

Rajeshwar Rao: Bridging the credit gap - the evolution of India's credit reporting infrastructure

Keynote address by Mr Rajeshwar Rao, Deputy Governor of the Reserve Bank of India, at the TransUnion CIBIL's Credit conference, Mumbai, 1 July 2025.

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Ladies and gentlemen, Good Afternoon.

At the outset, let me thank the organisers for inviting me to deliver the keynote address at this milestone event and congratulate Trans Union CIBIL (TU CIBIL) on its 25th anniversary. Credit reporting and TU CIBIL have grown together in India and the company has made a significant contribution in expanding the footprint of credit reporting in the country. Credit reporting systems today operate as a key element in the national financial architecture, encouraging greater credit access, supporting financial inclusion, enabling effective supervision, and enhancing financial stability. This silver jubilee therefore also represents a significant milestone in TU CIBIL's ongoing contribution to strengthening this framework. This also gives us an occasion to reflect on how the information gap between the credit institutions and the borrowers has been addressed over time and the possible way ahead.

Evolution of Credit Information Companies in India

To set a context to the theme of this speech, it may be worthwhile to reflect briefly on the evolution of credit information companies in India. The Reserve Bank had recognised the need for establishing a Credit Information Bureau for collection of credit information from lending institutions and for the provision of such information to the financial system and had set up a Working Group in 1999 for the purpose. Credit Information Bureau (India) Ltd. (CIBIL) was thereafter incorporated in 2000, and over the years, three other Credit Information Companies (CICs) have also started their operations in India.

A variety of challenges had hindered wider acceptance of credit information companies over the years. The key obstacles included inconsistent quality in data submitted by lenders and shortcomings in consumer protection mechanisms. Therefore, a committee was set up in 2013, to examine the issues hampering the sector and based on its recommendations, significant policy changes were made in 2014¹. These included standardisation of data formats for individual, corporate and micro finance borrower segments, institutionalizing the mechanism of Technical Working Group comprising of representatives from various regulated entities and introduction of Data Quality Index for improving data quality.

In the recent past, our focus has been on taking regulatory measures to improve quality of data and ensure faster redressal of customer grievances. Several policy measures have been taken to reduce information asymmetry, enhance data quality and improve customer satisfaction. Just to illustrate, these steps included mandating availability of free full credit report (FFCR) to individuals, appointment of internal ombudsman by CICs, extending the Reserve Bank's Integrated Ombudsman Scheme to CICs,

introduction of a framework for granting compensation to customers for delayed rectification of their credit information and increasing frequency of credit reporting. RBI directions have also mandated the CICs to display the list of suit-filed accounts of large defaulters and wilful defaulters on their website.

The role of data and emerging technology in enabling credit access is therefore extremely topical and relevant at this juncture. But if we were to go back in time, 25 years back, lack of information and high cost of access to information hindered access to credit to large segment of the populace, the financially excluded. It was in this scenario that credit reporting started to take root in the country, and we have traversed a long road since then. Apart from greater access to secured lending, the creditors gain confidence to underwrite unsecured loans, facilitated by access to credit information provided by the CICs as this reduces the information gap that existed earlier between even the prime borrowers and the lenders.

While CICs have undoubtedly played an important role in reducing the information asymmetry thereby facilitating better credit decisions, they are not going to be the only game in town to source the required data, as information asymmetries are also sought to be addressed through other complementary mechanisms. This trend is driven by the digitalization of financial services and electronification of records which has created a large repository of data which can be used to get better handle on economic trends, both micro and macro. This coupled with the growth of FinTechs and innovations in financial services, has created business opportunities to harness alternate data sets in order to gain a better understanding of financial behaviour and credit worthiness of individuals and entities. These insights can give a richer perspective than conventional analysis and provide an impetus to the measures taken to foster greater financial inclusion. Let me highlight a few of these developments, technology led, and regulator supported.

CERSAI and CRILC

In 2011, the Central Registry of Securitisation Asset Reconstruction and Security Interest of India (CERSAI) was incorporated, initially for operating a registration process under the provisions of SARFAESI Act. Over the years, it has developed into a complete registry containing security interest of immovable, movable, intangible properties and assignment of receivables. By providing access to all kinds of creditors and the facility for filing of attachment orders and court orders, CERSAI delivers a comprehensive status of any encumbered / attached property.² The Central Repository of Information on Large Credits (CRILC), was set up in 2013 by the Reserve Bank to collect, store and disseminate information on large credits of scheduled commercial banks, all India financial institutions and certain non-banking financial companies. These initiatives have undoubtedly helped banks and other financial institutions in improving their credit administration besides providing vital inputs for supervisory risk assessment on build-up of credit risk in the financial system.

