

Macroprudential policies have assiduously nurtured the health parameters of the Indian banking system and non-banking financial companies (NBFCs) in an environment of balancing innovations with safeguards to secure and preserve overall financial stability. This has enabled financial entities to sustain credit growth and support domestic economic activity.

1. Introduction

I.1 Following the synchronised global monetary tightening undertaken during 2022-23, inflation has been easing, while economic activity is on course for a soft landing. This had prompted major central banks to start cutting policy rates in 2024. The last mile of disinflation, *i.e.*, alignment with targets, is, however, turning out to be challenging and accompanied by bouts of volatility in global financial markets. Looking ahead, geopolitical conflicts, geoeconomic fragmentation, commodity price volatility, climate change, ageing populations and weakening productivity weigh on the global economic outlook.

I.2 After the banking sector turmoil in certain advanced economies (AEs) in 2023 was quelled by prompt policy actions that forestalled a systemic crisis and potential spillovers, the global banking sector shows signs of resilience, with strong capital buffers, improved profitability, rising non-interest income and comfortable asset quality. However, the number of vulnerable banks with weak risk indicators is rising, particularly in Asia¹.

I.3 In India, strong macroeconomic fundamentals have boosted the performance

and soundness of the Indian banking and non-banking financial sectors. Banks' profitability improved for the sixth consecutive year in 2023-24, while their gross non-performing assets (GNPA) ratio reached its lowest level in 13 years at 2.7 per cent at end-March 2024². Banks' capital position remained satisfactory, as reflected in key parameters like leverage ratio and capital to risk weighted assets ratio (CRAR). Strong credit expansion by NBFCs was accompanied by further strengthening of their balance sheets, improvement in credit quality and profitability, and satisfactory capital buffers.

I.4 Against this backdrop, this chapter provides an overall perspective of the opportunities and challenges faced by the domestic banking sector and NBFCs. The chapter presents an outlook for regulatory and supervisory changes in Section 2. Developments in payment and settlement systems are covered in Section 3. Opportunities and risks associated with adoption of emerging technologies are discussed in Section 4. Issues relating to financial inclusion, consumer protection and climate change are covered in sections 5 to 7, respectively. The chapter concludes with an overall assessment in Section 8.

¹ International Monetary Fund (2024). *Global Financial Stability Report*, October.

² Data pertain to global operations of scheduled commercial banks.

2. Regulation and Supervision

I.5 Building on the Reserve Bank's recent regulatory measures, a consultative process in formulation of regulations is being fostered through the 'Connect 2 Regulate' programme. A dedicated section on the Reserve Bank's website will be made available to stakeholders to share their inputs on topics announced by the Reserve Bank from time to time³.

I.6 Under the process of supervision of banks, NBFCs and other financial entities, the focus is now on early detection and pre-emptive correction. The enhanced off-site assessment framework is more analytical and forward-looking with introduction of macro-stress tests, early warning indicators (EWIs), fraud vulnerability index (FVI), micro-data analysis (MDA), and use of artificial intelligence (AI) and machine learning (ML) techniques.

I.7 The Reserve Bank's frequent and wide interactions with supervised entities (SEs), including with managing directors (MDs) and chief executive officers (CEOs) as well as board directors, will be carried forward. Engagement with SEs is also being strengthened through DAKSH portal – a SupTech initiative with end-to-end workflow solution to streamline and strengthen various supervisory processes. Additionally, direct interactions with statutory auditors have further strengthened the oversight framework. This consultative approach is also being followed in revision of various regulatory guidelines including Basel III standards. The Reserve Bank is also working on issuing final guidelines on disclosure framework for climate-related financial risks.

Unsecured Lending

I.8 In response to the Reserve Bank's November 2023 macroprudential measures to contain potentially excessive risk build-up from high credit growth in unsecured retail segments, there has been some moderation in credit growth, but delinquency levels and leverage warrant enhanced vigil. While specific limits have been prescribed for unsecured lending by urban co-operative banks (UCBs), boards of SCBs and NBFCs have discretion in fixing limits on unsecured exposures. However, some entities have fixed very high ceilings, which need to be continuously monitored. Going forward, the Reserve Bank expects the boards of REs to show prudence and avoid exuberance in the interest of their own financial health as also systemic financial stability⁴.

