

Bridging the Credit gap for MSMEs

Gaps in access and solutions to bridge the gap

10th December 2020





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Abbreviations

AA	Account Aggregators
ANBC	Adjusted Net Bank Credit
APSL	Adjusted PSL
CPSE	Central Public Sector Enterprises
CGTMSE	Credit Guarantee Fund Trust for Micro and Small Enterprises
CGFMU	Credit Guarantee Fund for Micro Units
DFS	Department of Financial Services
DSA	Direct Selling Agent
e-KYC	Electronic-Know Your Customer
GDP	Gross Domestic Product
GeM	Government e-Marketplace
GST	Goods and Services Tax
GSTN	Goods and Services Tax Network
IU	Information Utility
KYC	Know Your Customer
LSP	Loan Service Providers
MSME	Micro, Small and Medium Enterprise
MSE	Micro and Small Enterprise
MUDRA	Micro Units Development and Refinance Agency Ltd.
NBFC	Non-Banking Financial Company
NCGTC	National Credit Guarantee Trustee Company Ltd.
NITI	National Institution for Transforming India
NRLM	National Rural Livelihood Mission
NSS	National Sample Survey
OAE	Owned account enterprises
PAN	Permanent Account Number
PCR	Public Credit Registry
PMMY	Pradhan Mantri MUDRA Yojana
PSL	Priority Sector Lending
PSS	Priority Sector Shortfall
PTC	Pass Through Certificate
RBI	Reserve Bank of India
SARFAESI	Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest
SGST	State Goods and Service Tax
SIDBI	Small Industries Development Bank of India
TAT	Turn Around Time
TReDS	Trade Receivables Discounting System
UIDAI	Unique Identification Authority of India



Section 1. Introduction and context

The micro, small, and medium enterprise (MSME) sector was one of the worst affected due to the COVID-19 pandemic. The Union Government of India has announced a slew of measure to counter the challenges posed by the pandemic. In addition, it also came up with measures that structural issues like changes in the definition of MSMEs or setting up of funds of funds to infuse quity in MSMEs¹. However, access to credit continues to be one of the key challenges faced by MSMEs.

This report touches upon the issues pertaining to the constraints MSMEs face in access to credit. It starts with estimating the current gap in credit for the MSMEs and then analyzes the supply-side issues that have led to this gap.

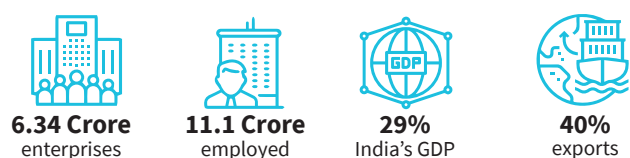
MSMEs overview

The micro, small, and medium enterprise (MSME) sector is pivotal to foster economic development, promote employment, and eliminate poverty in a resource-poor setting. As a key player in generating employment and contributing to the country's GDP and industrial output, the MSME sector is vital to the growth and development of the Indian economy. MSMEs are critical for local and international supply and value chains and support the progress of larger, more mature consumer markets as suppliers, manufacturers, contractors, distributors retailers, and service providers².

As depicted in the figure below, MSMEs foster

entrepreneurship and generate the largest employment opportunities at comparatively lower capital cost, next only to agriculture. The country has 6.34 crore enterprises in various industries, employing close to 11.1 crore people³. In all, the MSME sector accounts for 29% of India's GDP and 40% of exports.

Figure 1: The contribution of MSMEs to India's economy



Source: Annual Report 2019-20, Ministry of MSME

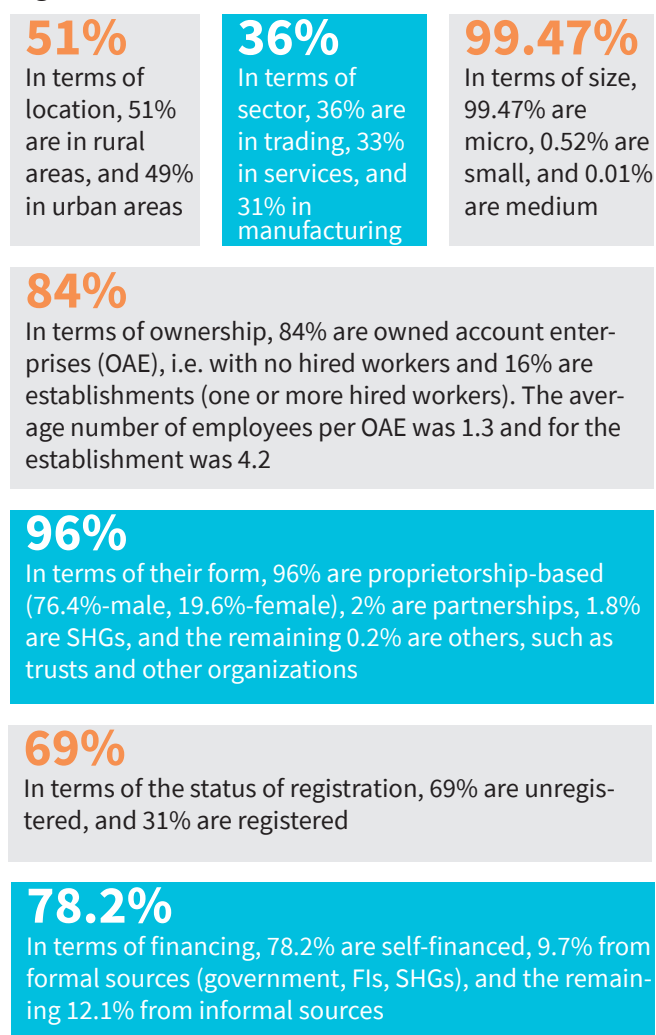
¹ Refer annex 1 for the list of key measures taken by the Government

² Financing India's MSMEs, IFC, 2018

³ This is as per the 73rd round of the National Sample Survey (NSS) conducted between Jul'16 to Jun'15 and published in June 2017 unincorporated non-agriculture MSMEs in the country

In the illustration below, the data on the total number of MSMEs has been disaggregated along various parameters.

Figure 2: All-India MSME Profile



Source: 6th Economic Census⁴

The impact of COVID-19 on MSMEs

MSC conducted a detailed country-level study of the impact of COVID-19 on micro and small enterprises⁵. The study was conducted in April, 2020, at a time when the lockdown was still in force. Because of this, 74% of the sample consisted of “essential services,” that is, groceries, pharmacies, and dairies, among others⁶. The section below outlines key findings of the report:

1. Most MSEs faced a double whammy of a massive sales shock on one hand and the cost

escalations on the other, leading to a substantial income squeeze, as explained below:

a. Sales plummeted as customer footfall reduced—nearly 75% of MSEs reported a decrease in footfall with a median reduction of around 45% from pre-pandemic levels. This had a direct impact on household incomes, as most MSEs are owned account enterprises that do not hire workers.

b. The lockdown disrupted the supply chains, which forced many MSEs to arrange for their transportation to ensure that they could meet the existing demand, however muted. This increased the cost of supplies by around 20%.

The squeeze in incomes from the business forced the households to dip into their savings to manage their household expenses and in some cases their business expenses as well.

2. The lockdown proved unfavorable for most MSEs in terms of working capital. While receivables from the customers froze, the suppliers also dithered from offering credit. Around 25% of the MSEs reported that credit offered by suppliers had reduced.

3. To cope with the shock in income and unfavorable business conditions, MSEs adopted a wide range of strategies. Two extreme scenarios are depicted below. Most MSEs adopted a mix of strategies that were between these two extremities.

a. The risk takers diversified their product range and started to stock easily-accessible essential items that were in high demand among customers. Some also borrowed from informal sources, such as friends and families to tide over liquidity issues

b. The risk-averse reduced the volume and variety of goods they sold before COVID-19 and took to various cost-cutting measures like laying off employees.

Additionally, around 45% of the MSEs reported that they hiked the prices of goods and around

⁴Registered under industry-specific agencies or authorities like the State Directorate of Industries, KVIC, DC- Handicraft/Handlooms, various commodity boards, DGFT, Pollution Control Board, EPF Organization, Sale Tax etc.

⁵The sample for quantitative and qualitative research was 152 and 15 MSMEs respectively. The medium enterprises were not included in the study

⁶List of essential services: https://mofpi.nic.in/sites/default/files/mha_order_and_guideline_as_on_24.03.2020.pdf

14% restricted the volume of sales on credit.

4. One positive outcome of the crisis has been the adoption of digital technologies by MSEs. Approximately 33% of MSEs now use social media platforms like WhatsApp and Facebook to place and accept orders. Similarly, when it comes to payments, around 60% MSEs reported that they decreased cash transactions and adopted digital payments to a varying degree. Around 10% of MSEs also reported that they established partnerships with e-commerce players. These tie-ups helped local grocery stores ensure the availability of essential supplies for consumers.

The MSC report also recommended measures that would help MSEs tide over the liquidity constraints imposed COVID-19. These get

covered in section 5.

As the MSME sector emerges from the shadows of COVID-19, this report takes a fresh guard and assess the current demand-supply gap in the MSME sector. To do this, we have used the estimates from the IFC report (Financing India's MSMEs, 2018). In section 3, we present the current state of financing to MSMEs, including the role of initiatives like TReDS and GeM in meeting the short term financing gap. In section 4, we discuss the supply-side issues that affect access to finance for MSMEs. In the final section, we draw upon the recommendation of MSC's study on COVID-19 and that of the expert committee set up by RBI to suggest ways to bridge the credit gap.





