector is envisaged as the engine of growth and innovation as the government embarks on the 'Make in India strategy' with focus on generating income and employment and keeping the export sector competitive. However, despite promotion and protection measures extended to MSMEs by the Government of India and the Reserve Bank of India (RBI), the sector faces several challenges such as investment constraints, inability to achieve scale economies and high failure rates, thereby requiring coordinated policy interventions in multiple fronts.

There are compelling reasons for a pro-MSME growth strategy in India's policymaking. First, a pro-MSME strategy would act as the driver for growth and would absorb expanding non-agricultural labor. Second, the growth of small and medium enterprises (SMEs) is also linked to the overall growth of large industries with significant backward and forward linkages. There is evidence of increasing trends towards interfirm linkages in production involving subcontracting and outsourcing. There are also several instances of successful multinational firms whose local supply chain comprises predominantly the SMEs. Third, MSMEs have also played a significant role in outlying regions and sectors, providing the necessary local content in the growth process, thereby redressing regional imbalances. The industrial clusters in and around larger enterprises in several parts of the country have a trickle-down effect and displayed significant dynamism making productive use of local resources and facilitating regional growth. Fourth, the promotion of MSMEs with the provision of finance and other business development services helps to sustain social and economic cohesion.

The Indian MSME policy framework has evolved with incentives, guarantees and directed credit with interest subventions, which together are aimed at redressing the constraints in access to finance. A plethora of government initiatives are designed so that MSMEs achieve economies of scale, and seize market opportunities and new technologies. However, the realities on the ground could be vastly different for a large category of MSMEs who continue to face investment constraints, resulting in higher transaction costs and failure rates than larger firms. Access to credit is not just important for business continuity; it is equally vital for the MSMEs to stay competitive and innovative. In the case of the microenterprise units, which constitute almost 99 per cent of the enterprises in the MSME space, financial constraints have been identified as the primary reason for staying small. Strapped for funds, micro units get stunted and fail to reap the benefits of economies of scale, technology adoption, innovation and creating an asset base that is vital for their growth and survival.

DEFINITION OF MSME

The canvas of the MSME sector is very broad comprising a heterogeneous group of enterprises. These enterprises encompass a wide variety of informal units, such as retail trade, restaurants, metal workshops, auto-repairs, plastic and rope making, handicrafts and pottery producing an innumerable number of products that form the majority of the consumption basket of the households and businesses. Considering the wide diversity in a socio-economic environment within which the MSMEs operate and given the changing scope and scale in their operation as determined by the technology, any uniform definition of these enterprises would be impracticable. There is also no globally accepted definition of MSMEs; the European Union, for example, considers the number of employees, whereas the United States defines MSMEs based on ownership structure and revenues. The classification should evolve in line with the growth and transformation in the structure and sophistication of the enterprise sector. The size-based criteria generally adopted are intended for the purpose of policy interventions and to identify the constraints and other forms of market failure as faced by the MSMEs needing intervention.

The MSMEs Development Act, 2006, categorized enterprises based on investments in plant and machinery, whereas the revised classification with effect from June 2020 adopts a composite criterion based on investment and turnover (Table 8.1).

Table 8.1: MSME Classification

	Classification—MSME Development Act, 2006		Revised Classification—June 2020 Composite Criteria: Investment and Annual Turnover
	Manufacturing Enterprises	**Service Enterprises**	**Manufacturing and Services**
Micro	< 25 lakh	< 10 lakh	Investment < ₹ 1 crore Turnover < ₹ 5 crore
Small	25 lakh–5 crore	10 lakh–2 crore	Investment < ₹ 1–10 crore Turnover < ₹ 5–50 crore
Medium	5 crore–10 crore	2 –5 crore	Investment < ₹ 10–20 crore Turnover < ₹ 50–100 crore

Source: The classification as per the guideline of the Ministry. Available at: https://msme.gov.in/know-about-msme.

COMPOSITION OF MSMES

As per the estimates provided by the 73rd National Sample Survey (NSS) for the period 2015–2016, there were 633.88 lakh unincorporated non-agricultural MSMEs engaged in different economic activities, with 630.52 lakh (99%) enterprises in the micro sector, 3.31 lakh (0.52%) in the small sector and 0.05 lakh (0.01%) in the medium sector. Of the total number of MSMEs, 324.88 lakh (51.25%) are in rural areas, and 309 lakh MSMEs (48.75%) are in the urban areas. The Indian MSME sector is characterized by the missing middle syndrome,[2] a situation whereby the micro firms fail to graduate to small- and medium-sized firms. Most of the Indian MSMEs are in the informal sector, therefore outside the ambit of the formal trade and financial systems. The labour statistics also reveal that of the 450 million workforces, 90 per cent are informal, and MSMEs employ about 40 per cent of these informal sector workers.

As per NSS 73rd round, the MSME sector has created about 11.10 crore jobs, with 3.6 crore jobs in manufacturing, 3.9 crore in trade and the rest 3.6 crore in the service sector. Of the total employment in the MSME sector, microenterprises employed 1076.13 lakhs (97%) persons, with the remaining 31.95 lakh (2.88%) and 1.75 lakh (0.16%) persons by the small and medium enterprise sectors, respectively. As per the self-declared information filed online in the Udyog Aadhaar Memorandum (UAM) since 2015, only 84.82 lakh MSMEs had registered by 15 January 2020. The UAM registration reveals that 89 per cent were microenterprises with the remaining 11 per cent small enterprises and 0.5 per cent medium enterprises.[3]

Most microenterprises are generally unregistered, belonging to the informal sector. The registered ones typically belong to the small and medium enterprise segment. For example, as per the Fourth All India MSME Census (2006–2007), of the total 36.17 million enterprises 34.61 million were unregistered ones, and the balance 1.56 million were registered. Based on the classification as per the MSMEs Development Act, 2006, the International Finance Corporation (IFC) study reported 558 lakh MSMEs with 85 per cent as unregistered (Figure 8.1).[4]

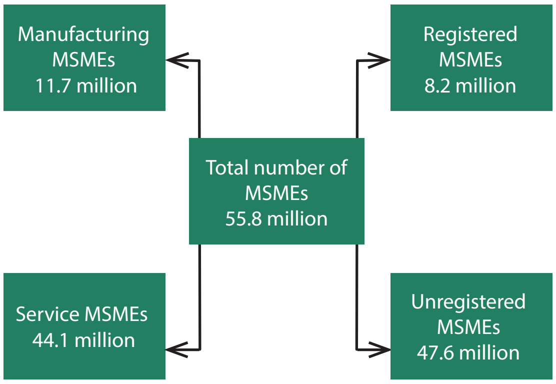

Figure 8.1: Broad Classification of the MSMEs in India

Source: IFC, Financing India's MSMEs: Estimation of Debt Requirement of MSMEs in India (2018). Available at: https://www.ifc.org/wps/wcm/connect/region__ext_content/ifc_external_corporate_site/south+asia/resources/financing+indias+msmes+estimation+of+debt+requirement+of+msmes+in+india (accessed on 6 January 2021).

There are significant regional variations in the distribution of the number of MSMEs with eight states (Maharashtra, Madhya Pradesh, Tamil Nadu, Gujarat, Rajasthan, Uttar Pradesh, Karnataka and Punjab) having 77 per cent of total enterprises. Similar trends in regional variations are observed in investment, employment and output of the MSME sector (Annexure 8A). The flows of credits would naturally follow the same pattern of regional variations, determined by the MSME operations in the states.

MSME FINANCING

India has evolved a robust credit architecture for the MSMEs (Figure 8.2) governed by the regulatory framework of RBI and the policy support of the Ministry of MSMEs. The credit delivery to the MSMEs by the banking sector comes under the rubric of the priority sector lending (PSL) guidelines of RBI. The landscape of MSME financing follows a multi-agency approach with direct lending by the banking institutions at the core, such as the public and private sector banks, foreign banks, co-operative banks and regional rural banks (RRBs). According to the data provided by the RBI, the banking institutions together offer about 17 per cent of the industrial credit to the MSME sector and 40 per cent of the PSL lending.

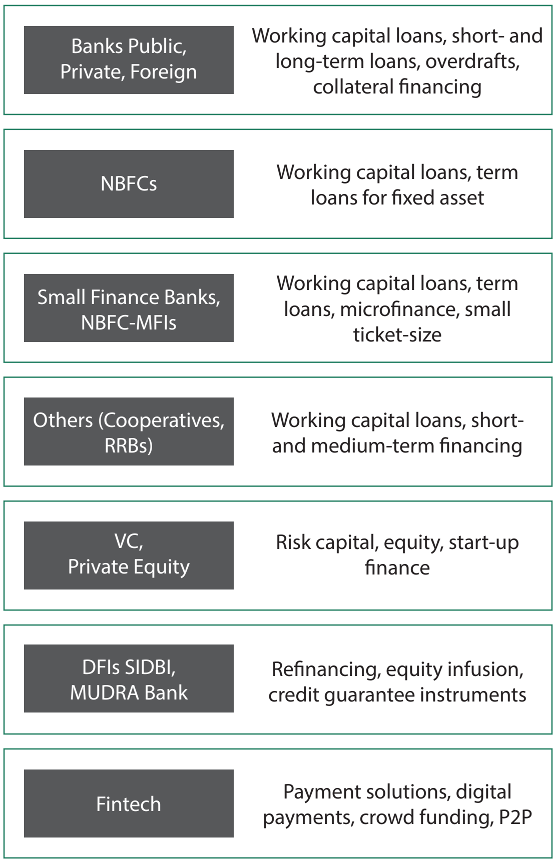

Figure 8.2: MSME Financial Architecture in India

Source: Author.

Banks and non-banking financial companies (NBFCs) report their credit flows by economic sector to RBI. Based on the RBI data for the banking sector, the credit outstanding was ₹ 15 lakh crore for the MSMEs serving 3.8 crore borrowers as on 31 March 2020 (Table 8.2). The share of micro, small and medium enterprises was 46.3 per cent, 41 per cent and 12 per cent, respectively. In the MSME credit outstanding, banking sector dominates with 87 per cent, followed by NBFC at 9 per cent and foreign banks at 4 per cent (Figure 8.3). As expected, public sector banks have been the dominant lenders to the MSME at 54 per cent. Within the MSMEs sector, the micro segment is the fastest-growing segment with about 93 per cent of the loan accounts in 2019–2020, rising from 80 per cent in 2017–2018. The small and medium enterprises, respectively, have 6 per cent and 1 per cent accounts in 2019–2020.

Table 8.2. Bank Credit to MSMEs (Number in Lakh, Amount in ₹ Crore)

Year	Micro Enterprises		Small Enterprises		Medium Enterprises		MSMEs	
	No. of Accounts	Amount Outstanding	No. of Accounts	Amount Outstanding	No. of Accounts	Amount Outstanding	No. of Accounts	Amount Outstanding
1	2	3	4	5	6	7	8	9
2018-19	255.6	6,59,102	23.03	6,38,031	2.6	1,97,419	320.68	15,10,651
2019-20	352.9	7,16,962	23.26	6,33,625	3.52	1,95,487	379.69	15,46,074

Source: RBI: Priority Sector Returns submitted by SCBs.

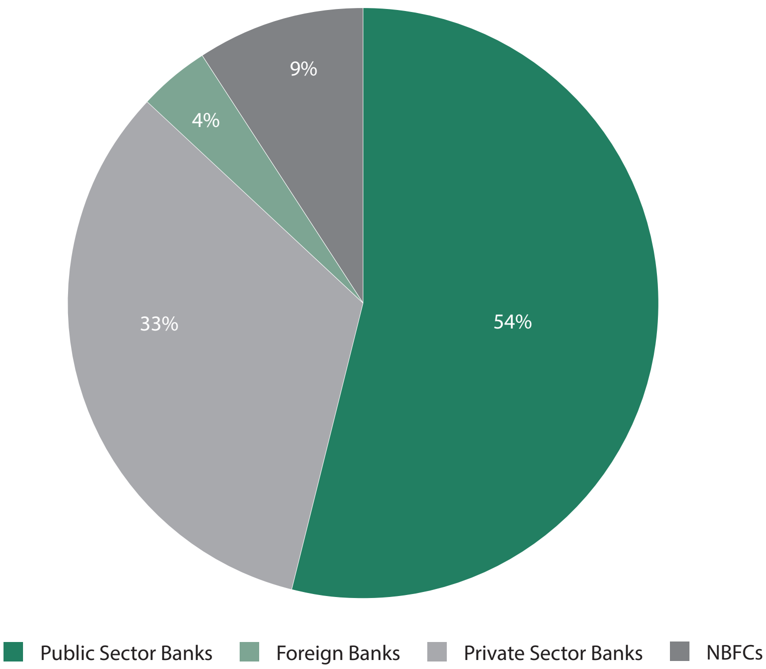

Figure 8.3: Credit Flow to the MSME Sector by Category: December 2019

Source: RBI, Annual Report 2019-20, Chapter IV Credit Delivery and Financial Inclusion, August 25, 2020.

The credit information agency TransUnion CIBIL obtains data on credit extended by the banking and NBFC sector at a more granular basis with further credit disaggregation by loan sizes. The total commercial credit exposure by banks and NBFCs stood at ₹ 17.54 lakh crore as on 31 March 2020 (Table 8.3). The difference between the data as reported by RBI and TransUnion CIBIL will represent the contribution of the NBFCs. More granular data are provided by TransUnion CIBIL with the loan accounts between ₹ 1 and 10 crore has the highest share of credit outstanding at 40 per cent, followed by ₹ 10 and 25 crores at 19 per cent, ₹ 25 and 50 crore at 15 per cent and the remaining 26 per cent shared among loan amounts up to ₹ 1 crore (Figure 8.4). Micro loans below ₹ 10 lakh accounted for just 1.3 per cent and loans between ₹ 10 and 50 lakh at 3.1 per cent of the total outstanding. Public sector banks remain as the dominant source of credit providers to the micro segment borrowers with loan ticket size up to ₹ 50 lakh, holding almost 60 per cent share in this segment. As can be seen from Table 8.3, the credit exposure across segments have remained somewhat stagnant or reduced marginally in recent months.

Table 8.3: Commercial Credit Exposure by Banks and NBFCs (₹ Lakh Crore)

	Very Small <₹ 10 lakhs	Micro1 ₹ 10-50 Lakhs	Micro2 ₹ 50Lakhs-1 Crores	Small ₹ 1-10 Crores	Medium1 ₹ 10-25 Crores	Medium2 ₹ 25-50 Crores	Large > ₹ 50 Crores	Overall
Jun-18	0.78	1.91	1.3	6.51	3.27	2.67	44.9	61.33
Sep-18	0.82	2.02	1.37	6.84	3.38	2.75	48.93	66.11
Dec-18	0.85	2.1	1.42	7.04	3.45	2.78	49.99	67.63
Mar-19	0.88	2.18	1.48	7.29	3.55	2.87	52.33	70.59
Jun-19	0.88	2.14	1.45	7.23	3.48	2.79	51.79	69.77
Sep-19	0.89	2.2	1.47	7.25	3.47	2.78	51.5	69.57
Dec-19	0.92	2.23	1.5	7.33	3.48	2.77	51.49	69.73
Mar-20	0.93	2.19	1.45	7.02	3.33	2.62	52.03	69.58
Jun-20	0.91	2.17	1.42	6.81	3.18	2.46	50.09	67.03

Source: TransUnion CIBIL, MSME Credit Health Index (2020). Available at: https://www.transunioncibil.com/resources/tucibil/doc/insights/reports/report-msme-chi-october-2020.pdf (accessed on 6 January 2021).

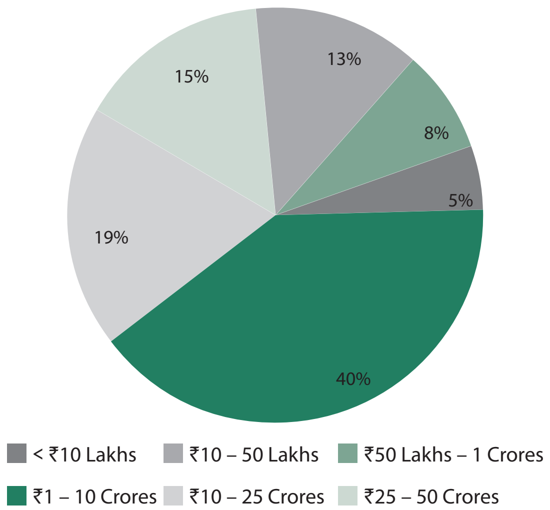

Figure 8.4: Credit Exposure by Banks and NBFCs by Loan Size: March 2020

Table 8.4: Direct and Indirect Credit Extension by SIDBI (₹ Crore)

	March 31, 2019	March 31, 2020
Indirect Credit	1,26,819	1,55,429
Refinance to Banks, SFB, FIs	1,16,277	1,43,233
Assistance to MFIs	1,172	1,821
Assistance to NBFCs	9,370	10,375
Direct Credit	9,411	9,993
Loans and Advances	8,897	9,867
Receivable Finance & Bill Discounted	514	126

Source: SIDBI, Annual Report 2019-20 (2020). Available at: https://sidbi.in/AnnualReport201920/pdf/Sidbi-AR-2020.pdf (accessed on 6 January 2021).