Gold Loans

I.9 In view of several irregularities observed in grant of loans against gold ornaments and jewellery, including top-up loans, the Reserve Bank advised SEs to comprehensively review their policies, processes and practices on gold loans to identify gaps and initiate appropriate remedial measures in a time-bound manner. SEs were advised to closely monitor their gold loan portfolios and ensure adequate controls over outsourced activities and third-party service providers.

Top-up Loans

I.10 While top-up loans provide additional credit facilities to customers on the strength of their existing collateral such as houses,

³ Reserve Bank of India (2024). Statement on Developmental and Regulatory Policies, December 6.

⁴ Current Issues in the Indian Banking and Financial Sector, inaugural address by Shri Shaktikanta Das, July 19, 2024 at the Financial Express Modern BFSI Summit, Mumbai.

automobiles or gold, many REs may perceive such secured loans as having lower risk. Hence, such additional facilities are often sanctioned with minimal processes and due diligence, with liberal underwriting standards and lax adherence to prudential guidelines on loan-to-value (LTV) ratios, risk weights, and without ensuring the end-use of funds. These practices could lead to build-up of risks, especially during times when collaterals for such loans become volatile or face cyclical downturns. In view of these concerns, the Reserve Bank in November 2023 had instructed that all top-up loans extended by REs against movable assets, which are inherently depreciating in nature, should be treated as unsecured loans for credit appraisal, prudential limits and exposure purposes. The Reserve Bank will assess the need, if any, for additional regulatory interventions to mitigate the identified risks in cases of other top-up loans.

Foreclosure Charges/ Pre-payment Penalties on Loans

I.11 Banks and NBFCs are presently not permitted to levy foreclosure charges/ pre-payment penalties on any floating rate term loan sanctioned for purposes other than business, to individual borrowers with or without co-obligant(s). To safeguard customers' interest through better transparency, broadening the scope of such regulations to cover loans to micro and small enterprises (MSEs) is being considered.

Private Credit Markets

I.12 The shift in lending intermediation from banks to private entities is gaining traction globally. Traditionally, private credit firms raise

resources from high-risk appetite investors to finance mid-sized companies — a segment which often faces challenges in getting finance from banks and public debt markets. Recent trends, however, indicate that the reach of private credit is expanding beyond mid-sized corporate borrowers, intensifying competition with banks in the syndicated loan markets⁵. In India, the size of such private credit firms and the resources raised by them is not very large. A closer look is, however, warranted at the inter-linkages between REs, including banks and NBFCs, with such firms. Strong interrelationship between them could give rise to systemic concerns along with the possibility of regulatory arbitrage to circumvent regulations.

Know Your Customer (KYC)

I.13 The amendments to KYC master directions, issued on November 6, 2024, now mandate REs to seek from the customer or retrieve from Central KYC Registry (CKYCR), the customer's KYC identifier for the purpose of verification of identity of the customer and for ongoing due diligence. It also mandates the use of CKYCR for the purpose of re-KYC or periodic updation of KYC details by REs. The amendment further mandates a time limit of seven days or as notified by the central government for REs to update customer records in CKYCR. REs are also required to retrieve the updated information from CKYCR and maintain the updated record.

I.14 However, certain gaps in implementation of these directions by REs are resulting in several accounts getting frozen, denying customers access to their funds. Other related issues include lack of a proactive approach in assisting and obtaining customers' documents; inadequate

⁵ International Monetary Fund (2024). *Global Financial Stability Report*, The Last Mile: Financial Vulnerabilities and Risks, April.

staff deployment in such critical functions resulting in overcrowding or denial of service at branches; directing the customers to their home branch for KYC updation rather than facilitating the same at branch of customers' convenience; and failure to update the details in the system even after the customers have provided the required documents. There are also instances of accounts meant to receive direct benefit transfers (DBT) from the government being made inoperative or frozen, contrary to regulatory guidelines. In such matters, it is essential for the banks' boards to establish policies and direct banks to adopt standard operating procedures that are not only compliant with regulatory guidelines but also practical for effective implementation. Banks should ensure that KYC guidelines are followed with both precision and empathy⁶.

