Financial Stability Report

June 2025

Reserve Bank of India

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Foreword

The announcement of large tariffs by the US administration in April has set in motion a new paradigm in trade and economic policy. Geopolitical risks remain elevated. The ensuing policy uncertainty and unpredictability will influence global growth. International agencies, including the IMF, the OECD and the World Bank, have revised growth downwards.

Against this backdrop, near-term global financial stability risks have increased. The market turbulence in April was a stark reminder of how existing vulnerabilities in the global financial system are amplified by sudden shocks. Though financial markets have stabilised after this episode, they remain volatile and highly sensitive to economic and geopolitical developments. Globally, risks associated with elevated public debt and possibilities of further corrections in asset prices remain high.

There are many structural shifts that are reshaping the global economy, including growing fragmentation in trade, rapid technological disruption, ongoing climate change and protracted geopolitical hostilities. They make economic forecasts difficult and policy interventions challenging. Therefore, even as they navigate through the fog of uncertainty, it is imperative for central banks and financial sector regulators to remain vigilant, prudent and agile in safeguarding their economies and financial systems.

In this global milieu, the Indian economy remains a key driver of global growth. Growth momentum is buoyed by strong domestic growth drivers, sound macroeconomic fundamentals and prudent policies. Nonetheless, external spillovers and weather-related events could pose downside risks to growth. The outlook for inflation, on the other hand, is benign and there is greater confidence in the durable alignment of inflation with the Reserve Bank's target.

As this edition of the Financial Stability Report (FSR) highlights, the resilience of the domestic financial system is continuously improving, bolstered by strong capital buffers, low non-performing loans and robust profitability. Results of stress tests reaffirm the strength of the banking and non-banking sectors with capital levels projected to remain well above the regulatory minimum even under adverse shock scenarios. The healthy balance sheets of corporates, banks and non-bank financial companies (NBFCs) augur well for the economy.

Financial sector regulators remain committed to protecting customers, promoting competition and fostering innovation as they strike the right balance between improving efficiency and growth, and safety and soundness. Financial stability, like price stability, is a necessary condition, and not a sufficient one to boost India's potential growth. As custodians of financial stability, we must endeavour to develop a well-functioning financial system that not only promotes macroeconomic stability but also provides financial services efficiently.

Sanjay Malhotra
Governor

June 30, 2025

Contents

Page No.

LIST OF BOXES

Chapter I

Chapter II

LIST OF CHARTS

Chapter I

Page No.

Page No.

Page No.

LIST OF TABLES

Chapter I

Page No.

Chapter II

Chapter III

List of Select Abbreviations

3-MMA	3-Month Moving Average
AA	Adjudicating Authority
AEs	Advanced Economies
AFA	Authorisation for Assignment
AFS	Available for Sale
AID	All Inclusive Directions
AIFs	Alternative Investment Funds
AIFIs	All-India Financial Institutions
AMCs	Asset Management Companies
AMFI	Association of Mutual Funds in India
APIs	Application Programming Interfaces
APY	Atal Pension Yojana
ARCL	AMC Repo Clearing Limited
ARCs	Asset Reconstruction Companies
ASPs	Annuity Service Providers
AUM	Assets Under Management
BCBS	Basel Committee on Banking Supervision
BIFR	Board for Industrial and Financial Reconstruction
Bima-ASBA	Bima Applications Supported by Blocked Amount
BIS	Bank for International Settlements
BLC	Balanced Life Cycle Fund
BPS	Basis Points
BRSR	Business Responsibility and Sustainability Reporting
BSI	Banking Stability Indicator
CAD	Current Account Deficit
CAGR	Compounded Annual Growth Rate
CART	Continuous Assessment-Based Red Teaming
CASA	Current Account and Savings Account
CCIL	Clearing Corporation of India Ltd.
CCPs	Central Counterparties
CCRI	Credit Concentration Risk Index
CCs	Clearing Corporations
CDs	Certificates of Deposit
CDSL	Central Depository Services Limited
CET1	Common Equity Tier 1
CGFMU	Credit Guarantee Fund for Micro Units
CICs	Core Investment Companies
CIRP	Corporate Insolvency Resolution Process
CLOs	Collateralised Loan Obligations
CMs	Clearing Members
CoC	Committee of Creditors
CP	Commercial Paper
CPGRAMS	Centralised Public Grievance Redress and Monitoring System
CPI	Consumer Price Index
CRAR	Capital to Risk-Weighted Assets Ratio
CRAs	Credit Rating Agencies
CRR	Cash Reserve Ratio
D-SIIs	Domestic Systemically Important Insurers
DGA	Duration Gap Analysis
DICGC	Deposit Insurance and Credit Guarantee Corporation
DIIs	Domestic Institutional Investors
DFM	Dynamic Factor Model
DIF	Deposit Insurance Fund
DLAs	Digital Lending Apps
DPD	Days Past Due
DRS	Debt Relief Schemes
DSR	Debt Service Ratio
EAR	Earnings At Risk
EBIT	Earnings Before Interest and Taxes
EBLR	External Benchmark-Based Lending Rate