Section 2. Estimating the current gap in credit for the MSMEs

To arrive at the estimate of the current gap, we have used data from the IFC report (Financing India's MSMEs, 2018), and extrapolated it for 2020 by using a CAGR of 12%, which was the rate at which the demand for credit grew between 2010 and 2017.

- The overall demand for credit in the MSME sector was INR 69.3 lakh crore (USD 940 billion) in 2017⁷. Assuming a CAGR of 12%, which was the rate at which the demand grew between 2010 and 2017, **the estimated current demand for credit in 2020 is INR 105.5 lakh crore (USD 1,431 billion).**
- About 47%, that is, INR 49.57 lakh crore (USD 673 billion) is non-addressable due to several factors like sick and redundant enterprises, the presence of new enterprises that have limited operational history, or enterprises that voluntarily exclude themselves from formal financial services. Furthermore, since

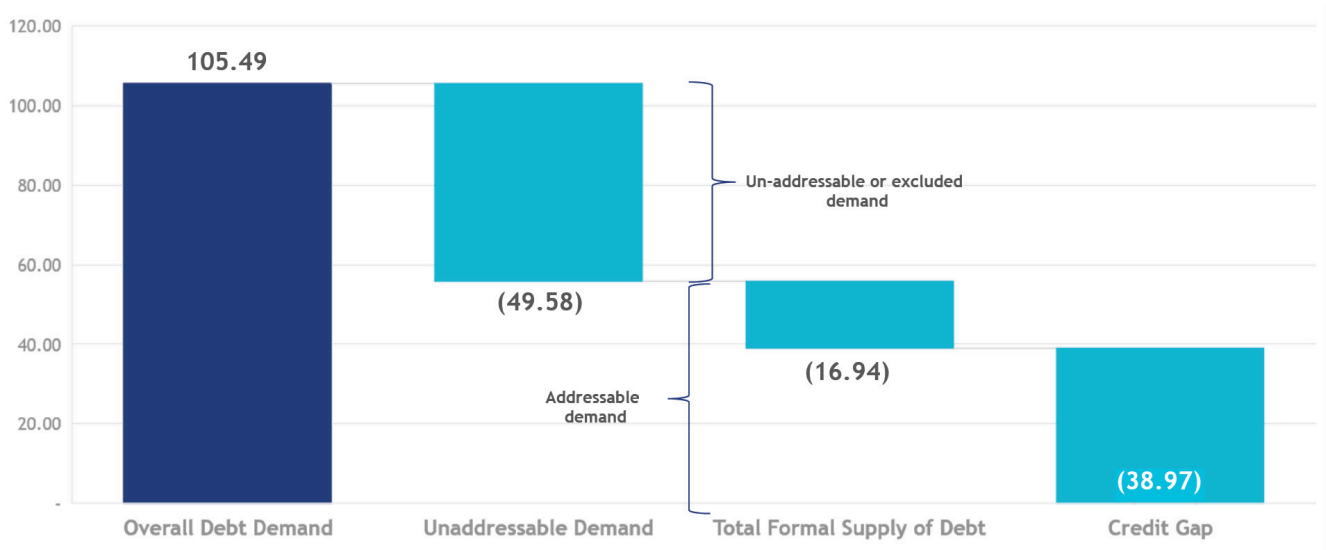
enterprises with scalable business models are considered borrowers in the traditional credit assessment process, a large set of MSMEs get left out—even though they may be making good profits. These include food, handicrafts, and parts-manufacturing industries.

- Of the total estimated demand, only 53% is “addressable,” that is, INR 55.9 lakh crore (USD 758 billion) can be served by the formal financial institutions. Of this addressable demand, formal financial institutions currently address roughly one-third, that is, INR 16.9 lakh crore (USD 229 billion)⁸. Thus the total credit gap is estimated at INR 39 lakh crore (USD 529 billion). Refer to graph 1.

⁷Financing India's MSMEs; IFC & Intellectap: <https://www.intellectap.com/wp-content/uploads/2019/04/Financing-Indias-MSMEs-Estimation-of-Debt-Requirement-of-MSMEs-in-India.pdf>.

⁸MSME Pulse October 2020: <https://www.sidbi.in/files/article/articlefiles/MSME-Pulse-Edition-10-Oct-2020.pdf>

Figure 3: The gap in credit for MSMEs



Source: MSC analysis and IFC report (2018)

Financing gap engendered by delay in payment by the buyers

All MSMEs face a short-term financing gap due to the time lapse between raising a bill or invoice and its due date. This gap widens if buyers delay the payments. Buyers effectively finance their working capital by delaying their payments to MSMEs, which increases the payables of buyers. This has the same effect as short-term finance through a bank. According to the Union Minister

of MSMEs, **MSMEs collectively are yet to receive more than 5 lakh crore (USD 68 billion) in outstanding payments from the central government, state governments, PSUs, and the private sector—a sum that amounts to nearly 2.5% of India’s GDP, as on October, 2020.**⁹



⁹<https://smefutures.com/working-capital-for-msmes-is-paramount-today-why-treds-is-the-need-of-the-hour/> dated 12th August, 2020



Section 3. The state of supply of finance to MSMEs

As discussed in the previous section, the overall demand for credit is estimated to be INR 105.49 lakh crore (USD 1,431 billion). Formal sources meet less than one-sixth of this demand at INR 16.94 lakh crore (USD 229 billion).

- Of the INR 16.94 lakh crore of credit through formal sources, 27% (INR 4.5 lakh crore) is directed to micro, 40% (INR 6.81 lakh crore) to small, and 33% (INR 5.64 lakh crore) to medium enterprises¹¹.

- Public sector banks (PSB) account for 51.6%, Private sector banks (PVB) 38.7%, and NBFCs 9.7%. PSBs have traditionally been the dominant lenders to the MSME sector. Yet the typical trend for the past few years is that private banks and NBFCs have strongly competed with PSBs in gaining a larger share of the MSME sector. However, that trend has changed after the nationwide lockdown and

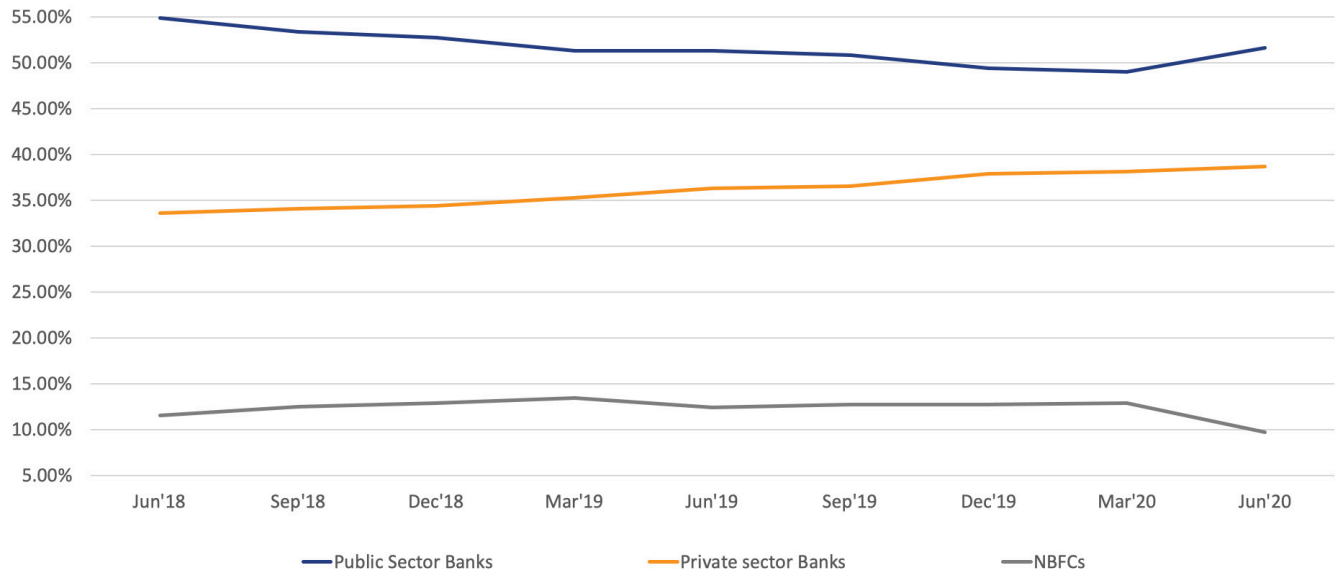
the stimulus packages announced by the Government of India. PSBs have regained market share from 49.0% in March, 2020 to 51.6% in June, 2020, while NBFCs have been losing ground.¹²

¹⁰Informal sources include non-institutional sources include family, friends and family businesses; and institutional sources comprise of moneylenders and chit funds

¹¹Here, we have assumed that the micro segment corresponds to the credit exposures up to INR 1 crore small enterprises from INR 1 crore to 10 crores, and medium enterprises from INR 10 crores to 50 crores.

¹²PSBs have disbursed significantly higher loan amounts in June, 2020, which amounts to 2.63x of the disbursals in February, 2020. PVBs have come back to their earlier disbursal levels from February, 2020. NBFCs have only been able to bounce back to 0.2x of the disbursal amounts of February, 2020 in Jun, 2020.