Higher Employee Attrition

I.15 Employee attrition rates are high across select private sector banks (PVBs) and small finance banks (SFBs). The total number of employees of PVBs surpassed that of public sector banks (PSBs) during 2023-24, but their attrition has increased sharply over the last three years, with average attrition rate of around 25 per cent. High attrition and employee turnover rate pose significant operational risks, including disruption in customer services, besides leading to loss of institutional knowledge and increased recruitment costs. In various interactions with banks, the Reserve Bank has stressed that reducing attrition is not just a human resource function but a strategic imperative. Banks need to implement strategies like improved onboarding processes, providing extensive

training and career development opportunities, mentorship programmes, competitive benefits, and a supportive workplace culture to build long-term employee engagement.

3. Payment and Settlement Systems

Payment Aggregators (PAs)

I.16 The Payments Vision 2025 emphasised the need to bring all significant payment intermediaries under direct regulation of the Reserve Bank. In line with the vision, guidelines for regulation of online PAs are proposed to be applied to PA-Point of Sale as well. This measure would bring in synergy in regulation and convergence of standards.

Beneficiary Name Look-up Facility

I.17 The facility for the remitter to verify the name of the receiver before initiating a transaction in payment systems like Unified Payments Interface (UPI) and Immediate Payment Service (IMPS) is being extended to cover the Real Time Gross Settlement (RTGS) and National Electronic Funds Transfer (NEFT) systems. This facility will help reduce the possibility of wrong credits and frauds.

Cheque Truncation System (CTS)

I.18 The current batch processing approach of cheque processing results in a clearing cycle of up to two working days. To improve efficiency and reduce settlement risk for participants, a proposal to transition CTS to 'on realisation settlement' is being considered. Under the new approach, cheques will be scanned, presented, and passed on a continuous basis during business hours and the clearing cycle will be reduced to a few hours.

⁶ The Board's Role in Navigating Transformation, Special Address by Shri Swaminathan J., November 18, 2024, at the Conference of Directors of Private Sector Banks in Mumbai.

Internationalisation of Payment Systems

I.19 The Reserve Bank has taken several steps to promote and enhance acceptance of Indian payment instruments globally through initiatives like interlinking the UPI with fast payment systems of other countries and promoting acceptance of RuPay cards globally. Such arrangements have already been operationalised in Singapore, UAE, Nepal, Mauritius, Bhutan, France, Sri Lanka and the Maldives. The deployment of UPI-like payment system is underway in Peru and Namibia. In June 2024, the Reserve Bank joined Project Nexus, a multilateral international initiative to enable instant cross-border retail payments by interlinking domestic fast payment systems of five countries *viz.* Malaysia, the Philippines, Singapore, Thailand and India, who would be the founding members of this platform.

4. Adoption of Emerging Technologies

I.20 Digital technologies have been instrumental in expanding financial inclusion, improving efficiency, and enabling real-time services across India. Initiatives leveraging technologies such as the Unified Lending Interface (ULI) and Open Credit Enablement Network (OCEN) are expected to redefine credit access, particularly for small businesses and individuals. The Reserve Bank has been supporting innovations to provide seamless and efficient experience for customers. However, the digital shift also introduces risks that must be identified, mitigated and managed to maintain a stable and secure financial ecosystem.

I.21 The Reserve Bank convened structured and open interactions with FinTechs at periodic intervals with a view to convey the policy initiatives, understand the new developments, products,

services and use cases, and gather market intelligence. The financial sector landscape is witnessing paradigm shifts with the advent of emerging technologies like AI/ML, tokenisation and cloud computing. While the benefits of their adoption are many, the attendant risks like algorithmic bias, explainability of decisions and data privacy are also high. To address the attendant risks early in the adoption cycle, the Reserve Bank announced that a committee will be constituted to develop a Framework for Responsible and Ethical Enablement of AI (FREE-AI) to recommend a robust, comprehensive, and adaptable AI framework for the financial sector⁷.

