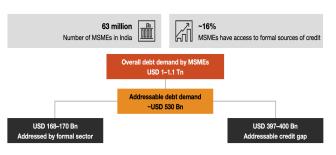
Bridging the MSME Financing Gap in India: The Role of the Unified Lending Interface (ULI)

Adhiraj Singh, Dhruv Achappa, Dhvani Agarwal, Medhavi Devraj, Siddharth Chandak *March 16, 2025*

Abstract: MSMEs in India face a \$530 billion credit gap, with formal banks covering only 17% of demand, forcing reliance on high-cost informal lending. Existing government schemes suffer from restrictive eligibility or indiscriminate lending, leading to inefficiencies and high NPAs. The Unified Lending Interface (ULI) has the potential to transform MSME financing by streamlining credit access through digital integration. However, it currently functions only as a data aggregator, lacking a standardized credit risk assessment framework. We propose the Unified Credit Risk Assessment Authority (UCRAA), which will develop a standardized risk assessment layer within ULI that lenders can customize, reducing inefficiencies in model development. Additionally, it will also incorporate flexible, cash-flow-based repayment structures that will improve loan sustainability and reduce defaults for banks.

The MSME Lending Gap

Micro, Small, and Medium Enterprises (MSMEs) are a critical pillar of the Indian economy, contributing 31% of the GDP, 45% of exports and employing 203.9 million people (Government of India: Ministry of Micro, Small and Medium Enterprises). Access to credit is essential to most MSMEs – it is used to meet working capital needs. expand the business, make investments in technology and weather the economic cycle. Without the right funding, many of these enterprises are unable to grow, create jobs, build supply chains, and otherwise contribute to industrial development and exports. Despite their pivotal role in economic activity, MSMEs are faced with the challenge of accessing formal credit facilities. At present, the sector has a \$530 billion funding gap, with the formal sector covering only ~32% of the addressable demand (PwC). Consequently, the remaining proportion of MSMEs depends on informal credit markets, which are characterized by high interest rates and stringent penalties for default.



Source: PwC

The constraints causing the current financing gap for MSMEs are multifaceted. The absence of collateral and verifiable financial records with many MSMEs is a key constraint that makes them high risk borrowers from the view of the formal financial systems.

Therefore, banks either charge high interest rates that are prohibitive or do not offer the loans at all. Moreover, from a cost-efficiency perspective, the processing of MSME loans is currently resource-intensive and, given the lower margins and relatively higher transaction costs, banks prefer to cater to corporate clients.

Thus the informal credit market has emerged as the main alternative for MSMEs, as it is more accessible, faster in disbursals and does not require extensive documentation. But this comes at a cost – the interest rates are relatively higher, thereby making the firms financially vulnerable with poor repayment terms. Furthermore, most MSMEs require working capital solutions that are in sync with their business cycles but conventional banking systems do not offer such tailor-made products making them more dependent on informal lenders.

Government Measures to Enhance MSMEs Credit Access

In light of these challenges, the Indian government has brought in many initiatives (PIB Delhi) to help MSMEs get credit and solve problems like the absence of collateral, payment delays, and limited financial records.

- I. Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE):

 Assists firms in acquiring guarantee-free loans up to ₹5 crore per borrower. So far, it has granted more than 7.8 million guarantees, covering more than ₹4.5 trillion in loans.
- II. Pradhan Mantri Mudra Yojana (PMMY):
 Launched in 2015, this scheme has issued
 ₹ 23.2 lakh crore in micro-loans under three segments Shishu, Kishore and Tarun to support small businesses.
- III. Emergency Credit Line Guarantee Scheme (ECLGS): This scheme which was introduced during the pandemic offered a guarantee for ₹3.6 trillion of loans to MSMEs to assist them during the crisis.
- IV. **Stand-Up India**: Targets at promoting entrepreneurship among women and socially disadvantaged groups.
- V. **SIDBI 59-Minute Loan Scheme**: Attempts to reduce time for loan disbursement with manual verification of documentation which leads to delays.
- VI. *Trade Receivables Discounting System* (*TReDS*): Facilitates on time payments to MSMEs by enabling invoice financing.
- VII. *Udyam Assist Platform (UAP):* Supports the informal micro-enterprises that are not registered under GST and brings them within the formal sector.
- VIII. **SAMADHAAN Portal**: Tracks outstanding payments owed to MSMEs, helping ensure they receive timely payments.

Limitations of Existing Schemes and the Need for ULI

Despite various government interventions, there still persist some structural inefficiencies in the inception and implementation of these schemes, primarily (A) restrictive or indiscriminate lending and (B) a fragmented, disjointed financing landscape.