Digital Public Infrastructure (DPI)

At the heart of the FinTech revolution in India is India's Digital Public Infrastructure (DPI) - a framework that integrates technology, markets, and governance to serve public interest. The DPI includes Unified Payments Interface (UPI) which is the flagship

instant mobile digital payments system, interoperable across any bank account or app, Aadhaar Digital ID for over a billion adults, Aadhaar Payment Bridge which facilitates cash transfers directly to beneficiaries' bank accounts, Aadhaar Enabled Payments System (AEPS) which is an interoperable network of biometric based cash withdrawal & deposits, DigiLocker which is an e-Locker for storing verifiable credentials, Bharat Bill Payments System, now called Bharat Connect for bill fetch & pay, and FastTag - a near field communication based toll charges and parking collections platform. This is supplemented by the Account Aggregator Framework, another cog in the DPI, which is a cross-sectoral framework for consented financial data sharing. Apart from facilitating credit delivery, this is an initiative towards open finance. It has now come a long way and is growing rapidly with onboarding of financial institutions, since guidelines were first issued in 2016. The inclusion of Goods and Services Tax Network (GSTN) as a financial information provider under the account aggregator framework is expected to give further impetus to cashflow based lending to MSMEs.

Unified Lending Interface (ULI)

The latest addition in the Digital Public Infrastructure for credit is the Unified Lending Interface (ULI), designed to simplify and democratize credit access by offering lenders regulated, seamless access to verified borrower data. The convergence of Jan Dhan Accounts, Aadhaar and Mobile Phones, popularly known as the JAM trinity, UPI and ULI, represents a significant advancement in India's digital lending infrastructure. One of ULI's standout features is its ability to tap into alternative digital data, enabling access to credit even for those without formal financial histories. Its integration with NABARD's e-KCC portal is expected to extend access to customers of District Central Co-operative and Regional Rural Banks, previously excluded from formal digital channels. Integration of state-level digitized data, such as land records and cooperative databases into the ULI framework, would provide novel cash flow-based lending solutions. Going forward, the potential for ULI to also harness data from e-commerce platforms and gig economy apps could open new doors for credit inclusion for small sellers, delivery workers, and freelancers.

Improved access to credit

When we evaluate the outcomes of these measures, we can see the significant changes and benefits. Over the years, India's household debt as a percentage of GDP has increased and stands at ~43 percent in 2024. This rising trend is fuelled more by an expansion in the number of borrowers rather than just through an increase in average indebtedness³. Despite some moderation observed recently, the growth in deployment of bank credit under 'retail/personal loan' category witnessed a CAGR of approximately 17 percentage over the past five years.⁴ Moreover, the composite Financial Inclusion (FI) - Index to measure and evaluate the extent of financial inclusion too has improved substantially from 49.9 in 2019 to 64.2 in 2024 indicating progress in deepening of financial inclusion in the country⁵. This reflects two important facets of credit that need to be borne in mind. First, the availability of credit to individual borrowers has improved and second the improvement in the FI- Index reflects reduced frictions in credit delivery with consequential improvement in financial access.

Digital initiatives for MSME sector

A targeted beneficiary of increased use of data and technology in credit decisions should be the MSME sector, which remains the backbone of India's economy. With over 7.34 crore enterprises, contributing nearly one-third of our GDP and 46% of exports, this sector is key to our economic future⁶. Increasing the availability of credit to the MSMEs has been a policy priority of the Reserve Bank and the Government of India. However, MSMEs have faced several challenges in accessing formal credit such as information asymmetry, excess documentation and lack of transparency. Here the role of CICs has become important. When commercial credit reporting is efficient, creditors need to rely less on relationship lending and soft information, and more on facts and fact-based analyses based on credit reports and other credit reporting products.