The MSME lending space has also witnessed new entrants in recent years like the NBFC-microfinance institutions (MFIs) and the small finance banks (SFBs); the latter was introduced in 2015 to focus primarily on financing at the bottom of the pyramid. SFBs have the mandate of 75 per cent of its adjusted net bank credit (ANBC) as PSL compared to the 40 per cent for the universal banks. SFBs have predominantly microfinance portfolios, typically following their legacy lending models. SFBs are required to ensure that at least 50 per cent of its loan portfolio should constitute loans and advances of up to ₹ 25 lakh. Both NBFC-MFIs and SFBs, which traditionally extended loans to the low-income population, have enhanced their lending portfolios in the microenterprise segment. NBFCs lending portfolios include fixed assets and working capital loans, which has risen from 6 per cent in 2008 to 10 per cent in 2019 in the total institutional credit to MSMEs. The emergence of Fintech companies, which are typically registered as NBFCs, have accelerated the financing in the MSME segment synergistically using innovative payment solutions.

The Small Industries Development Bank of India (SIDBI) extends institutional lending by way of refinancing as well as sector support using the schemes of the central government. SIDBI serves as the apex financial institution for the promotion, financing and development of MSMEs as well as coordinates the implementation of government schemes. As seen from Table 8.4, much of SIDBI's financial support is in the form of refinancing banks, SFBs and NBFCs, though assistance in the form of direct lending and equity infusion has grown (Table 8.4).

Micro Units Development and Refinance Agency (MUDRA) Ltd, a wholly owned subsidiary of SIDBI, has been engaged in refinancing of the lending institutions (banks, MFIs, NBFCs and SFBs) against their loan portfolios under the Pradhan Mantri MUDRA Yojana (PMMY). The MUDRA scheme was launched in 2015 to offer collateral-free loans up to ₹ 10 lakh to small and microenterprises. The three categories of loans envisaged under the scheme are up to ₹ 50,000 (Shishu), up to ₹ 500,000 (Kishor) and up to ₹ 1,000,000 (Tarun). In 2019–2020, the public sector banks had disbursed 6.22 crore loans of ₹ 3.82 lakh crore under the MUDRA scheme. The U. K. Sinha report recommends hiking the limit of collateral-free loans to ₹ 20 lakh. The non-performing assets (NPAs) under this category of loans have stood at 4.92 per cent in 2019–2020. Rising NPAs in this portfolio does not augur well for this ambitious MUDRA scheme, though might have helped many small and micro-entrepreneurs in securing a livelihood.

ESTIMATES OF CREDIT GAP

IFC (2017) estimated the total financing demand of MSMEs in India at ₹ 87.7 lakh crore with ₹ 18.4 lakh crore in equity and ₹ 69.3 lakh crore in debt component. As can be seen from Figure 8.5, about 84 per cent of credit demand by the MSMEs in the debt component was being met by the informal sector comprising family, friends and family business, local moneylenders and chit funds. Thus, the formal institutional credit accounted for just 16 per cent of the overall credit requirement of the MSME sector. Scheduled commercial banks dominate the

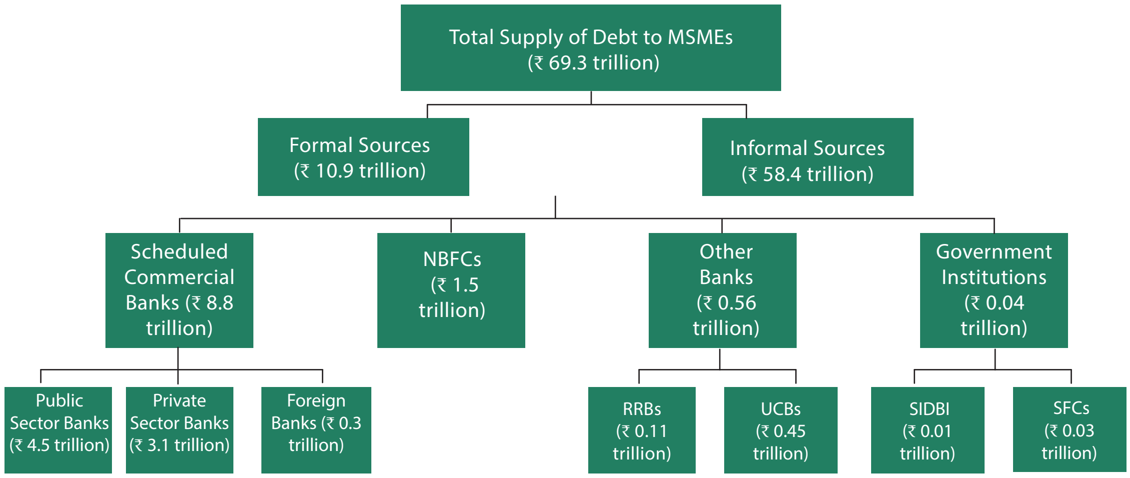

Figure 8.5: Overall Credit Supply to MSMEs in India

Source: IFC, Financing India's MSMEs: Estimation of Debt Requirement of MSMEs in India (2018). Available at: https://www.ifc.org/wps/wcm/connect/region__ext_content/ifc_external_corporate_site/south+asia/resources/financing+indias+msmes+estimation+of+debt+requirement+of+msmes+in+india (accessed on 6 January 2021).

institutional credit supply with over 81 per cent share, with the rest coming from NBFCs, RRBs, UCBs, SIDBI and SFCs. According to the IFC report, the MSME sector faced an institutional credit shortfall of ₹ 25.8 Lakh Crore in 2017, which translates into only 30 per cent demand for credit being met. IFC estimates the credit gap as the difference between the total addressable demand for external credit with the overall supply of finance from the formal sources, excluding credit demand from new enterprises as well as from enterprises that do not seek formal financing. The credit gap is huge, requires significant policy push in several directions, as discussed in the present chapter. This calls for a concerted approach in augmenting the extant regulatory framework along with government support and improved financial architecture.

Data on financials of the unregistered MSMEs are not available. Based on the data available with the Centre for Monitoring Indian Economy (CMIE) of the registered enterprises for the three financial years 2017, 2018 and 2019, we compiled the median ratios of 1,229 manufacturing and 2,038 services MSMEs, classified as per the MSME Development Act, 2006 (Annexure 8B). The data provides important insights into the financial structure of the registered MSMEs. The internal funds and retained earnings constitute the main source of financing, as most MSMEs historically were financed by short-term debts and informal credits. The shares of external finance, such as equity and long-term bank debt, were negligible. The median debt to equity ratio for manufacturing SMEs is about 0.5, whereas for services, it is merely about 0.1 for the year 2018–2019. The smaller enterprises depend to a large extent on equity financing, predominantly coming from their owner/manager. As the firm grows, there occurs a transition from equity to debt financing. MSMEs, in general, do not fund from external equity, as the owner/manager may not accept dilution or external control, and in the presence of information asymmetry, their stakes are also not accepted by the outside investors.

NPAs COMPARATIVES

Tables 8.5 and 8.6 present the recent trends in NPAs by the type of borrowers and lenders, respectively, according to data from TransUnion CIBIL. The overall NPA rates continue to remain less for the MSMEs as compared to the large borrowers' category (Table 8.5). NPA ratios are generally observed to be higher for the loan segments with larger ticket sizes. Despite the liquidity stress during the COVID pandemic, there is a marginal increase in the NPA rates for all category of borrowers in June 2020 as compared to March 2020, much due to the beneficial impact of loan moratorium. The NPA rate on MSME loans of public sector banks was well above the range of NPA rates of private sector banks and NBFCs (Table 8.6). According to the data released by the Ministry of MSMEs, the NPAs on account of MUDRA loans extended under PMMY was 4.92 per cent in 2019–2020 (₹ 18,835 crore out of the total disbursement ₹ 3.82 lakh crore), up from 3.42 per cent in 2017–2018 (₹ 7,277 crore out of the total disbursement of ₹ 2.12 lakh crore).[5]

Table 8.5: NPAs by Types of Borrowers

	March 2018 (%)	March 2019 (%)	March 2020 (%)	June 2020 (%)
Very small (<₹ 10 lakh)	11.20	11.30	12.60	13.10
Micro-1 (₹ 10–50 lakh)	7.60	7.80	8.70	9.10
Micro-2 (₹ 50 lakh–1 crore)	7.70	7.70	8.60	9.00
Small (₹ 1.0–10 crore)	9.10	9.30	10.30	10.70
Medium-1 (₹ 10–25 crore)	12.90	13.70	15.60	15.60
Medium-2 (₹ 25–50 crore)	15.10	16.20	19.40	20.10
Large (> ₹ 50 crore)	17.70	16.70	17.30	17.30

Table 8.6: NPAs by Types of Lenders

	Micro		Small		Medium	
	December 2019 (%)	June 2020 (%)	December 2019 (%)	June 2020 (%)	December 2019 (%)	June 2020 (%)
Public sector banks	11.70	12.5	17.70	16.6	29.20	27.3
Private sector banks	4.20	5.6	4.40	4.8	6.8	7.3
NBFCs	5.70	6.4	7.40	8.1	9.60	14.1

Source: TransUnion CIBIL. MSME Pulse (2020). Available at: https://www.transunioncibil.com/resources/tucibil/doc/insights/reports/report-msme-pulse-april-2020.pdf (accessed on 6 January 2021).

The COVID pandemic has a detrimental effect on credit growth as well as credit quality across several sectors of the Indian economy with severe impact in the MSME sector. According to a report by TransUnion CIBIL,[6] in June 2020, the strength index of MSME credit (measuring asset quality) had sharply fallen by 14 per cent from its 2018 levels whereas the credit growth index remains flat. The credit growth would have fallen even more sharply but for the Emergency Credit Line Guarantee Scheme (ECLGS) of the Government of India to sustain credit delivery to MSMEs during the pandemic.

Sustaining credit growth of MSMEs requires addressing resolutions of NPAs and payment defaults, improving the risk appetite of the lenders. Given that a vast majority of micro and small enterprises (MSEs) are very small in size and are vulnerable to financial distress, NPA resolution requires policy interventions from multiple fronts. One such suggestion has been through a provision of out-of-court assistance for NPA resolution provided for under the Insolvency and Bankruptcy Code. The out-of-court assistance could be in the form of mediation, debt counselling and financial education as recommended by the U. K. Sinha Committee. NPAs arising out of adverse business conditions also need to be dealt with differently. The U. K. Sinha Committee recommended that a distressed asset fund be created with a corpus of ₹ 5,000 crore, structured to assist units in clusters where a change in the external environment has led to the MSME loans becoming NPAs.

LENDING FRAMEWORK FOR MSME LOANS

The prevalence of credit constraints facing Indian MSMEs has been widely acknowledged by the regulators as well as lending institutions. The policy framework to support a pro-MSME policy has evolved over the years with redefining the PSL guidelines, scheme of interest rate subventions, partial credit guarantee, relaxing prudential norms for the lending institutions, creating new instruments for term loans, discounting of the trade receivables and so on. MSME lending is separately categorized within the priority sector loans by banks to increase credit access. Extensive interventions involving financial system have been in place to bridge the gap in the financing of MSMEs. Plethora of initiatives have been launched in recent years that include Stand-Up India scheme, Udyamimitra portal of SIDBI, PMMY, mandatory buying of MSME products by public sector enterprises and a 59-minute in-principle approval scheme for loans up to ₹ 1 crore for MSMEs and so on (see Box 8.1 for a selective set of measures). The policy initiatives facilitating access of credit to MSMEs can best be summarized in the statement of the Union Minister of Finance in Rajya Sabha:

Reserve Bank of India (RBI) and the Government have taken several steps to ensure access of credit to MSMEs, which inter-alia include, advice to all Scheduled Commercial Banks (SCBs) to achieve a 20 percent year-on-year growth in credit to Micro and Small Enterprises (MSEs), allocation of 60 percent of the MSEs advances to the Microenterprise Accounts, a 10 percent Annual Growth in number of Microenterprise Accounts, additional working capital limit to meet the requirements arising due to unforeseen/ seasonal increase in demand, adoption of one cluster, operationalising at least one specialised MSME Branch in every district, simplified computation of Working Capital of MSE units to make it minimum 20 percent of the Projected Annual Turnover of the unit for borrowable limits up to ₹ 5 crore, setting-up of Trade Receivables Discounting System (TReDS) to solve the problem of delayed payment of MSMEs, etc.[7]

Box 8.1: Select Policy Initiatives Facilitating Credit Flows to the MSME Sector

- To enable easy access to credit for MSMEs, a 59-minute in-principle approval scheme for loans up to ₹ 1 crore for MSMEs through the portal linked with GST was announced in November 2018. Till September 2020, 213,639 numbers of loans, involving ₹ 67,569 crore have been sanctioned and 198,720 numbers of loans, involving ₹ 55,229 crore have been disbursed.
- PMMY was launched in April 2015 for providing MUDRA loans up to 10 lakh to the non-farm small/microenterprises to be extended by commercial banks, RRBs, SFBs, MFIs and NBFCs. For the financial year 2019–2020, a total of 62,237,981 PMMY loans were sanctioned with an aggregate disbursement of the amount of ₹ 329,684.63 crore.
- A scheme of interest subvention of 2 per cent for all GST registered MSMEs announced on 2 November 2018 for scheduled commercial banks, which included co-operative banks also as eligible lending institutions effective from 3 March 2020 on fresh or incremental loans up to ₹ 1 crore.
- In August 2019, RBI allowed banks to classify the loans to NBFCs for on-lending to MSEs up to ₹ 20 lakh as priority sector loans.
- One-time restructuring of loans to GST registered MSMEs that were in default but 'standard' as on 1 January 2019 was permitted until 31 March 2020, which is extended further until 31 March 2021.
- New floating-rate loans to MSEs extended by banks with effect from 1 October 2019 were linked to external benchmarks, which included all floating rate loans with effect from 1 April 2020.
- The Credit Linked Capital Subsidy Scheme (CLCSS) which has been in operation facilitates technology upgradation by providing an upfront subsidy of 15 per cent on institutional credit up to ₹ 1 crore for the MSMEs in the specified 51 sub-sectors.
- Credit Guarantee Fund Scheme for MSE (CGMSE) operating under a trust named Credit Guarantee Fund Trust for MSE (CGTMSE) provides the lending institutions with credit guarantee up to 50/75/80/85 per cent of the credit facility in the event of an MSE borrower defaulting on a collateral-free loan.
- The Emergency Credit Line Guarantee Scheme (ECLGS) is a 100 per cent credit guarantee by National Credit Guarantee Trustee Company (NCGTC) to member lending institutions (MLIs) such as banks and NBFCs, who, in turn, extend additional working capital enabling the MSMEs to meet their operational liabilities during the COVID pandemic. The ECLG Scheme comes with a pre-approved credit sanction of 20 per cent of the borrower's total outstanding credit of up to ₹ 50 crore as on 20 February 2020.
- Three lakh crore rupees on 13 May 2020 with a one-year moratorium on interest payment provided to MSMEs as immediate financial relief.

The priority sector norms have been metamorphosed significantly over the years in order for the banks to increase credit access to this sector. The important ones include (a) the setting of targets and sub-targets under PSL on the basis of ANBC/ credit equivalent of off-balance sheet exposures, (b) incentivizing flow of credit to underserved districts by assigning additional weightage on such loan book, (c) inclusion of fresh categories under PSL as well as enhancement in the credit limit of the existing categories, (d) bank finance for the start-ups (up to ₹ 50 crore), (e) inclusion of on-lending by banks to NBFCs for the latter's MSME portfolio within the individual bank's total PSL and (f) allowing banks to acquire loans under direct assignment arrangements or invest in pass-through certificates backed by loans which qualify the definition of PSL. The revised guidelines issued in September 2020 is comprehensive,[8] expected to align with the national priorities of focusing on inclusive agenda, as applicable to all the commercial banks including RRBs, SFBs and local area banks and co-operative banks.

Banks have been using various credit appraisal system in their loaning operations of the MSMEs. One such method in vogue is the credit scorecard, wherein the lender uses minimum cut-off scores for automated loan approval or rejection of the loan application. Credit scoring serves as a low-cost method for the lender to evaluate loan applicants, which also reduces the turnaround time.

The credit scorecard system effectively arrives at standardized scores by appropriately weighing the financial ratios such as liquidity, profitability, turnover or activity, financial leverage and solvency ratios. Research has shown that banks that implemented the credit scorecard system systematically increased the availability of credit to SMEs, especially to the smaller scoring ones. Basel norms permit banks to use scoring models of loans up to ₹ 5 crore, as rating based models are complex. RBI also has permitted the banks to use the board approved credit scoring models in their evaluation of the loan proposals of MSE borrowers.[9]

Another area that has significant implications on MSME loan pricing is the acceptance of the risk-adjusted return on capital (RAROC) framework and economic capital allocation on the basis of risks. The internal rating models that have been used to arrive at risk pricing of the MSME borrower based on rating can be subjective. To bring transparency and fairness to the credit pricing framework, RBI in its report on pricing credit (2014)[10] mandated banks to base the interest rates charged to MSME customers consistent with their RAROC. Subsequently, RBI has mandated the board of a bank to ensure that any price differentiation is consistent with the bank's credit pricing policy factoring RAROC. RAROC-based pricing of MSME loans considers the expected risk of defaults and, at the same time, determining the risk pricing in tandem with the level of risk undertaken. By combining the scorecard and risk-based pricing approach, banks can effectively lower the capital requirement by reducing the default risk as well as improve the portfolio quality.

The Basel-III norms have ushered in a more stringent, risk-based Tier-I capital requirement regime for banks. These norms are expected to strengthen the capital quality and risk capture of banks, thereby impose higher compliance burden for the MSME loan book. Basel norms impose higher collateralization requirements which, in turn, may lead to reduced exposure of such banks to SMEs. For India, the presence of priority sector norms and dominant state ownership of banks serve to mitigate these potential adverse effects of Basel norms on SME financing. In January 2019, RBI had permitted banks a scheme for one-time restructuring of stressed assets of MSME borrowers, expected to boost funding to MSMEs and ease capital pressure on banks. To mitigate the burden of debt servicing due to disruptions on account of COVID pandemic and to ensure business continuity, RBI had granted moratorium and subsequently on term loans of all commercial banks, financial institutions and NBFCs.

