

*The banking and non-banking sectors globally are facing headwinds emanating from globalisation of inflation, synchronised monetary policy tightening and continuing geopolitical risks to growth. Although presently the Indian banking sector remains robust and resilient with improved asset quality and strong capital buffers, the policymakers remain mindful of dynamically evolving macroeconomic conditions that may impinge on the health of regulated entities. Going forward, the focus of the Reserve Bank will remain on encouraging use of technology and innovation in this space, while containing the possible systemic risks.*

I.1 In 2022, with the globalisation of inflation, energy and food shortages and synchronised tightening of monetary policy worldwide, the outlook for global growth and trade is deteriorating. The combination of capital outflows, currency depreciations and reserve losses has exacerbated the prospects for emerging market economies (EMEs), exposing their financial systems to greater uncertainties and downside risks. Financial conditions have tightened, though sentiment has improved recently on expectations of inflation peaking. Although global banks appear robust, asset quality may come under strain in a rising interest rate environment with weak growth impulses. As yields rise, banks may incur mark-to-market (MTM) losses on their investment portfolios and higher provisioning requirements can dent their profitability.

I.2 In this highly uncertain global environment, the Indian economy is exhibiting signs of a gradual strengthening of the growth momentum, drawing from macroeconomic fundamentals. In 2021-22 as also in 2022-23 so far, the balance sheets of scheduled commercial banks (SCBs) in India have expanded strongly, fuelled by robust credit demand. Their asset quality and profitability have improved, while low slippages and

high capital buffers are reinforcing investor confidence in banks.

I.3 The bottom lines of the non-banking financial company (NBFC) sector improved in 2021-22 with the waning of COVID-19. With strong capital buffers, adequate provisions, and sufficient liquidity, NBFCs are poised for expansion. Nevertheless, going forward, NBFCs need to be wary of rising borrowing costs as financial conditions tighten. On the regulatory front, scale-based regulation is expected to strengthen the NBFCs in step with the growing scope for organic consolidation in the sector.

I.4 Against this backdrop, this chapter presents a bird's eye view of the challenges faced by banking and non-banking sectors and the way forward.

### **Impact of Rising Interest Rates on Bank Profitability**

I.5 In an environment of rising interest rates, an increase in banks' net interest income (NII) can be expected in the near term, reflecting better transmission to lending rates. On the other hand, higher yields expose banks to MTM losses on their treasury investments, decreasing their non-interest income. The impact of rising yields on SCBs' profitability has been mitigated

to some extent by the increase in the limit of SLR securities under the held to maturity (HTM) portfolio<sup>1</sup>. The investment fluctuation reserve (IFR), that was introduced in 2018, is another mitigating factor. Data on modified duration gathered at end-September 2022 from select banks showed that, *ceteris paribus*, banks would remain adequately capitalised even after making necessary provisions for MTM losses due to a rise in yield.

### Resolution of Stressed Assets

I.6 The enactment of the Insolvency and Bankruptcy Code (IBC) in 2016 was a paradigm shift in the ethos for resolution of stressed assets in India. In recent years, however, declining rates of recovery in comparison to their claims admitted through this mechanism has raised concerns<sup>2</sup>. The rate of recovery is contingent on several factors, including the overall macroeconomic environment, perceived growth prospects of the entity and its sector, and the extent of erosion in the intrinsic value of the entity. As a broad-based recovery gains traction, these factors are likely to turn favourable for financial resolution.

I.7 In a public auction-based resolution model such as the IBC, the extent of haircut represents the discount the market demands for acquiring the stressed entity as a going concern. Since significant value destruction may have already happened in these assets, a comparison of realised value with admitted claims may not be a reasonable indicator of the effectiveness of the resolution process. Rather, the resolution value

may be compared with the liquidation value of stressed assets. Data indicate that at end-September 2022, in cases where the corporate insolvency resolution processes (CIRPs) were initiated by financial creditors (FCs), the realisation through the IBC was close to 201 per cent of the liquidation value.

I.8 Within the IBC framework, the time taken for admission of resolution application as well as the final resolution and liquidation has steadily increased. The Insolvency and Bankruptcy Board of India (IBBI) recently amended the CIRP regulations aimed at improving realised value, reducing delays in the process, enhancing efficiency of available time, and improving information availability. Through another amendment to IBC regulations, performance-linked incentives have been introduced for insolvency professionals, which should help in maximising the realised value of stressed assets beyond their liquidation value, and in their timely resolution.