Rise of FinTech Ecosystem

It needs to be recognised that of late FinTech players have emerged as powerful enablers, transforming how credit reaches previously unserved and underserved populations. By leveraging the power of technology, they have significantly lowered the cost and complexity of delivering financial services to the last mile. This has not only improved user experience but also addressed persistent challenges that had kept many outside the formal credit fold. Importantly, we are seeing a growing collaboration between FinTechs and traditional financial institutions. This partnership is particularly impactful in credit origination and supply chain finance, where it bridges gaps created by physical infrastructure and human resource constraints in remote and rural areas. For example, in FY 2024, FinTechs have processed approximately 47% of small ticket personal loans of less than 1 lakh, by count.⁷

Open Credit Enablement Network and Open Network for Digital Commerce

The Open Credit Enablement Network (OCEN) that facilitates interactions among lenders, borrowers, and loan service providers, effectively uniting all participants within the credit ecosystem on a common platform to streamline credit delivery, is also poised to be a significant part of the fintech landscape. It is expected to enable lenders to make more informed credit decisions by utilizing alternative data sources, such as cash flow information. Going forward, there is a promising scope for deeper integration between OCEN and the Open Network for Digital Commerce (ONDC). Such interoperability could democratise credit access further and open new avenues for MSMEs to participate in digital commerce, fostering broader economic growth on multiple fronts.⁸

Central Bank Digital Currency (CBDC) for credit disbursement

The proposed use of programmable CBDC for credit disbursement is another pioneering initiative. One commercial bank's pilot for tenant farmer lending under Kisan Credit Cards, where programmable CBDC ensures end-use monitoring, looks promising. Even without land records, tenant farmers are being extended formal credit, based on livelihood activity tracking. If successful, this model could be replicated for collateral-free loans to micro-enterprises, street vendors, and artisans, where end-use assurance allows for responsible, productive lending. The digital nature of such

disbursements also creates valuable digital footprints, which can enable further lending and reduce dependence on government schemes.

Leveraging Tokenisation for Credit Delivery

Tokenisation i.e. generating and recording a digital representation of financial or real assets on a programmable platform could be an option that can offer enhanced efficiency, transparency and accessibility, and may be seen as the next step following dematerialisation and digitalisation. It could favour small and medium enterprises' (SMEs') access to credit by narrowing the information gap. Further, SMEs could improve their collateral offering by tokenising real assets or trade receivables, thus improving their standing in the credit markets⁹. Tokenisation may also enable simultaneous asset transfer and payment in a financial transaction, minimizing counterparty risk and thereby considerably reducing the need for collateral.

Role of AI/ ML in facilitating credit delivery

One of the main challenges in the provision of credit facility, especially among underprivileged populations, is the absence of credit history. By using artificial intelligence (AI) and machine learning (ML), algorithms can evaluate alternative data from diverse sources to determine creditworthiness more accurately. In fact, it seems that time is not far when alternative data will no longer be alternate, but it will be the mainstream. This advancement would allow lenders to extend credit to individuals who were once deemed ineligible. Use of AI/ML could simplify the disbursement process by automating credit assessments and risk evaluations, which not only accelerates fund distribution but also cuts administrative costs, making it practical to offer small loans even in remote regions. Moreover, AI models excel at uncovering previously hidden insights in data, enabling financial institutions to more precisely forecast their clients' funding requirements and creditworthiness. They also streamline compliance workflows, such as Know Your Customer (KYC) procedures, which significantly cuts operational costs and increases their speed of lending. Microfinance and microloans which serve as crucial support systems for underserved communities are likely to be the biggest beneficiary of this advancement.

Grameen Credit Score

Another initiative that is on the anvil is the Grameen Credit Score. This score will be in addition to the existing credit score and will be specifically designed to enhance financial inclusion in rural areas, particularly for members of self-help groups (SHGs). It aims to address the limitations of existing generic credit scoring systems by creating a tailored framework for assessing the creditworthiness of rural borrowers. This measure can improve access to formal credit for rural populations, including farmers and marginalized communities.

Role played by the Reserve Bank

In this dynamically evolving scenario, the Reserve Bank has been endeavouring to create an enabling regulatory environment for fostering innovation and ensuring financial system integrity. With a view to put in place a regulatory framework for

FinTechs that maintains a balance between maximising their creative potential while minimising the idiosyncratic risks they pose to the financial system; the Reserve Bank issued a Framework for Self-Regulatory Organisation(s) in the FinTech Sector in 2024. The Reserve Bank Innovation hub, a wholly owned subsidiary of RBI, commenced an initiative to foster a vibrant infrastructure for facilitating the progress of FinTechs in the country. The initiative - Fintech and Startup Acceleration (FAST) - aims to connect the stakeholders, viz., the startups, incubators, accelerators, investors, regulators and banks and financial institutions to accelerate innovation and financial inclusion. Through the HaRBInger initiative, Reserve Bank is encouraging the global innovation community to solve real-world problems with a special focus on inclusive design and accessibility for differently abled persons in the digital finance journey. To foster continuous innovation, we have made the Regulatory Sandbox 'on tap' and 'theme-neutral'.

