Chapter III

Regulatory Initiatives in the Financial Sector

Global regulatory priorities have shifted back to consolidation of the regulatory framework and protecting the financial system from the knock on effects of an uncertain, volatile and hostile macroeconomic environment. Integrating climate risk into existing frameworks and mitigating the rising cyber risks are major areas of focus. Domestically, the emphasis is on improving the resilience of financial intermediaries, enhancing customer and investor protection, accelerating digitalisation, developing financial markets and strengthening the supervisory architecture. The Financial Stability and Development Council (FSDC) and its Sub-Committee remain steadfast in their commitment to develop a robust and efficient financial system for the Indian economy.

Introduction

3.1 As the global economy transitions through a period of multiple shocks, regulatory efforts are refocusing on building up the resilience of the financial system. Specifically, global regulatory initiatives aim to address fragilities in non-bank financial intermediation and certain segments of financial markets, leveraged lending, cyber risks and crypto assets. Efforts are also on to integrate climate risk into regulatory frameworks.

3.2 Against this backdrop, this chapter reviews the recent regulatory efforts made both internationally and in India to strengthen the stability and efficiency of the financial system.

III.1 Global Regulatory Developments and Assessments

III.1.1 Markets and Financial Stability

3.3 In the light of dislocations in sovereign debt markets, the FSB examined the liquidity, structure, and resilience of core government bond markets and observed that changes in market structure have rendered these markets susceptible to liquidity imbalances during periods of stress[1]. According to the FSB, dealers' risk warehousing capacity to support intermediation is lower than the magnitude of trade flows, especially during times of stress, and non-bank liquidity sources do not seem to enhance market making. Elevated debt levels and increased usage of government bonds by some investors for trading, hedging and liquidity management strategies may have made some investors more susceptible to shocks. Central bank interventions, though effective in alleviating market strains, come with a price and should not replace market participants' responsibilities towards managing their own risks. To improve market resilience, the FSB also suggests policy measures such as enhanced use of central clearing for cash and repo transactions and use of all-to-all (A2A) trading platforms to lessen the need for dealer intermediation.

3.4 Heightened market volatility experienced in March 2020 led to a spike in margin calls across the financial system, for both centrally and non-centrally cleared markets. There was significant dispersion in the size of increases in initial margins (IMs) across and within asset classes. Evidence suggests that transparency around IM models differs across CCPs and jurisdictions. In this context, the BIS and the International Organisation of Securities Commissions (IOSCO) reviewed margining practices[2]

[1] FSB (2022), "Liquidity in Core Government Bond Markets", October.

[2] BIS/ IOSCO (2022), "Review of margining practices", September.

and suggested areas for further policy work such as increasing transparency in centrally cleared markets through consistent metrics and disclosures concerning procyclicality. They also recommend improving disclosures about liquidity, identifying data gaps in regulatory reporting and streamlining variation margin (VM) processes in centrally and non-centrally cleared markets.

3.5 In its statement on financial reporting and disclosure during economic uncertainty[3], the IOSCO has emphasised that auditors have the responsibility of establishing and maintaining effective internal controls over financial reporting, and providing transparent, entity-specific disclosures to investors about the current and future effects of economic uncertainty.

3.6 The FSB published a progress report on enhancing the resilience of non-bank financial intermediation (NBFI)[4]. This was aimed at assessing and addressing vulnerabilities in specific NBFI areas that may have contributed to the build-up of liquidity imbalances and their amplification in times of stress. These areas include money market funds, open-ended funds, margining practices, bond market liquidity and fragilities in USD cross-border funding. The policy proposals aim to: reduce liquidity demand spikes; enhance the resilience of liquidity supply in stress; and enhance risk monitoring and the preparedness of authorities and market participants. They involve largely repurposing existing policy tools rather than creating new ones, given the extensive micro-prudential and investor protection toolkit already available. The FSB will assess in due course whether repurposing such tools is sufficient to address systemic risk in NBFI, including the need to develop additional tools for use by authorities.

III.1.2 Climate Related Risks and Financial Stability

3.7 The FSB's final report on regulatory approaches to climate-related risks[5] has highlighted the need for policy authorities to focus on defining, identifying, and gathering climate-related data and indicators that can help with monitoring and assessing climate risk as well as arrive at common definitions for different risks.

3.8 The report also notes that microprudential tools alone may not sufficiently address the cross-sectoral, global and systemic dimensions of climate-related risks. Authorities should take into account the possible extensive effects of climate-related risks on the financial system and develop macroprudential tools by expanding the use of climate scenario analysis and stress testing, with research and analysis on appropriate enhancements to regulatory frameworks.

III.1.3 Crypto Assets and Financial Stability

3.9 The FSB has proposed a framework for the international regulation of crypto assets activities[6]. It observed that the turmoil in crypto assets market highlights their intrinsic volatility and structural vulnerabilities whereas their interconnectedness with the traditional financial system is increasing. Its recommendations seek to promote international consistency on regulatory and supervisory approaches, which are grounded in the principle of "same activity, same risk, same regulation" approach. The framework proposes that authorities should have appropriate powers, tools and resources to regulate, supervise, and oversee crypto assets activities and markets, both domestically and internationally, proportionate to the financial stability risk they pose. In addition, the

3 IOSCO (2022), "IOSCO Statement on Financial Reporting and Disclosure during Economic Uncertainty", November.

4 FSB (2022), "Enhancing the Resilience of Non-Bank Financial Intermediation – Progress Report", November.

5 FSB (2022), "Supervisory and Regulatory Approaches to Climate-related Risks", April.

6 FSB (2022), "Regulation, Supervision and Oversight of Crypto-Asset Activities and Markets", October.

recommendations include, but are not limited to, promoting comprehensive governance and effective risk management frameworks, addressing financial stability risks that arise from interconnectedness and developing an appropriate disclosure framework.

3.10 The Basel Committee prescribed a global minimum prudential treatment for banks' exposures to crypto assets to mitigate the risk from crypto assets, which was endorsed by the Governors and Heads of Supervision (GHOS) on December 16, 2022[7]. Under the new standard, banks are required to classify crypto assets on an ongoing basis into the following two groups, where those in Group 2 will be subjected to newly prescribed conservative capital treatment effective from January 1, 2025:

a. Group 1:
    - those including tokenised traditional assets; and
    - those with effective stabilisation mechanisms that are subject to capital requirements based on the risk weights of underlying exposures as set out in the existing Basel Framework; and

b. Group 2:
    - those that pose additional risks compared with Group 1. This includes all unbacked crypto assets along with any tokenised traditional assets and stablecoins that fail certain classification conditions.

3.11 The new standard includes description of how the operational risk, liquidity, leverage ratio and large exposure requirements would be applied to banks' crypto assets exposure.