Figure 4: Share of different FIs in terms of the total lending to the MSME sector

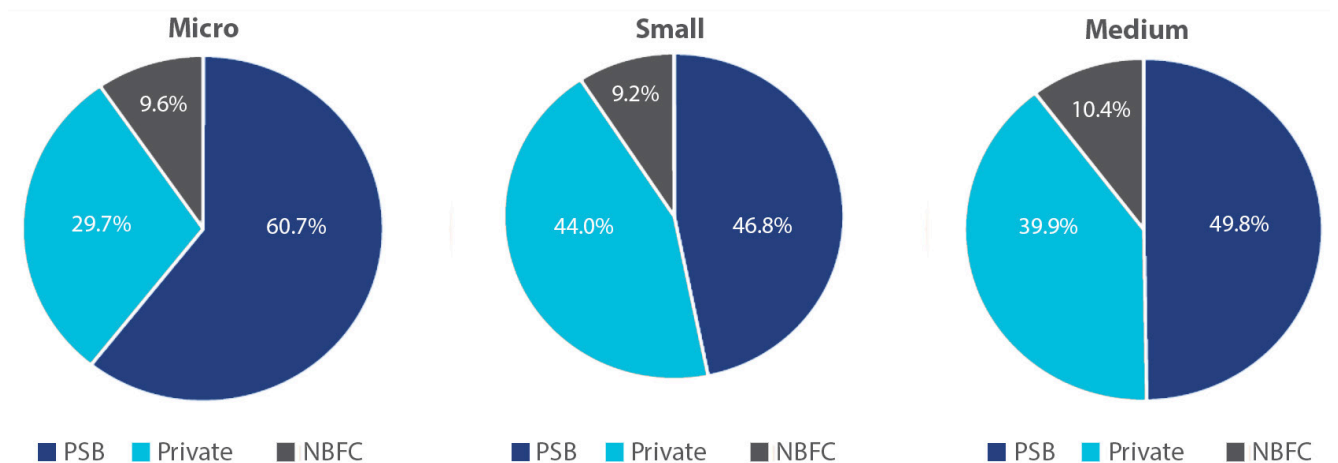


Source: MSME Pulse, October 2020

• PSBs continue to be the dominant contributors in providing credit to micro-segment borrowers, holding almost 60% share in this segment. PSBs play a critical role in enabling the financial inclusion of microenterprises. The share of

PSBs and private banks in the small segment of borrowers is 47% and 44% respectively. The medium segment, which has larger ticket-size MSME loans, is again dominated largely by PSBs.

Figure 5: Share of lenders across MSME segments as of June, 2020



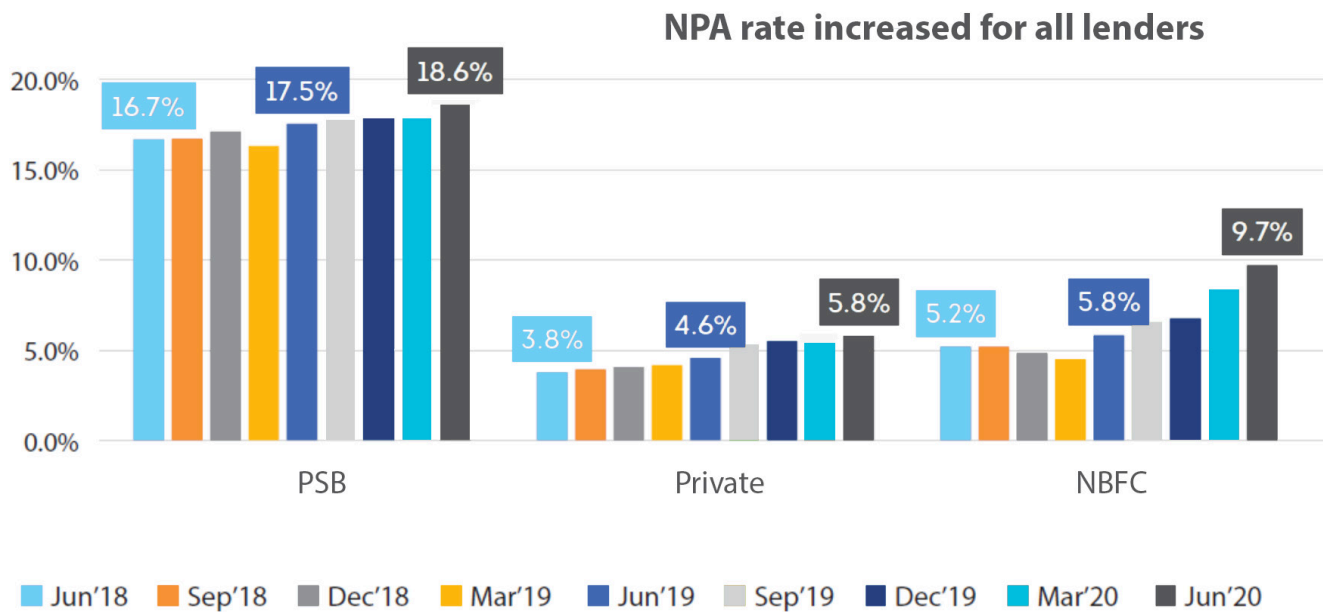
Source: MSME Pulse, October, 2020

• **NPA trends in MSME lending**

Within the MSME sub-segments, the NPA rates are generally higher for sub-segments with larger ticket sizes. Private banks have the lowest NPA rates even at sub-segment levels and PSBs have the highest NPA rates across sub-segments.

Moreover, the trend that NPA rates are generally higher for sub-segments with larger ticket sizes holds broadly even for each lender group. One of the reasons for a sharp increase in the NPA rates of NBFCs is the severe slowdown in the growth of MSMEs

Figure 6: NPA rates of lender group in the MSME segment.



Source: MSME Pulse, October, 2020

Meeting the short-term financing gap—the role of TReDS, Government e-Marketplace, and Udyam registration

The TReDS is a key institutional mechanism to facilitate access to working capital finance for MSMEs. It was set up in 2014 to streamline the problem of erratic and delayed payments that MSMEs face. As of August, 2020, TReDS had around 10,000 MSME sellers and 1,300 buyers (with a turnover of more than INR 500 crores that is around USD 68 million). As per the data submitted to the RBI, as of 31st March 2019, 3,738 sellers, 71 banks, and five NBFC-factors participated on the TReDS platform. A total of 2.52 lakh invoices were financed with an aggregate value of INR 6,669 crore. For the FY'19-20, the total number of invoices financed has gone up to 4.77 lakh, with the total value of invoice financing at approximately INR 11,000 crore (USD 1.5 billion)¹³.

The Government e-Marketplace (GeM) is an e-commerce business-to-government (B2G) portal set up in 2016 to help MSMEs connect with buyers from PSUs and government departments. In February, 2020, GeM entered into a partnership

with one of the three TReDS platform operators, RXIL. The objective of this partnership is to help government departments, PSUs, and CPSEs finance their payments to MSME sellers of goods and services¹⁴. The number of MSE sellers on GeM has crossed the 1.5-lakh mark as of 3rd November, 2020, and contributed to 57.50% of the total order value on the GeM platform.

The GeM and TReDS platforms work on a collaborative basis, under which invoices that have a certificate of acceptance will be put up for discounting on the TReDS platform through an integrated system. This will enable the bill to be discounted, the PSE will get time to make the payment, and the MSME supplier will get funds. The final IT integration for seamless transition is currently underway between GeM and the three TReDS platforms.

The government has mandated the central public sector enterprises (CPSEs) to onboard their vendor network onto TReDS. Less than 10% of the 33,640 eligible vendors of CPSEs have been onboarded. Further, only 155 of the 255 CPSEs have registered on the platform as of March, 2020. During the lockdown, the government took