I.9 The pre-packaged insolvency resolution process combines the best of the out-of-court resolution efforts and the judicial finality of a resolution plan. This mechanism, which is allowed only for micro, small and medium enterprise (MSME) borrowers, may effectively complement the prudential framework of the Reserve Bank, if extended to all borrowers. In India, credit contracts are often embedded with cross obligations and credit risk mitigation covers provided by parent and group companies of the borrower. In such a system, a default by one borrower is likely to spur cross defaults by

<sup>1</sup> In October 2020, banks were permitted to exceed the HTM ceiling up to an overall limit of 22 per cent of NDTL (instead of 19.5 per cent earlier), creating greater headroom for banks to invest in SLR securities. The limit was further extended to 23 per cent in April 2022. The dispensation was made available up to March 31, 2023, which was further extended up to March 31, 2024. The HTM limits will be restored to 19.5 per cent in a phased manner starting from the quarter ending June 30, 2024.

<sup>2</sup> As on September 30, 2022 the realisation was 33 per cent of total claims in cases where CIRPs were initiated by FCs.

group companies, thereby increasing the overall credit risk to the financial system. A group resolution framework, in which the resolution of borrowers belonging to the same corporate group if undertaken together, could help in improving the efficacy of the IBC.

### **Securitisation of Stressed Assets**

I.10 In September 2021, the Reserve Bank issued the revised framework for securitisation of standard assets, which simplified requirements on minimum holding period and minimum retention requirement, while the capital requirements for securitisation exposures were converged with Basel III norms. Securitisation of non-performing assets (NPAs) are currently allowed to be undertaken by licensed asset reconstruction companies (ARCs), under the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002. In addition to the ARC route, the Reserve Bank proposes to introduce a framework for securitisation of stressed assets similar to the revised framework for standard assets. As announced in September 2022, a discussion paper (DP) will be issued soon to solicit comments from market participants.

### **Prudential Norms for Investment Portfolio**

I.11 The extant guidelines for valuation of investments were issued nearly two decades ago. Since then, domestic financial markets have grown manifold in size and complexity, necessitating a comprehensive review. The Reserve Bank released a DP on the prudential norms for classification, valuation, and operations of the investment portfolio of commercial banks in January 2022. The proposed framework aims at providing greater

flexibility to banks in the management of their investment portfolio while addressing transparency concerns through enhanced disclosures. Its proposals include *inter alia* symmetric recognition of fair value gains and losses, removal of various restrictions on investment portfolio such as the ceilings on investments in HTM and allowing non-SLR securities to be included under the HTM book. The proposed guidelines, which are being examined in view of the feedback received from stakeholders, will promote transparency and entrench market discipline while increasing banks' freedom.

### **Framework on Expected Credit Loss**

I.12 Currently, banks operating in India are required to make loan loss provisions based on an incurred loss model wherein provisions are made after the occurrence of a default. A revised approach, termed as expected credit loss (ECL) model, requires a credit institution to make provisions based on forward-looking estimations of credit losses. In India, some NBFCs<sup>3</sup> follow the ECL approach, in contrast to their banking peers. The Reserve Bank's proposed DP on the ECL framework for banks will help in formulating principle-based guidelines, supplemented by regulatory backstops wherever necessary.

### **Bank Ownership**

I.13 The Government of India has been facilitating consolidation of public sector banks (PSBs) through mergers over the last few years. In the Union Budget for 2021-22, the government announced its intent to take up the privatisation of two PSBs. Convergence is required between PSBs and private sector

<sup>3</sup> NBFCs covered by Rule 4 of the Companies (Indian Accounting Standards) Rules, 2015.

banks (PVBs) on corporate governance practices as well as managerial and operational flexibility. Going forward, this will generate the requisite space for both PSBs as well as PVBs to expand their business and thrive.