Notwithstanding the elaborate framework to support lending to the MSME sector, the ground realities pose significant barriers to the flow of formal credit. Despite such policy nudges, bank credit to the MSME sector has not witnessed any significant growth over the years. The majority of banks appeared to have remained in the vicinity of the RBI's PSL limits. In addition to the overall quantum of credit, the distribution of utilization of credit is also skewed in favour of medium and small sector. The medium and small enterprises are better placed on the parameters of credit appraisal as they have a much higher degree of formalization. The micro sector faces significant hurdles, as the institutional mechanism of credit appraisal depends on several business parameters, availability of financial statements and adequate and chargeable collateral, which are found to be wanting such enterprises. It, therefore, could be inferred that bank approach lending to MSMEs as 'good compliance' rather than 'good business'. In addition, the sectoral and regional distribution of PSL appears skewed too. A relook on PSL guidelines by instilling some flexibility to banks is likely to help the cause of MSMEs better.

Box 8.2: The Extant Framework of Bank Lending to MSMEs

The salient features of the framework as provided over the years by RBI for bank lending to MSMEs include the following:

1. **Appraisal:** For units seeking a working capital limit up to ₹ 5 lakh, an appraisal is to be done at a minimum 20 per cent of projected turnover as per method recommended by the Nayak Committee. In addition, banks are required to financing working capital limit in every term loan sanctioned to enable commercial production to start as soon as possible.
2. **Collateral:** For MSEs, no collateral for a loan up to ₹ 10 lakh, extensible up to ₹ 25 lakh.
3. **Credit rating:** External credit rating is not mandatory but encouraged.
4. **Cluster financing:** Cluster-based approach helps banks in dealing with homogeneous groups, assesses risk better due to better information, enables better monitoring and leads to cost reduction. Accordingly, banks have been encouraged by the regulator to open full-service branches in MSME clusters, and each lead bank is required to adopt at least one cluster in each district. By March 2017, scheduled commercial banks had about 3,000 specialized MSME branches.
5. **Revival/rehabilitation:** A detailed framework for revival/rehabilitation of MSMEs exists for those having loan limits up to ₹ 25 crore, including accounts under consortium or multiple banking arrangements. Similarly, a framework for non-discretionary one-time settlement scheme also exists.
6. **National Mission for Capacity Building of Bankers for financing MSME Sector (NAMCABS):** To bring in the attitudinal change among bankers, RBI designed NAMCABS with training in the credit-related issues of the potential entrepreneurs.
7. **Certified Credit Counsellors Scheme:** A Certified Credit Counsellors scheme was also launched by SIDBI to assist the entrepreneurs in preparing financial plans and project reports professionally enabling better credit decisions by the banks.

RECEIVABLES MANAGEMENT BY SMEs

The working capital of MSMEs, particularly those operating as ancillary units, continue to remain under liquidity strain owing to overdue of receivables. The CMIE data analysed by the authors indicate that the median average collection period for manufacturing MSMEs for the year 2018–2019 is about 65 days and over 100 days for those in the services sector (Annexure 8B). The findings of a survey undertaken by RBI in 2019 reported that 44 per cent SMEs in manufacturing and 27 per cent units in the services sector are facing the problem of delayed payments.[11] Large buyers enjoy interest-free financing by delaying payments to SME ancillaries, effectively exploiting their weak bargaining power and disproportionate reliance on a handful of (at times a single buyer) buyers.

RBI has made it mandatory that while sanctioning/renewing credit limits to their large corporate borrowers (working capital limit more than ₹ 10 crore), banks will fix a separate sub-limit, within the overall limits, specifically for meeting payment obligations in respect of purchases from MSEs either on a cash basis or on bill basis.[12] Banks have also been advised to closely monitor the operations in the sub-limit by ascertaining periodically from their corporate borrowers, the extent of their dues to MSME suppliers and ensuring that the corporates pay off such dues before the 'appointed day'/agreed date by using the balance available in the sub-limit so created. The Department of Company Affairs vide its notification in February 1999 amending Schedule VI of the (then) Companies Act, 1956 made it obligatory on companies to disclose in their balance-sheets the outstanding dues owed by them to SSIs for a sum of ₹ 0.01 million or more which are outstanding for more than 30 days.[13] MSME Development Act, 2006, made a provision of penalty if payment of dues to MSMEs by buyers delayed beyond 45 days, making it liable to pay interest to MSME supplier. The government launched an online portal Samadhaan in October 2017, enabling MSMEs across the country to directly register their cases relating to delayed payments. Yet the legal recourse available to MSMEs is often not resorted to, despite the legal provisions in force obligating payments of dues.

In 2014, RBI set up an online receivable discounting system called trade receivables discounting system (TReDS). This platform offers the MSMEs a facility to discount receivables from multiple financiers drawn against large buyers (companies/public sector undertakings [PSUs]/government). The MSMEs benefit by competitive rates due to auction mechanism and seamless data flow in addition to the elimination of paperwork (for a description of TReDS see Figure 8.6). Currently, there are three TReDS platforms in operation, namely SIDBI- and National Stock Exchange-owned (NSE) Receivables Exchange of India Ltd, Mynd Solutions-owned M1xchange and Axis Bank-owned Invoicemart. A number of initiatives are underway to popularize TReDS usage. RBI has incentivized banks to participate in this platform by allowing them to classify financing through TReDs under priority sector. In addition, RBI plans to provide on-tap authorization to entities desirous of operating TReDs platform to increase their number from the current three.

The central government in 2018 made it mandatory for companies with turnover over ₹ 500 crore to register on TReDS. In January 2020, the government-mandated all Central Public Sector Enterprises to bring their entire vendor network on TReDS and not to delay payments beyond 45 days. The Government of India also announced[14] in the Budget 2019 that NBFCs, not registered as NBFCs-Factor, will be brought on the TReDS platform, through an amendment in the Factoring Regulation Act, 2011. All NBFCs would directly participate on the TReDS platform.

Despite these efforts, many buyers have yet to onboard the TReDS platform. Many of those signing on appear to have done so for compliance only. For example, out of the 4,599 companies (having turnover of more than ₹ 500 crore) which have been mandated to register on TReDS,[15] 1,384 (30%) have registered on TReDS at the time of writing this report. Similarly, 155 out of 255 Central Public Sector Enterprises have registered on TReDS by March 2020, only 32 had ever done a transaction.[16] Nevertheless, the turnover on all three TReDS platforms combined touched ₹ 7,000 crore in 2019 clocking a growth of almost 900 per cent over the previous year. The recent waiver of ₹ 10,000

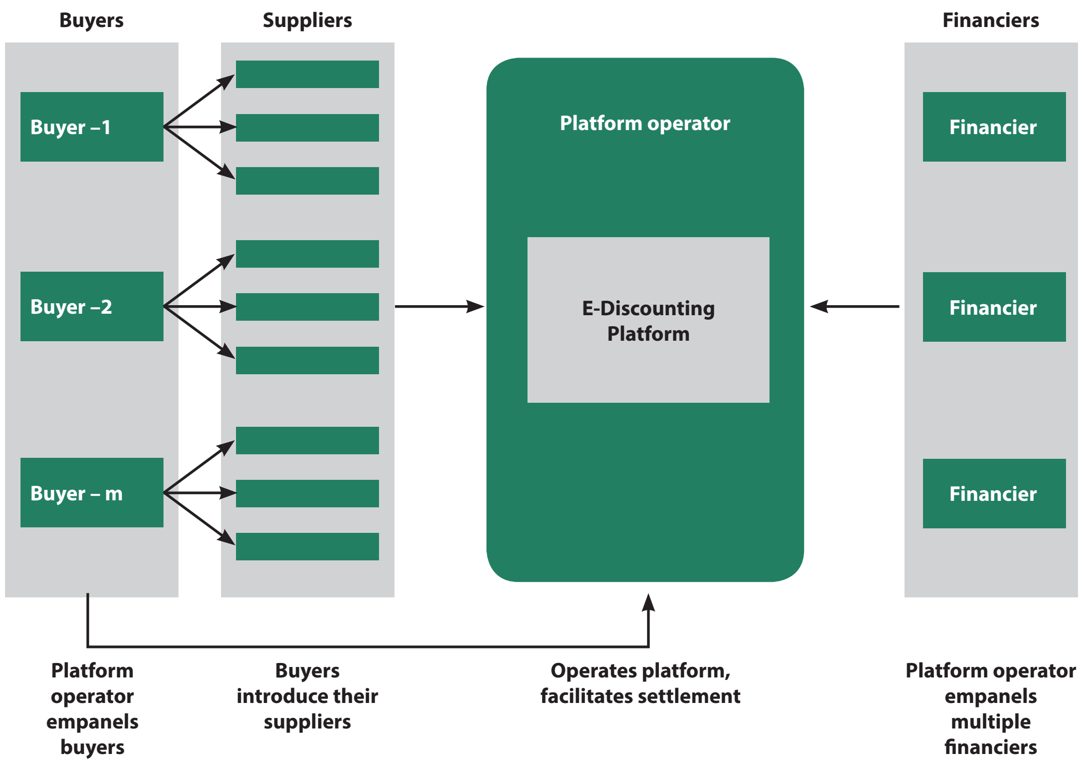

Figure 8.6: Trade Receivables Discounting System (TReDS)

Source: RBI, 'Trade Receivables and Credit Exchange for Financing of Micro, Small and Medium Enterprises,' (2014). Available at: https://rbidocs.rbi.org.in/rdocs/Content/PDFs/MSMETCE19032014.pdf (accessed on 6 January 2021).

fee for MSMEs to join TReDS by the Government of India is also likely to boost onboarding further.

The U. K. Sinha Committee had recommended the RBI to enable the MSME to check the credit rating and Credit Monitoring Report (which would have liquidity risk, repayment track and specific behaviour for their buyers) with the consent of their primary banker. This would enable the MSMEs to be able to make an informed decision on extending credit to buyers.

CREDIT GUARANTEE FUND TRUST FOR MICRO AND SMALL ENTERPRISES (CGTMSE)

Lack of adequate collateral, particularly with MSEs, has been another impediment in obtaining institutional credit in India.[17] In cases where either the requirement of collateral has been mandated to have been waived or is not available, institutional lenders have not been comfortable in credit extension. What will they turn to in the event of default? Credit guarantee comes in as a solution. It strengthens the credit delivery and ensures the flow of credit to the MSE sector. It is almost two decades now when the government launched CGMSE under a trust named Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), launched on 30th August 2000. The guarantee, in this scheme, is provided to the individual borrower. There are many other credit guarantee schemes catering to a specific target group (see Table 8.7). The Credit Guarantee Scheme (CGS) of CGTMSE guarantees to make good the loss incurred by a lender up to 50/75/80/85 per cent of the credit facility in the event of an MSE borrower defaulting on a collateral-free loan. The credit facilities up to ₹ 200 lakh (term loan or working capital) are eligible.

In order to administer different types of schemes, government has set up National Credit Guarantee Trustee Company (NCGTC). NCGTC operates the following schemes targeted at MSME financing: (a) Credit Guarantee Fund Scheme for Factoring, (b) Credit Guarantee Scheme for Stand-Up India and (c) Credit Guarantee Scheme for Micro Units. NCGTC is a joint venture between the Government of India and SIDBI. The eligible lenders (MLIs) include commercial banks (public/private/foreign/RRBs), NBFCs, financial institutions and SFBs. At the end of March 2019, the number of different types of MLIs was as follows:

Table 8.7: Types of Member Lending Institutions of CGTMSE

Total	PSB	PVSB	RRB	FB	OFI	NBFC	SFB
116	21	19	51	5	9	8	3

Source: CGTMSE, Annual Report 2019. Available at: https://www.cgtmse.in/Annual%20Reports/CGTMSEAR021219(With-outcutmark)Eng.pdf (accessed on 6 January 2021).

It is interesting that out of 10 SFBs, only 3 have taken the membership. This is in spite of the fact that eligibility norms for SFB wishing to become MLIs are benign. If more SFBs, which are specialized banks catering to the MSE sector, join CGTMSE, it will certainly provide more comfort to them in credit decisions eventually leading to higher and deeper credit penetration. Although CGTMSE has been seeing increased coverage in terms of guarantees approved (See Table 8.8), the average ticket size of the guarantees remains much lower contrasted with an eligible ticket size of ₹ 200 lakh. It appears that improvement in claim settlement ratio of CGTMSE might lead to higher coverage.

Table 8.8: CGTMSE Performance

Year	Guarantee Approved	No. of Guarantees	No. of Claims Settled	Claims Paid (Crore)	Recoveries Received (Crore)	Average Size of Loan (Lakh)
2010	6,875	151,387	1,722	34.32	1	4.54
2011	12,589	254,000	2,731	59.09	3	4.95
2012	13,784	243,981	1,894	67.96	4	5.65
2013	16,062	288,537	11,231	175.53	10	5.57
2014	18,188	348,475	15,075	424.45	15	5.22
2015	21,275	403,422	29,595	716.98	31	5.27
2016	19,949	513,978	35,240	1,004.73	58	3.88
2017	19,931	452,127	39,605	1,034.00	126	4.41
2018	19,065	257,204	36,277	967.79	178	7.41
2019	30,168	435,520	38,947	816.55	210	6.93

Source: CGTMSE annual reports, authors own calculations.

CREDIT RATING AND BUREAUS

The information asymmetry plaguing the MSME-financial institutions' credit interface delays underwriting and deprives the borrower of timely funds. If lenders do a microscopic appraisal of an MSE borrower, they incur huge per-unit processing costs owing to small ticket size in general. In addition, the absences of adequate financial records/data and credit history of MSEs prevents lenders from developing handy prediction models. Yet another issue impeding the credit flow to MSEs is the absence of customized appraisal process for them. Often, lenders use the same appraisal criteria they do for large firms leading to a downward bias in resultant risk rating of MSEs.

Despite a number of initiatives that have been taken to minimize the information asymmetry through credit rating agencies and credit bureaus,[18] the system lacks a credible source for unambiguous financial and non-financial information about MSMEs. Institutional lenders rely on their own credit risk assessment models which vary from lender to lender. The elaborate models primarily designed for large borrowers often lead to delays in credit decision too. The U. K. Sinha Committee[19] recommended the PAN to be used as a Unique Enterprise Identifier for the MSMEs linked to various data repositories and could be used to pull out financial as well as non-financial information about an entity by institutional lenders. The committee also recommended the creation of an independent credit rating agency under RBI monitoring for SMEs, which can provide objective credit risk assessment in this sector.

Accordingly, a Performance and Credit Rating Scheme was announced by the government in 2004–2005 to be led by National Small Industries Corporation with provisions of reimbursement of rating fee by ministry of MSME. An external rating agency SME Rating Agency of India (since renamed Acuité Ratings and Research), dedicated and customized for SME sector, was also launched as a joint venture between SIDBI, Dun & Bradstreet and some banks in 2005. However, the full benefit of credit rating and credit guarantee schemes could be forthcoming only by creating a credit-risk database of all credit events related to MSMEs. A similar database created in Japan has led to marked improvements in facilitating bank lending to SMEs.[20] The database could be authorized to source information from credit rating agencies, NBFCs, banks and even borrower themselves. The resultant data could prove useful for generating default scenarios not only for individuals but even for entire sectors with the help of analytics.

INNOVATIONS IN MSME LENDING

The MSME lending space has witnessed extensive innovations globally with lending products designed by unbundling several forms of risks and cash flow characteristics. Broadly termed as structured finance, these innovations have taken the form of securitization, leasing and factoring, value chain financing, etc. These products which have been found extensive applications in corporate lending are now being tried out in the MSME sector. These structured lending products have potential to scale-up access to formal finance, by linking repayments to cashflows. A report drawing from the experience of Organization for Economic Co-operation and Development countries[21] highlights the need for broadening the range of instruments available for MSME financing using the asset-based financing route.[22] Some of the innovative financing instruments can be summarized in the following:

- **Asset-based finance:** In asset-based finance, MSMEs can get funding on the strength of assets like accounts receivables, stock, property, plant and equipment and land and building, instead of their credit rating. This method of finance is particularly useful for younger firms who find it difficult to access traditional credit owing to lack of track record. This method is already popular in several European countries.
- **Hybrid Financing:** Hybrid financing has debt and equity characteristics combined into a single instrument and is closely linked to the life-cycle approach to SME financing. In the early stage, a firm may be entering the growth stage of its life cycle with a potentially higher risk of investment, and the firm would not have access to debt or equity financing. Hybrid instruments such as subordinated debt, convertible debt and mezzanine finance are found to be very useful.
- **Securitization:** Lending based on receivables called as securitization has been extensively used in SME financings such as working capital and letter of credit. For the SME's who receive a purchase order usually seek bank financing against the order. The key issue in this lending decision does not remain confined to the performance of the enterprise but of the collateral, which is receivable. Securitization can have the potential to funding alternatives to SME borrowers by enabling them to turn assets with predictable cash flows into new money.
- **Factoring:** Factoring bundles credits and collections thereby facilitate the financing of

high-risk SME borrower. Credit extension is based on the value of the borrower's accounts receivable. Under the arrangement the receivables are purchased by the factor, the title of the goods thus passing on to itself, rather than used as collateral in the case of a securitized transaction. Factors purchase receivables in a manner similar to the accounts receivable component of securitization. Factoring can be on a non-recourse basis, whereby the factor assumes no claim (recourse) against the borrower, recourse basis whereby the factor has a claim against its borrower for any account payment deficiency. MSMEs essentially outsource their collection activities to the factor.