¹³As per discussions with the industry expert

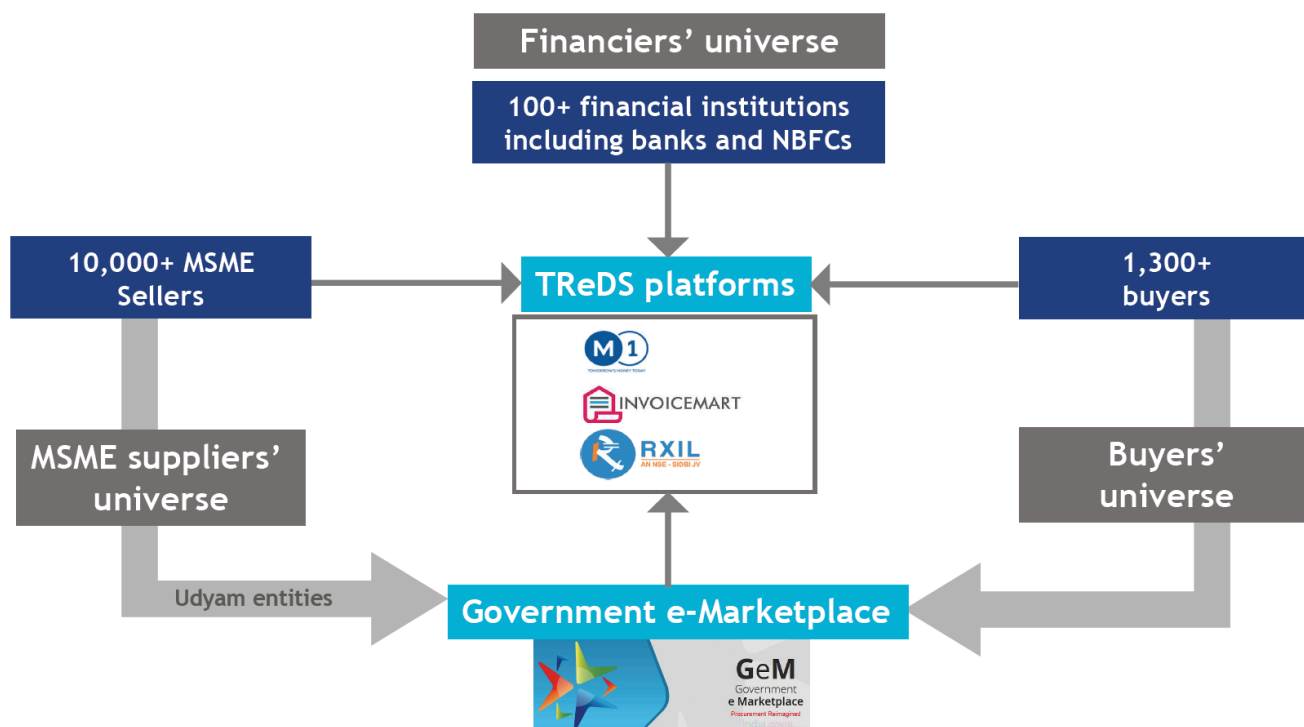
¹⁴Link: <https://www.financialexpress.com/industry/sme/msme-eodb-govt-takes-first-step-toward-rs-3-lakh-crore-turnover-target-proposed-in-budget-for-its-gem-portal/1854504/> dated 3rd February 2020

several measures to onboard corporates onto the TReDS platform. These include a waiver of onboarding fees, reduced cut-offs, the inclusion of performance summary on TReDS in annual documents of CPSEs, and allowing participation by NBFCs on the platform as well.

For the ease of business of MSMEs, the Ministry’s portal for new registration of Udyam¹⁵ is being integrated with TReDS and GeM. Therefore, it would be adequate for an enterprise to register

as an MSME on the government portal. The integration with TReDS and GeM mechanisms will happen automatically. This will benefit the MSMEs by offering a free and automatic route to onboard bill discounting mechanisms and the government’s online procurement system. By 1st October 2020, close to 7 lakh-plus registrations¹⁶ have already taken place since the new system was launched in July¹⁷.

Figure 7: Linking TReDS, GeM, and Udyam



Source: MSC analysis

¹⁵<https://udyamregistration.gov.in/>

¹⁶Link: <https://indianexpress.com/article/opinion/columns/msme-registration-nudge-toward-formalisation-6745455/ dated 16th October 2020>

¹⁷Link: <https://www.thestatesman.com/india/historic-intervention-government-to-ensure-timely-payments-to-msmes-1502921633.html dated 2nd September 2020>



Section 4. Supply - side issues that affect access to finance for MSMEs

While there are several demand-side issues, like the informal nature of MSMEs that reduce access to finance, issues in the supply side also affect financing for MSMEs. Current trends in financing within the MSME sector reflect certain skews that need to be corrected. The MSME ecosystem is biased toward lending to medium enterprises over micro and small ones. Approximately 5,000 medium enterprises account for an exposure of INR 5.64 lakh crore, which is one-third of the total supply of INR 16.9 lakh crore to the MSME sector (as on 30th September 2020).

Thus, within the MSME ecosystem, medium enterprises seem to be adequately financed with an average exposure of more than INR 100 crore per firm. Therefore, medium enterprises face no gaps in the demand and supply of finance—at least in quantitative terms. Of the total gap of INR 39 lakhs, one-third comes from microenterprises while the remaining two-third from small enterprises. Besides the size bias, aspects related to gender also need to be corrected.

This section highlights key reasons that preclude MSME from access to credit.

- **High risk of lending to MSMEs**

The ability of the MSMEs to pay is compromised

due to several risk factors linked to the business. These include delayed buyer payments embedded in supply chains and other business risks, including changes in consumer demand or extraneous events that create a slowdown in the market. MSMEs often have little to no equity buffers to tide over adverse events, while risk mitigation mechanisms are available neither to the MSMEs nor their lenders. This inevitably translates into significant credit losses. Moreover, even the expected losses on these loans are not priced rationally.

- **High transaction costs and lower margins**

Banks and NBFCs find it expensive to finance MSMEs. Constantly monitoring and engaging with MSMEs is considered too high a cost for business. Analysis suggests that the average size of credit demand from micro and small enterprises is INR 5.68 lakhs and 1.56 crore lakhs respectively. The average size of credit extended by formal FIs based on assessed repayment capacity is even lower.

The profit margin from MSME loans is generally low, especially for traditional financial institutions. This is due to factors, such as smaller ticket size and high cost of due diligence

and collections. These inherent challenges make it harder for these institutions from pursuing MSME accounts actively.

• **Lender coverage**

While urban areas largely have sufficient lender coverage, many parts of the country still have poor credit depth. This remoteness translates into weaker access to formal credit. As per the IFC report (2018), low income states (LIS)¹⁸ and Northeastern states (NES)¹⁹ receive only 27% of the supply of debt finance. This represents massive deficit, if one considers that of the 5.85 crore enterprises enumerated in the 6th economic census, the LIS and NES accounts for around 44% of the total enterprises.

• **Outdated underwriting processes**

The issue of higher risk aversion in the case of MSME loans, especially loans to MSEs, is worsened by outdated standards of credit evaluation. These place too much emphasis on collateral and do not truly paint an effective picture of a borrower's ability to repay a loan. Because many FIs do not spend adequate time on the ground with MSMEs to understand their business models and monitor their performance, traditional lenders find it hard to create loan underwriting systems relevant to MSMEs. In most cases, FIs rely on the past performance of the enterprise rather than future opportunities.

• **Low traction on TReDS and GeM**

In 2017, the GoI mandated PSUs to register on the TReDS platform. In November, 2018, the GoI announced that companies with a turnover of more than INR 500 crore will have to register on the TReDS platform. Further, The government has now waived on-boarding charges for MSMEs till March, 2021²⁰. Despite the initiatives taken by the government and the RBI, the usage of this facility remains rather low, as the number of large corporates, PSUs,

and government departments onboarded on the platform remains low.

Lastly, while the Budget speech of 2018 proposed linking the TReDS platform with the GST database, it has yet to become operational²¹. Vendors will have to be GST-compliant to be eligible for bill discounting via TReDs. This cash-flow information database would also aid banks to take quick decisions regarding lending to smaller enterprises²².

• **Other factors**

Various other factors also contribute to the size of the gap. For instance, credit bureaus in India have a limited amount of data on MSMEs. Additionally, the slew of laws that govern insolvency in India has slowed down the process of judicial remedy. Recent changes in the Insolvency and Bankruptcy Law, however, aim to address these concerns. Its implementation will be key to the MSME sector.

¹⁸Includes the states of Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and West Bengal.

¹⁹Includes the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura.

²⁰Link: <https://www.thestatesman.com/india/historic-intervention-government-to-ensure-timely-payments-to-msmes-1502921633.html> dated 2nd September 2020

²¹Link: <https://theprint.in/opinion/modi-govt-treds-platform-nbfcs-msme-financing/487006/> dated August 2020

²²Link: <https://theprint.in/opinion/nirmala-sitharamans-budget-2020-must-make-msme-lending-a-core-business-activity-of-banks/353196/> dated 23rd January 2020



Section 5. Recommendations to bridge the credit gap

Given the immediacy of the impact on COVID-19, we delve briefly into recommendations based on MSC's research before presenting the key recommendations of the expert committee on MSME constituted by the RBI in 2019.

Recommendations to RBI and the Department of financial services (DFS) specific to MSME lending are as follows:

1. To provide MSMEs some liquidity in the short-term, financial institutions should be allowed to continue the loan moratorium on a case-to-case basis for at least another six months. Extension of the moratorium should be across intermediaries, banks, as well as NBFCs. This will provide MSMEs some liquidity in the short term.
2. Provide interest subvention on loans to MSEs through the MUDRA initiative
3. Encourage banks to use business correspondents for credit check and KYC to deliver credit to rural MSMEs
4. The crisis should also be used to accelerate the efforts around the formalization of microenterprises. COVID-specific cash transfer

initiatives should be used as an incentive for unregistered enterprises to be registered under various national, state, and local governments by making registration a precondition to avail benefits. Governments, both at the union and the states level, can also partner with third-party agencies or NGOs to collect data on unregistered MSMEs at the village or the block level

The expert committee's recommendations are divided into two segments—general and technology-specific.