Digital Lending

I.22 Several reports indicate continued presence of unscrupulous players in digital lending space, who falsely claim association with REs. To aid the customers in verifying the claims of a Digital Lending App's (DLA's) association with an RE, the Reserve Bank is in the process of creating a public repository of DLAs deployed by REs. The repository will contain data submitted by REs, without any intervention by the Reserve Bank and REs will be required to update the same whenever there is an addition of a new DLA or deletion of an existing DLA.

Scaling up Unified Lending Interface

I.23 The ULI (earlier called Public Tech Platform for Frictionless Credit) is a digital public infrastructure in lending space, which will unlock critical financial, non-financial and alternate data for lenders to enable informed credit decisions. The pilot on ULI commenced from August 17, 2023. As on December 6, 2024, over 6 lakh loans amounting to ₹27,000 crore, including a substantial number of micro, small

⁷ Reserve Bank of India (2024). Statement on Developmental and Regulatory Policies, December 6.

and medium enterprise (MSME) loans (1.60 lakh loans amounting to ₹14,500 crore) have been disbursed using application programming interfaces (APIs) from the platform. 36 lenders, including various banks (PSBs, PVBs, SFBs, district central co-operative banks, regional rural banks) and NBFCs have been onboarded. These lenders are using more than 50 data services including, *inter alia*, authentication and verification services, land records data from six states, satellite service, transliteration, property search services, dairy insights and identity/document verification. Further, 12 loan journeys have been introduced, including *kisan* credit card, digital cattle, MSME (unsecured), housing, personal, tractor, micro business, vehicle, digital gold, e-Mudra, pension and dairy maintenance loans. Based on the learnings and the positive response from stakeholders, the scope and coverage of the platform is being expanded to include more loan journeys, data providers and lenders.

Central Bank Digital Currency (CBDC)

I.24 The CBDC-retail (CBDC-R) pilot currently enables person-to-person (P2P) and person-to-merchant (P2M) transactions using digital rupee wallets provided by pilot banks. The programmability and offline functionality in CBDC-R are also being tested under the pilot. Programmability will permit users, including government agencies, to ensure that payments are made for defined benefits. Similarly, entities will be able to program specified expenditures, such as, business travel for their employees. Features like validity period or geographical areas within which CBDC-R may be used can also

be programmed. The solutions to enable offline functionality in CBDC-R (both proximity and non-proximity based) for making transactions in areas with poor or limited internet connectivity are also being tested in a closed user group. These functionalities will be scaled up through pilots in a gradual manner.

5. Financial Inclusion

I.25 India has taken significant strides in enhancing access to banking and financial services, reaching even the most remote areas of the country. Efforts are envisaged for improving the usage and quality of services, including bridging the gender gap⁸.

National Strategy for Financial Inclusion 2.0

I.26 The next iteration of the National Strategy for Financial Inclusion (NSFI) for the period 2025-30 is being developed based on wide ranging stakeholder consultations and the experience gained during the implementation of the current strategy. It will focus on further deepening of financial inclusion while tackling emerging challenges.

Review of Lead Bank Scheme (LBS)

I.27 A comprehensive review of the LBS is underway to enhance the effectiveness of the scheme and achieve deepening of financial inclusion through improved access, usage, and quality of financial services for all sections of the population.

6. Consumer Protection

I.28 Fair treatment of customers and effective grievance redressal mechanism are the most

⁸ Reaching the Unreached – Ensuring Last Mile Connectivity of Banking Services-keynote address by Shri Swaminathan J., September 20, 2024 at the Conference of Lead District Managers and District Development Managers in Hubballi.

important means of consumer protection. In this regard, a survey is being carried out by the Reserve Bank to gain insights into the low number of complaints emanating from rural and semi-urban populations. The Reserve Bank is also encouraging banks to strengthen their internal grievance redress frameworks.

I.29 With a view to fostering greater transparency and disclosure by REs in pricing of loans and other charges levied on the customers, with effect from October 1, 2024, it has been made mandatory for REs to provide a key facts statement (KFS) to borrowers in respect of all new retail and MSME term loans, containing the important information regarding a loan agreement, including all-in-cost of the loan, in simple and easy-to-understand format.