III.1.4 Financial Innovation and Financial Stability

3.12 The IOSCO report on innovation facilitators (IFs) has highlighted the use of financial technology to enhance risk management, compliance, and supervision[8]. It covers three types of IFs, *viz.,* innovation hubs, regulatory sandboxes and regulatory accelerators. Innovation hubs and regulatory sandboxes may provide regulators with additional market intelligence and can constitute a source for understanding potential risks and mitigating elements. While establishing IFs, authorities should undertake a comprehensive analysis of function, scope and structure along with potential impact on investor protection, market integrity and financial stability. Test scenarios, expected outcomes and the target audience should be properly defined, and authorities should engage with key stakeholders, industry associations and other relevant authorities to address regulatory barriers for beneficial innovations.

III.1.5 Cyber Risk and Financial Stability

3.13 The FSB's consultative document on cyber incident reporting has proposed greater convergence in cyber incident reporting (CIR) for enhancing cyber resilience of the financial system[9]. It has set out recommendations to address operational challenges arising from the process of collection of information as well as reporting of cyber incidents to multiple authorities, especially during the early stages of a cyber incident when confidence may be low about the cause and probable impact of the incident. The consultation also covers establishing common terminologies related to cyber incidents and the proposal to develop a common format for incident reporting exchange (FIRE). Harmonised CIR schemes necessitate a common language and common definition and understanding of what constitutes

7 BIS (2022), "Prudential treatment of cryptoasset exposures", December.

8 IOSCO (2022), "The Use of Innovation Facilitators in Growth and Emerging Markets", July.

9 FSB (2022), "Achieving Greater Convergence in Cyber Incident Reporting", October.

a cyber incident, so as to avoid over reporting of incidents. A review of incident reporting templates and stocktake of authorities' cyber incident reporting regimes indicated a high degree of commonality in the information requirements for cyber incident reports. Building on this, it is proposed to develop a common reporting format that could be further considered among financial institutions.

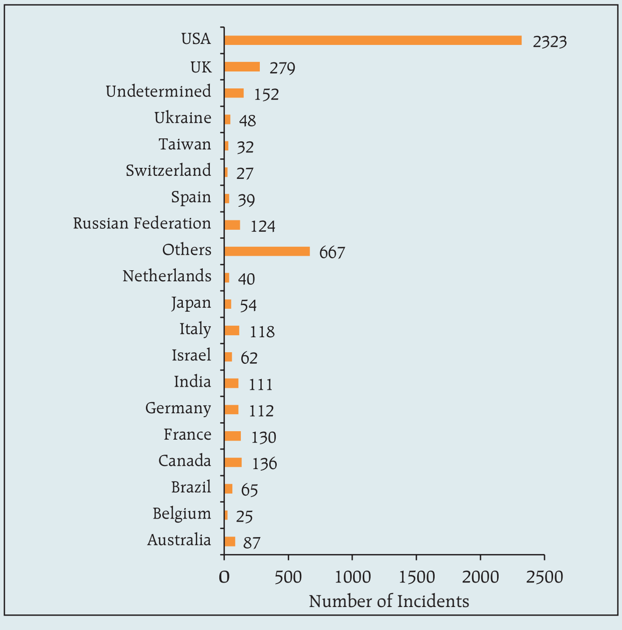
3.14 The BIS working paper on cyber risk in central banking has highlighted phishing and social engineering as the most common methods of cyber attacks related to central banks. The growing adoption of cloud based services as well as the shift to remote work has key implications for cyber security strategies[10]. In the absence of a well defined perimeter, one of the challenges of cloud adoption relates to information security being threatened by lack of consistently applied security controls. The BIS survey reveals that central banks have notably increased their investments in cyber security since 2020, giving priority to technical security control and resiliency and focussing on developing incident response plans. While integrated operational risk management and third-party vendor management are key concerns for AE central banks, addressing cyber security skills shortage is important among central banks in EMEs.

3.15 From a financial stability perspective, cyber risk involves both micro and macroprudential concerns as it could weaken financial intermediation. Major cyber shocks may exacerbate liquidity risk and consequent fire-sale of assets for firms. Thus, cybersecurity measures and regulations are receiving greater attention from policymakers (Box 3.1).

Box 3.1: Strengthening of Cyber Security Preparedness

Cyber attacks are increasing across the globe (Chart 1), as threat actors use increasingly advanced and malicious tactics to perpetrate cyber crimes.

Chart 1: Global Cyber Attacks Events: Country-Wise (2020-22)



Note: Data updated till November 18, 2022.
Source: University of Maryland CISSM Cyber Attacks Database.

Cyber incidents have several dimensions and can be broadly classified by type, motive and industry. The European Union Agency for Cybersecurity (ENISA) "Threat Landscape 2022" has observed that the attacks are mostly targeted towards public administration and digital service providers. In addition, consistent attacks on finance and health sector are observed to steal bank details and personal data. The Centre for International Security Studies at Maryland (CISSM) global database shows that cyber attacks are concentrated in centres associated with public administration, scientific and technical services, healthcare and educational services, where espionage, financial gains and sabotage are some of the common motives (Chart 2).

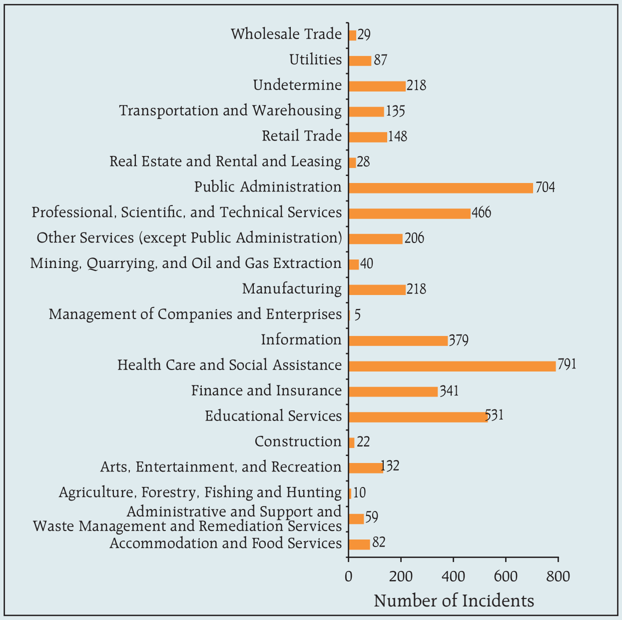
In India, financial motivation is observed as the primary driving force of cyber attacks, while exploitation of application server and data attack are among the most frequent types (Charts 3, 4 and 5). In many cases, the origin/ source of attack remains unknown, highlighting concerns about data gaps, incident reporting and imperfect judgement of the threat landscape.

Systemic cyber resilience stress tests and cyber mapping for identifying systemically important nodes can be

(Contd.)

[10] BIS (2022), "Cyber risk in central banking", September.