General recommendations

1. Modifications in the PSL norms

We suggest the following three tweaks in the extant PSL norms:

- a. The adjusted PSL mechanism should be tried out, starting with MSMEs in Phase 1 and evaluating its results. For banks that wish to specialize in MSME lending, the conditions for agricultural lending under PSL can be waived, provided they achieve 50% of NBC as SME-PSL lending in the case of universal banks and 80% in the case of SFBs. Additionally, weightages

may be constructed for MSME lending in the Aspirational Districts to encourage the flow of credit to these underserved regions.

b. Price caps on investments by banks in securitized assets must be relaxed. The base cap should be revised to the base rate of the investing bank plus 12% per annum. This would encourage smaller NBFCs to extend MSME lending to underserved areas and micro-segments where the cost of intermediation is higher. It would also promote partnerships between banks and NBFCs.

c. PSL targets should exclude takeover finance to ensure enough fresh incremental lending to SMEs, resulting in higher economic activity, enterprise creation, and employment generation. In many cases, private sector banks and especially new age ones have been using takeover financing to achieve PSL targets. This is akin to risk-averse lending and does not lead to fresh loans. Thus, the same loan may get reported as PSL by two or more banks even though it is a single instance of lending.

2. Credit guarantee schemes

An analysis of various credit guarantee schemes suggests considerable deployment of public funds with overlapping guarantees and gross underutilization or over-leverage of the corpus in some funds. For instance, as on 31st march 2019, around 41% of the CGTMSE guarantees goes to loan up to INR 10 lakh. This creates a overlap between CGTMSE and CGFMU (for MUDRA). These different guarantee schemes must be rationalized and be made subject to the regulation and supervision of RBI. Currently, CGTMSE and NCGTC have devised credit guarantee schemes for MSE loans. However, these entities are outside the purview of regulation. These guidelines could draw upon the well-acknowledged principle for design, implementation, and evaluation of public credit guarantee schemes for SMEs that the World Bank Group has developed.

3. Loan portability

RBI should develop measures on portability of MSME loans with a lock-in period of one year. This will allow MSMEs to switch from an existing lender to a new lender that offers more favorable terms of credit. The need for loan portability

could arise from various factors including inadequate credit limits, service deficiencies, the potential for lower rates, and the need for value-added services, such as trade finance and forex.

4. Increase the cap of regulatory retail

Beyond INR 5 crore exposure, risk weights on retail loans increase to 100% and more. This limit should be increased to 7.5 crores since Basel II allows for regulatory retail (or SME exposure) up to Euro 1 million (approximately equal to INR 7.5 crores).

5. Collateral-free limit

Increase the limit for non-collateralized loans to INR 20 lakh, from the current INR 10 lakh

6. Restructuring of NPA accounts

An MSME account could be considered for an upgrade to “standard” after six months of satisfactory operation, instead of one year at present. In addition to stable performance for six months, the MSME must also have demonstrable additional equity in the business or new sources of cash-flow, or both. Further, NPA norms for MSMEs could be more relaxed considering their problems around receivables. A 120- or 150-day window can be allowed instead of 90 days to classify assets. A one-time restructuring without downgrading to NPA should be permitted. This will help many more enterprises sail through troubled times.

7. Reimagining SIDBI’s role

As the apex body responsible for the development of the MSME sector, SIDBI should gradually take on the role of a market maker for SME debt on select platforms. In the almost three decades of its existence, SIDBI has been primarily engaged in the re-finance business, much of which has been through funds provided to it from the shortfall of priority sector lending by banks. Some suggestions in this regard are as follows:

- i. The government should deploy the PSL shortfall (Priority Sector Shortfall or PSS funds) to SIDBI on the lines of the RIDF fund of NABARD for lending to state governments as soft loans for infrastructural and cluster development.

ii. SIDBI should deepen credit markets for MSMEs in underserved districts and regions by handholding private lenders, such as NBFCs and MFIs.

iii. SIDBI must develop additional instruments for debt and equity, such as FLDGs, Pass-Through Certificates (PTCs), among others, to help crystallize new sources of funding for MSMEs and MSME lenders.

iv. SIDBI has to be proactive in addressing market failures in MSME credit, develop new instruments for adoption by the market, play the role of the market maker, and foster partnerships that work toward the capacity-building of lenders. These measures would enable supply-side improvements to help meet the unmet demand for MSME credit.

8. Reimagining MUDRA's role

MUDRA must focus on catalyzing markets and provide risk management support through specialized products and investment approaches. The support would boost risk-taking by its member institutions in the previously underserved regions and sectors. This is likely to catalyze a new base of capital market investors. These products could include credit enhancements of various types, including investments in junior tranches of securitization transactions. A reimagining of MUDRA is necessary, including assessing the rationale for it to continue as a subsidiary of SIDBI.

9. Banks and NBFCs must focus on cluster-based finance

A cluster-based approach to financing lowers the transaction costs of the banks. For instance, the credit assessment is easier as the cost structure and industry prospects of units in a cluster are similar and the information provided by one unit can be used to verify the information supplied by other units. It enables the bank to gain a comprehensive understanding of the sector as banks also have other actors, such as raw material suppliers or buyers, as an account holder. Refer annex 5 for details on a 3-step approach for implementing cluster based finance. Also refer annex 6 for a case study on Aye finance's approach to cluster based finance.





Recommendations related to technological interventions

The recommendations in this section focus on technological interventions in four areas—financial architecture, regulatory action plan, receivable finance and digital public infrastructure action plan. These have the potential to lead to disruptive changes in the MSME lending landscape.

1. Financial architecture

The financial architecture has several elements from the perspective of improving lending to MSMEs. The key elements that go into the designing of a robust financial architecture are discussed below.

a. Building Udyam registration number as a unique enterprise identifier

The government launched the new Udyam registration process, where an enterprise needs to register itself online based on self-declaration. Upon registering, the enterprise is issued a permanent registration number and a certificate. As of 1st October, 7 lakh registrations have taken place²³. The enterprise needs to provide only the Aadhaar number at the time of registration, while the system would extract

the PAN and GST linked details on investment and turnover automatically from government databases. Udyam is an attempt to converge the information scattered across various databases (UAM, MSME databank, and GSTN) and also address some of their deficiencies.

The government should turn the Udyam registration number (URN) into a unique enterprise identifier (UEI) and use it for various purposes like procurement and availing government-sponsored benefits, among others. The URN will enable e-verification, e-KYC, and allow various credentials and other services to be enabled on top of this unique enterprise ID, and ease the cost of doing business.

URN can serve as a proof of identity for the enterprise much like what Aadhaar does to establish the identity of an individual. This URN can act as a single source of truth for all data and information for an enterprise

The URN can be used to create comprehensive reports pulled from different data sources that cover both financial and non-financial

²³Entities that are registered on other portals and systems need to register on Udyam by 31st March, 2021

information. Such financial information includes ownership structure, financials, and auditor reports, while non-financial information includes registration details, management details, 'related entity' of the proprietor and partners, and the status of statutory compliance, that is, TDS, GST, export-import regulation, among others. Each of the individual owners of the repositories with this information should include the UEI in their database and make an API available for this access.

b. Rating of MSMEs

RBI can facilitate the creation of additional information sources from where a financial institution may download a report which includes a score for the entity based on additional factors including business risk, industry risk, management risk, and financial risk. Additional parameters used in this score could include: business vintage, GST compliance, direct tax compliance, PF and ESI compliance, export compliance, promoter net worth etc. Such reports could also provide additional information including peer comparisons and industry analysis. The role of SME Rating Agency (SMERA), which is part of the SIDBI ecosystem can be made more widespread within MSMEs. This will enable it to perform a much wider role.

c. The credit score of buyers for MSMEs

MSMEs commonly provide trade credit to their buyers. Often, a delay in payment or non-realization of payment from buyers deteriorates the asset quality of MSMEs. RBI should permit the MSME to check the credit rating or credit monitoring report (CMR) for their buyers, based on consent, through their primary banker. CMR is a strong indicator of liquidity risk, repayment track, and specific behavior on vintage and regency to credit. It can therefore be incorporated in the credit rating mechanism.

d. Regulated entities to validate KYC procedures

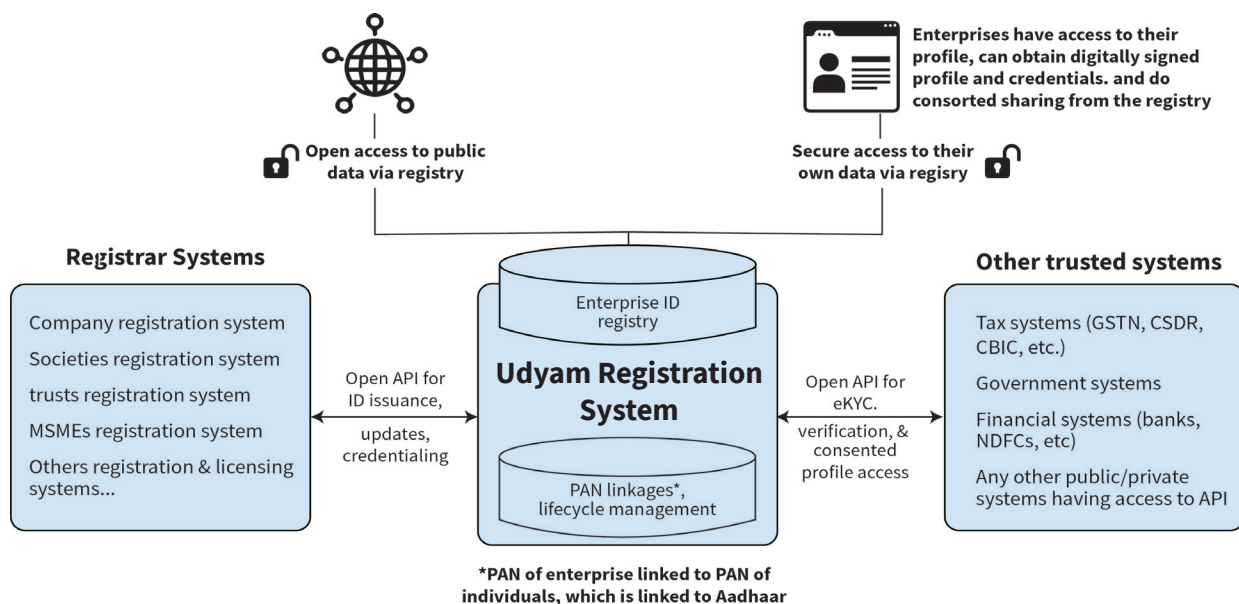
Regulated entities should be permitted to validate documents information in real time using API based verification procedures.