- **Trade credit:** Extended by the suppliers themselves, trade credit has certain advantages over bank credit. First, the supplier can assess better the creditworthiness of the MSME buyer due to the historical business relationship. The buyer usually is better credit disciplined due to the fear of any future interruption in the supply. It has been found that accessing trade credit creates borrowing history for the firms, thereby provide positive signals to the institutional lenders regarding the borrower's creditworthiness.
- **Leasing:** Lease financing of capital equipment and technology has served as an effective alternative to long term financing of corporate. Lease financing eases the collateral requirement in long term borrowing, as the lessor retains the ownership of the equipment being leased out and permits the lessee (the small enterprise) to use the equipment in exchange for periodic payments. SME can access lease finance more easily than bank loans as the leasing company emphasizes more on the cash flow generating capacity rather than its credit history, collateral, or net worth. Additionally, leasing also provides tax relief to the depreciation benefit on the asset owned.

Financial innovations such as the ones reviewed here offer superior risk unbundling features, providing sufficient incentives to lenders to enhance credit access. Factoring and leasing are instances which have greatly facilitated financing of informationally opaque high-risk MSME borrowers, particularly in situations of week contract enforcement and insolvency norms. Though these innovations have huge potentials for enhancing credit access, the MSMEs in India appear to suffer from an aversion to alternate forms of financing. For example, attempts to encourage equity financing in MSMEs has met with mixed success. By August 2019, only 200 SME stocks got listed on the dedicated SME platform of India's largest stock exchange NSE. There appears to be a palpable aversion to equity in MSMEs.

FINANCING START-UPS AND VENTURE CAPITAL

The Government of India has launched schemes to promote setting up of start-ups with technology focused innovation. Under Ministry of MSMEs, 31 schemes are currently operating which provide various incentives and support for the start-ups. One such schemes under ministry of MSMEs known as 'A Scheme for Promotion of Innovation, Rural Industries and Entrepreneurship' (ASPIRE) under which 73 livelihood business incubators and 16 technology business incubators have been set up with a financing assistance of ₹ 64.22 crore as on date. A key objective of this scheme is related to 'creating a framework for start-up promotion through SIDBI by using innovative means of finance to enable ideas/innovation and to convert these into commercial enterprises'. The government has also announced a ₹ 50,000 crore fund of funds (FoF) for equity investments into MSMEs, with ₹ 10,000 crore coming from the government itself. This is broadly modelled on a similar and reasonably successful scheme of SIDBI where about 80 per cent of the corpus came from venture capital firms. Another important feature of this FoF is nudging the MSMEs to finally list on SME platforms like Emerge of NSE.

There is no separate data available as to how many venture capital firms financed the start-ups which are registered as SMEs. Some reports[23] have recently emerged where firms already registered as start-ups have started registering as SMEs to be able to stay afloat with the help of government schemes during COVID pandemic. SMEs on their part must meet the operational agility and innovativeness that these start-ups demand to obtain the institutional financing arrangements viz. recently announced by SIDBI of the collateral-free loans of ₹ 3 lakh crore and subordinated debt of ₹ 20,000 crore for stressed MSMEs. The start-up initiatives appear all over the place with different ministries running different and sometimes overlapping schemes. The need for a centralized nodal agency cannot be emphasized more. The U. K. Sinha Committee recommended SIDBI as a nodal agency, 'should ideally play the role of a facilitator to create platforms wherein various Venture Capital Funds can participate and in turn create multiplier effect for providing equity support to MSMEs.'

CROWDFUNDING

The U. K. Sinha committee recommended that the Ministry of MSME may establish a 'Non-Profit Special Purpose Vehicle' to support crowd sourcing of investments by SMEs. Accessing funds using crowdfunding route does not require a bank to act as an intermediary but source unsecured funding from a wider set of investors. Crowdfunding may be in the form of pre-orders, rewards, donations, debt, equity or financing in some hybrid form, depending on the contractual arrangement between the firm and the investor. Crowdfunding using pre-orders, rewards and donations are treated as non-financial funding are commonly used in the micro business sector. Online lending platforms such as Crowdera, Wishberry, Anglepaisa, Lentra, Ketto and WealthBook and so on are increasingly being used to pool loan pledges from the crowd for funding an SME entity. The crowdfunding platforms are also evolving with more specialized services such as due diligence, business development services and scouting for partner investors for the project, that come with the transaction fees and loan interest as charged by the online intermediary. Although three countries such as China, the United States and the United Kingdom dominates, India's ranked 14th in the global crowdfunding market with $547.43 million in 2018, with a meagre market share of 0.18 per cent, as reported by Cambridge Centre for Alternative Finance.[24] RBI issued guidelines under the NBFC Peer to Peer Lending Platform (Reserve Bank) Direction, 2017, which formalized the online lending model.

TECHNOLOGY AND FINTECH INNOVATIONS

At the risk of repetition, it is well known that information asymmetry is one of the chief causes of the lack of institutional credit to SMEs. The problem gets even more acute owing to the under-formalization of MSME sector. The traditional credit assessment models typically rely on financial information and collateral of the borrowing entity, which are often not available with the MSMEs. The enterprises in general score lower on collateral, repayment capacity, financial literacy and systematic bookkeeping. Technology has evolved to become more affordable over the years. Reforms such as GST and the Jan Dhan Adhaar Mobile ecosystem have resulted in KYC authentication faster.

The revolutionary Software as a Service (SaaS) model is enabling MSMEs to bring about a digital transform to their infrastructure, payments, accounting, marketing and selling operations. The long-standing constraint of proper book-keeping by MSMEs are being addressed by new, efficient and affordable technology solutions, for example, billing software platform such as 'Vyapar', payment reminders like KhataBook and tracking of receivables and payables by OkCredit. Another innovative software called Marg ERP which has brought hitherto unimaginable power of ERP within the reach of MSMEs, significantly enhancing coordination across business functions leading to enhanced productivity. The increased transparency in bookkeeping and effective tracking of receivables and payables would likely have a salubrious effect on credit assessments and eventually to access to credit for MSMEs.

The emergence of artificial intelligence-enabled tools is also making back-office tasks easier. Models based on artificial intelligence (AI) and machine learning (ML) are being developed, rely on alternate data that may range from cash-flows to reputation drawn out of the social media behaviour of the entrepreneur. Data are drawn from various social and demographic sources which are able to bridge the information asymmetry problem of SMEs. The information processing is automated thereby saving time and human resources in processing smaller loan applications, making the processing of loan faster and cost-effective for the lenders to make credit decisions for the MSMEs.

Technology has shown incredible promise for overcoming and minimizing information asymmetry and improve risk assessment of the enterprises. For the MSME financing models to be successful, intensive use of technology and the adoption of cost-effective models of information processing is required. Partnership between banks and Fintech solutions provider in a symbiotic relationship based on complementarities will really be a big boost to MSE lending. Admittedly, technology adoption will remain a function of the innovativeness and skill of the entrepreneur. As more young Indians turn entrepreneurial, these innovative trends would strengthen in addition to adoption of newer ways of working like co-working spaces.

GREATER ROLE OF SIDBI

Given the importance of MSMEs in the development process, both the government and the RBI have been instrumental in creating newer institutional arrangements for stepping up MSME credit access. There has been general recognition of the expanding role of SIDBI in MSME finance. In addition to its role as an apex Institution engaged in financing and development of MSMEs, SIDBI has been encouraged to address market failures in MSME credits, facilitating innovations and risk capital infusion. The U. K. Sinha Committee opined the SIDBI to handhold private lenders such as NBFCs and MFIs for deepening credit markets for MSMEs in underserved districts and regions. The committee observed that additional instruments for debt and equity would be required to help crystallize new sources of funding for MSMEs. SIDBI could develop innovative financial instruments such as first loss guarantees, pass-through certificates and so on to gradually take on the role of a market maker for SME debt. The committee also recommended that the priority sector shortfall of commercial banks be deployed with SIDBI on the lines of Rural Infrastructure Development Fund of National Bank for Agriculture and Rural Development, who could on-lend this corpus as soft loans to state governments for creating and developing MSME clusters.

CONCLUSIONS

The MSME sector remains vital as the government targets raising the level of GDP to touch $5 trillion by 2025. Considering the importance of MSMEs' developmental role, both the Government of India and the RBI have been instrumental in creating a supportive regulatory framework and newer institutional arrangements for stepping up MSME credit access. The lending framework has evolved over the years with progressively amending the PSL guidelines complementing with schemes such as interest rate subventions, partial credit guarantee, relaxation of prudential norms, creating new lending instruments, addressing delayed payments and discounting of the trade receivables. Notwithstanding these elaborate frameworks to support the MSME sector, the ground realities pose significant barriers to the flow of formal credit. The credit gap is huge requiring more targeted policy push in several areas covering finance, technology, and business development services. All these calls for a concerted approach in augmenting the extant regulatory framework along with government support and improved financial architecture. More focused strategies needed to overcome lending resistance to the MSME sector, addressing information asymmetries, operational inadequacies, and collateral shortfall.

The MSME lending space has witnessed extensive innovations globally with lending products designed by unbundling several forms of risks and cash flow characteristics. Broadly termed as structured finance, these innovations have taken the form of securitization, leasing and factoring, value chain financing, etc. which are found to have a greater scope on the supply side than the traditional credit models. These structured lending products have the potential to scale-up access to finance by linking repayments to business cashflows. These innovative products which have been found extensive applications in corporate lending are now being tried out in the MSME sector. The use of credit score cards and RAROC approach have superior risk-mitigating features, which can provide incentives to lenders to enhance credit access. The strengthening of legal framework under the SARFAESI Act with taking possession of assets used as collateral has improved the environment of contact enforcement. Technology has shown incredible promise for overcoming and minimizing information asymmetry and improve risk assessment of the enterprises. The partnership between banks and Fintech solutions provider in a symbiotic relationship will be a big boost to MSME accredit access. Admittedly, technology adoption will remain a function of the innovativeness and skill of the entrepreneur. Apex institution like SIDBI engaged in financing and development of MSMEs should be encouraged to address market failures in MSME credits, facilitating innovations and risk capital infusion.

Within the MSME space, the micro business sector faces far greater hurdles in accessing credit, specifically to bank credit and are more vulnerable to liquidity and financial distress which was also evident during the economic lockdown. The standard credit appraisal process as applied to larger SMEs requiring business parameters, financial statements and chargeable collateral is found to be wanting in the case of microenterprises with small size loan. Bankers face additional hurdles of high transaction costs because of administering small size loans, monitoring of repayments, and low information on the business operations of these micro businesses. Sustaining credit growth of the microenterprises requires improving the risk appetite of the lenders including drastic change in the attitudinal front of the bank officials. More focused attention is also needed with supporting regulations in deepening credit markets for MSMEs in underserved districts and regions. There is an increasing demand for formalization and compliance under the emerging digital ecosystem such as GSTN, UAM and Udyam registration system. The integrated onboarding system under Udyam initiative with the Trade Receivables

Electronic Discounting System (TReDS) and the government e-marketplace are expected to greatly benefit the bill discounting and the government's online procurement system. RBI's revised PSL guidelines issued in September 2020 require the MSMEs to be identified as per the gazette notification laying down the new process of classification and registration. Though desirable these compliance and documentation protocols have not boded well with microenterprises, imposing additional costs, thereby generating perverse incentives of staying small and informal. To maintain the institutional credit flows to the large micro business sector the government and RBI should consider somewhat liberal documentation system with phase-wise implementation programme.

APPENDIX 8.1:
State-Wise Data of Medium & Small Scale Industries

State/Union Territory	Number of Enterprises: NSS 73rd round (2015-16), in Lakhs	Investments: Fourth Census (2006-07), ₹ Crore	Production: Fourth Census (2006-07), ₹ Crore	Employment: NSS 73rd round (2015-16), in Lakhs
Andaman & Nicobar Islands	0.19	96.95	254.24	0.39
Andhra Pradesh	33.87	32,757.63	58,404.82	56.19
Arunachal Pradesh	0.23	937.48	1,101.73	0.41
Assam	12.14	6,941.15	13,403.27	18.16
Bihar	34.46	8,405.45	16,709.30	53.07
Chandigarh	0.56	607.05	1,888.55	1.29
Chhattisgarh	8.48	3,303.41	8,437.34	8.48
Dadra & Nagar Haveli	0.16	229.58	2,177.43	0.36
Daman & Diu	0.08	1,881.53	7,735.73	0.14
Delhi	9.36	10,164.54	29,672.34	23.01
Goa	0.70	3,820.19	8,147.46	1.60
Gujarat	33.16	1,66,753.60	55,306.91	61.18
Haryana	9.70	25,998.80	53,198.68	19.12
Himachal Pradesh	3.92	5,599.25	17,247.20	6.48
Jammu and Kashmir	7.09	8,475.28	16,035.39	10.89
Jharkhand	15.88	5,020.72	10,040.29	25.03
Karnataka	38.34	27,161.11	56,317.61	71.45
Kerala	23.79	44,353.53	74,821.73	44.92
Lakshadweep	0.02	17.30	20.01	0.03
Madhya Pradesh	26.74	10,530.40	34,388.44	49.25
Maharashtra	47.79	67,941.24	1,26,864.55	91.23
Manipur	1.80	646.03	1,094.70	2.92
Meghalaya	1.12	468.55	1,150.80	1.91
Mizoram	0.35	403.14	677.21	0.62
Nagaland	0.91	1,273.67	2,845.03	1.77
Odisha	19.84	12,284.89	29,075.42	33.26
Puducherry	0.96	1,135.29	5,771.99	1.84
Punjab	14.65	37,126.69	81,625.05	24.80
Rajasthan	26.87	25,452.90	50,004.43	46.52
Sikkim	0.26	72.16	189.76	0.45
Tamil Nadu	49.48	77,824.34	1,05,270.21	96.82
Telangana	26.05	.	.	2.95
Tripura	2.11	661.73	1,177.84	40.26
Uttar Pradesh	90.00	56,161.03	1,11,089.69	165.38
Uttarakhand	4.17	6,014.98	16,187.64	6.60
West Bengal	88.68	39,433.22	78,880.05	135.54
ALL INDIA	633.92	6,89,954.86	10,77,212.86	1,112.71

Source: Ministry of Micro, Small and Medium Enterprises (MSME) & Ministry of Statistics and Programme Implementation (MOSPI), Government of India.

APPENDIX 8.2:
Median Values of Financial Ratios of MSMEs (CMIE Data)

Manufacturing MSMEs	Medium (N=326)			Small (N=271)			Micro (N=632)		
	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19
Current Ratio	1.22	1.21	1.33	1.18	1.26	1.32	0.99	0.93	1.26
Debt/Gross Fixed Assets	0.71	0.66	0.55	0.72	0.65	0.52	0.77	0.78	0.56
Debt/Net Fixed Assets	1.32	1.29	1.00	1.28	1.21	0.90	1.27	1.38	0.98
Debt To Equity	0.59	0.62	0.66	0.77	0.56	0.49	0.25	0.14	0.61
Debtor Days	70.54	75.27	61.18	70.04	79.59	68.66	79.23	88.73	63.73
Debtor Turnover	4.86	4.60	5.91	5.02	4.41	5.28	3.41	2.96	5.61
DSCR Times	0.36	0.34	0.42	0.26	0.26	0.49	-	-	0.45
ICR Times	2.33	2.57	3.04	1.64	1.88	3.07	1.50	1.50	3.29
Long Term Borrowings/ PBITDA	0.24	0.19	0.39	0.00	0.00	0.40	0.00	0.00	0.26
NWC Days	76.44	75.79	80.31	86.86	90.64	84.27	111.49	137.85	80.68
NWC	5.60	7.10	79.95	1.55	2.90	85.40	0.20	0.10	37.60
NWC/Sales	0.09	0.10	0.11	0.07	0.12	0.10	0.10	0.12	0.09
PBDITA/NFA	0.35	0.34	0.38	0.28	0.28	0.39	0.02	0.03	0.38
PBITDTA/TA	0.08	0.07	0.10	0.05	0.06	0.10	-	-	0.10
ROTA	0.55	0.73	2.33	-	-	2.74	-	-	2.55
Short Term Borrowings from Banks	9.30	10.80	162.35	4.45	4.40	150.80	2.45	2.30	136.75
ST from FI	1.90	2.20	9.55	1.15	0.30	9.45	0.60	0.60	31.70
Total Short Term Borrowings	11.90	13.60	167.30	6.80	6.10	148.85	2.70	2.70	126.55
Net Sales Dep Amor/Total Liabilities	0.91	0.93	1.11	0.67	0.63	1.05	-	-	0.98
Total Borrowings	22.00	24.85	262.20	13.10	14.25	253.20	6.00	6.30	199.20
Services MSMEs	**Medium (N=794)**			**Service-Small (N=1040)**			**Service-Micro (N= 204)**		
	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19
Current Ratio	1.42	1.39	1.49	1.17	1.17	1.20	0.72	0.68	0.67
Debt/Gross Fixed Assets	0.48	0.49	0.47	0.44	0.51	0.49	0.15	0.14	0.00
Debt/Net Fixed Assets	1.00	0.97	0.99	1.00	1.00	1.11	1.00	0.50	-
Debt To Equity	0.15	0.16	0.15	0.09	0.09	0.07	-	-	-
Debtor Days	88.05	98.08	96.36	98.95	95.10	95.86	173.38	130.36	146.00
Debtor Turnover	3.71	3.28	3.41	2.80	3.00	2.65	0.44	-	0.10
DSCR Times	0.28	0.33	0.37	0.12	0.13	0.12	-0.04	-	-
ICR Times	2.09	2.25	2.25	1.80	2.00	2.00	1.00	1.00	3.00
Long Term Borrowings/ PBITDA	-	-	-	-	-	-	-	-	-
NWC Days	32.11	25.87	34.61	43.29	35.57	39.58	120.86	121.67	91.25
NWC	3.00	3.20	3.80	0.50	0.40	0.60	0.10	0.10	0.10
NWC/Sales	0.17	0.16	0.19	0.14	0.13	0.15	0.46	0.21	0.33

PBDITA/NFA	0.37	0.41	0.40	0.18	0.20	0.25	-	-	-
PBITDTA/TA	0.04	0.04	0.04	0.02	0.02	0.02	-	-	-
ROTA	0.22	0.35	0.29	-	-	-	-	-	-
Short Term Borrowings from Banks	4.00	4.80	5.20	1.50	1.50	1.90	0.20	0.20	0.20
ST from FI	1.00	1.70	1.30	0.65	2.10	3.00	-	-	-
Total Short Term Borrowings	5.70	7.10	6.90	2.10	2.60	3.00	0.70	0.70	0.80
Net Sales Dep Amor/Total Liab	0.46	0.42	0.38	0.29	0.27	0.23	-	-	-
Total Borrowings	10.10	11.40	10.80	3.90	4.30	4.50	1.00	1.00	1.30
Short TermBank and FI/Total Short Term Borrowings	0.86	0.91	0.66	0.15	0.04	-	-	-	-

Source: CMIE (Centre for Monitoring Indian Economy), ProwessIQ Database 2020.