A. Restrictive or Indiscriminate Lending

Government-backed MSME credit programs can currently be characterised into two extremes: either they impose stringent eligibility conditions, restricting access to credit, or they adopt broad-based lending with inadequate risk assessment, leading to inefficiencies and elevated default rates.

For example, the Credit Guarantee Fund Scheme for Micro and Small Enterprises (CGTMSE) which aims to facilitate collateral-free loans has been plagued by excessive bureaucratic hurdles and conservative risk assessments. Consequently, it has only benefited 12% of India's 63 million MSMEs (PIB Delhi). Conversely, the Pradhan Mantri Mudra Yojana (PMMY) has issued ₹23.2 trillion since its inception but has been criticized for having weak credit evaluation frameworks that lead to high non-performing assets (NPA). By 2022, Mudra-related NPAs reached ₹40,456 crore with stress levels as high as 16% in public sector banks, raising concerns regarding fund allocation efficiency (KPMG). The absence of a structured risk-based lending mechanism leads to either restricted credit supply to viable MSMEs or suboptimal fund deployment.

B. Fragmentation and Lack of an Overall Framework

Currently, there exists a multitude of schemes, each targeting different subsets of enterprises but lacking coordination. Schemes such as Stand-Up India target first-time entrepreneurs marginalized sections, CGTMSE is aimed at collateral-free lending and PMMY focuses on microfinance. Other initiatives like ECLGS provided temporary relief during the COVID-19 pandemic but are short-term interventions rather than structural solutions. With such an approach it becomes cumbersome for businesses to transition across different funding mechanisms as they grow. The lack of an integrated system to track financial histories across schemes also leads to duplication of efforts and inefficiencies in credit allocation

Given this, the recently piloted Unified Lending Interface (ULI) by the RBI offers the most comprehensive and scalable solution to MSME lending. Unlike other schemes, it has the potential to serve as a one-stop shop to streamline MSME lending. However, its successful implementation hinges on addressing key operational challenges and refining its framework— the central focus of this policy brief.

Before delving into these aspects, it is essential to first understand the core concept and functionalities of ULL.

What is ULI and How it Works

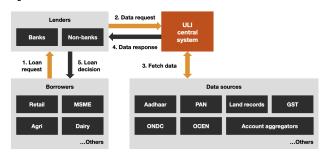
To understand ULI, it is essential to understand the India Stack. One can think of it as a set of building

blocks that power India's digital economy. These building blocks have successfully been integrated into a significant part of our economic function and include:

- I. $Aadhaar \rightarrow Digital identity for every Indian$
- II. e-KYC & e-Sign \rightarrow Paperless verification and authentication
- III. *UPI*→ Instant, seamless digital payments
- IV. *Account Aggregators*→ Secure data-sharing system for financial information

These tools cut through red tape, and make it easier for businesses to access financial services. UPI, for example, eliminated the need for traditional bank transfers, allowing anyone to send money instantly using just a phone number. ULI is set to do the same for lending.

Figure 4: ULI functional architecture



Source: PwC

ULI is a platform that connects borrowers, lenders (banks, NBFCs, fintech), and data providers (Account Aggregators, credit bureaus, e-KYC) in one single standardized interface. Rather than building and managing separate, complex systems for document verification, credit assessment, and loan processing, banks and lenders can seamlessly integrate with the Unified Lending Interface (ULI)—a pre-built, standardized framework that automates these tasks instantly.

In simple words, with the help of ULI, lenders can get instant access to a single digital platform that links them to the borrower's verified information like PAN, Aadhaar, bank statements, land records and credit history, from account aggregators, credit bureaus and government databases with user consent. This means that lenders can get all the financial and indentification details of the borrower in one go without having to ask for documents physically. This way, ULI cuts the time for approval processes as it eliminates the need for manual paperwork. Therefore, it makes the lending

process faster, more efficient and accessible. As such, it enables lenders to concentrate on providing better loan products while borrowers get a smoother, faster, and more transparent loan experience (Sanghi and Vir).

Integrating different data sources and standardized lending practices can serve to change the availability of credit for MSMEs, agricultural borrowers, and other previously non-targeted populations. However, since it is currently a data aggregation framework, it must develop more functionality to become a full-fledged solution for hassle-free lending. These gaps and the necessary improvements are outlined in the subsequent section.

Functional Gaps in ULI's Current Framework

ULI's potential as a one-stop lending platform is currently hindered by two critical gaps: (A) Limited usage of ULI as a data aggregation platform and (B) Persistent Repayment Challenges.

A. Limited usage of ULI as a data aggregation platform

Currently, ULI functions as an aggregator of information for lenders and not a processor of information. Lenders on the platform are expected to independently process this information by coming up with their in-house data processing models.