EBPT	Earnings Before Profit and Tax
ECB	External Commercial Borrowings
ECLGS	Emergency Credit Line Guarantee Scheme
EMDEs	Emerging Markets and Developing Economies
EMEs	Emerging Market Economies
EMP	Exchange Market Pressure
EoDB	Ease of Doing Business
EOI	Expression of Interest
EPS	Earnings per Share
ERPs	ESG Rating Providers
ESG	Environmental, Social, and Governance
ETFs	Exchange Traded Funds
FBs	Foreign Banks
FCI	Financial Conditions Index
FDI	Foreign Direct Investment
FEMA	Foreign Exchange Management Act, 1999
FIRE	Format for Incident Reporting Exchange
FMEs	Fund Management Entities
FoFs	Fund of Funds
FPI	Foreign Portfolio Investment
FSB	Financial Stability Board
FSDC	Financial Stability and Development Council
FSR	Financial Stability Report
FSSI	Financial System Stress Indicator
FVTPL	Fair Value Through Profit and Loss
FY	Financial Year
GAOs	Global Administrative Offices
GaR	Growth-at-Risk
G20	Group of Twenty
GDP	Gross Domestic Product
GEP	Global Economic Prospects
GNPA	Gross Non-Performing Asset
GPR	Global Geopolitical Risk
GSIBs	Globally Systemically Important Banks
G-Secs	Government Securities
GST	Goods and Services Tax
HFCs	Housing Finance Companies
HHI	Herfindahl-Hirschman index
HFT	Held for Trading
HQLAs	High Quality Liquid Assets
HTM	Held to Maturity
HVDLEs	High Value Debt Listed Entities
HySAC	Hybrid Securities Advisory Committee
IAIS	International Association of Insurance Supervisors
IBBI	Insolvency and Bankruptcy Board of India
ICR	Interest Coverage Ratio
IESSA	International Ethics Standards for Sustainability Assurance
IFSC	International Financial Services Centre
IFSCA	International Financial Services Centres Authority
IIBX	India International Bullion Exchange
IIF	Institute of International Finance
IIP	International Investment Position
IM	Information Memorandum
IMF	International Monetary Fund
INR	Indian Rupee
InvITs	Infrastructure Investment Trusts
IOSCO	International Organization of Securities Commission
IPO	Initial Public Offerings
IPs	Insolvency Professionals
IR	Information Ratio
IRDAI	Insurance Regulatory and Development Authority of India
ISPOT	Integrated SEBI Portal for Technical Glitches

ISSA	International Standard on Sustainability Assurance
IU	Information Utilities
KMPs	Key Managerial Personnel
KYC	Know Your Customer
LCR	Liquidity Coverage Ratio
LGD	Loss Given Default
LODR	Listing Obligations and Disclosure Requirements
LPCC	Limited Purpose Clearing Corporation
LSPs	Lending Service Providers
LT	Long-term
LTV	Loan-to-Value
MDG	Modified Duration Gap
MeitY	Ministry of Electronics and Information Technology
MF	Mutual Fund
MF Lite	Mutual Funds Lite
MII	Market Infrastructure Institutions
MITRA	Mutual Fund Investment Tracing and Retrieval Assistant
MNRL	Mobile Number Revocation List
MoU	Memorandum of Understanding
MRC	Minimum Required Corpus
MSME	Micro, Small And Medium Enterprises
MTM	Mark-To-Market
MVE	Market Value of Equity
NABARD	National Bank for Agriculture and Rural Development
NAVs	Net Asset Values
NaBFID	National Bank for Financing Infrastructure and Development
NBFCs	Non-Banking Financial Companies
NBFC-ML	Middle layer NBFCs
NBFC-UL	Upper layer NBFCs
NBFI	Non-Bank Financial Intermediaries
NBSI	Non-Banking Stability Indicator
NDS-OM	Negotiated Dealing System – Order Matching
NDTL	Net Demand and Time Liabilities
NeGD	National e-Governance Division
NFCs	Non-Financial Corporates
NFO	New Fund Offer
NHB	National Housing Bank
NIC	National Industrial Classification
NII	Net Interest Income
NIM	Net Interest Margin
NNPA	Net Non-Performing Assets
NOC	No-Objection Certificate
NOI	Net Operating Income
NPL	Non-Performing Loans
NPS	National Pension System
NRC	Nomination and Remuneration Committee
NSDL	National Securities Depository Limited
NSE IX	NSE International Exchange
NSFR	Net Stable Funding Ratio
NSO	National Statistical Office
NSUCBs	Non-Scheduled Urban Cooperative Banks
ODIs	Offshore Derivative Instruments
OECD	Organisation for Economic Co-operation and Development
OFIs	Other Financial Intermediaries
OIS	Overnight Indexed Swap
OOI	Other Operating Income
ORBIO	Offices of the Reserve Bank of India Ombudsman
OTC	Over-the-Counter
OVD	Officially Valid Document
P/E	Price-to-Earnings
PaRRVA	Past Risk and Return Verification Agency