Annexure 2 contains a median values of various financial ratios of a MSME firms grouped by Medium, Small and Micro categories for the most recent three years whose data was available. Panel-A covers Manufacturing MSMEs and lower Panel-B covers Services ones. Since the CMIE Prowess database does not host MSME data separately, filters were applied on investment in Plant and Machinery as per the pre-COVID definition of MSMEs prescribed by the Government of India to extract data. Data for Small and particularly Micro enterprises was sporadically available. The ratios have their usual interpretation.

[a]DSCR= Debt Service Coverage Ratio,b ICR = Interest Coverage Ratio,dPBDITA=Profits Before Depreciation,Interest, Taxes and Amortization,cNWC = Net Working Capital, eNFA = Net Fixed Assets,@TA =Total Assets,FROTA = Return on Total Assets,GFI = Financial Institutions

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Solving a Global Challenge from the Bottom Up: Water and Sanitation Micro-lending

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9

THE EMERGENCE AND SIGNIFICANCE OF WATER SUPPLY AND SANITATION LENDING

Why Water and Sanitation?

Access to water and sanitation is a fundamental need. However, the development community globally is struggling to achieve this at the household level. Data from the World Health Organization indicate that 785 million people still lack access to safe water (WHO 2019a) and 2 billion people lack access to a toilet (WHO 2019b).

The progress made during Swachh Bharat Mission (SBM) to make India open defecation free (ODF) needs to be maintained as a significant portion of the population would require the upgradation/maintenance of the toilet in the years to come. If water and sanitation problems are not addressed, India will not achieve the Sustainable Development Goal 6 (SDG 6): access to safe water and sanitation for all (United Nations n.d.).

In most cases, if families do not have an in-house water supply, they obtain water from sources that are often unsafe or from informal vendors at an exorbitant price. Access to water at the household level can also ensure that proper hygiene practices, like hand washing, can be appropriately followed and maintained—a key to fighting the spread of infectious diseases.

Women and girls are disproportionately affected by the lack of household water and sanitation facilities. They are often tasked with collecting water, requiring them to travel distances with heavy vessels, which can prevent them from attending school and have prolonged physical impacts. To relieve themselves in private, women and girls without household facilities travel to discrete locations before sunrise and after sunset.

By having water and sanitation facilities at home, women and girls can have privacy, feel safe, pursue income-generating opportunities, attend school, be less disturbed during menstruation, pregnancy and monsoons, and have more time for household priorities.

Having household water and sanitation can empower families to live better lives by enabling higher attendance at school, improving health and reducing health expenditures, and expanding the time available for economic pursuits. Although significant progress has been made globally and even more demonstrably in India over the last two decades due to the efforts of SBM (refer to Section 9.4), there is still a long way to go. The bigger question is how do people living in poverty have access to these services?

What Is Water Supply and Sanitation (WSS) Lending?

WSS lending is a demand-driven solution for household water and sanitation access that encourages people using microloans to construct or connect water and sanitation assets at home. The lack of credit or capital options is often a roadblock for people living in poverty who lack savings to pay upfront construction costs. WSS lending provides an affordable solution to those living in poverty who seek to finance a solution to their challenges.

While WSS lending may sound obvious, micro-lenders tend to prefer income-generating loans because of reservations about the ability of the borrower to repay. However, these concerns do not take into account the high cost of purchasing water from tankers or other private vendors or days/

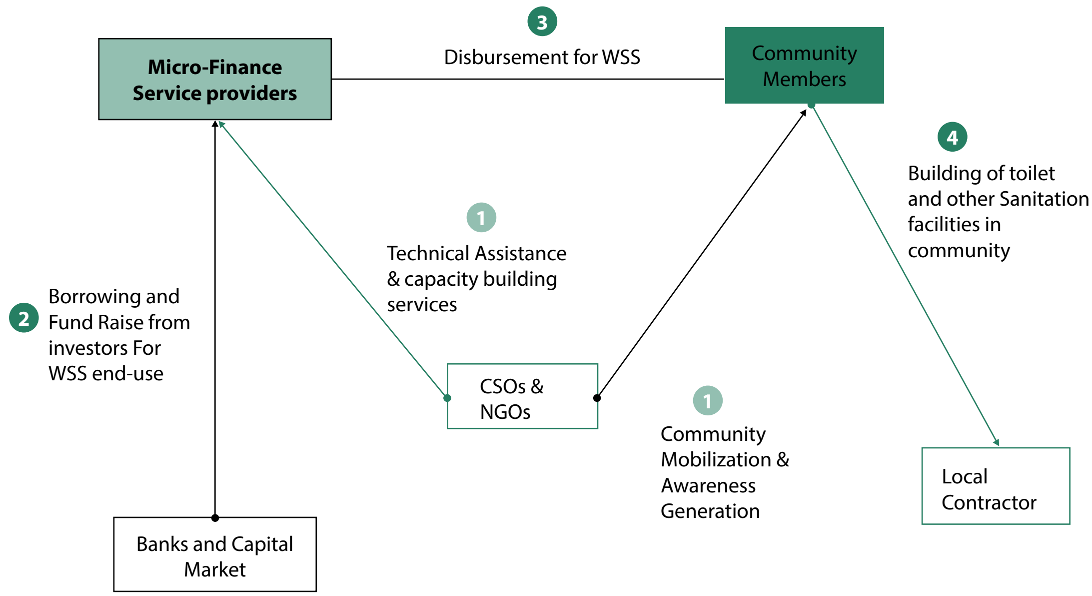

Figure 9.1: Model for WSS Lending for Households

hours of work that are forfeited when someone has to collect water instead of working or is ill from a waterborne disease. Figure 9.1 depicts the model of WSS household lending by micro-lenders.

What Is the Gap We Are Trying to Fill?

SDGs 6.1 and 6.2 call for universal access to safe water and sanitation, with a clear focus on first reaching the most marginalized people. The World Bank estimates that achieving these targets will cost approximately $114 billion per year between 2016 and 2030. This is only the cost of constructing new infrastructure—not the cost of operating and maintaining infrastructure over time. This amount is twice the current level of investment. This simply means that there is not enough money from traditional sources (government and development actors) to achieve these goals.

New solutions are needed to fill this funding gap. Providing financing options (i.e., micro-credit) that enable people living in poverty to construct their WSS solutions serves as a powerful tool to bridge the financing gap, in addition to government and development assistance.

Water.org, an international non-profit organization, has been motivating financial institutions to lend for WSS since 2004 and the demand for WSS loans has continued to grow (see Section 9.3). A 2020 study of the total market size for sanitation lending in India is ₹820 billion, of which, controlling for income and other factors, ₹230 billion is addressable in the short term (ADB, Water.org and Dalberg 2020). This suggests that lenders engaged in sanitation lending will tap into a mostly underserved market that has the dual advantage of providing social benefits to those living in poverty.

> Over the years, an increasing number of MFIs in India started recognizing water and sanitation as a key ingredient to the health and economic wellbeing of their clients. We expect the availability of more dedicated lines of credit to this sector.
>
> —Mr P. Satish,
> Executive Director, Sa-Dhan

FROM NICHE TO SCALE: UPTAKE OF WSS LENDING

WSS Lending Growth Rate of Water.org Partners in India

All the data in this section are from Water.org's partners in India.

The growth of WSS lending depicted in Figure 9.2 shows a substantial increase in the amount disbursed for WSS lending , growing from a modest ₹12 million in 2005 to more than ₹8,400 million in 2019. Although the 2018 non-banking financial company (NBFC) crisis led to a slight decline in 2019, overall Figure 9.2 shows a consistent upward

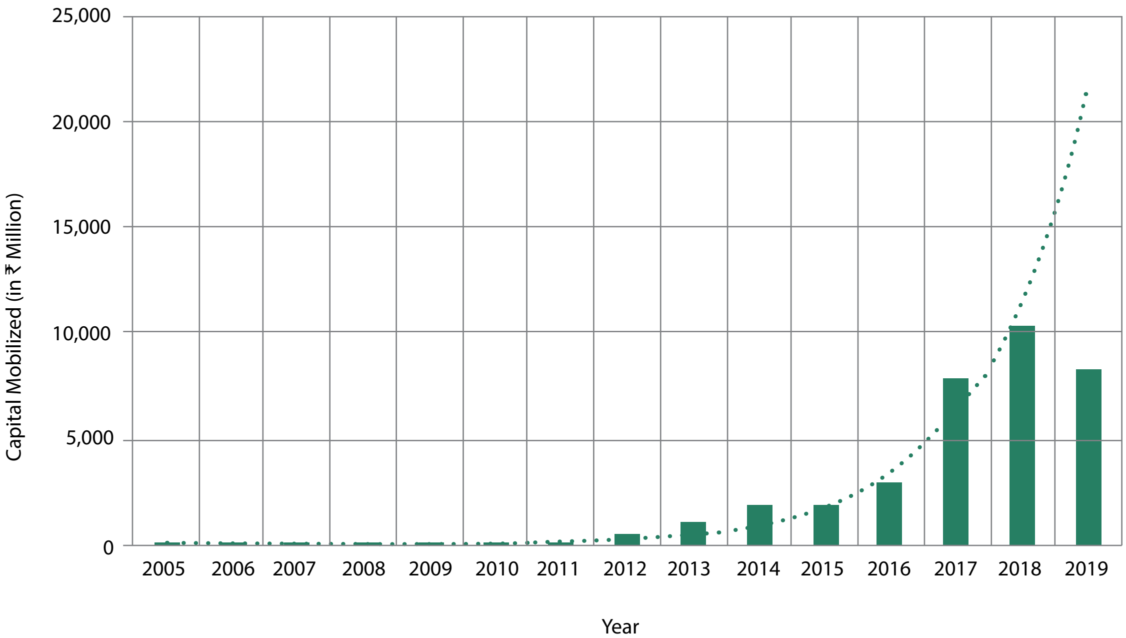

Figure 9.2: WSS Lending Growth Rate for Water.org India Partners from 2005 to 2019

trajectory with significant growth after 2014, which coincides with the launch of SBM discussed in the next section.

Over the last 15 years, financial institutions have often, in partnership with the government, reached more than 13 million people in India through the disbursement of more than 2.8 million loans to families in need of safe water and sanitation. As trust in this model has grown, more lenders are establishing their WSS lending portfolios.

> With WSS loan offerings, our purpose is to better the living conditions of people at the base of the pyramid and create awareness. In the near future, I expect greater acceptance for WSS portfolio among global impact investors.
>
> —Mr Vivek Tiwari,
> Managing Director & CEO, Satya MicroCapital

WSS Loan Details

As of 2020, the data indicate that a WSS loan can range from ₹1,000 to ₹50,000. The effective interest rate for WSS lending varies between 10 per cent and 23 per cent.

Women borrowers constitute 99 per cent of the borrowers for WSS loans.

Sanitation loans comprise 67 per cent of the total WSS loans disbursed while water falls at 27 per cent of the total loans. Out of the remaining 6 per cent, water and sanitation loans make up 5 per cent and water quality loans are at 1 per cent. The demand for sanitation loans has picked up from 2014 onwards with the launch of SBM (Fig 9.3).

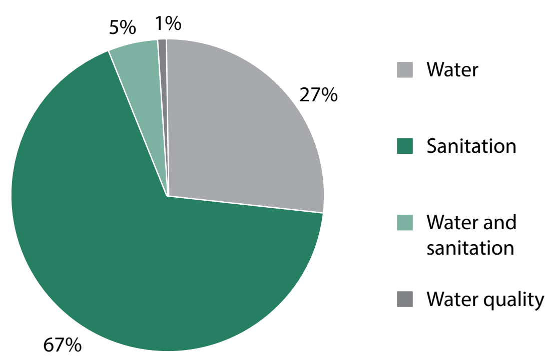

Figure 9.3: India: Product Composition

Some of the purposes for which loans are made by financial institutions include the following:

- Connection of household drinking water
- Borewell or hand pump for potable household water
- Construction of a household toilet
- Water filters or purifiers
- Retrofitting/upgradation of an existing toilet or the addition of a bathroom
- Construction of household rainwater harvesting systems

- Construction of toilet for special needs members such as the elderly, pregnant women and people living with disabilities or injuries

While some of the purposes, such as the retrofitting/upgradation of toilets, have seen an increasing demand among borrowers, others, such as the construction of rainwater harvesting systems, are expected to be a growing product category due to factors such as water scarcity. Similarly, 'special needs or accessible family toilet' is another emerging product category, the demand for which is expected to rise steadily. Also, an estimated 70 per cent of the surface water resources in India are polluted (ADRI n.d.) leading to a growing market for water filters/purifiers.

Economic Effects on Borrowers

An analysis of WSS loans made by financial institutions shows that water and sanitation is not just a consumption loan, but an income-enabling loan that helps enhance household income by improving health, hygiene, productivity and safety. WSS lending makes economic sense to borrowers as access to safe water and sanitation leads to reduced healthcare expenditure and more productive hours, leading to increased household incomes. It also indirectly benefits financial institutions as it leads to discipline in repayment, retention of client and local appreciation for providing loans that help people with basic needs.

Customer Testimonial

We did not have a toilet. It was disheartening to see my family relieve themselves out in the open. For safety and privacy reasons, we had to go to nearby farms and relieve ourselves. Several times, we were verbally abused by the farm owners, but there was not much I could do about it. We are lucky that a snake did not bite my daughter. It was a horrifying experience that I would never want any of my family to go through again.

The snake incident solidified my reasoning to get a loan and build a toilet. I am thankful for the ₹15,000 loan that helped me immensely. I can finally relax and not worry about the safety of my family when they go and relieve themselves.

—Mrs Phula Devi, MFI customer

THE ENABLING ENVIRONMENT FOR WSS LENDING

The History of Sanitation Policies in India

In India, the conversation about sanitation had begun before Independence. Mahatma Gandhi and Swami Vivekananda emphasized the need for sanitation for the nation to prosper. Well after Independence, in the mid-1980s, the central government launched its first subsidy-based sanitation programme—the Central Rural Sanitation Programme. Since then, several programmes have been renamed and relaunched, including Total Sanitation Campaign in 2001, Nirmal Bharat Abhiyan in 2007 and finally SBM in 2014. What made SBM unique was the focus on behavioural change and awareness-raising practices on sanitation. The World Bank also granted a $1.5 billion loan to finance the SBM initiative, which they identified as the largest ever sanitation drive in the world (World Bank 2018). The project specifically supports the rural component SBM-G (Grameen), as more than 60 per cent of India's population resides in rural areas (World Bank 2015).

On 2 October 2019, reflecting upon the great progress made by the country, the government announced the achievement of the ODF status. The government is now focusing on ensuring the sustainability of progress (ODF-S) and has recognized that affordable financing is a critical tool in ODF-S. Affordable funding is recommended under the Rural Sanitation Strategy (2019–2029; Ministry of Jal Shakti 2019).

The History of Water Policies in India

One of India's first water policy, the National Water Policy, was launched in 1987 (Ministry of Jal Shakti n.d.). It focused on drinking water, water conservation and irrigation. In 2009, the National Rural Drinking Water Mission was launched and focused solely on drinking water in rural areas of India, which was then renamed Jal Jeevan Mission (JJM) in 2019 (Irava and Kapur 2019). JJM aims to provide piped water connections to all rural households by 2024: *har ghar nal se jal* (water to every household).[1]

Policy Changes to Create the Enabling Environment for WSS Lending

Government schemes and the Reserve Bank of India (RBI) policies have been critical components for the growth of WSS lending in the past 15 years. A financial environment that allows and encourages WSS lending is required to increase the availability of credit within the sector.