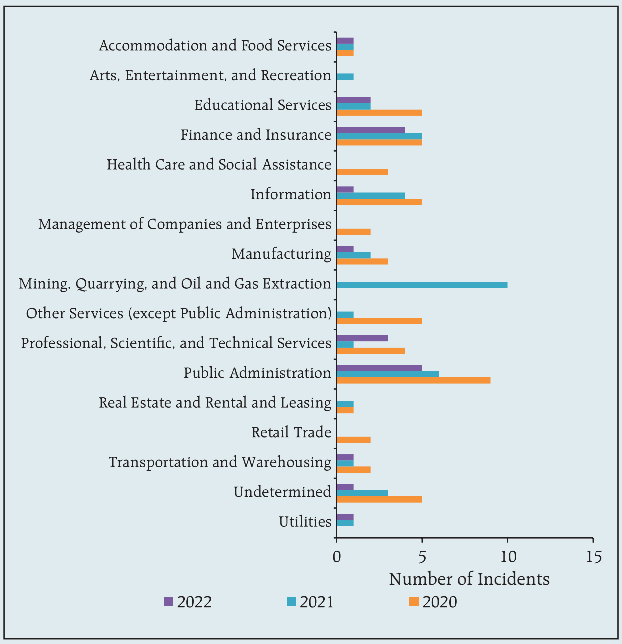
Chart 2: Global Cyber Attacks Events: By Industry (2020-22)



Note: Data updated till November 18, 2022.
Source: University of Maryland CISSM Cyber Attacks Database.

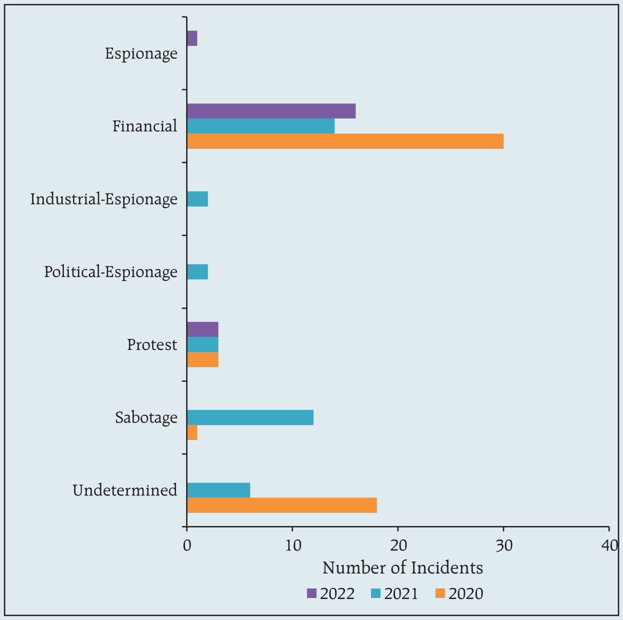
used to improve cyber resilience across industries when information is aggregated into a cyber resilience index (CRI). Remote work and adoption of cloud based services by financial institutions has created additional security challenges.

Chart 3: Cyber Attacks Events in India: By Industry (2020-22)



Note: Data updated till November 18, 2022.
Source: University of Maryland CISSM Cyber Attacks Database.

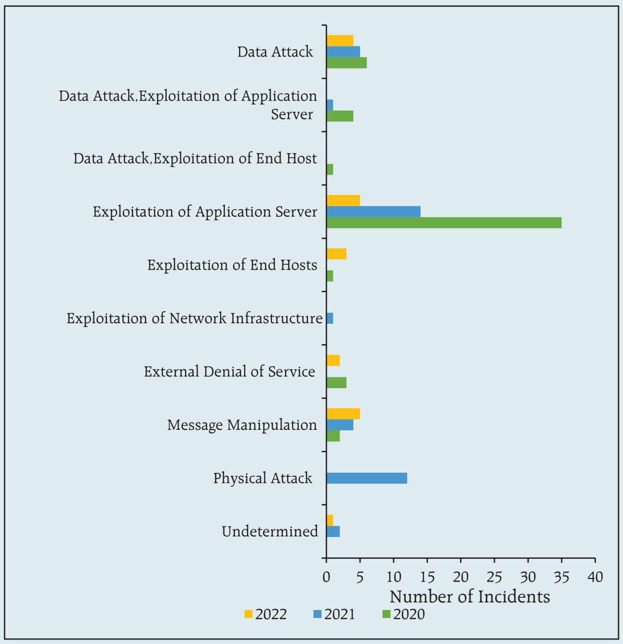
Chart 4: Cyber Attacks Events in India: By Motives (2020-22)



Note: Data updated till November 18, 2022.
Source: University of Maryland CISSM Cyber Attacks Database

In the Indian context, the Reserve Bank has taken various initiatives to increase cyber resilience at both institutional and system-wide levels, including issuance of directions to supervised entities (SEs), timely guidance on tackling emerging cyber security challenges and threats:

Chart 5: Cyber Attacks Events in India: By Type (2020-22)



Note: Data updated till November 18, 2022.
Source: University of Maryland CISSM Cyber Attacks Database.

(Contd.)

(i) a master direction (MD) on digital payment security controls was issued on February 18, 2021 to Regulated Entities (REs), which provides minimum standards of security controls for digital payment products and services to help mitigate risks associated with digital transactions;

(ii) a draft MD on the risk originating from exposure of financial institutions to service providers due to outsourcing of IT activities/ services was released for public comments on June 23, 2022 and feedbacks received is being examined;

(iii) public comments have also been sought on a draft MD released on October 20, 2022 on information technology governance, risk, controls and assurance practices as part of operational risk management and feedback received is being examined.

Similarly, the Computer Security Incident Response Team-Finance Sector (CSIRT-Fin) is also identifying gaps and systemic risks through incident analysis and providing recommendations to enhance resilience of financial sector.

As the frequency and sophistication of cyber attacks amplify in tune with accelerated digitalisation, continuous monitoring of emerging risks is vital. In this context, under India's G20 presidency, reporting framework for global cooperation for strengthening the cyber resilience of the financial sector remains a priority.

References:

1) European Union Agency for Cyber Security (2022), "ENISA Threat Landscape", November.

2) Harry, C., and Gallagher, N. (2018), "Classifying cyber events". *Journal of Information Warfare*, 17(3), 17-31.

3) BIS (2022), "Cyber risk in central banking", September.

III.2 Domestic Regulatory Developments

3.16 Since the publication of the June 2022 issue of the FSR, the Financial Stability and Development Council (FSDC), chaired by the Union Finance Minister, met once on September 15, 2022. The Council deliberated on early warning indicators for the economy, improving the efficiency of the existing financial/ credit information systems, issues of governance and management in systemically important financial institutions (SIFIs) including FMIs, strengthening the cyber security framework in financial sector, common know-your-customer (KYC) for all financial services and related matters, status of the account aggregator (AA) framework, issues relating to financing of the power sector, the strategic role of the International Financial Services Centre (IFSC) in India, inter-regulatory issues relating to Gujarat International Finance Tec-City (GIFT) - IFSC, and the need for utilisation of the services of registered valuers by all government departments. The Council noted that there is a need to monitor financial sector risks and market developments on a continuous basis to ensure appropriate and timely action for strengthening financial stability. The Council also took note of the preparations in respect of financial sector issues to be taken up during India's G-20 Presidency.