These APIs will verify customers' data from the Government databases maintained by the issuing department. Specifically:

- Such API verification should be treated at par with physical verification of the documents submitted by customers, which in turn would also mitigate the risk of fake or forged documents being submitted
- Lenders may use API services—either by themselves or through Fintech providers—and maintain appropriate logs to prove verification of such documents. Currently, for example, GSTIN or PAN can be used to fetch the name of the entity, registered address, e-mail ID, and entity type through an API with the GST database.
- Physical verification should be replaced with electronic verification wherever possible

The high level financial architecture is illustrated in the figure below.

Figure 8: High-level system architecture



Source: Report of the Expert Committee on MSME, RBI, 2019

2. Regulatory action plan

The introduction of cash-flow lending is essential to ease the credit gap faced by MSMEs. However, cash-flow lending to MSMEs faces structural barriers, such as customer acquisition cost and loan operating cost (LOC). Some of these costs are fixed. Hence, smaller business loans, particularly those less than INR 10 lakhs are considerably less profitable than larger ones and are therefore less appealing to banks. These structural barriers can be addressed by bringing greater innovation in how small business loans are evaluated, underwritten, and managed. Paperless (digital) applications, rapid loan underwriting, and a greater emphasis on customer service can redefine the MSME lending sector.

a. Loan service providers

To enable more customers to access credit, the regulator must create a new category of loan service providers (LSPs)—borrower-facing agents. LSPs will bring down customer acquisition costs by tapping into existing online and offline business networks. Their captive customer bases and deep data on customer activities would reduce customer acquisition costs for lenders. The LSPs partner with lenders in one of two ways—a) arm’s

length activities, such as referrals of small loans and b) integrations of new applications or underwriting models into a bank’s existing operating and compliance systems. We recommend that LSPs be lightly regulated entities, much like PhonePe, BharatPay, and Google Pay, which are regulated in the new UPI ecosystem.

b. Account aggregators

When account aggregators (AA) become operational, lenders will have access to borrowers’ transactions at a single point. These new architectures would facilitate cash-flow-based lending, connect GSTN to AAs, and upgrade the e-way bill system to include proof of delivery (POD). Making GST invoices available to the lender is essential for cash-flow lending to take off. For this, the GSTN system needs to be connected to the AA system. Dematerializing of POD is essential for inventory financing for MSMEs to grow. The design is already in place. Only an implementation project needs to be created.

c. Mandatory disclosures

The regulator must mandating disclosure of originations, annual percentage rate (APRs), default rates, and borrower satisfaction across

the MSME lending market. The regulator must also collect specific data from market players on their small business loan transactions through the proposed Public Credit Registry (PCR). The regulator must also ensure that metadata provides data on gender to enable gender-based disaggregation.

d. MSME lending innovation and box

The RBI has already announced a draft framework for a regulatory sandbox. It can be extended to bring in a focus on MSME lending to simplify the compliance process without compromising on the regulatory objectives. Sandbox participants should seek out innovative ways to execute the regulatory tasks, such as data collection, compliance and reporting, and disclosure that takes advantage of technology. They should also work to keep processes simple and leave room for continuous improvement and innovation in the way the regulations are implemented.

3. Expanding receivable finance through the TReDS “second window”

It is time to rapidly expand TReDS system to enable other forms of financing. One such proposal is to enable a “second window”. The second window eliminates the need for a buyer on the TReDS platform, thereby reducing the number of steps and lowering the operational costs. In the second window, the MSME sellers and the lenders on the TReDS platform will enter into an agreement to obtain cash-flow based lending for its invoices.

The authenticity of the invoice is determined by the lender from GST submissions for Input Tax Credit, and payments are enforced through a lien on the buyer’s bank account, hence this process solely needs the MSME seller and lenders involved in a transaction. The invoice needs a pay-by-date for this purpose. Various Open APIs released by the India Stack can be integrated into the TReDS platform to facilitate MSME onboarding, invoice verification via GST, MSME’s bank’s transactional cash flow data, GST data, credit history, repayments tied to electronic liens on cash inflows etc.

4. Digital public infrastructure plan

Reducing operations cost for processing the

loan application, disbursement, and chasing repayments require the creation of shared digital public infrastructure like India Stack. A lot of this infrastructure is in place. However, a concerted time-bound effort is required to bring forth the full power of this approach.

a. Deploy OCEN

Deployed in tandem with the Account Aggregators (AA) framework, the Open Credit Enablement Network (OCEN) can potentially deepen access to credit for credit-starved MSMEs. Developments in technology over the past decade has seen the emergence of marketplaces, platforms, and aggregators that represent new digital touchpoints for both consumers and businesses.

In theory, these should be empowered to play a role at different levels in the credit value chain—that is, customer acquisition, loan processing, and servicing. OCEN provides a protocol to integrate the tech players with lenders. The protocol provides a standardized set of APIs so that applications that already interface with individuals and MSMEs can effectively “plug-in” lending capabilities into their current product and service offerings.

On the OCEN-enabled marketplaces, the Loan Service Providers (LSPs) play a novel role as borrower-facing agents or intermediaries in this reimagined digital lending flow. They play the role of customer discovery and credit delivery. They also enable customers to utilize the data that is already being captured by these LSPs so that lending can become a cash-flow-based operation instead of being focused on the current balance sheet as is the case now.

OCEN will be a “win-win-win” proposition for LSPs, customers, and lenders alike. LSPs will benefit from greater customer retention due to their enhanced ability to provide what customers want (credit). Customers will benefit from easy and cheap access to credit. Lenders will benefit through market expansion and reduced costs of customer discovery. OCEN will unlock the same ease in credit that UPI unlocked for payments.

Account Aggregators (AA) function as enablers

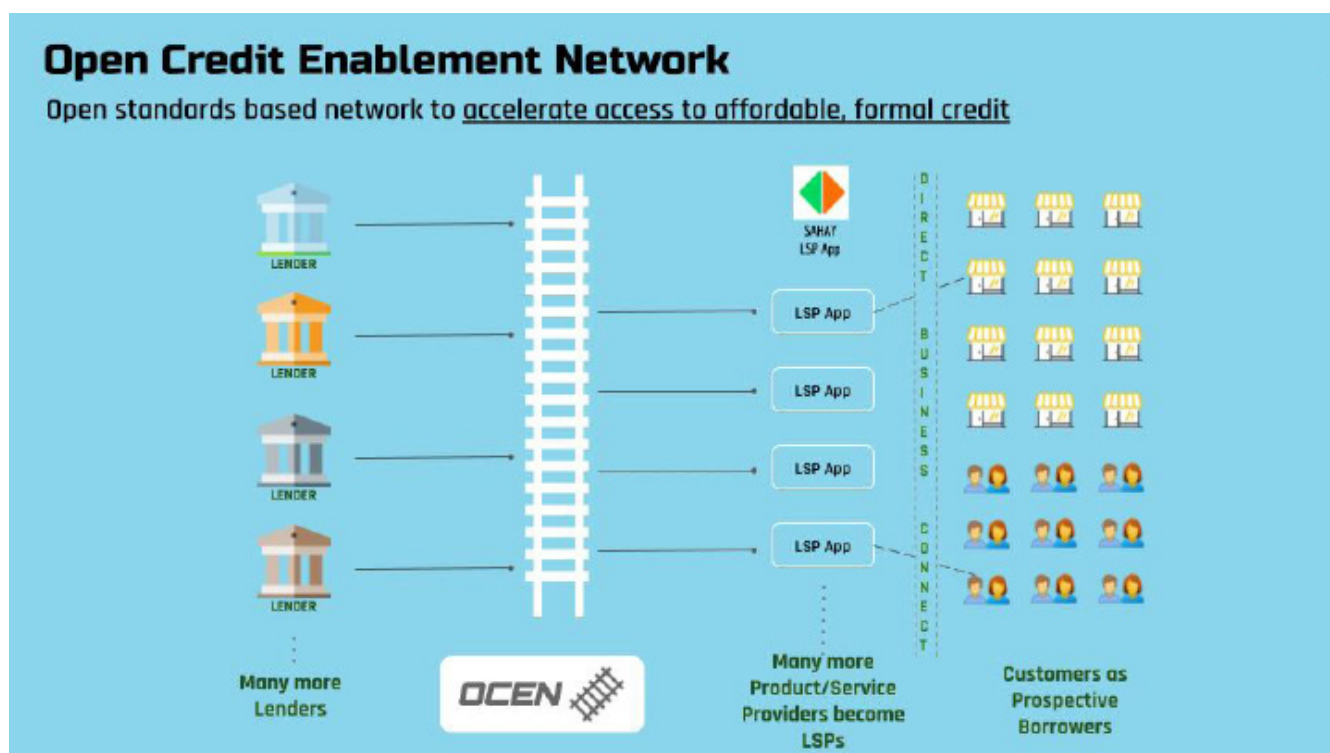
in this OCEN-powered credit landscape. LSPs must embed AA APIs into their flow so that lenders can digitally and securely request borrower data. Using their AA handles, borrowers can consent to share officially verified data with lenders that will be incorporated in the onboarding, underwriting, and monitoring process.