Digital Frauds

I.30 While many cases of digital frauds result from social engineering attacks on customers, there is also a rapid increase in the use of mule bank accounts to perpetrate such frauds. This exposes banks not only to serious financial and operational risks, but also to reputational risks. Banks, therefore, need to strengthen their customer onboarding and transaction monitoring systems to monitor unscrupulous activities. This also requires effective co-ordination with the law enforcement agencies (LEAs) so that the concerns occurring at a systemic level are detected and curbed in time. The Reserve Bank is working with banks and LEAs to strengthen transaction monitoring systems and ensure sharing of best practices for control of mule accounts and prevention of digital frauds⁹. Another initiative in

this direction is the AI / ML based model called MuleHunter.AITM, being piloted by Reserve Bank Innovation Hub (RBIH)¹⁰.

Dark Patterns

I.31 Dark patterns, which are design interfaces and tactics used to trick users into desired behaviour, have emerged as a new form of mis-selling. The Central Consumer Protection Authority (CCPA) notified guidelines on prevention and regulation of dark patterns on November 30, 2023, with the objective of identifying and regulating such practices. The Reserve Bank is also looking into the prevalence of such practices among its REs and considering appropriate policy actions.

7. Climate Change

I.32 Climate change risks are envisaged to impact profitability of financial institutions, growth prospects, and inflation dynamics and, thus, impinge upon financial stability and price stability. To foster assessment of these concerns by REs, regulatory and supervisory frameworks need to be strengthened with enhanced risk management guidelines; disclosure requirements; periodic stress testing; and stipulating reasonable verification and assurance functions.

I.33 In line with India's commitment towards net-zero transition, the Reserve Bank has taken proactive steps like including financing renewable energy projects under priority sector loans; introducing green deposits framework; issuance of sovereign green bonds (SGrBs); allowing investment and trading in SGrBs

⁹ Current Issues in the Indian Banking and Financial Sector-Inaugural Address by Shri Shaktikanta Das, July 19, 2024 at the Financial Express Modern BFSI Summit, Mumbai.

¹⁰ Reserve Bank of India (2024). Statement on Developmental and Regulatory Policies, December 6.

by eligible foreign investors in International Financial Services Centre (IFSC) in India; and issuing a draft disclosure framework for climate-related financial risks for public consultation.

I.34 The Reserve Bank is also in the process of finalising and issuing a guidance note on scenario analysis and stress testing of climate related risks for REs, covering modelling techniques, scenario considerations and methodologies for carrying out stress testing exercises. The Reserve Bank's aspirational goals for RBI@100 include establishing a robust regulatory and supervisory framework to effectively manage challenges arising from climate change, enhancing the resilience of payment systems against climate risks, and collaborating with the government for finalising a comprehensive taxonomy¹¹.

Reserve Bank Climate Risk Information System (RB-CRIS)

I.35 Climate risk assessments by REs would require, *inter alia*, high quality data relating to local climate scenarios, climate forecasts, and emissions. The publicly available climate related data are characterised by various gaps, such as, fragmented and varied sources, differing formats, frequencies and units. To bridge these

gaps, the Reserve Bank plans to create a data repository, *viz.*, the Reserve Bank – Climate Risk Information System (RB-CRIS)¹². The first part of the repository will be a web-based directory, listing various data sources, including meteorological and geospatial data, which will be publicly accessible at the RBI website. The second part will comprise processed datasets in standardised formats. The access to this data portal will be made available only to REs in a phased manner.

8. Overall Assessment

I.36 Banks and NBFCs remain the backbone of India's financial sector, providing support to its growth aspirations by meeting the credit requirements of the productive sectors of the economy. The Reserve Bank will continue to nurture and incentivise the development of infrastructure to give a 'digital push' to payments and settlements. It is also committed to playing an enabling role in the adoption of emerging technology, while reinforcing its customer-centric measures and deepening financial inclusion. Maintaining financial stability remains the overarching goal and will continue to guide the Reserve Bank's regulatory and supervisory policies.

¹¹ Reserve Bank of India (2024). Governor's Statement, June 7.

¹² Reserve Bank of India (2024). Statement on Developmental and Regulatory Policies, October 9.