3.17 In its 29th meeting held in November 2022, the FSDC Sub-Committee reviewed major global and domestic developments as also in various segments of the financial system. The deliberations covered regulatory issues, the activities of the technical groups under the Sub-Committee and the functioning of the State Level Coordination Committees (SLCCs) in various States/ UTs. Members resolved to remain vigilant and proactive to ensure that financial markets and financial institutions remained resilient amidst destabilising global spillovers.

III.3 Initiatives from Regulators/ Authorities

3.18 Regulators undertook several initiatives to improve robustness and resilience of the Indian financial system (Annex 3).

III.3.1 Reserve Bank of India (Unhedged Foreign Currency Exposure) Directions, 2022

3.19 Entities which do not hedge their foreign currency exposures can incur significant losses during a period of heightened volatility in foreign exchange rates. These losses may reduce their capacity to service the loans taken from banks and increase their probability of default thereby affecting the health of the banking system.

3.20 To address the risk emanating from banks' exposure to entities having Unhedged Foreign Currency Exposure (UFCE), several guidelines / instructions were put in place starting from October 1999. A review of these guidelines was undertaken and consolidated as master directions to all commercial banks (excluding payments banks and RRBs). Some of the key changes incorporated in the directions *ibid.* to provide clarity/ reduce compliance burden are as under:

a) Exemption from UFCE guidelines: Banks' exposures to entities arising from derivative transactions were exempted, provided such entities have no other exposures to banks in India. This exemption has been expanded to include factoring transactions.

b) Alternative method for exposure to smaller entities: To reduce the compliance burden, the threshold for 'smaller entities' based on total exposure from banking system has been revised to ₹50 crore (up from ₹25 crore). For such entities, banks will not be required to periodically obtain hedging information.

III.3.2 Review of Regulatory Framework for ARCs

3.21 Asset reconstruction companies (ARCs) play a vital role in the management of distressed financial assets of banks and financial institutions. Based on the recommendations of a Committee set up by the Reserve Bank to undertake a comprehensive review of their working, the extant regulatory framework has been amended to strengthen governance norms, enhance transparency and disclosures, strengthen prudential requirement and increase the efficacy of ARCs. The guidelines *inter alia* mandate an independent director as Chair of the Board, maximum continuous tenure of 15 years for the Managing Director (MD)/ Chief Executive Officer (CEO) and wholetime Directors, constitution of an Audit Committee and a Nomination and Remuneration Committee. ARCs are required to disclose the information about the track record, rating migration and engagement with rating agency of schemes floated by them over the last eight years.

3.22 From a prudential perspective, the minimum net owned fund (NOF) of ARCs has been increased to ₹300 crore. They are required to invest in security receipts (SRs) at a minimum of the higher of the 15 per cent of transferors' investment in the SRs or 2.5 per cent of the total SRs issued. ARCs are also permitted to act as resolution applicant under the Insolvency and Bankruptcy Code (IBC), 2016, subject to certain conditions. Lenders can now transfer all categories of special mention accounts to ARCs. Furthermore, the avenues for deployment of surplus funds have been broadened. Linking the collection of management fee/ incentive to the recovery effected from the underlying financial assets is expected to shift the focus of ARCs from a management fee mindset to resolution mindset.

III.3.3 Regulations Review Authority 2.0

3.23 The Regulations Review Authority 2.0 (RRA) was set up by the Reserve Bank in 2021 with the objective of *inter alia* enhancing the ease of compliance for regulated entities (REs). Based on internal and external review process, the RRA made recommendations on reduction of regulatory burden, rationalisation of reporting mechanism and streamlining of regulatory instructions and communication. For further ease of access to information, a 'Regulatory Reporting' portal has been created within the RBI website, which contains information relating to statutory, regulatory and supervisory returns at a single source. For dissemination among the REs and stakeholders, press releases recommending withdrawal of certain regulatory instructions and discontinuation/ merger/ online submission of returns were issued.

III.3.4. Regulatory changes undertaken in respect of Urban Cooperative banks

3.24 The Reserve Bank had formed an Expert Committee on UCBs in 2021. The recommendations of the Committee have since been examined for implementation duly factoring in the feedback received. The major recommendations, which have been accepted/ accepted with modification include:

(a) Adoption of a simple four-tiered regulatory framework with differentiated regulatory prescriptions aimed at strengthening the financial soundness of the existing UCBs. Specifically, a minimum net worth of ₹2 crore for Tier 1 UCBs operating in single district and ₹5 crore for all other UCBs (of all tiers) have been stipulated. The UCBs which do not meet the requirement, have been provided with a glide path to facilitate smooth transition to revised norms.

(b) Revision of minimum CRAR to 12 per cent to strengthen the capital structure of Tier 2, Tier 3 and Tier 4 UCBs. UCBs which do not meet the revised CRAR have been provided with a glide path for achieving the same in a phased manner[11]. For Tier 1 UCBs, CRAR is retained at 9 per cent.

(c) Introduction of automatic route for branch expansion to UCBs which meet the revised financially sound and well managed (FSWM) criteria and permitting them to open new branches up to 10 per cent of the number of branches as at the end of the previous financial year, subject to a minimum of one branch and a maximum of five branches. Apart from the above, the branch expansion through the approval route under the existing framework will also continue.

(d) Assignment of risk weights for housing loans based on Loan to Value (LTV) Ratio alone, which would result in capital savings.

(e) Inclusion of revaluation reserves in TierI capital subject to applicable discount on the lines of scheduled commercial banks.

III.3.5 Appointment of Internal Ombudsman by the Credit Information Companies

3.25 With a view to strengthening and improving the efficiency of the internal grievance redressal mechanism of credit information companies (CICs), it has been decided to bring the CICs under the Internal Ombudsman (IO) framework. The Directions *inter alia* cover the appointment/ tenure, role and responsibilities, procedural guidelines and oversight mechanism for the IO. Under the mechanism, all complaints that are partly or wholly rejected by CICs will be reviewed by the IO before the final decision of the CIC is conveyed to the complainant. The IO will not entertain any complaint directly from the members of the public. The implementation of the IO mechanism will be monitored by the CIC's internal audit system, apart from regulatory oversight by the Reserve Bank.