Even as we embrace these sweeping changes, we must remain cognizant of the need for addressing issues around data accuracy, data security, and model risk. These could present significant challenges in the effective deployment of data-driven systems. Inaccurate or incomplete data can undermine the reliability of analytical outputs and decision-making processes, while poor data security can expose organizations to breaches, resulting in legal liabilities and reputational damage. Additionally, the use of complex AI and machine learning models introduces concerns around model risk, especially when these models are not thoroughly tested, validated, or monitored for biases and performance drifts. Rigorous validation protocols, continuous monitoring, and robust governance frameworks are essential to ensure that these models remain fair, transparent, and aligned with regulatory and ethical standards. While we should be willing to embrace new technologies and modern regulatory approaches, the core values - integrity, transparency, and commitment to public service - should drive our innovation and initiatives towards financial inclusion. Innovation needs to be responsible and accountable. It should not be at the cost of an individual's rights regarding the use of their personal data.

Looking ahead

The path ahead is filled with opportunity and responsibility. For the CICs let me outline two critical enablers i.e. (i) Enhancing Data Freshness and (ii) Improving Data Quality. Currently, credit data is refreshed on a fortnightly basis. We must aspire to more frequent updates. Real-time or near-real-time credit reporting will improve underwriting precision, enable timely reflection of borrower actions like loan closures or repayments and deliver a superior consumer experience. This shift requires investments in technology, process reengineering, and change management. But the rewards - transparency, efficiency, and trust, far outweigh the costs. Similarly, data quality is the bedrock of responsible lending and Reserve Bank has always emphasised the importance of accuracy in regulatory submissions. It has been prescribed that CICs shall provide a data quality index score to the Credit Institutions (CIs) on a monthly basis to facilitate improvement in the quality of data submitted by CIs. Another key challenge is identity standardization. CICs rely on credit institutions to provide accurate and validated IDs. Without this, duplication and misreporting remain risks. We must move towards a unique borrower identifier, which is secure, verifiable, and consistent across the system.

We stand on the cusp of a transformative financial era where technology, policy, and innovation converge to democratise credit access. Various initiatives, collaborative partnerships and sustained regulatory support are laying the foundation for a more inclusive, resilient, and sustainable economy. But at the heart of a sustainable credit landscape lies an empowered consumer which is enabled when we have a financially aware and literate customer. While regulations mandate transparency and awareness, the responsibility needs to be fulfilled by all of us. Financial literacy cannot be achieved through a one-time campaign; it has to be a sustained commitment for all the institutions and entities involved. While the institutions in the financial system have done commendable work, the journey is far from complete. The setting up of Credit Information Companies was in one sense the starting point of this journey of financial inclusion and democratisation of credit. Even as the journey continues, the role of the CICs remains integral and important in realizing the vision of Total Financial Inclusion.

Thank You.

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¹ Report of the Committee to Recommend Data Format for Furnishing of Credit Information to Credit Information Companies 2014, under the chairmanship of Shri Aditya Puri

² <https://www.cersai.org.in/CERSAI/aboutus.prg>

³ [Financial Stability Report, December 2024 – Reserve Bank of India](#)

⁴ Deployment of Bank Credit by Major Sectors – Database on Indian Economy; personal loans include consumer durables loan, housing loan, advances against FDs /shares/bonds/, credit card, education loan, vehicle loan, loans against gold and other personal loans.

⁵ [Annual Report 2025 – Reserve Bank of India](#)

⁶ Understanding Indian MSME Sector – Progress and Challenges, May 2025 – Small Industries Development Bank of India (SIDBI)

⁷ Small is BIG - How Fintechs are Revolutionising Lending, 2024 – Experian

⁸ https://www.dbs.com/india/newsroom_media/how-ocen-can-revolutionise-in-indias-msme-lending-ecosystem.page

⁹ Leveraging tokenisation for payments and financial transactions, April 2025 - Consultative Group on Innovation and the Digital Economy, Bank for International Settlements