ensure the availability of credit to MSMEs. This is already discussed in the previous section.

e. Making GST invoices available to the lender

Making GST invoices available to the lender is essential for cash-flow lending to take off. For this, the GSTN system needs to be connected to the AA system. Dematerializing of the Proof of

Figure 9: Open Credit Enablement Network (OCEN)



Source: <https://sahamati.org.in/blog/ocen-account-aggregators-will-change-digital-lending-in-india/>

b. E-liens

Deployment of E-liens so that future incoming cash-flows can be locked down for better loan repayment rates.

c. Second TReDS window

Creating a second TReDS window for reverse factoring so that supplier financing can be provided easily. This is already discussed in the previous section.

d. UEI

Using the Udyam registration number as the unique enterprise ID on a mission-mode basis to

Delievry (PoD) is essential for inventory financing for MSMEs to grow.

f. Grandfathering SHG member history into the credit system

Upgrade Self-Help Group (SHG) access to credit by grandfathering SHG member history into the credit system and by the introduction of mobile or tablet-based book-keeping. NABARD's E-Shakti program is one such illustrative case²⁴. Such programs should be scaled up and public funding may be provided to support these initiatives.

²⁴Source: <https://eshakti.nabard.org/> accessed on 27th November, 2020



Annexes

Annex 1: Measures taken by the Government of India for MSMEs to counter the impact of COVID-19

Since the outbreak of the epidemic, the union government has undertaken several relief measures for the MSME sector²⁵. Some key measures that the government announced to tide over the constraints in liquidity and credit brought about by the pandemic are as follows:

1. The INR 3 lakh-crore Credit Guarantee Scheme under which MSMEs could borrow 20% of their total pending credit before the outbreak of the pandemic²⁶
2. INR 20,000 crore of subordinated debt for MSMEs that have been declared NPA or are stressed
3. An INR-10,000-crore corpus for Fund of funds (FoF) to infuse equity into MSMEs that are viable and have the potential to grow. It will also urge MSMEs to list on stock exchanges
4. Revision of the definition of MSMEs to include turnover as a criterion, thereby accommodating manufacturing and service units in the same metric
5. Fast-tracking the payment of dues held by the government and central public sector enterprises (CPSE) by mandating the release of payments within 45 days of supply
6. A moratorium period of six months for repayment of MSME loans and other forms of debts, together with a provision of “no change” in the credit rating during the said period.
7. Norms for declaring NPA period in banks be extended to 180 days for at least the next two years
8. Interest rate subvention @ 3% on MSME loans that are healthy and not NPAs.

²⁵Link: <https://msme.gov.in/sites/default/files/ActiononCOVID-19ReliefforMSMESector.pdf> dated 1st December, 2020

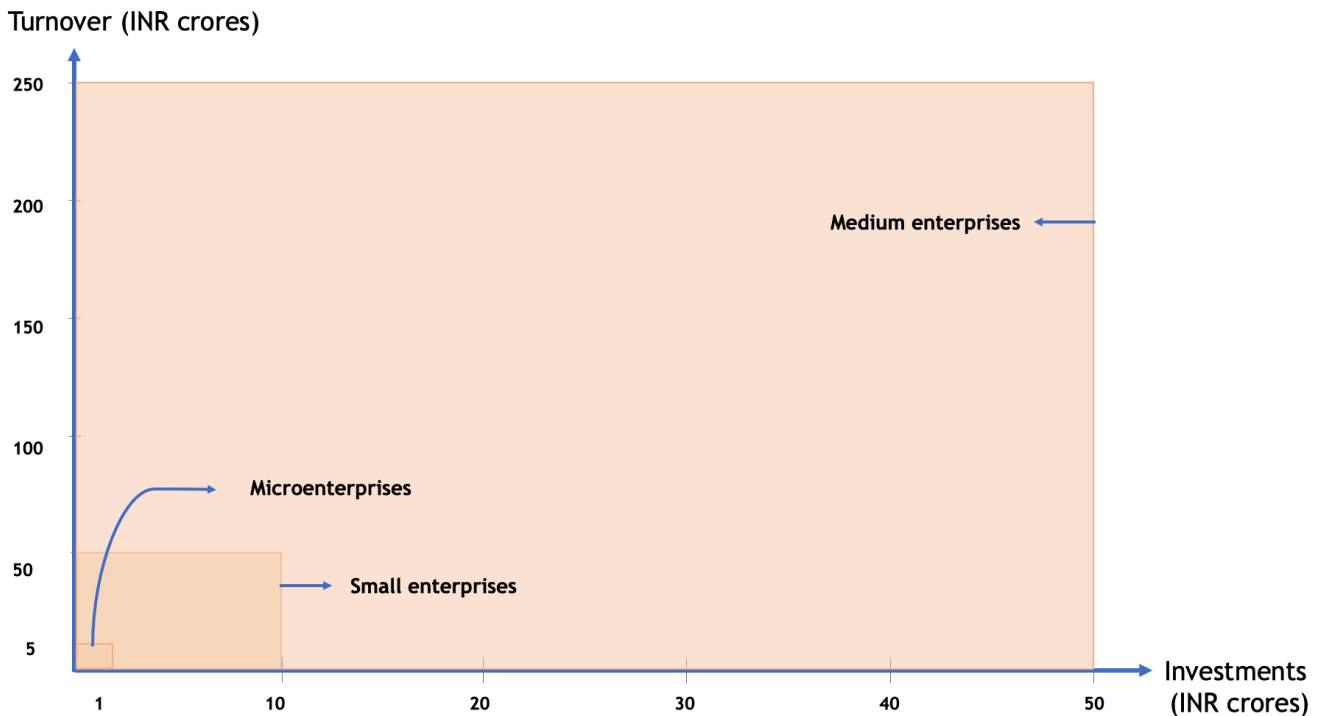
²⁶Units with up to INR 25 crore outstanding credit and INR 100 crore turnover are eligible to take these loans that will have four-year tenor with a moratorium of 12 months on principal payment. The limits were subsequently revised to < to be filled with date>²⁷Source: <https://m.rbi.org.in/Scripts/FAQView.aspx?id=132>; and <https://theprint.in/opinion/modi-govt-treds-platform-nbfc-msme-financing/487006/ on 25th August, 2020>

Annex 2: New classification of MSMEs

The graphic below depicts the new classification of MSMEs.

Category	Investment in plant and machinery or equipment (not to exceed these upper limits)	Turnover (not to exceed these upper limits)
Micro	<INR 1 Crore	<INR 5 Crore
Small	<INR 10 Crore	<INR 50 Crore
Medium	<INR 50 Crore	<INR 250 Crore

Figure 10: New classification of MSMEs



Source: MSC analysis

Annex 3: Measures taken by the government to counter COVID-19

The Atmanirbhar Bharat Initiative launched by the Government of India included a series of interventions to boost the resurgence in the MSME sector. The interventions included:

- Equity infusion to MSMEs via fund of funds
- Subordinate debt for stressed MSMEs

- MSME definition based on turnover and investment
- Provision to clear MSME dues within 45 days by the government and PSUs
- Providing guaranteed emergency credit line to MSMEs.

Among all the interventions, the MSME lending ecosystem utilized the Emergency Credit Line Guarantee Scheme (ECLGS) extensively. Key features of this initiative include:

- It provides a credit guarantee of up to -3 lakh crores or by 31st October, whichever is reached earlier on MSME lending.
- MSMEs with combined outstanding loans across all lenders of up to 50 crore as of

29th February, 2020 and an annual turnover of up to 250 crore for FY 2019-20 are eligible.

- Borrower accounts should be less than or equal to 60 days past due as of 29th February, 2020 to be eligible under the Scheme, that is, all borrowers who have not been classified as SMA 2 or NPA by any of the lenders as of 29th February, 2020 are eligible for the scheme.
- MSMEs are eligible for up to 20% of their total outstanding loans up to 50 crore as of

29th February, 2020, subject to the borrower meeting all the eligibility criteria.

Annex 4: About TReDS

TReDS²⁷ is an electronic platform that finances or discounts trade receivables of MSMEs through multiple financiers. On such a platform, MSMEs participate as sellers; corporates, government departments, and PSUs participate as buyers; while financial institutions permitted by the Reserve bank of India (RBI) participate as financiers. All these participants enter into an agreement with the TReDS platform. Presently, three TReDS platforms provide such discounting services.

The key benefit of using such a platform is that the seller does not have to wait for the buyer to make the payment—this is where the role of financiers comes in. Once the invoice is uploaded onto the platform by the seller, it is termed a “factoring unit.” After the buyer accepts this, an e-auction is conducted where multiple financiers bid for the factoring unit. The TReDS also allows reverse factoring, where the buyer creates the factoring unit.