### **Regulatory Sandbox**

I.14 The Reserve Bank conceptualised the regulatory sandbox (RS) in 2019 to enable entities to test innovative products, services or business models, usually in a live but controlled environment with certain safeguards and oversight. The themes of the RS cohort announced so far include ‘retail payments’, ‘cross-border payments’, ‘MSME lending’ and ‘prevention and mitigation of financial frauds’. So far, six entities have successfully exited the first cohort and four entities have successfully exited the second cohort. The entities selected under the third cohort are currently undergoing testing and the applications received under the fourth cohort are being evaluated for shortlisting of entities for the test phase. The fifth cohort under the RS has been announced to be theme neutral for innovative products/ services/ technologies cutting across various functions of the Reserve Bank. Based on experience gained so far, the enabling framework for the RS has undergone changes to make it more broad-based and innovation friendly. Further, ‘on tap’ application facility has been introduced in RS for themes of closed cohorts to ensure continuous innovation.

### **Strengthening Off-site Monitoring System**

I.15 The Reserve Bank has been actively engaged in making its off-site surveillance systems sharper, more comprehensive and in

tune with the international best practices. A major initiative in this regard was the commissioning of the advanced supervisory monitoring system—DAKSH, which is a fully functional platform for further digitalisation of supervisory work processes. Other major initiatives in the pipeline include (a) implementation of the Centralised Information and Management System (CIMS) for automatic data reporting by regulated entities (REs) and monitoring tools; (b) supplementing supervisory intelligence with big data; (c) implementation of Cyber Range—a virtual controlled environment and tool used for cyber security drills; (d) development of a fraud vulnerability index<sup>4</sup> dashboard using artificial intelligence and machine learning (AI/ML); and (e) standardisation / optimisation of a risk based approach for know-your-customer (KYC) and anti-money laundering (AML) framework of all supervised entities (SEs). Emphasis is also being placed on capacity building, development of specialised workforce and use of modern technology.

### **Differential Banking**

I.16 While small finance banks (SFBs) and payments banks (PBs) have played an important role in financial inclusion, some PBs are yet to break even. Moreover, technology-oriented business models are no longer the niche of these banks alone; almost all banks are leveraging technology to improve and expand delivery of financial services and products. These efforts have received a boost with the establishment of Digital Banking Units (DBUs). Against this backdrop, concerns are being raised in some quarters about viability and sustainability of differentiated banking models. It needs to be ensured that their

<sup>4</sup> Presently the fraud vulnerability index is designed to track vulnerabilities in banks. Going forward, the scope of the index may be enhanced to cover other SEs.

business models are sufficiently robust and good governance and technological standards are adhered to, so that they survive in a competitive environment.

### **Payment and Settlement Systems**

I.17 Recent pro-active measures undertaken by the Reserve Bank have revolutionised the payment and settlement ecosystem, enhancing consumer experience, deepening digital reach and aiding financial inclusion. The introduction of UPI123Pay has facilitated access to unified payments interface (UPI) to more than 40 crore feature phone subscribers in the country. In addition, UPI Lite has facilitated low value transactions in offline mode through on-device wallet. The eligible subsidy amount from the Payment Infrastructure Development Fund (PIDF) was enhanced and the subsidy claim process was simplified to provide further impetus to deployment of payment acceptance touchpoints. The Reserve Bank allowed foreign inward remittances received under the Rupee drawing arrangement (RDA) to be transferred to the KYC compliant bank account of the biller (beneficiary) through Bharat Bill Payment System (BBPS) subject to certain conditions. This is expected to facilitate payment of utility, education and other bills by non-resident Indians (NRIs) on behalf of their families in India. Quick response (QR) based person-to-merchant (P2M) payments, leveraging UPI, have been enabled in Bhutan, Singapore and UAE. The DigiSaathi Helpline was established to enhance awareness about payment systems. Card tokenisation and enhancement of e-mandate limit for recurring transactions further bolstered the safety of digital transactions.

I.18 An efficient payment system requires that the fees are appropriately determined to

ensure optimal cost to users and returns to operators. In August 2022, the Reserve Bank published a discussion paper (DP) which outlined existing rules for charges in payment systems, while also presenting other options through which such charges could be levied. Based on the feedback received, the Reserve Bank endeavours to structure its policies and streamline the framework of charges for different payment services and activities in the country. This will ensure that India has a state-of-the-art payment and settlement system that is not just safe, secure, efficient and fast but also affordable.