Incorporating Water and Sanitation within Priority Sector Lending

In July 2015, the RBI revised the priority sector lending (PSL) guidelines, bringing in sanitation facilities, including the construction/refurbishment of household toilets, into the social infrastructure priority sector. The same category also included 'bank credit to microfinance institutions (MFIs) extended for on-lending to individuals and members of SHGs/JLGs for water and sanitation facilities as eligible'. This encouraged commercial banks to start lending for water and sanitation through MFIs or SHG–bank linkages. The inclusion of WSS within PSL was the first critical step in creating an enabling environment that encouraged WSS lending as a complement to SBM efforts.

Inclusion of Toilet Construction in the National Rural Livelihood Mission

The inclusion of water and sanitation lending in PSL reflected the national priorities to promote SBM towards achieving its goal of making India ODF. Following this success, the RBI updated its National Rural Livelihood Mission (NRLM) programme policy in July 2017 to include toilet construction as an eligible category towards which participating self-help group (SHG) members can avail loans (Reserve Bank of India 2017). This inclusion meant that banks could lend through the NRLM, a flagship programme of the Ministry of Rural Development that focuses on building financial inclusion and women's economic empowerment through the SHG networks. NRLM-supported SHG members are entitled to preferential interest rates on loans for eligible categories. Currently, there are 6.4 million NRLM-supported women-based SHGs in India.

> We believe that by collaborating with stakeholders to institutionalize affordable financing for WSS within national and state policies, and by building demand and capacity for innovative WSS financing systems such as affordable loans to households, we can hope to bring both policy change and implementation capability to achieve safely managed drinking water, sanitation and hygiene for all in the context of the SBM-Phase 2 and the JJM flagships of the Government of India.
>
> —Nicolas Osbert, Chief, Water, Sanitation, Hygiene (WASH), UNICEF India

TAKING A STEP AHEAD: AREAS OF CONVERGENCE

The Entry of Banks and Business Correspondent Model

Private and Small Finance Banks

Commercial and small finance banks have a market share of more than 50 per cent in the overall micro-lending portfolio (CRIF 2020). Their growing customer base, coupled with the change in PSL guidelines, has generated attention around WSS lending. An increasing number of banks have integrated WSS lending as part of their microfinance portfolio. By offering WSS loans to existing customers, some banks have kept their customer acquisition costs low. The business correspondent model has emerged as a preferred channel for private banks to reach out to microfinance borrowers in remote areas, including borrowers in need of WSS.

> As a bank, we have always believed in making a long-term positive impact by creating sustainable opportunities in the areas of livelihood and healthcare, in the underserved communities. In these testing times, it becomes all the more crucial to establish interlinkages between livelihood financing and lending for WSS facilities, to ensure a quick rebound of the economy with minimal health implications.
>
> —Mr Srinivas Bonam, Head, Inclusive Banking Group, CCBG Commercial Banking, IndusInd Bank

Public Sector Banks

Public sector banks (PSBs) continue to provide WSS loans to SHG members who are supported and credit-linked by self-help promoting institutions (SHPIs). Some of the prominent SHPIs working in the WSS lending area are Development of Humane Action (DHAN) Foundation, Professional Assistance for Development Action, Mahila Arthik Vikas Mahamandal and Shri Kshetra Dharmasthala Rural Development Project. An example of this SHPI–bank linkage model is DHAN Foundation's tie-ups with 36 commercial and rural regional banks. PSBs such as State Bank of India, Indian Bank, Canara Bank, Union Bank of India and others have been instrumental in mobilizing credit for SHG members for their WSS requirements (DHAN Foundation n.d.)

State Rural Livelihood Missions

On the demand side, State Rural Livelihood Missions (SRLMs) promote financial literacy and raise awareness of the availability of affordable WSS funding for SHG. On the supply side, they coordinate and develop strategic partnerships with major banks at various levels to create an enabling environment for members to benefit from financing (Umed n.d.). SRLMs in Maharashtra, Madhya Pradesh, Bihar and Andhra Pradesh have been especially noteworthy in their efforts to encourage and support members to avail loans for WSS.

The Maharashtra State Rural livelihood Mission (MSRLM) or Umed is actively involved in the state's WSS landscape.

On the demand side, Umed is working with UNICEF and Water.org to promote WSS financing at state and district administration level and capacity building through training and information, education and communication materials for Umed's master trainers. On the supply side, Umed is engaging with MFIs such as Annapurna and Agora, public and private banks such as Bank of Maharashtra and IDFC FIRST and ICICI to ensure that the WSS credit needs of SHG members are met.

Collaboration with Other Multilateral Agencies

The growing demand for water and sanitation structures has led to innovative collaboration among various multilateral agencies, financial institutions and government entities.

Women + Water Alliance: An Ecosystem Approach

The Women + Water Alliance is a public–private partnership led by the United States Agency for International Development (USAID) and Gap Inc., a global apparel retailer. Partners include CARE, the Institute for Sustainable Communities, the International Center for Research on Women, the Institute for Development Impact, WaterAid and Water.org

Through an ecosystem approach, the Women + Water Alliance is opening up lending channels for families living at the base of the economic pyramid to access credit for water and sanitation improvements by working with a number of financial partners, including MFIs, PSBs and private sector banks and government entities (e.g., SRLM). In Maharashtra and Madhya Pradesh, the design and execution of partnerships with the government and NGOs has led to improved financial and operational capacity of SHPIs to mobilize additional capital to extend and improve WSS services for women living at the base of the economic pyramid.

National Bank for Agriculture and Rural Development

National Bank for Agriculture and Rural Development (NABARD) has been a key player in the mission to support the government on SBM with the necessary funds for the construction of household toilets.

> At Gap Inc., we have a responsibility and an opportunity to address water issues because it is a critical natural resource for our business. Through the USAID Gap Inc. Women + Water Alliance, we aim to improve the health and well-being of women and communities touched by the apparel industry in India, by enabling sustainable access to safe water, sanitation, and hygiene (WASH), and by empowering women with the agency and self-efficacy to advance their WASH needs.
>
> —Mr Saswat Rath, Deputy Chief of Party (W+W Alliance), Gap Inc.

In support of the government's ODF-S mission, NABARD launched a pan-India sanitation literacy campaign, leveraging its rural Indian reach through its partner agencies (NABARD n.d.).

On 2 October 2020, NABARD introduced a special refinancing facility for financial institutions (banks, regional rural banks, small finance banks, NBFCs and MFIs) against their water, sanitation and hygiene portfolios. The funds allocated under this scheme for FY 2021 are ₹800 million. With this announcement, NABARD has committed itself to promoting affordable financing through financial institutions. The refinancing facility is expected to benefit NBFCs and MFIs by providing timely liquidity and making funds available for on-lending for water and sanitation purposes.

Water Equity and Other Impact Investors

Impact investing is a rapidly growing investment approach that generates measurable, social impact

> NABARD supports the Government's mission of ensuring sustainable and healthy lifestyle in rural areas by supporting their WASH, while also recognising the importance of financial institutions in providing affordable financing to vulnerable communities who do not have access to WASH facilities. The focus is to sustain the gains from SBM and to support JJM to cover all households with functional tap connections by 2024. The special refinancing scheme for WASH will catalyse much-needed financing to millions of households and micro-entrepreneurs from NBFCs and banks for creating WASH-related assets which have become even more relevant in the COVID-19 environment.
>
> —Dr G. R. Chintala, Chairman, NABARD

alongside financial returns. WaterEquity is the first impact investor exclusively focused on the water and sanitation sector. They invest in financial institutions and enterprises in emerging markets providing access to safe water and sanitation to low-income consumers while offering investors an attractive return. Debt investors such as Caspian, Svakarma, Developing World Markets and others are also investing in WSS sector.

Learning from around the World: Indonesia

In Indonesia, piped water supply to households is carried out through government-backed community-based organizations (CBOs) in rural and peri-urban areas. The government has implemented a national programme called the Community Based Drinking Water and Sanitation Program (PAMSIMAS), which focuses on rural regions as well as on the outskirts of cities. Through this programme, the government provides the stimulus to develop community-based water supply and sanitation systems by supporting the costs of the initial infrastructure.

A unique financial model in which PAMSIMAS has collaborated with UNICEF and Water.org has made it possible to strengthen and finance CBOs in the form of capacity building, technical assistance and loan guarantees. The model also focused on CBOs availing loans through financial institutions for building WSS infrastructure. These targeted efforts have led to increased piped water access across rural and peri-urban geographies.

The Indonesian water supply landscape is an example of how a multi-stakeholder approach can result in overcoming of infrastructural and funding challenges and lead to the strengthening of existing institutions. This can give interesting insights as India strives to provide piped water connection to rural households.

WSS Lending during a Pandemic

With the onset of the pandemic, communities without water and/or sanitation facilities at home may face a higher risk of infection as they continue to use shared facilities thereby not being able to practise social distancing and perform proper hygiene practices (hand washing) at home. Although COVID-19 has led to several economic challenges for communities, it also sheds light on the importance of access to water, sanitation and improved hygiene at home.

As public health messaging centres around social distancing and the need to maintain good hand washing as a critical preventative measure, financial institutions have found that communities have become more aware of the link between access to household water and improved sanitation and the spread of the virus. This increase in understanding is expected to trigger increased and sustained demand for WSS loans in the near future as households race to prepare themselves for the next wave of COVID-19 or the outbreak of another deadly virus.

The Future of WSS Lending

There are multiple arguments to be made in the favour of the adoption of WSS lending.

At the macro level, climate change is disrupting weather patterns, leading to extreme weather events, unpredictable availability of water, exacerbating water scarcity and contaminating water supplies (UNICEF 2020b). These changes have a disproportionate impact on poor communities who lack the resilience to rebound from extreme events and disasters.

At the micro level, WSS lending enables borrowers to build or upgrade WSS systems, thereby leading to health, dignity, economic and social impact. With access and use of improved sanitation facilities, a study has shown that in 2018–2019, the poorest households saved ₹45,910 in rural areas and ₹61,777 in urban areas per year (UNICEF 2020a).

The improved social and economic health of borrowers translates into a better quality portfolio for financial institutions, leading to lower default rates and better repayment rates. This is also in line with the experience of Water.org's, which shows that WSS lending works as a viable business for financial institutions. With repayment rates of more than 99 per cent, the risk of default by borrowers is low.

From a lender's perspective, other than excellent repayment rates, the lower customer acquisition cost also makes WSS lending attractive. By mainstreaming the WSS loan product as part of their overall microfinance portfolio, like income-generating group or individual loans, financial institutions can sustain financial gains while keeping costs low.

With the success of SBM, the government's focus is now on sustaining the ODF status (ODF-S) and ensuring that the gains achieved are sustained. The government is also focused on each household having a piped water connection (JJM). While the population of India continues to grow, with looming climate change and the pandemic sending shock waves throughout the nation, there will be continued demand for WSS lending.

> We at CreditAccess Grameen strive to address the adverse impact of lack of safe water and unsanitary practices on the health of our customers. Our WASH initiative creates awareness at different levels and offers solution through access to finance. We consider WASH loans as part of core lending, knowing well that solving WASH issue is directly income enabling.
>
> —Mr Udaya Kumar, Managing Director and CEO, CreditAccess Grameen

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Technology Innovations in Agriculture Finance: Delivering on the Promise

Hemendra Mathur

10

BACKGROUND

The Indian food and agricultural economy (gross value added by agriculture and allied sector in 2018–2019) is estimated to be US$368 billion (bn). The share of agriculture, livestock and fisheries in the economy is 66 per cent, 28 per cent and 6 per cent,[1] respectively. The agricultural and allied sectors contribute about 16 per cent to Indian gross domestic product and provide livelihoods to 55 per cent of India's population. India's agricultural trade surplus is about US$16 bn in agricultural food exports and about US$4.5 bn in imports in 2019–2020.[2]

Indian agriculture is dominated by fragmented landholdings, with small and marginal farmers (SMFs; with less than 2 hectares of farm size) accounting for about 86 per cent of farmers and 47 per cent of operating landholdings. The total number of operational holdings in the country is approximately 146 million (mn) hectares and the total area of operation is 157.14 mn hectares (Table 10.1).[3]

Fragmentation in landholdings with a multi-layered supply chain has kept Indian agriculture supply driven, limiting farmers' and other supply chain members' ability to invest in the adoption of new innovations. In the absence of innovations, farmers continue to face supply-side challenges, including low soil and crop productivity, high water stress (despite the fact that 80% of water in India is used for agriculture), poor soil health (nutrient imbalances including NPK and micronutrients), lack of traceability (much needed for export markets), high post-harvest losses (as high as about one-third in horticulture). A combination of fragmentation, lack of data and a supply-led approach has constrained a large number of farmers to access institutional credit, crop insurance, quality inputs and markets.

Clearly, there is a need to make the supply chain of agriculture more transparent, efficient, demand-driven and predictive. In addition, Indian agriculture also needs solutions to improve its climate resilience by depleting natural resources and increasing pressure to grow more. There can be no better time but now to integrate technology into the agricultural supply chain in all possible ways, as we have access to technology like never before. The

Table 10.1: Number of Farmers in India by Size of Landholdings

Type of Farmers	Size of Farm Landholding	Number of Farmers (in mn)	Share of Farmers (%)
Small & marginal	<2 hectares	126	86.2
Medium	2–10 hectares	19.2	13.2
Large	>10 hectares	0.9	0.6
Total		**146.1**	

Source: Agri-fintech study from ThinkAg and MSC Consulting, done on behalf of Rabo Foundation.

policy impetus provided by the government through multiple reforms during the COVID-19 period to connect farmers to markets will further accelerate the adoption of technology by multiple stakeholders in the supply chain.

Although New Age technologies are being applied across the agricultural supply chain, an important implementation (just to avoid repetition of the word 'application') of such technologies is to improve access to finance for farmers. This chapter focuses on how a combination of agritech and fintech solutions can address the challenges faced by financial institutions, including banks and non-banking financial companies (NBFCs) in scaling the financing of the agricultural supply chain. At the end of this chapter, a 'Framework for Agritech and Fintech Applications for Agricultural Financing (FAFAAF)' is proposed along with the policy prescription.

STATE OF AGRICULTURAL FINANCE IN INDIA

Institutional credit to the agricultural sector under priority sector lending (PSL) for the financial year (FY) 2019–2020 was about ₹13 trillion[4] and the target for FY 2020–2021 is about ₹15 trillion.[5] About 30 per cent of PSL is long term (with a three-year repayment period) and 70 per cent is short term for crop loans. The share of borrowers and their borrowing from both formal and informal sources is listed further. As evident from Table 10.2, only about 30 per cent of the farming population has access to institutional credit[6] from formal sources, despite the large allocation under the PSL to agriculture and allied activities.

As per PSL norms, banks are mandated to lend 18 per cent of adjusted net banking credit to agriculture and the allied sector, of which 8 per cent is the sub-target for SMFs. The interest rate on the crop loan is 7 per cent. If the farmer pays on time, he or she will receive an interest subvention of 2 per cent and an additional 3 per cent under prompt repayment. Essentially, the loan rate can be as low as 2 per cent if the payment is made on time.

As per the Report of the Internal Working Group to Review Agricultural Credit, public sector banks achieved 18.12 per cent in PSL lending to agriculture, while private banks fell short and reached 16.30 per cent of their target in 2018–2019.[7]

The number of bank accounts under the category of SMFs is 51,388,257 and the total number of SMFs in the country[8] was 125,635,000 in FY 2015–2016. This implies that a significant number of small farmers have not benefitted from various government initiatives to improve access to institutional credit.

The Kisan Credit Card (KCC) scheme is one of the key schemes designed to meet the credit requirements of farmers, such as crop inputs, the marketing of agricultural products and post-harvest needs, allied farm activities as well as the needs of farmers for consumption. As per 2019 data, there were a total of 66.2 mn KCC operating accounts, implying less than 50 per cent of farmers holding a KCC card. The government has been pushing to bring more farmers under KCC scheme.

BANKERS' CHALLENGES IN AGRICULTURAL FINANCING

Farmers need crop loans at the start of the crop season, usually once, twice or thrice a year, depending on the number of crop cycles. Rabi (winter crop between October and April) and Kharif (monsoon crop between June and October) are the most common crop rotations followed by farmers. Since sowing to harvest takes about 3 to 5 months for most crops, the loan can only be repaid at the end of the crop cycle as a bullet payment, unlike most other forms of loans which are paid on a monthly basis.

Banks typically ask farmers for land records at the time of the loan application and check whether the land is mortgaged to another lender. Bankers

Table 10.2: Share of Farmers Borrowing from Formal Sources of Credit

Type of Farmers	Number of Farmers (in mn)	Number of Borrowers (in mn)	Borrowers from Formal Sources (in mn)	Share of Farmers Borrowing from Formal Sources (%)
Small & marginal	126	62.1	36	29
Medium	19.2	11	7.6	40
Large	0.9	0.7	0.5	54
Total	**146.1**	**73.8**	**44.1**	**30**

Source: National Sample Survey Office (NSSO), 2012–2013.

face challenges in accessing land records as many records still exist in physical form and are not updated. The government is pushing for digitization of land records, and it is hoped that access of the bankers to such records will improve. Bankers also insist on no-due certificates from other banks in the same catchment area. The creditworthiness of the farmer is assessed by the banker on the basis of his or her repayment records, acreage and crop under cultivation. Banks also assess the farmer's CIBIL score on the basis of the Credit Information Bureau (India) Limited if he or she has a history of borrowing. Typically, the scale of the financing or loan amount is decided on the basis of a guidance document prepared by the National Bank for Agriculture and Rural Development (NABARD) and the State Level Bankers' Committee (SLBC) in different states.