After the seller finds a suitable bid, the financiers, which are financial intermediaries, such as banks and NBFCs, provide the seller with the agreed rate of financing or discounting. This financing is done without any collateral provided by the seller. The buyer repays the financier on the due date of the invoice. All these payments are auto-debited from the accounts of the participants, thus ensuring that transactions are completed in a fair, transparent, and efficient manner. If the buyer defaults on the repayment to the financier, the MSME seller is not obligated to pay the financier. All transactions processed under TReDS are “without recourse to MSMEs” and hence remain beneficial for them.

Annex 5: Implementing cluster based finance

To succeed, banks need to have the right cluster financing strategy that defines the process of

assessing the robustness of both the sector and the clusters within the chosen sector. Typically, a sector that has good sales growth in the past is expected to grow steadily in the next few years and has moderate to high financial strength is best suited for cluster financing. Once the sector is chosen, various clusters within it can be compared using a set of parameters, as illustrated in the table below.

Table 1: Parameters to assess the robustness of a cluster

	Parameters	Trend
Financial strength	Past three year's sales CAGR	Higher the better
	Operating margins	Higher the better
	Leverage levels	Lower the better
	Return on capital employed	Higher the better
	Future sales growth	Upward trend
Business potential	Demand-supply gap	Greater the demand exceeds supply, the better
	Count of SME units	Higher the better
	Share of SME units as a percentage of total units in a cluster	Higher the better
	Extent of competition	Lower the better
	Length of the operating cycle	Lower to moderate better

Typical sources of data to gather this information could be the reports from the rating agencies and other industry reports. Another way of gathering information is a primary survey of the cluster based on overall demand and growth of business. To maximize the bank's profitability in cluster-based financing and gain scale, it is

²⁷Source: <https://m.rbi.org.in/Scripts/FAQView.aspx?Id=132>; and <https://theprint.in/opinion/modi-govt-treds-platform-nbfc-msme-financing/487006/> on 25th August, 2020

critical to have a product that find traction among cluster players and a sustainable cost structure.

The final step is the credit assessment of an enterprise within the cluster. This shares several similarities with the credit assessment process of an SME elsewhere. There are some notable differences as well. For working capital loans, the cash flow method of assessment is adopted and linked to upstream customers and downstream suppliers. More than financials, sales or purchase ledger is used for financing transactions. This allows higher eligibility, short cycles, and reduced risk. There are many fintech that are working in the SME lending space. These systems are geared to collect data from various sources like e-commerce portals, apps and business itself. Banks and financial institutions can tie-up with these fintechs to ensure that sufficient data is available to put in place a credit assessment algorithm that relies on information beyond financial data.

Annex 6: About Aye Finance's cluster based approach to MSME finance

Aye Finance uses a proprietary cluster-based underwriting methodology. The credit assessment is called the Cluster-Based Credit Assessment, and the methodology is based on data points from industry-specific clusters collected from social, business, and demographic sources. It performs a preliminary market study to identify suitable business clusters and understand the dynamics of the cluster by interacting with buyers, suppliers and manufacturers. Once a cluster is selected, the company opens a branch and starts lending to that cluster. Aye has recognized that every industry has a unique need. Its industry Cluster Enterprise (ICE) methodology delivers deeper insights specific to the numerous industries that they service. For example, through its in-depth research on the shoe cluster of Agra, Aye was able to assess the creditworthiness of the micro and small shoe manufacturers operating in the cluster of the micro and small shoe manufacturers operating in the cluster.



Its methodology stands upon three robust pillars of innovation in Credit, Technology and Analytics as shown below.

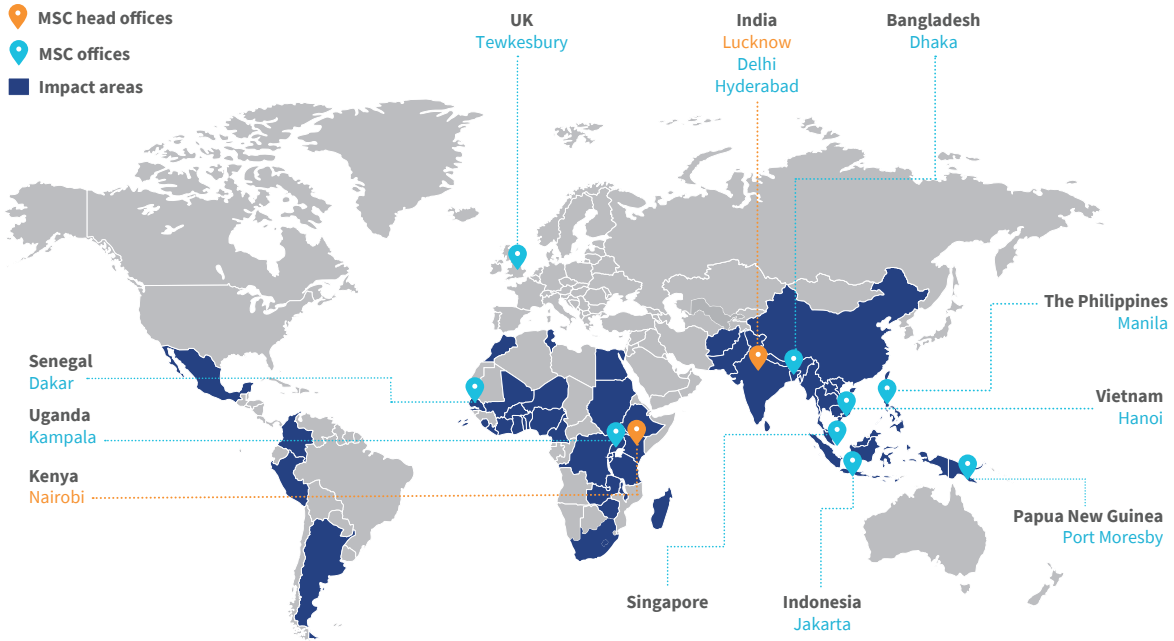
Credit	Technology	Analytics
<ul style="list-style-type: none"> • Estimate client's willingness & ability to repay. Measure client's traceability as well • De-layer the credit risks based on components of probability and impact of a default • Industry specific Input-Output parameters with specified tolerance levels • Products that secure loans through a variety of business collateral 	<ul style="list-style-type: none"> • Automation focus on low cost delivery and controls • Online integration with credit bureaus and business reference validations • Systems to measure and increase sales productivity • Systems with metrics to optimize TAT (Turn Around Time) 	<ul style="list-style-type: none"> • Analysis of credit habits and seasonal swings in business • Data analytics of financial, behavioral and psychometric parameters • Industry specific early warning triggers • Credit Scoring for new and repeat business customers

Source: <https://www.sramanamitra.com/2019/03/25/fintech-startup-aye-finance-focuses-on-msmes/>; and <https://ayefin.com/our-method/>



References

1. Financing India's MSMEs; IFC & Intellectap: <https://www.intellectap.com/wp-content/uploads/2019/04/Financing-Indias-MSMEs-Estimation-of-Debt-Requirement-of-MSMEs-in-India.pdf>. For updated figures, refer: <http://www.marketreportsonindia.com/marketreports/msme-financing-market-in-india-2020/2111397>
2. MSME Pulse October 2020: <https://www.sidbi.in/files/article/articlefiles/MSME-Pulse-Edition-10-Oct-2020.pdf>
3. Ministry of MSME Annual Report 2019-20: https://msme.gov.in/sites/default/files/FINAL_MSME_ENGLISH_AR_2019-20.pdf
4. NSSO 73rd Round report, June 2017
5. 6th Economic Census
6. Report of the Expert Committee on MSME set up by RBI (2019)
7. Another news link on MSME credit gap: <https://www.financialexpress.com/industry/msme-fin-indias-answer-to-its-problem-of-380-billion-msme-credit-gap-lies-in-these-type-of-lenders-to-step-up/1887426/>
8. Credit Disrupted- Digital Lending in MSME, BCG report (2018)
9. New Wave- Indian SME, a report by KPMG-CII (2015)
10. Thematic paper on Global value-chains for Indian SMEs, a report by MoMSE & CII (2018-19)
11. Economic Survey 2018-19, chapter 3; and Economic Survey 2019-20 (Volume II), pg-11, 64, 120, 229,
12. RBI Crisis of Sep 2018 & One-minute loan- <https://www.financialexpress.com/budget/economic-survey-2020-government-committed-to-supporting-msme-sector/1841437/>
13. RBI FAQ on MSMEs: <https://www.rbi.org.in/commonman/english/scripts/FAQs.aspx?Id=966>
14. Finance for MSMEs- Sources and Challenges (ADB, 2016): <https://www.adb.org/sites/default/files/publication/188868/adbi-wp581.pdf>
15. Impact of COVID-19 on MSMEs in India, MSC (June 2020): <https://www.microsave.net/wp-content/uploads/2020/06/Impact-of-COVID-19-pandemic-on-micro-small-and-medium-enterprises-MSMEs-India-report-1.pdf>
16. Annual Report MCA: http://www.mca.gov.in/Ministry/pdf/AnnualReport2019_20_17042020.pdf
17. PSL: <https://www.rbi.org.in/scripts/NotificationUser.aspx?Mode=0&Id=11959>
18. Dvara Blog: <https://www.dvara.com/blog/wp-content/uploads/2018/10/Assessment-of-PMMY-report.pdf>
19. Fintech Lending: Unlocking Tapped Potential; NASSCOM, 2019



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