III.3.6 Guidelines on Digital Lending

3.26 Based on the recommendations made by the Working Group on Digital Lending, the Reserve Bank issued guidelines on digital lending applicable to all commercial banks, primary (urban) co-operative banks, state co-operative banks, district central

[11] Tier 1 - All unit UCBs and salary earner's UCBs (irrespective of deposit size), and all other UCBs having deposits up to ₹100 crore;
Tier 2 - UCBs with deposits more than ₹100 crore and up to ₹1000 crore;
Tier 3 - UCBs with deposits more than ₹1000 crore and up to ₹10,000 crore;
Tier 4 - UCBs with deposits more than ₹10,000 crore.

co-operative banks and non-banking financial companies, including housing finance companies (collectively referred to as REs). The guidelines seek to achieve transparency and fairness *inter alia* by (a) mandating flow of funds between lenders and borrowers only through their bank accounts without any pass-through account/ pool account of any third party; (b) ensuring loan service providers do not collect any fee/charges directly from the customer; (c) transparent disclosure of the key facts of the borrowing arrangement including the all-inclusive cost to a borrower; (d) ensuring need based collection of data with audit trails backed by explicit customer consent; and (e) putting in place an appropriate privacy policy with regard to customer data.

3.27 Further, it has been reiterated that the outsourcing arrangements entered by REs with a lending service provider (LSP)/ digital lending app (DLA) do not diminish the REs' obligations and they shall continue to conform to the extant guidelines on outsourcing. The REs shall ensure that the LSPs engaged by them and the DLAs (either of the RE or of the LSP engaged by them) comply with the guidelines.

III.3.7 Liberalisation of Forex Flows

3.28 The Reserve Bank has been continuously monitoring liquidity conditions in the forex market to ensure orderly market functioning. The following measures were announced to enhance forex inflows and to diversify the sources of forex funding, mitigate volatility and dampen global spillovers: (a) CRR and SLR exemption on incremental foreign currency non-resident (banks) accounts {FCNR(B)} and non-resident (external) account (NRE) term deposits[12]; (b) temporary relaxation in the restrictions with respect to interest rates on FCNR(B) and NRE deposits; (c) regulatory changes to encourage FPI in debt instruments; (d) permitting authorised dealer (AD) banks' lending for a wider set of end-use purposes to facilitate foreign currency borrowing by a larger set of borrowers; and (e) doubling of limit under the automatic route of ECB and increase in the all-in cost ceiling for investment grade rating borrowers. These measures lapsed on October 31, 2022, except for the measure on ECB, which would be available till December 31, 2022.

III.3.8 International Trade Settlement in Indian Rupees

3.29 In order to promote trade with emphasis on exports from India and to support the increasing interest of the global trading community in INR, an additional arrangement has been put in place for invoicing, payment and settlement of exports/ imports in INR. Under the Foreign Exchange Management Act, (FEMA), 1999 the broad framework for cross border trade transactions in INR is: (a) all exports and imports under this arrangement may be denominated and invoiced in INR; (b) the exchange rate between the currencies of two trading partner countries may be market determined; and (c) settlement of trade transactions under this arrangement shall take place in INR. Accordingly, subject to prior approval from the Reserve Bank, Authorised Dealer (AD) banks in India are permitted to open Special Rupee Vostro Accounts of correspondent bank/s of the partner trading country for settlement of trade transactions, and Indian exporters may receive advance payment in INR against exports from overseas importers through this channel.

[12] CRR/ SLR exemptions were valid for deposits raised till November 04, 2022.

III.3.9 Master Directions on Transfer of Loan Exposures and Securitisation of Standard Assets (Amendments)

3.30 Master Direction on Transfer of Loan Exposure was amended to *inter alia* permit overseas branches of specified lenders to (a) acquire only 'not in default' loan exposures from a financial entity operating and regulated as a bank in the host jurisdiction; (b) transfer exposures 'in default' as well as 'not in default' pertaining to resident entities to a financial entity operating and regulated as a bank in the host jurisdiction; and (c) transfer exposures 'in default' as well as 'not in default' pertaining to non-residents, to any entity regulated by a financial sector regulator in the host jurisdiction. Amendments have also been made in certain provisions related to minimum holding period (MHP), valuation of security receipts (SRs), transfer of stressed loans to ARCs, and credit/ investment exposure of lenders. Additionally, the term 'Economic Interest' has now been explicitly defined as 'the risks and rewards that may arise out of loan exposure through the life of the loan exposure'.

3.31 In December 2022, the Reserve Bank, disallowed securitisation of loans with residual maturity of less than 365 days. Furthermore, it was clarified that the minimum holding period (MHP) for commercial or residential real estate mortgages shall be counted from the date of full disbursement of the loan, or registration of security interest with the Central Registry of Securitisation Asset Reconstruction and Security Interest of India (CERSAI), whichever is later. For the purpose of these directions, the said amendment has further explained that the minimum ticket size for issuance of securitisation notes refers to the size of investment by a single investor and shall be ₹1 crore.

III.3.10 Outsourcing of Financial Services - Responsibilities of regulated entities employing Recovery Agents

3.32 The Reserve Bank of India has been addressing the issues relating to recovery agents (RAs) engaged by the REs. Given the growing incidences of unacceptable practices followed by RAs, the Reserve Bank issued additional instructions to REs *inter alia* extending the scope of the guidelines to cover more REs and specifying permissible hours of calling borrowers for recovery of overdue loans. The REs were also advised to strictly ensure that they or their RAs do not resort to intimidation or harassment of any kind, either verbal or physical, against any person in their debt collection efforts, including acts intended to humiliate publicly or intrude upon the privacy of the debtors' family members, referees and friends, sending inappropriate messages either on mobile or through social media, *etc.* These instructions were made applicable to all commercial banks (excluding payments banks), AIFIs, NBFCs, UCBs, StCBs, CCBs, and ARCs. However, these instructions are not applicable to microfinance loans covered under 'Master Direction – Reserve Bank of India (Regulatory Framework for Microfinance Loans) Directions, 2022', dated March 14, 2022.

III.3.11 Identification of NBFCs in the Upper Layer

3.33 Considering the evolution of NBFCs in terms of size, complexity, and interconnectedness within the financial sector, the Reserve Bank had issued 'Scale Based Regulation (SBR): A Revised Regulatory Framework for NBFCs' on October 22, 2021 to align the regulations for NBFCs with their changing risk profile. The framework categorised NBFCs in Base Layer (NBFC-BL), Middle Layer (NBFC-ML), Upper Layer (NBFC-UL) and Top Layer (NBFC-TL) and stated that the Upper Layer shall comprise those NBFCs which are specifically identified by the Reserve Bank, based on a set of parameters and scoring methodology as provided in the framework. The top ten NBFCs in terms of their asset size shall always reside in the Upper Layer. Accordingly, a list of sixteen NBFCs categorised as NBFC-UL was released on September 30, 2022.

III.3.12 Regulatory framework for NBFC - Account Aggregators (Amendments)

3.34 To facilitate cash flow-based lending to MSMEs, it has been decided to include the Goods and Services Tax Network (GSTN) as a Financial Information Provider (FIP) under the Account Aggregator (AA) framework. The Department of Revenue shall be the regulator of the GSTN for this specific purpose and Goods and Services Tax (GST) Returns *viz.* Form GSTR-1 and Form GSTR-3B, shall be the Financial Information.