Although the procedures for crop loans are in place, there is room of subjectivity in the granting of the loan and the amount of the loan to be disbursed to farmers. Bank managers are also expected to make a field visit before and after the loan disbursal, which is often ignored. The loan is treated non-performing asset (NPAs) if it remains unpaid for two crop seasons (short-term crops) and one crop season (long-term crops) beyond the due date. This implies that the farmer has the flexibility to rotate the loan for multiple crop cycles and can also use it for post-harvest purposes before the due date.

In many cases, state governments have also announced loan waivers for farmers. Ten states have announced loan waivers aggregating ₹2.4 trillion between 2014–2015 and October 2019.[9] The NPA ranged from 7 per cent to 9 per cent on loans for agriculture and allied activities.[10] Farmers do not pay loans on time in anticipation of the loan waiver and those who pay feel cheated. Loan waivers distort credit culture, and even those farmers who have the capacity to repay loans on time feel tempted to not to pay.

It is imperative that the challenges facing the banker in terms of agricultural financing on a scale be resolved. Some of the key challenges faced by bankers in improving farmers' access to institutional financing relate to access to farmers, accurate and timely data, risk assessment and management as classified further.

Farmer access

- Difficult-to-reach remote areas in villages.
- High acquisition and servicing costs for SMFs.
- High share of tenants, landless and sharecroppers who do not have the proper documentation, such as lease agreements.

Lack of access to data for credit assessment

- Limited visibility on financial information such as cash flows and credit history.
- Limited expertise to verify income from alternative sources.
- Difficult to gather and verify farm-level and farmer-level data.
- Lack of digitization in ancillary value chains such as dairy and poultry.

Risk assessment and management

- Perceived higher risk of default.
- Lack of asset monitoring mechanism in the case of post-harvest financing.
- Farm loan waiver by state governments affects the culture of credit among farmers.
- Perception of higher NPA under PSL.

Crop Loan	C1: Farmer acquisition/onboarding	Farmer access and KYC Lack of accurate and authenticated data on farmer, farmland record and crops
	C2: Estimating farmers' creditworthiness	Assessment of farmer income (crop and ancillary activities), assets and credit behaviour
	C3: Linking credit to crop	Lack of KYC documents: Aadhaar, land records linking loan to use of farm-related inputs
	C4: Post-disbursement risk assessment/mitigation	Remote crop health monitoring and assessment on risk (weather, soil, crop data)
	C5: Loan recovery	Collection in case of delay and default Lack of digital payments Loan waivers
Post-harvest Finance	P1: Farmer onboarding	Farmer access and KYC
	P2: Valuation of assets	Quality assessment of commodities
	P3: Monitoring of assets	Lack of real-time information on safety of goods in warehouses
	P4: Liquidation of assets v	Market price fluctuation and price crash
Ancillary Industries	A1: Financing for sectors such as dairy, poultry, apiaries and sericulture	Data and digitization of supply chain for the purpose of risk monitoring Tools for risk mitigation

Figure 10.1: Loan Cycle and Bankers' Pain Points

All these challenges are mapped to the various stages of crop loans (C1–C5), post-harvest financing (P1–P4) and financing for ancillary industries (A1) as shown in Figure 10.1.

Majority of the challenges listed earlier can be solved with agritech and fintech solutions (with the exception of policy issues such as loan waivers) that can help bankers improve access to institutional finance for farmers, particularly small farmers.

ROLE OF AGRITECH IN SOLVING THE CHALLENGES OF BANKERS IN LENDING TO AGRICULTURE AND ALLIED SECTORS

Agritech took its root in the last decade, but gained momentum in the last few years with the entry of high-quality entrepreneurs in the last three to five years. There are about 600 agritech start-ups in the country trying to solve the multidimensional problems of agriculture, as discussed in the first section, including pre- and post-harvest financing challenges.

Tech applications in Indian agriculture include digital technology, biotech and food technology with dominant digital solutions. The digitalization of the supply chain has demonstrated success in improving farmers' access to markets, agricultural inputs, data, institutional credit and crop insurance. Since 2010, the total investment in the agritech sector has amounted to about US$600 mn in the upstream part of the supply chain and about US$1.3 bn in the downstream part, totalling US$1.9 bn, indicating an upsurge in the interest of the investors from India as well as outside India.[11]

Food and agriculture in India continue to be a large unaddressed market (compared to urban-centric e-commerce and fintech) from the perspective of technology application and adoption. Many agritech entrepreneurs come from a technological background and are trying to integrate technology solutions, including space technology, image processing, blockchains, machine learning, sensors and IoT, into conventional agricultural supply chains.

Agritech's innovations have been trying to solve multiple problems prevalent in Indian agriculture, including low productivity, water stress, poor soil health, suboptimal efficiency in supply chain, post- harvest loss, lack of farmer access to institutional credit, crop insurance, quality inputs and market linkages. Traceability of the food supply chain along with post-harvest management (storage, transportation and primary processing) is another important area witnessing multiple innovations.

HOW TECHNOLOGY AS COMBINATION OF AGRITECH AND FINTECH CAN SCALE AGRIFINANCE?

As discussed in the previous section, all the pain points of the bankers can be solved by agritech solutions in combination with some fintech solutions. At this stage of ecosystem, no single start-up can offer a full range of services. A collaborative platform approach is needed to provide a holistic solution for bankers, at least in the medium to short term.

The challenges that these start-ups are trying to solve, their specific role, the type of start-ups with some examples, are tabulated under each of the following sections.

Farmer Onboarding (C1)

Farmers' onboarding is an important element given the fact that the farmers' access to bank branches and vice versa is low. Many agritech start-ups have on-site resources that can play a role in farmer onboarding. Farmer onboarding can be achieved through a 'digital assist model' which essentially uses digital tools for completing farmer 'know your customer' (KYC) and the necessary documentation.

This model involves training of village-level entrepreneurs (VLEs), farmer producer organizations (FPOs) and farmer-centric organizations to use such digital tools. Many agritech start-ups, particularly the ones selling farm inputs and providing data and advisory to farmers, work with VLEs, FPOs and local organizations. These village-level resources can double as farmer onboarding agents (or business correspondent, as they are conventionally called). As majority of them belong to the same village/region, their ability to obtain and validate farmer data is far higher.

Alternatively, fintech start-ups working in rural pockets could be other options that typically have access to digital tools that can be used for farmer onboarding. They may not focus on the agriculture sector, but typically have good resources and trained manpower for collecting this type of data (Table 10.3).

Table 10.3: Role of Technology in Farmer Onboarding

Role of Start-ups	Type of Start-ups
Farmer KYC including landownership, type of farmer (sharecropper, tenant farmer, lessee)	Agri-input e-commerce platform and those providing data/advisory to farmers Examples: DeHaat, BigHaat, AgroStar, Gramophone, Bharat Agri, BharatRohan, Fasal Fintech start-ups with digital onboarding tools *(may or may not be agriculture focused)* Examples: Haqdarshak, Awaaz.De, Frontier Markets

Source: Authors Analysis.

Measuring Farmer Creditworthiness (C2)

This essentially requires the estimation of farmer assets, income and credit behaviour. A sense of farmland and crop assets can be gained through satellite imagery and drones by detecting farm boundaries and identifying crop signatures with reasonable accuracy. These data can also be used to estimate the likely farm income (Area × type of crop × likely yield × commodity price). However, estimation of income from non-farm sources and ancillary activities, such as dairy and poultry, need data directly from farmers that need to be assessed physically at the time of farmer onboarding.

Credit behaviour can be assessed for those borrowers who have a credit history. The challenge is to estimate the creditworthiness of first-time borrowers and those who are primarily dependent on informal credit. There is potential to use alternate data and apply concepts of behavioural sciences to come up with a credit score. This is attempted by a few agritech start-ups, but there is a long way to go (Table 10.4).

Table 10.4: Role of Technology in Assessing Farmer Creditworthiness

Role of Start-ups	Type of Start-ups
Estimation of assets, income and farmers' credit behaviour	Spacetech and drone start-ups with focus on agriculture Examples: Satsure, CropIn, Mantle Labs Agri-fintech start-ups and NBFCs with ability to use and synthesize alternate data Examples: Samunnati, Unnati, Jai Kisan, Pay Agri, XaasTag, Dvara

Source: Authors Analysis.

The following box is a case study of the Jai Kisan model for farmer onboarding, bookkeeping and credit score.

Linking Credit to Crop (C3)

The monitoring of the end use of the loan is critical to make sure that the loan is used for productive purposes. It can be managed by issuing credit limits/credit cards that can only be used for the purposes of necessary agricultural inputs, such as fertilizers, seeds and agrochemicals.

Start-ups selling inputs directly to farmers or through retailers are best suited to manage this job. This can be an addition to their core value proposition of selling the right inputs at the right time at the right price to farmers. The majority of start-ups in this segment have a regional presence, both online and offline, in the villages. Solutions involve prescriptive selling through data collection and dissemination about farm and crop diagnostics for mapping soil nutrition requirements, hyperlocal weather data and pest attack detection. Banks

Jai Kisan

How Jai Kisan Is Building Farmer Onboarding, Bookkeeping and Credit Scoring Model?

About Jai Kisan

Jai Kisan is building a rural fintech full-stack platform to cater to the financial needs of rural borrowers such as secured and income-generating loans, insurance products and soon-to-be-start savings products for customers in rural India, mostly farmers from various lending institutions through its proprietary technology platform.

How Jai Kisan's Innovative Business Model Is Solving Challenges in Agri-financing?

Jai Kisan operates on a model of securitized financing to farmers through its unique business model, partnering with rural stakeholders to enable a risk-sharing relationship, thereby increasing the accountability of rural stakeholders to build an ecosystem of superior credit quality. The company has the following three financing products to offer:

1. Input financing for buyer farmers/producers/suppliers which enables producers to increase capacity.
2. Equipment financing for farmers for catchments of institutional farmers or point-of-sale financing, including custom hiring solutions for agri, dairy and poultry equipment.
3. Invoice discounting for buyer farmers/producers/suppliers that enable producers to get payment on the spot and start their next production cycle immediately.

Role of Technology in Growth of Jai Kisan Model

Jai Kisan's full stack, tech-integrated platform provides seamless experience in the documentation and underwriting process, capturing extensive data about the borrower (farmer) otherwise missed by conventional credit bureaus.

This reduces the hassles in the documentation, underwriting and disbursement processes typically observed in delivering loans to the agri sector. The mobile or web interface is available at the borrowers' fingertips or at any of Jai Kisan's channel partner locations. The artificial intelligence (AI)-powered credit score with 200+ factors is used to analyse the ability to pay and willingness to pay. Additionally, Jai Kisan's bookkeeping solution for value chain partners across the agri, dairy and poultry value chains is helping digitize and formalize rural transactions, thereby creating large amounts of insightful data for lenders and other stakeholders on the Jai Kisan platform. The company is working with over 10,000+ active borrowers and has transacted with over 100,000 farmers across nine states.

can tie up with these start-ups for the delivery of inputs against the assigned credit limit. The agri fintech start-ups have also built models for arriving at a credit limit depending on the farmer creditworthiness and linking it to the input use (Table 10.5).

A case study of the start-up called 'Unnati' which provides a farmer banking platform for end-to-end crop cycle management is presented further.

Table 10.5: Role of Technology in Linking Credit to the Crop

Role of Start-ups	Type of Start-ups
Farmer profile, location, input needs and creditworthiness	Agri input ecommerce platforms Example: AgroStar, BigHaat, Gramophone, E fasal, Behtar Zindagi, FreshoKartz Agri-fintech start-ups Example: Samunnati, Unnati, Jai Kisan, Pay Agri, XaasTag, Dvara

Source: Authors Analysis.

unnati

Unnati. Providing Full Stack Banking Solutions to Farmers for Crop Cycle Management

Unnati provides modern tools of business to enable farmers to become entrepreneurs. Unnati offers a unique farmers card that allows the farmer to do the following:

- Save money in farmers' bank account.
- Avail working capital support.
- Procure farm inputs for production.
- Access markets for farm output.
- Access knowledge for data-led scientific farming.

Farmers use the card to transact on the platform through various partner access points. Unnati tech platform handholds the farmers across the complete farming life cycle. More than 250,000 farmers use the Unnati platform to improve their earnings and reduce their cost of production.

Innovative Business Model Adopted by Unnati in Scaling Agricultural Financing

Unnati's business model is built on the integration of all elements of the agricultural value chain using a technology platform powered by various contextually relevant financial services. Farmers conduct various transactions on the Unnati's tech platform, guided by the platform intelligence. Due to the complete digital platform, farmers can avail services that otherwise are difficult to offer to small- and medium-sized farmers in a commercially sustainable way.

Unnati's asset light business model, in collaboration with all other industry partners, including agri-input brands, small agri-retailers, warehouse owners, food processors, financing partners orchestrated on a technology backbone, ensures wide choices to farmers in all aspects related to his or her farming business.

Farmers can access small ticket digitally delivered non-collateral working capital loans to avail quality inputs from the platform. Repayments can be done at the convenience of farmers as and when they can pay, and he is charged interest only for the number of days that he avails the credit of. While selling farm output through the Unnati, the farmer will be able to receive the money in real time directly into his or her account.

Role of Technology for Growth of Unnati Model

Technology is at the core of the growth of the Unnati model. The only way services can be cost effectively delivered to farmers is using technology. Unnati has two layers of technology built into its platform:

1. Transaction platform that enables farmers to transact digitally and avail innovative services delivered in a cost-effective manner. The transaction platform also provides the context for enabling various services for the farmers in the most effective and relevant way.
2. Data platform for adding intelligence to the delivery of knowledge-based services to farmers in a personalized way. Platform consumes various types of data, ranging from transaction history of farmers, past farming behaviour, soil data, weather and satellite data to build farmer rating, credit analysis, farm profile, etc., for the farmer. The technology platform helps orchestrates the services at a scale for the benefit of farmers.

Risk Assessment, Monitoring and Mitigation (C4)

These start-ups are capturing and analysing multiple data points, including weather, farm, soil and crop data, all of which can facilitate decision-making for the banks for risk assessment and monitoring. Many of these start-ups use satellite images to geotag farms, assess crop health and estimate output. They also build algorithms using machine learning for farm monitoring and models for AI to automate and improve the predictability of crop stress, pest attack, harvest, yield and farmers' incomes.

These models can help bankers monitor crop assets from remote locations. Digital tools on the basis of imagery can also guide farmers to take corrective action to reduce crop losses and, in the process, help bankers in making sure that the underlying assets against the loan do not go bad (Table 10.6).

Table 10.6: Role of Technology in Risk Assessment, Monitoring and Mitigation

Role of Start-up	Type of Start-ups
Risk assessment and monitoring	Spacetech/drone start-ups Examples: CropIn, SatSure, Niruthi, AgRisk, Skymet, Mantle Labs
Risk mitigation	Sensor/IoT-based start-ups Examples: Bharat Agri, Fasal, BharatRohan, AgSmartic, Cultyvate, Proximal SoilSense, Yuktix, Sense it Out

Source: Authors Analysis.

This agritech solution is adopted by many banks. ICICI Bank has recently made a public statement on the use of satellite imagery for the purpose of farm loans. The bank[12] uses satellite data to assess the creditworthiness of its customers belonging to the farm sector. It gets data on land, irrigation and crop patterns and uses them, in combination with demographic and financial parameters, to make expeditious lending decisions for farmers.

This use of innovative technology helps the borrowers of ICICI Bank with existing credit to enhance their eligibility, while new-to-credit farmers can now get better access to credit. Additionally, since land verification is done in a contactless manner with the help of satellite data, credit assessments are being done within a few days as against industry practice of up to 15 days. The bank has been using satellite data in over 500 villages in Maharashtra, Madhya Pradesh and Gujarat, and plans to scale up the initiative to over 63,000 villages shortly across the country.

A case study on satellite imagery applications by SatSure for the purpose of profiling farm risk is presented further.

Loan Recovery (C5)

This is one of the most challenging areas for bankers, as the recovery of crop loans from farmers who do not repay on time is cumbersome and needs a lot of effort. Market linkage agritech start-ups that help farmers in connecting with buyers can play an important role in loan recovery. These start-ups typically help farmers sell to multiple buyers, including retailers, e-commerce players, processors, cloud kitchens and even direct to consumers.

Majority of these start-ups have farm-level collection centres and aggregation points. These market linkage start-ups can be partnered by bankers for settling loans against payment for agricultural produce at the end of the harvest. A tripartite agreement among such start-ups, bankers and farmers need to be executed prior to the crop cycle for this model to work (Table 10.7).

Another emerging option is to lend to FPOs and farmers' collectives and help them connect with markets that can enable working capital/invoice financing against confirmed orders.

Table 10.7: Role of Technology in Loan Recovery

Role of Start-ups	Type of Start-up
Settlement of loan and collection against purchase of output	Market linkage start-ups: Ninjacart, Jumbotail, Bigbasket, ShopKirana, SuperZop, WayCool, MeraKisan, Kamatan, DeHaat, KrishiHub, AgroWave, Loop, Crofarm, Agribolo, Himkara, Kisan Network, IRIL Farms, S4S Technologies NBFCs and agri-fintech: Samunnati, Jai Kisan

Source: Authors Analysis.

Another model for loan recovery could be the 'assist model' as suggested earlier for the farmer onboarding. The same agents used for farmer onboarding can be hired and incentivized for loan recovery.

Samunnati's model of financing through building market linkage is explained in the following case study.

Post-harvest Financing (P1 to P4)

This section is focused on the warehouse receipt financing where agritech has made some inroads in

SatSure

How SatSure Is Using Satellite Imagery for Farm Risk Assessment?

About SatSure

SatSure is a satellite imagery start-up with applications in both agricultural and non-agricultural sectors.