To understand the challenges associated with such a disaggregated set-up, it is essential to evaluate the current status of Private and Public Sector Banks (PSB) in the adoption of such in-house models as they currently form the majority share in lending to MSMEs:

Public Sector Banks: The Government in the Union Budget 2024-25 announced that each PSB will develop a new credit assessment model that leverages the digital footprints of MSMEs (PIB Delhi). This initiative is in line with the government's larger strategy to modernise PSBs, especially given their improved financial standing—with the lowest-ever gross non-performing assets (GNPAs) of 3.12% in September 2024 and record-high net profits in the past six years of ₹1.41 lakh crore (PIB Delhi).

However, PSBs have historically lagged in adopting technology-driven credit assessment, far from being the ones to create such systems. For instance, when credit scoring technology was introduced in India in 2007, new private banks rapidly integrated these tools for assessing both new and existing borrowers, but PSBs were reluctant to use credit scores even though they effectively predicted delinquency. Given PSBs' rather slow adoption of digital tools, there is a possibility that individually developed risk models will be sub-optimal, making the main goal of the mandate redundant — to effectively serve the MSME sector using alternate digital mechanisms.

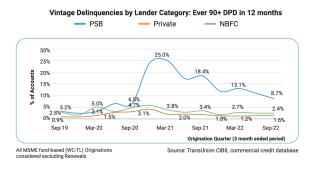
Private banks: They have been faster in implementing technology-driven loan approvals however this innovation has only benefited individual borrowers who have a stable financial history. Conversely, MSME lending by private banks is still based on traditional underwriting methods which rely on GST filings and other conventional financial data. This means that the key problem for MSME funding remains – credit assessibility.

Clearly, the current credit ecosystem has a major inefficiency – the fragmented approach taken by PSBs and private banks in developing digital risk assessment models. The independent creation of such models would result in duplication of efforts, higher costs, and inconsistencies in credit evaluations. This decentralized strategy means that each institution must spend resources to develop its data infrastructure, AI expertise, and risk modelling, despite their shared objective of enhancing MSME lending.

B. Persistent Repayment Challenges.

PSBs have several structural weaknesses that affect their ability to effectively lend to MSMEs. Unlike NBFCs and private banks which offer more

tailored financial products, PSBs offer rigid loan instruments. Additionally, the bureaucratic processing of PSBs slows down the loan approval and fund disbursement processes, which hinders timely access to such credit. Private banks and NBFCs are also more active in loan recovery processes – reducing the risk of defaults through structured repayment plans and close borrower engagement. (Government of India: Ministry of Micro, Small and Medium Enterprises).



Repayment issues remain a critical challenge, especially for PSBs, where 8.7% of MSME accounts have more than 90+ days past due for their EMIs, i.e, the standard to classify loans as NPAs, as compared to 2.4% for NBFCs and 1.6% for private banks (SIDBI). The reason for this difference could be attributed to the fact that PSBs have adopted relationship-based banking to a relatively limited extent, which allows private banks and NBFCs to reduce risks by offering financial counselling and better repayment terms. Without a shift toward data-driven risk assessment and personalized lending strategies, PSBs may continue to struggle with both loan recovery and expanding financial inclusion for MSMEs.

Policy Recommendations

In the previous section, we elaborated on why the disaggregated creation of in-house risk assessment models by banks may be inefficient. Building on this, we propose the establishment of the Unified Credit Risk Assessment Authority (UCRAA) – a dedicated body responsible for developing a baseline digital credit risk assessment model that will seamlessly integrate into the ULI.

The objective of UCRAA is to create a standardized credit evaluation framework that improves lending efficiency while allowing for customization by lenders. This model will adopt a two-pronged approach: (A) AI-Based Credit Risk Analysis, (B) Flexible and Data Smart Repayment Structures.

A. AI-Enabled Credit Risk Analysis

UCRAA will develop an adaptive, data-driven framework that lenders can use as a foundation for their digital risk assessment models. To improve credit evaluations, the model will integrate insights from key industry players across diverse MSME sectors, ensuring a sector-specific understanding of borrower risks.

To determine a borrower's creditworthiness, the model would analyze both financial and non-financial data, including UPI transactions, Accounting software records, Utility bill payments, E-commerce and POS sales data, Supplier invoices, and trade credit history.

This granular data approach would provide a more accurate assessment of cash flows, sales volume, scale of operations, and business viability. We realize that MSMEs are operational across diverse sectors with distinctly different financial structures and risk profiles. A standardized AI-driven model may not fully capture sector-specific risks, particularly in industries with cyclical income. Therefore, this model will be used only as a base-level framework that lenders can build on and tailor to their own needs, including regional economic indicators, industry-specific factors, and proprietary insights to create an accurate and context-specific credit assessment system.