III.3.13 Digital Rupee (e₹) – Wholesale and Retail

3.35 Digital Rupee (e₹), the CBDC in India, is similar to the physical currency in terms of being a legal tender, accepted as a medium of payment and a safe store of value. The e₹ will provide an additional form of money to be used by the public.

3.36 A pilot for e₹ in the wholesale segment (e₹-W) for settlement of secondary market transactions in government securities, was launched on November 1, 2022 with the participation of nine banks. It is expected to make the inter-bank market more efficient and reduce transaction costs by pre-empting the need for settlement guarantee infrastructure or for collateral to mitigate settlement risk. Based on the learnings from this pilot, other wholesale transactions and cross-border payments will be the focus of future pilots.

3.37 The first pilot e₹ in the retail segment (e₹-R) was launched on December 1, 2022 in select locations in a closed user group comprising customers and merchants across the country. The first phase has begun with four banks, and more banks will join this pilot subsequently. The e₹-R pilot will provide the public with a risk-free medium of exchange as it represents a direct liability of the central bank, with features of physical cash like trust, safety and immediate settlement finality in digital transactions. During this pilot, use cases of person-to-person (P2P) and person-to-merchant (P2M) transactions in a closed user group are being tested. It will also test the robustness of the entire process of digital rupee creation, distribution and retail usage in real time. Based on the learnings from the current pilot, other features and applications of e₹ token and architecture may be tested in future pilots.

III. 3.14 Move towards frictionless credit - Pilot on digitisation of Kisan Credit Card

3.38 Considering the challenges associated with rural credit in India, digitalisation of its various aspects has emerged as an important objective for the Reserve Bank. To start with, a pilot project for end-to-end digitalisation of Kisan Credit Card (KCC) lending, has been developed by the Reserve Bank Innovation Hub (RBIH) under the Reserve Bank's guidance. The Digital KCC pilot aims to significantly reduce the turn around time (TAT) of KCC applications by automating and enabling end-to-end digitisation of key processes such as automation of a bank's loan origination system (LOS) and its integration with the state government's land record database through application programme interfaces (APIs) to enable the real-time verification of land record data.

3.39 The pilot is being carried out in select districts of two states, *viz.*, Madhya Pradesh and Tamil Nadu. Work to further scale up the pilot in other districts of these two states as also across more states in partnership with other banks is underway.

3.40 This pilot project on digitalisation of KCC lending is expected to play a pivotal role in facilitating credit flow to the unserved and underserved rural population by making the credit process faster and more efficient. When fully implemented, this is expected to transform the rural credit delivery system of the country.

III.3.15 Enabling framework for Regulatory Sandbox

3.41 The Reserve Bank issued standard operating procedure (SOP) for Interoperable Regulatory Sandbox (IoRS) to facilitate testing of innovative products/ services whose business models/ activities/ features fall within the regulatory ambit of more than one financial sector regulator. The SOP for IoRS has been prepared by the Inter-Regulatory Technical Group on FinTech (IRTG on FinTech). The regulatory sandbox framework of the regulator under whose remit the 'dominant feature' of the product falls, shall govern it as 'Principal Regulator (PR)'. The regulator/s under whose remit the other features apart from the dominant feature of the product fall shall be the 'Associate Regulator (AR)'. The test design shall be finalised by the PR in consultation with the AR.

III.3.16 Customer Protection

3.42 The number of complaints received by the Offices of the Reserve Bank of India Ombudsman (ORBIOs) for the previous two quarters under the Reserve Bank – Integrated Ombudsman Scheme (RB-IOS), 2021 indicates that the complaints relating to loans and advances (including credit cards) constitute nearly 40 per cent of the total complaints received during Q1 and Q2 of 2022-23 (Table 3.1). Complaints relating to mobile/ electronic banking, deposit accounts, automatic teller/ cash deposit machines and debit cards also had a significant share. The number of complaints, however, as a percentage of total transactions/business was negligible.

Table 3.1. Category of Complaints Received under the RB-IOS, 2021

	Grounds of Complaint	April to June 2022		July to September 2022	
		No.	Share in per cent	No.	Share in per cent
1	Loans and Advances and Non-adherence to FPC	14,794	27.7	13,179	25.8
2	Mobile/ Electronic Banking	8,584	16.1	8,377	16.4
3	Opening/ Operation of Deposit accounts	8,155	15.3	8,264	16.2
4	Credit Card	7,190	13.4	7,493	14.7
5	ATM/ CDM/ Debit card	7,685	14.4	7,135	14.0
6	Other products and services	3,743	7.0	3,748	7.4
7	Pension	1,295	2.4	1,056	2.1
8	Para-Banking	652	1.2	635	1.2
9	Remittance and Collection of instruments	784	1.5	632	1.2
10	Others	605	1.1	493	1.0
Total		**53,487**	**100.0**	**51,012**	**100.0**

Source: RBI.

3.43 To protect the customers and general public from the increasing number of cyber and digital payment frauds, the Reserve Bank intensified its awareness initiatives under the RB-IOS, 2021 to safeguard consumers against such frauds. These include, but not limited to, Ombudsman Speak programs across multi-media channels in local and regional languages, Talkathon with media and intensive awareness campaigns across the nation.

III.3.17 Enforcement

3.44 During June - November 2022, the Reserve Bank undertook enforcement action against 105 regulated entities (four public sector banks; three private sector banks; eighty eight co-operative banks; two foreign banks; one small finance bank; one regional rural bank; and six non-banking financial companies) and imposed an aggregate penalty of ₹24.57 crore for non-compliance with/ contravention of statutory provisions and/ or directions issued by the Reserve Bank.

III.3.18 REITs and InvITs – Fund Raising and Future Outlook

3.45 Real Estate Investment Trusts (REITs) comprise of portfolios of commercial real assets a major portion of which is already leased out, while Infrastructure Investment Trusts (InvITs) comprise of portfolios of infrastructure assets such as highways and power transmission assets. REITs and InvITs facilitate real estate and infrastructure financing and investment in the country.

3.46 There are five registered REITs and 19 registered InvITs with the SEBI as on November 30, 2022. Till November 30, 2022, InvITs raised ₹79,483 crore, while REITs raised ₹15,250 crore (Table 3.2). The Union Budget of 2022-23 has allocated ₹7.5 lakh crore for infrastructure, which is 35.4 per cent more than the allocation in the previous year. The Government of India has also laid an added thrust on infrastructure development, with its focus on initiatives like PM Gati Shakti, National Infrastructure Pipeline, inclusive development and financing of investments.

III.4 Other Developments

III.4.1 Deposit Insurance

3.47 The insurance cover of the Deposit Insurance and Credit Guarantee Corporation (DICGC) for depositors in all commercial and co-operative banks instils confidence in the banking system, thereby promoting financial stability. The number of registered insured banks as on September 30, 2022 stood at 2,034 comprising 141 commercial banks {including 43 RRBs, two local area banks (LABs), six payment banks and 12 small finance banks (SFBs)} and 1,893 co-operative banks. With the present limit of deposit insurance at ₹5 lakh, there were 267.1 crore fully protected deposit accounts (98.0 per cent of total) as at end-September 2022. In value terms, the insured deposits of ₹80.95 lakh crore formed 46.2 per cent of the total assessable deposits.