How SatSure's Innovative Business Model Is Scaling Agricultural Financing?

Bankers use SatSure's satellite big data analysis capabilities, in addition to CIBIL score, past performance and informal networks for verification purposes, to aid the bank manager to take a more informed and objective decision. SatSure prepares a scorecard for the farm. A sample digital farm report is as follows:

Digital Farm Report

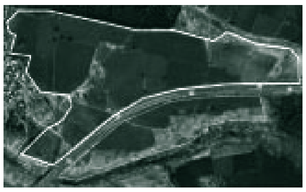
Application ID:	Applicant Name:	Loan Product:	Report Queried On:
37845672	Bharat Aggarwal	KCC	16th August, 2020
Location			
Village	**Tehsil**	**District**	**State**
Chander	Depalpur	Indore	Madhya Pradesh

Farm Details

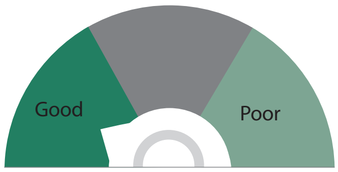
Survey No.:	Land Area:	Soil Type:	Ownership:	Verification:
116	17.2 Ha	Clayey Loam	Bharat Aggarwal	Success

(Verification dong using Bhulekha portal)

Digital Farm View



Farm Income Potential



Satellite Derived Information

Sl. No.	Parameter	Condition	Risk Rating
1	Ground Water	Good	
2	Land Utilization Rate	200%	
3	Kharif Crop (2016–18)	Soyabean, Pulses	
4	Rabi Crop (2016–18)	Wheat	
5	Seasonal Farm Performance	Good	
6	Irrigation Condition	Good	
7	Nearest Mandis (Distance)	10.2 km	
8	Average Annual Rainfall (mm)	1200 mm	
9	Drought Instances in 5 years	None	
10	Regional Prosperity Index	Hindi	

Outcome:
The overall farm risk is found to below and the farm income potential is high.

How Technology Is Helping in Growth of SatSure Solution?

SatSure obtains remotely sensed satellite images from modern platforms such as Landsat, Sentinel and MODIS, combined with parameters such as weather data: rainfall, temperature and atmospheric moisture, which helps in the risk assessment contributing towards intelligent loan and customer management for the banks. SatSure's intervention in satellite imagery and AI is re-engineering the agriculture lending process that benefits both banks and farmers.

How Samunnati Is Leveraging Social and Trade Capital for End-to-end Supply Chain Financing

Samunnati is steered by one vision 'to make market work for the smallholder farmers' by making the value chains operate at a higher equilibrium. Samunnati's leverages on 'social' and 'trade' capital to offer customized financial solutions to stakeholders across the agri-value chain. 'Social' capital assessment of borrower creditworthiness using social feedback, local networks, and peers and 'trade' capital is based on the length and value of the actual business potential and volumes. In addition, Samunnati developed a growth-oriented approach, known as AMLA (Aggregation, Market Linkages and Advisory Services), to empower the agricultural community by supporting them to build better market linkages and use relevant technology and skills for growth.

Samunnati works with around 500 FPOs on the supply side and 330+ agri-enterprise on the demand side in more than 54 agri-value chains spread over 19 states in India.

Innovative Business Model Adopted by Samunnati in Scaling Agricultural Financing

Traditional lending products in the agricultural sector are asset-backed, rigid, parameterized and often fail in ascertaining the creditworthiness of the borrower.

Samunnati works with FPOs on the supply side and agri-enterprises, such as processors, wholesalers, mandi traders, grading-sorting-packing houses, exporters, modern retailers, etc., on the demand side. This holistic approach links producers to demand generators, thereby creating linkages that minimize gaps in value chains. Samunnati leverages the strength of transactions (trade capital) as well as existing buyer–seller relationships (social capital). Samunnati believes in the non-traditional way of credit assessment and relies on the strength of the transaction rather than on the borrower alone. The presence of multi-layered lending solutions and a 'B to B to C' model helps Samunnati manage risks effectively and enables it to deliver customized and low-risk solutions to all players in the value chain.

Samunnati leverages the power of aggregation, creating these market linkages for the FPOs with the demand side, providing pre-harvest or post-production advisory services to enable linkages.

Role of Technology for Growth of Samunnati Model

Samunnati recognizes the role of technology in reducing risks, opening up newer opportunities and linkages in agriculture. Samunnati is constantly exploring new techniques/ways to enable stakeholders of the agri-ecosystem overcome hurdles. Samunnati introduced an ecosystem-level initiative towards leveraging technology to provide customized and timely financial support to farmers, Loan Paycard. The solution would be critical in building a formal payment infrastructure for farmers and agribusiness service providers in the value chain, thereby shortening transaction times and improving transparency through secured and traceable payments.

Samunnati recently launched Samaarambh, an agricultural start-up engagement platform. The platform supports and enables New Age agri start-ups and agtech players in the ecosystem by offering flexible solutions and enabling the agriculture ecosystem. Financial solution, advisory, solution deployment and market linkages are few of the engagements provided through the platform to cater to the prime intricacies.

providing innovative solutions. Other components of post-harvest financing, including value chain financing, dominated by NBFCs and banks that have been into MSME lending.

Warehouse receipt financing in India is still under-penetrated in the context of opportunity (165 mn tonnes of storage available in the country and an approximate value of farm output being US$250 bn). The warehouse receipt financing over the last few years has varied between US$5 and US$10 bn. Bankers have faced multiple challenges because of many frauds that have happened in the recent past, where assets got stolen or substituted by other commodities, and that is why many of them are reluctant to lend money for storage.

Like in crop loan financing, agritech start-ups have solutions for post-harvest financing as mentioned further.

A. Farmer onboarding (P1)

The farmer onboarding approach will be similar to the one adopted for crop loans as mentioned in the previous section. Market linkage agritech start-ups can also play a role of farmer onboarding for the purpose of post-harvest financing.

Many warehousing start-ups, such as Ergos, have developed their own apps to help farmers discover the nearest warehouse or have a team on the ground to recruit farmers from nearby villages.

B. Valuation of commodities (P2)

The valuation of commodities requires a quick and objective assessment of the quality of the produce. Multiple start-ups have developed image processing and spectrometry applications for quality assaying used in the supply chain from farm collection to aggregation to processing. Majority of start-ups specialize in certain crops and are in the process of improving their algorithm. Such start-ups are apt as an option to laboratory equipment-led assessment (Table 10.8).

Table 10.8: Role of Technology in Valuation of Commodities

Role	Type of Start-up
Valuation of assets	Quality assaying start-ups Examples: AgNext Intello Labs, Agricxlab, qZense, RAAV Tech, Occipital, Amvicube, nanoPix, SourceTrace, TraceX

Source: Authors Analysis.

C. Monitoring of assets

Physical audit continues to be a challenge for bankers, given the remote location of most such warehouses, as discussed earlier. There are a few start-ups that are trying to develop a technical platform for the digitization of the warehouse receipt financing process (Table 10.9).

Table 10.9: Role of Technology in Asset Monitoring

Role	Type of Start-up
Monitoring of assets	Digitization models Examples: Whrrl, Arya Collateral, StarAgri, Origo

Source: Authors Analysis.

D. Liquidation of assets

Typically, loans against warehouse receipt finance have a tenure of 2–4 months and are settled at the time of the liquidation of the stocks. Many start-ups in warehousing and collateral management are building marketplaces that can help liquidate stocks and, in the process, settle loans taken from banks and NBFCs (Table 10.10).

Table 10.10: Role of Technology in Liquidation of Assets

Role	Type of Start-up
Liquidation of assets	Warehousing start-ups and marketplaces: Examples: AgriBazaar, Arya Collateral, Origo, Procol, Farmley, Bijak

Source: Authors Analysis.

E. Financing of ancillary industry

There is an opportunity to improve financing for ancillary industries such as dairy, poultry, fisheries, aquaculture, apiaries and sericulture with increasing digitization of respective supply chains. Many agritech start-ups have focused on digitizing supply chains in ancillary industries.

In the milk supply chain, there are dairy tech start-ups who are capturing data from cattle farms, milk collection, bulk cooling and chilling centers, digitizing farmer payments and putting digital tools for quality control and monitoring.

There are poultry-tech start-ups monitoring bird health and critical parameters such as temperature, humidity, ammonia emission in a poultry farm. These solutions generate a lot of data for risk assessment and monitoring that can be used by bankers for financing of farmers and supply chain members. Similarly, there are aquatech start-ups working in the fisheries and shrimp value chains (Table 10.11).

Table 10.11: Role of Technology in Digitizing Allied Industries

Role of Start-ups	Type of Start-ups
Animal health, quality/productivity parameters, disease management, market linkage	*Dairy tech:* Stellapps, LiveStoc *Fisheries:* Numer8 *Poultry:* PoultryMon, Eggoz *Aquatech:* Eruveka, Aquaconnect, Captain Fresh *Sericulture:* Reshamandi

Source: Authors Analysis.

FRAMEWORK FOR AGRITECH AND FINTECH FOR APPLICATIONS IN AGRICULTURAL FINANCING (FAFAAF)

A combination of agritech and fintech solutions can provide a holistic solution for crop loan, post-harvest financing and loans for the ancillary industry, as

Table 10.12: Framework for Agritech and Fintech for Agricultural Financing

	Agri-input ecommerce	'Digital Assist' model	NBFC/agri-fintech	Satellite imagery/drone tech/space tech	Market linkage/marketplaces	Image processing /IoT/sensors
Crop Loan						
Farmer onboarding	Physical + digital	Largely physical	Physical + digital			
Credit scoring	Physical + digital		Physical + digital	Largely digital		
Linking credit to crop/end usage	Physical + digital		Physical + digital			
Risk assessment, monitoring and mitigation				Largely digital		Largely digital
Loan recovery		Largely physical			Physical + digital	
Post-harvest loan						
Farmer onboarding	Largely digital	Largely physical		Largely digital		
Quality assessment						Largely digital
Asset monitoring		Largely physical				Largely digital
Asset liquidation					Physical + digital	
Loans to ancillary industries		Largely physical			Physical + digital	Largely digital

Largely physical
Physical + digital
Largely digital

Source: Authors Analysis.

discussed in the previous section. The mapping of agritech solutions relevant for the various parts of the loan process is tabulated further. Solutions can be categorized into the following: largely physical (where local physical presence is necessary), phygital (physical presence + digital solutions) and largely digital (with little or no manual intervention).

As evident from Table 10.12, there are solutions for each component of the loan cycle, but there is no single entity or start-up that can provide a holistic end-to-end solution. It is recommended to start a collaborative framework to test, pilot and scale innovative solution for agricultural financing. As these models get adopted by bankers, there is a potential to significantly improve the penetration and usage of institutional credit. Technology has a pivotal role to play in this journey, and it is time that bankers and start-ups to come together to build up scalable agri-fintech models.

POLICY PRESCRIPTION

Policy can play a catalytic role in accelerating the adoption of agritech solution to improve access to finance for farmers. A seven-point agenda for policy interventions is prescribed further.

Building AgriStack for Farmer Onboarding

The challenges of farmer KYC and onboarding could be solved at a scale with little transaction cost by building a national level 'AgriStack', which links data about farmer to the farm on which he or she is cultivating. This can serve as open source platforms for banks, NBFC and agritechs for onboarding farmers.

The Union Rural Development Ministry announced in August 2020 that land records had been successfully digitized in 23 states and union territories (UTs) in the country.[13] The digitization of land records is one of the key components of the stack, as digitized land records can be used for developing farm identification numbers. It is important to link the cultivator farmer's identification to the identification of the farm he/she is cultivating. Linking of the farmer ID to the farm ID can create AgriStack and solve the challenges in building first and last mile access to the farmers.

Operationalizing AgriStack would require a collaborative effort, including governments (both federal and state) along with innovators. The use of technology in developing AgriStack can optimize the time and costs involved. There is clearly one-time investment in building this, and then there will be recurring cost to maintain and continuously update it. Unlike IndiaStack, AgriStack will have dynamicity given multiple crop cycles and changes in farmer boundaries over a period of time.

The Government of India has already initiated work on AgriStack under the IndEA framework, called IndEA Digital Ecosystem in Agriculture (IDEA). The Ministry of Electronics and IT, along with the Ministry of Agriculture and other stakeholders, is working on it.

Digitization of Agri-input Sales

Manufacturing, storage, testing, import, use, distribution, disposal and selling of agricultural inputs to farmers are governed by multiple acts:

- *Insecticides:* Central Insecticides Act, 1968 (central government act) to be replaced with the Pesticides Management Bill 2020 in the near future.
- *Seeds:* Most states have their own Acts.
- *Fertilizers:* Fertilizers Control Order, 1985 (central government act).

Central and state governments can consider digitization for approval and record keeping about the storage, distribution and retailing of agricultural inputs (seeds, fertilizer, agrochemicals). Since the majority of crop loans go towards buying agricultural inputs, the digitization of the agricultural input supply chain would help in linking credit to the purchase of inputs. It would require a common platform at the point of sale that can record the sale of input to a particular format.

Farmers will be able to purchase against the credit limit and banks will have data on use of credit limits by farmer on a real-time basis. This will lead to better control on the direct use of credit given to farmers. The digitization of agricultural input sales have a multiplier effect on many parts of the value chain, including building end-to-end traceability, predicting harvest schedule and production.

Credit Marketplace to Convert Crop Loans into Post-harvest Loan

Recent amendments in farm bills, including Farmers' Produce Trade and Commerce (Promotion and Facilitation Act), 2020; Farmers' (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act, 2020, and the Essential Commodities (Amendment) Act, 2020, will open doors for more post-harvest financing with improved farmers' access to the market, traceability enabled by contract farming and unrestricted movement of goods in the country.

Government can think of creating credit marketplace where bankers willing to finance post-harvest storage and processing of commodities can buy a pre-harvest loan of farmers as soon as a pledge can be created on the commodity/agricultural produce from their respective farmers. This will also eliminate the need for a loan recovery immediately after harvesting and give an option to farmer to store and sell the produce at the right time to maximize price realization.

Linking eNAM Platform to Banks

The government is promoting the National Agriculture Market (eNAM) which is a pan-India electronic trading portal, which networks the existing APMC mandis to create a unified national market for agricultural commodities. There are about 1,000 mandis which are connected on eNAM, and about 175 commodities are traded on the eNAM platform.[14]

Banks' lending to farmers can be given access to eNAM with the visibility of the sale of loanee farmers. Farmers can be given an option to settle loans when they sell their farm produce on eNAM. In order to promote eNAM and loan settlement through the eNAM platform, an additional interest subvention can be given to farmers who settle loans through sale on eNAM.

Promoting E-repositories to Boost Post-harvest Finance

The government should promote a platform like National E-Repository Limited (NERL) for the issuing of negotiable warehouse receipts for commodities in electronic form to promote post-harvest finance. This eliminates or reduces the need for paper-based warehouse receipts. Paper receipts carry the risk of mutilation, duplication and fraud.

Electronic receipts will bring convenience, safety and transparency for bankers as well as farmers, traders, warehouses and commodity exchanges.

Build and Promote Climate-linked Financing

There are enough data points that highlight climate risks to agriculture, such as flash floods, volatility in monsoon patterns, soil health deterioration, distortion in soil micronutrient levels, impact on crop cycles and locust attacks. There is an urgency with which we need to act on climate change through innovative financing of products.

Agritech start-ups can help address the data-related challenges that bankers face in building climate-linked credit instruments. There is a potential to develop products that can capture climate data (such as water use efficiency, use of pesticides, GHG emission). Standardizing the process of capturing climate data can be used for climate-linked financing products to incentivize farmers to adapt climate resilient practices.

Government can also think of building the climate risk index (CRI) for all 600,000 villages in India that can be used for modelling the risk and cost of capital to farmers as well as insurance products.

Data-driven Loan Waiver Management Policy

Incidents and the quantum of loan waivers have gone up in the last decade. This has impacted the loan repayment discipline among farmers and has made bankers nervous about lending to the sector. Technological intervention can make loan waiver data driven benefitting only those who are affected and who do not have the capability to pay back to the banks. Data around farm stress arising out of climate risks, demand supply imbalance and price crash can be captured and modelled for raising red flags and for determining inflection points for making a case for farm loan waivers.

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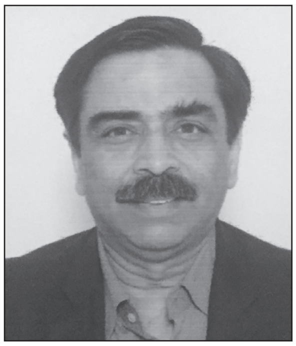

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The Inclusive Finance India Report is an in-depth, well researched, well analysed evidence on how the financial inclusion agenda has progressed at various levels and across all the broad themes. The report covers a review of the performance of diverse institutional structures and delivery models in inclusive finance – the commercial banks, Regional Rural Banks and Cooperative Banks, the new specialised banks, non-bank finance companies, self-help groups and the microfinance institutions.

The report covers the initiatives in digital technology that assess the last mile delivery challenges and provides an overview of some new initiatives. The report also tracks the performance of programmes and scheme of the government to promote financial inclusion, as also contribution and new initiatives of large apex institutions and regulators. The report aims to inform the policy development process on inclusive finance, inform banks and investors both national and international, highlight positive impact of various institutions, models and initiatives and identify policy and practice gaps.

The report is authored by experts from the financial inclusion landscape. The methodology of development of the report includes consultations with the RBI, Ministry of Finance, Banks, apex financial institutions, technology services providers, diverse delivery models and technical agencies.

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