### **FinTechs**

I.19 In India, one of the most transformative roles that can be played by FinTechs is credit delivery in partnership with traditional lenders, especially in rural and semi-urban areas. The current credit delivery systems are largely paper-based, with high turnaround time and requiring multiple visits to bank branches. It entails high operational costs for lenders and opportunity cost for borrowers. Considering these challenges, digitalisation of agri-finance was conceptualised jointly by the Reserve Bank and the Reserve Bank Innovation Hub (RBIH). This will enable delivery of Kisan Credit Card (KCC) loans in a fully digital and hassle-free manner. A pilot project based on this innovation was launched in Madhya Pradesh and Tamil Nadu in partnership with Union Bank of India and Federal Bank, respectively, for new KCC loans as well as renewal of such loans. Going forward, the vision of the Reserve Bank is to develop and operationalise an integrated and standardised technological platform to facilitate frictionless flow of credit to all segments of the society, with a special emphasis on rural and agricultural credit.

## Cyber Security Risks

I.20 With the exponential growth of digital payments and expanding digitalisation of the financial ecosystem, cyber security risks for financial institutions are also increasing. These warrant building of strong defences against cyber-attacks and constant upskilling of personnel. Continuous knowledge acquisition and staying ahead of the curve will be crucial.

I.21 The Reserve Bank has been undertaking pro-active steps to keep the supervised entities (SEs) abreast of new security challenges and cyber threats. A draft master direction (MD) on outsourcing of IT services, which was issued in June 2022 for public comments, is being revised based on feedback received. Moreover, a draft MD providing a consolidated and updated IT governance and risk management framework for regulated entities (REs) has been placed on the Reserve Bank's website in October 2022 for public comments.

## Climate Change and Green Finance

I.22 Climate change may result in both physical and transition risks that could have implications for sustainability and financial soundness of individual REs as well as systemic financial stability. There is a need for REs to develop and implement processes for understanding and assessing the potential impact of climate-related financial risks in their business strategies and operations. This will require *inter alia* appropriate governance structures and strategic frameworks to effectively manage and address these risks. REs will also need to focus on appropriate capacity building of their staff. Accordingly, the Reserve Bank released a DP on climate risk and sustainable finance in July 2022. The DP recommended REs to incorporate climate-related and environmental risks in their

business strategies as also in their governance and risk management frameworks. In line with the international best practices, REs were guided to adopt a forward-looking, comprehensive, and strategic approach to deal with climate-related risks.

I.23 Sustainable finance taxonomies are tools intended to help investors decipher whether an economic activity is environmentally sustainable, and to navigate the transition to a low-carbon economy. Such a taxonomy can play a key role in channelising and scaling up sustainable finance funds to India. It will also make the tracking of sustainable finance flows easier. Development of the taxonomy will require concerted efforts from stakeholders, led by the government.

I.24 Mobilising resources for green projects or refinancing them through issuance of green bonds provides a strong signal of the country's commitment to a low-carbon economy. Pursuant to an announcement made by Hon'ble Finance Minister in her budget speech on February 1, 2022, the Government has decided to issue ₹16,000 crore of sovereign green bonds in the domestic market during 2022-23. These borrowings will be part of Government of India's overall market borrowing for the year 2022-23 and proceeds will be deployed in green public sector projects. The sovereign green bond framework has been published by Government of India on November 09, 2022. Further, Centre for International Climate Research (CICERO), an independent and globally renowned Norway-based second party opinion (SPO) provider was appointed to evaluate the framework and certify its alignment with International Capital Market Association's (ICMA) green bond principles and international best practices. It rated the framework as 'medium green' with a 'good' governance score.

I.25 Overall, the Indian banking and non-banking financial sectors have displayed resilience to several shocks, facilitated effective delivery of post-pandemic public policy measures to targeted sectors of the economy, and preserved financial soundness while supporting a broad-based recovery of the Indian economy. While the current wave of technological innovations in the field of finance and new growth opportunities arising from global rebalancing of supply chains and domestic support to fourteen industries under

the production linked incentive (PLI) scheme opens new business avenues, it is important to be mindful of emerging risks from tech-led complex networks, alternative finance options and geopolitical developments. The financial sector also needs to remain alert to risks and uncertainties associated with climate change. The regulatory and supervisory policies of the Reserve Bank will endeavour to promote a dynamic, robust, resilient, and competitive financial system, while preserving financial stability.