3.48 During H1:2022-23, the DICGC received ₹10,512.8 crore from banks as deposit insurance premium, of which 93.9 per cent was contributed by commercial banks and the remaining by co-operative banks. The Deposit Insurance Fund (DIF) stood at ₹1.55 lakh crore at the end of H1:2022-23, yielding a reserve ratio (*i.e.*, ratio of DIF to insured deposits) of 1.92 per cent (Table 3.3 and 3.4).

Table 3.3. Deposit Insurance Premium

(in ₹ crore)

Period	Commercial Banks	Co-operative Banks
2021-22 (H1)	8,939.1	621.6
2022-23 (H1)	9,872.1	640.7

Source: Deposit Insurance and Credit Guarantee Corporation (DICGC).

Table 3.2. Fund Mobilisation by REITs and InvITs (Amount in ₹ crore)

Particulars	2019-20		2020-21		2021-22		2022-23^		Total
	No.	Amount	No.	Amount	No.	Amount	No.	Amount	
Total funds mobilised by REITs	**-**	**-**	**3**	**14,300**	**2**	**950**	**-**	**-**	**15,250**
Listed REITs	-	-	3	14,300	2	950	-	-	15,250
Total funds mobilised by InvITs	**4**	**11,496**	**2**	**40,432**	**9**	**21,195**	**6**	**6,360**	**79,483**
Listed InvITs	3	7,744	1	25,215	7	16,025	3	2,596	51,580
Unlisted InvITs	1	3,753	1	15,217	2	5,170	3	3,764	27,904
Total funds mobilised by REITs and InvITs*	**4**	**11,496**	**5**	**54,732**	**11**	**22,145**	**6**	**6,360**	**94,733**

Note: * Includes funds raised through public issue, private placement, preferential issue, institutional placement, rights issue.
^ Partial financial year 2022-23 (April 1, 2022 to November 30, 2022).
Source: SEBI.

Table-3.4: Deposit Insurance Fund (DIF)

Period	Deposit Insurance Fund (in ₹ crore)	Reserve Ratio (per cent)
End-Mar 2022	1,46,842	1.81
End-Sep 2022	1,55,459	1.92

Source: Deposit Insurance and Credit Guarantee Corporation (DICGC).

3.49 The settlement of claims in case of liquidated banks and banks under all inclusive directions (AID) during H1:2022-23 amounted to ₹479.8 crore, of which banks under AID accounted for ₹397.9 crore. Cash repayments (out of recoveries) of ₹58.1 crore were received during H1:2022-23 as against ₹267 crore in the corresponding period of the previous year. As on December 22, 2022, the insured deposits of banks under AID stood at ₹2,242 crore.

III.4.2 Corporate Insolvency Resolution Process (CIRP)

3.50 Since the inception of the Insolvency and Bankruptcy Code (IBC) in December 2016, 5,893 CIRPs had commenced by end-September 2022, of which 67 per cent have been closed. Of these, around 21 per cent were closed on appeal or review or settled, 19 per cent were withdrawn, 46 per cent ended in orders for liquidation and 14 per cent culminated in approval of resolution plans (Table 3.5).

3.51 Till September 30, 2022, 553 CIRPs have ended in resolution. Where the processes were initiated under section 7 of the Code, realisation by financial creditors (FCs) under resolution plans in comparison to liquidation value was 201 per cent while the realisation by them was 33 per cent of their claims. 46 per cent of the closed CIRPs yielded orders for liquidation, as compared to 14 per cent ending up with a resolution plan. However, more than 76 per cent of the CIRPs ending in liquidation (1349 out of 1774 for which data are available) were earlier with the Board for Industrial and Financial Reconstruction (BIFR) and/ or are defunct. The economic value of most of the corporate debtors that ended in liquidation had almost completely eroded even before they were admitted into CIRP. These

Table 3.5. Corporate Insolvency Resolution Process

Year/Quarter	CIRPs at the beginning of the Period	Admitted	Closure by				CIRPs at the end of the Period
			Appeal/ Review/ Settled	Withdrawal under Section 12A	Approval of Resolution Plan	Commencement of Liquidation	
2016 - 17	0	37	1	0	0	0	36
2017 - 18	36	707	94	0	19	91	539
2018 - 19	539	1157	153	97	77	305	1064
2019 - 20	1064	1989	344	217	136	541	1815
2020 - 21	1815	536	91	162	121	350	1627
Apr - Jun, 2021	1627	141	12	36	34	75	1611
Jul - Sep, 2021	1611	192	26	40	18	67	1652
Oct - Dec, 2021	1652	263	19	48	52	114	1682
Jan - Mar, 2022	1682	289	46	47	39	84	1755
April - Jun, 2022	1755	361	34	59	34	96	1893
Jul - Sep, 2022	1893	221	26	34	23	84	1947
Total	**NA**	**5893**	**846**	**740**	**553**	**1807**	**1947**

Note: 1. These CIRPs are in respect of 5721 CDs.
2. The data excludes 1 CD which moved directly from BIFR to resolution.
3. The data includes Dewan Housing Finance Corporation Limited data, Srei Equipment Finance Limited, Srei Infrastructure Finance Limited and Reliance Capital Ltd, wherein the application filed by the Reserve Bank was admitted under section 227 read with Financial Service Provider Rules of the Code.

Source: Compilation from website of the NCLT and filing by Ips.

CDs had assets, on an average, valued at less than 8 per cent of the outstanding debt amount (Table 3.6).

3.52 53 per cent of CIRPs initiated by operational creditors (OCs) were closed on appeal, review, or withdrawal. Such closures accounted for about 72 per cent of all closures by appeal, review, or withdrawal (Table 3.7 and Table 3.8).

III.4.3 Insurance

3.53 Life insurance sector has been registering consistently high y-o-y growth in premium. The total premium collected by the life insurance sector during the period from April-October 2022 was ₹4,11,474 crore, which was 21 per cent higher than the premium collection during the corresponding period of the previous year. During the same period, premium collection by the general and health insurance sector stood at ₹1,46,152 crore, which was 16 per cent more than the corresponding period of 2021-22. Among the business segments, motor and health insurance segments grew by 18 per cent and 21 per cent, respectively, and other segments too reported good growth.

Table 3.6. CIRPs Ending with Orders for Liquidation till September 30, 2022

State of Corporate Debtor at the Commencement of CIRP	No. of CIRPs initiated by			
	Financial Creditor	Operational Creditor	Corporate Debtor	Total
Either in BIFR or Non-functional or both	585	619	145	1349
Resolution Value > Liquidation Value	105	60	38	203
Resolution Value ≤ Liquidation Value*	692	730	149	1571

Note: 1. There were 99 CIRPs, where CDs were in BIFR or non-functional but had resolution value higher than liquidation value.
2. *Includes cases where no resolution plans were received and cases where liquidation value is zero or not estimated.
3. Data of 33 CIRPs is awaited.