B. Flexible, Data-Driven Repayment Mechanisms

In addition to the risk analysis, UCRAA will introduce flexible repayment schedules that are compatible with the cash flows of MSMEs. Instead of using rigid repayment schedules, it will track the fluctuations in the revenues and come up with recommendations for repayment plans that are consistent with the seasonal nature of business.

Research indicates that flexible conditions of loan repayment, including the grace period and adjustable installments, increase the effectiveness of loan use and decrease the probability of default (Ideas for India, 2019, Field et al.). By aligning repayment obligations with actual business earnings, this approach strengthens financial stability while fostering sustainable business growth.

Furthermore, UCRAA will employ a step-up loan product that allows MSMEs to access smaller

loans initially and get access to larger credit lines as they demonstrate reliable repayment behaviour. This ensures that businesses with limited or poor credit history are not excluded from formal lending facilities, while also minimizing the risks that are associated with extending credit to such entities.

Conclusion

ULI has the potential to revolutionize MSME financing by improving access to credit and reducing borrowing costs. However, its success depends on addressing challenges like standardized credit assessments and flexible repayment structures. Strengthening these aspects will enhance its effectiveness, fostering sustainable growth and financial inclusion for MSMEs.

Works Cited

- Choksi, Nirav. Credit for the Underserved:

 Addressing the Massive \$530 Billion

 MSME Credit Gap. Credable, 30 Jan.
 2024.
- Dimble, Vikas, and Mushfiq Mobarak. "Can the Microcredit Model Be Improved?" *Ideas for India*, 21 Aug. 2019
- Field, Erica, et al. Long Run-Effects of Repayment Flexibility in Microfinance: Evidence from India. International Growth Centre, June 2011.
- Government of India: Ministry of Micro, Small and Medium Enterprises. *Annual Report*. 2024.
- Habbel, V. et al. (2021), "Evaluating blended finance instruments and mechanisms: Approaches and methods", *OECD Development Co-operation Working Papers*, No. 101, OECD Publishing, Paris, https://doi.org/10.1787/f1574c10-en.
- John, Ritu. "How Is AI in Loan Management Transforming the Lending Industry?" *Docsumo.com*, 15 Nov. 2024, www.docsumo.com/blogs/workflow-automation/ai-in-lending.
- Kandpal, V. (2020). Non-performing assets in India: A critical analysis of public and private sector banks. Corporate Governance and Sustainability Review, 4(1), 65-73. http://doi.org/10.22495/cgsrv4i1p6
- KPMG. Impact Assessment of Pradhan Mantri Mudra Yojana (PMMY). Nov. 2023.
- PIB Delhi. *CGTMSE Impact on MSMEs*. 4 Dec. 2023, pib.gov.in/PressReleasePage.aspx?PRID=1 982308.
- PIB Delhi. GNPA of PSBs Declined from the Peak of 14.58% in Mar-18 to 3.12% in Sep-24.

 12 Dec. 2024,

 pib.gov.in/PressReleasePage.aspx?PRID=2
 083695.

- PIB Delhi. MSME Sector Sees MSME Sector Sees
 Continued Growth as NPAs Decline
 Sharply over the Past 5 Years. 11 Mar.
 2025,
 pib.gov.in/PressReleasePage.aspx?PRID=2
 110403.
- PIB Delhi. Overall Credit Disbursement to Priority Sectors Jumps 85% from ₹23 Lakh Crores in 2019 to ₹42.7 Lakh Crores in 2024. 11 Mar. 2025, pib.gov.in/PressReleasePage.aspx?PRID=2 110409.
- PIB Delhi. Union Finance Minister and MoS, Finance Launch the New Credit Assessment Model for MSMEs as Announced in Union Budget 2024-25. 6
 Mar. 2025, pib.gov.in/PressReleaseIframePage.aspx?P
 RID=2108812.
- PWC. Building Resilience Strategies for MSME Success in a Changing Landscape. 2024.
- Sanghi, Rahul, and Aaryaman Vir. "OCEN: A Conversation." Substack.com, Tigerfeathers, 19 Sept. 2020, tigerfeathers.substack.com/p/ocen-a-conversation?open=false#%C2%A7sweet-why-is-this-such-a-big-deal-though.
- Sidbi. MSME PULSE. 2024.
- Sidbi. *SIDBI: Annual Report 2024*. 2024, www.sidbi.in/annualreport/AnnualReport2 02324/index.php.
- World Bank Group, and SME Finance Forum.

 MSME Finance Gap: Assessment of the Shortfalls and Opportunities in Financing Micro, Small and Medium Enterprises in Emerging Markets.