Table 3.7. Outcome of CIRPs, Initiated Stakeholder-wise, as on September 30, 2022

Outcome	Description	CIRPs initiated by			
		Financial Creditor	Operational Creditor	Corporate Debtor	Total
Status of CIRPs	Closure by Appeal/ Review/ Settled	234	605	7	846
	Closure by Withdrawal u/s 12A	198	535	7	740
	Closure by Approval of Resolution Plan #	313	188	51	552
	Closure by Commencement of Liquidation	812	803	192	1807
	Ongoing #	974	877	93	1944
	Total	**2531**	**3008**	**350**	**5889**
CIRPs yielding Resolution Plans	Realisation by FCs as per cent of Liquidation Value	201.0	123.5	147.2	177.6
	Realisation by FCs as per cent of their Claims	33.0	16.5	18.3	30.8
	Average time taken for Closure of CIRP (days)	567	561	521	561
CIRPs yielding Liquidations	Liquidation Value as per cent of Claims	6.6	9.2	9.2	7.3
	Average time taken for Closure of CIRP (days)	457	429	388	437

Note: # This data excludes data in respect of Financial Service Providers admitted under section 227 read with Financial Service Provider Rules of the Code.

Table 3.8. Sectoral Distribution of CIRPs as on September 30, 2022

Sector	No. of CIRPs						
	Admitted	Closed					Ongoing
		Appeal/ Review/ Settled	Withdrawal under Section 12 A	Approval of Resolution Plan	Commencement of Liquidation	Total	
Manufacturing	2324	296	295	279	779	1649	675
Food, Beverages and Tobacco Products	303	33	37	32	96	198	105
Chemicals and Chemical Products	244	37	38	33	69	177	67
Electrical Machinery and Apparatus	169	22	14	9	75	120	49
Fabricated Metal Products	120	16	23	13	43	95	25
Machinery and Equipment	262	41	41	20	80	182	80
Textiles, Leather and Apparel Products	399	50	50	35	158	293	106
Wood, Rubber, Plastic and Paper Products	269	32	37	36	86	191	78
Basic Metals	387	44	31	77	124	276	111
Others	171	21	24	24	48	117	54
Real Estate, Renting and Business Activities	1227	230	181	73	313	797	430
Real Estate Activities	311	70	38	14	40	162	149
Computer and related activities	171	25	29	6	59	119	52
Research and Development	6	2	1	1	0	4	2
Other Business Activities	739	133	113	52	214	512	227
Construction	653	118	85	59	122	384	269
Wholesale and Retail Trade	588	72	55	36	230	393	195
Hotels and Restaurants	130	23	20	15	30	88	42
Electricity and Others	177	17	11	30	56	114	63
Transport, Storage and Communications	163	19	19	12	67	117	46
Others	631	71	74	49	210	404	227
Total	**5893**	**846**	**740**	**553**	**1807**	**3946**	**1947**

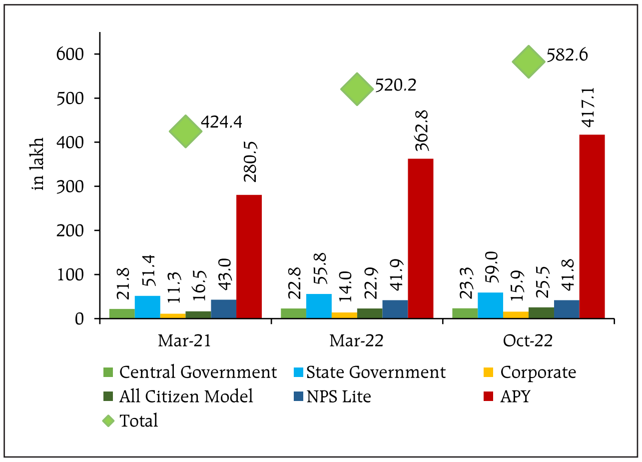
Source: Insolvency and Bankruptcy Board of India (IBBI).

III.4.4 Pension Funds

3.54 As on October 31, 2022, the National Pension System (NPS) and the Atal Pension Yojana (APY) recorded a 24.2 per cent and 21.1 per cent growth (y-o-y) in number of subscribers and their corpus, respectively (Chart 3.1 and 3.2).

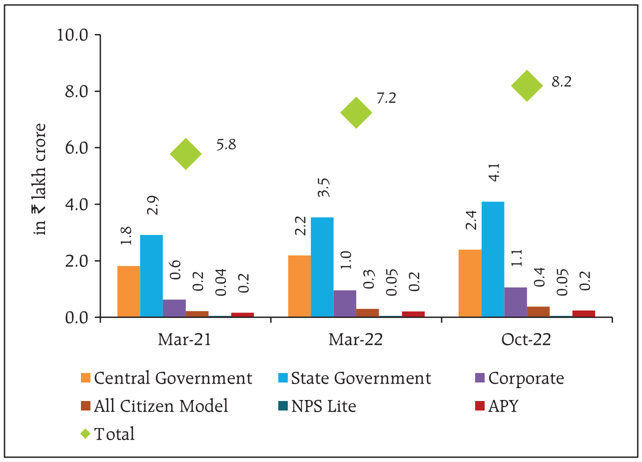
3.55 Both the NPS and the APY have continued to progress in terms of the total number of subscribers and AUM. Their combined subscriber base and AUM have reached 5.82 crore and ₹8,18,840 crore, respectively, of which APY has 71.6 per cent share in the number of subscribers (4.17 crore) and 2.9 per cent share in AUM (₹23,970 crore).

Chart 3.1: NPS and APY Subscribers – Sector-wise



Source: Pension Fund Regulatory and Development Authority (PFRDA).

Chart 3.2: NPS and APY AUM – Sector-wise



Source: Pension Fund Regulatory and Development Authority (PFRDA).

Summary and Outlook

3.56 Financial sector regulation involves continuous assessment of risks with pro-active policy responses. In the current challenging global environment, regulatory efforts are focused on addressing vulnerabilities in non-bank financial intermediation and core segments of financial markets. Protecting the financial system from the ill effects of climate risk is a major policy goal for regulators. The increasing threat of cyber risk is another key focus area for regulators, given its potential to increase vulnerabilities at institutional and system levels.

3.57 Domestically, the goal is to safeguard the domestic financial system from internal and external shocks while protecting customers and preserving financial stability. In this context, regulatory measures are aimed at improving the resilience of financial intermediaries, easing compliance, reducing regulatory costs, driving digitalisation, improving customer protection and access to finance. Regulators remain alert to the rapidly changing financial ecosystem with a view to enhancing its efficiency and ensuring its soundness and stability.