PAT	Profit After Tax
PCE	Personal Consumption Expenditures
PCR	Provisioning Coverage Ratio
PDs	Primary Dealers
PFRDA	Pension Fund Regulatory and Development Authority
PL	Performing Loans
PSBs	Public Sector Banks
PSL	Priority Sector Lending
PVBs	Private Sector Banks
RAR	Risk Adjusted Return
RAs	Retirement Advisers
RBI	Reserve Bank of India
REIT	Real Estate Investment Trust
REER	Real Effective Exchange Rate
REs	Regulated Entities
RMBS	Residential Mortgage-Backed Securities
RMC	Risk Management Committee
RoA	Return on Asset
RoE	Return on Equity
RPs	Resolution Plans
RPTs	Related Party Transactions
RRBs	Regional Rural Banks
RSA	Rate-Sensitive Assets
RSL	Rate-Sensitive Liabilities
RWA	Risk-Weighted Assets
SBs	Stock Brokers
SBU	Separate Business Unit
SCBs	Scheduled Commercial Banks
SD	Standard Deviation
SDI	Securitised Debt Instrument
SDLs	State Development Loans
SEBI	Securities and Exchange Board of India
SFBs	Small Finance Banks
SGF	Settlement Guarantee Fund
SIF	Specialized Investment Funds
SIMM	Standard Initial Margin Model
SIPs	Systematic Investment Plans
SLR	Statutory Liquidity Ratio
SMAs	Special Mention Accounts
SM REIT	Small and Medium Real Estate Investment Trust
SOC	Security Operations Centre
SPDs	Stand-alone Primary Dealers
SRC	Stakeholder Relationship Committee
SRS	Systemic Risk Survey
SRVA	Special Rupee Vostro Account
ST	Short-term
SUCBs	Scheduled Urban Cooperative Banks
TGA	Traditional Gap Analysis
TMs	Trading Members
UCB	Urban Cooperative Bank
UPS	Unified Pension Scheme
USD	US Dollar
VARX	Vector Auto Regression with Exogenous Variables
VIX	Volatility Index

Overview

The Financial Stability Report (FSR) is a half-yearly publication, with contributions from all financial sector regulators. It presents the collective assessment of the Sub Committee of the Financial Stability and Development Council on current and emerging risks to the stability of the Indian financial system.

Global Macrofinancial Risks

Elevated economic and trade policy uncertainties are testing the resilience of the global economy and the financial system. Multilateral agencies have downgraded global growth forecasts largely reflecting trade disruptions and heightened volatility. Financial markets remain volatile, especially core government bond markets, driven by shifting policy and geopolitical environment. Alongside, existing vulnerabilities such as soaring public debt levels, excessive risk taking in the non-banking financial sector[1] and elevated asset valuations have the potential to amplify fresh shocks. As countries confront varying trade-offs between growth and inflation, monetary authorities are charting divergent policy trajectory. Emerging market economies face significant challenges from headwinds emanating from escalating trade tensions, prolonged and intensified geopolitical tensions, and spillovers from advanced economies.

Domestic Macrofinancial Risks

Despite an uncertain and challenging global economic backdrop, the Indian economy remains a key driver of global growth, underpinned by sound macroeconomic fundamentals and prudent macroeconomic policies. Since India's growth is mainly driven by buoyant domestic demand, it remains relatively insulated from the global headwinds. The Indian economy continues to grow at a healthy pace, which coupled with steadily moderating inflation, is aiding macroeconomic and financial stability. The domestic financial system is exhibiting resilience fortified by healthy balance sheets of banks and non-banks. Financial conditions have eased supported by accommodative monetary policy and low volatility in financial markets. The strength of the corporate balance sheets also lends support to overall macroeconomic stability. While the economy and the financial system are relatively well positioned to withstand tariff-induced shocks, risks from global spillovers and escalation in geopolitical conflicts remain a key concern.

Financial Institutions: Soundness and Resilience

The soundness and resilience of scheduled commercial banks (SCBs) are bolstered by robust capital buffers, multi-decadal low non-performing loans and strong earnings. Furthermore, macro stress test results showed that SCBs' aggregate capital levels will continue to remain above the regulatory minimum even under adverse stress scenarios.

The capital position of the urban cooperative banks (UCBs) strengthened, while that of the non-banking financial companies (NBFCs) remained well above the regulatory minimum. The consolidated solvency ratio of the insurance sector, both life and non-life segments, remained above the minimum prescribed threshold limit. Stress test results of mutual funds and clearing corporations affirm their resilience to shocks.

[1] International Monetary Fund (2025), "Global Financial Stability Report: Enhancing Resilience amid Uncertainty", April.

Regulatory Initiatives and Other Developments in the Financial Sector

Globally, financial sector regulators in most major economies have implemented measures to strengthen the financial system by bringing key reforms in liquidity management, credit risk regulation and securitisation practices. Furthermore, they are stepping up efforts to safeguard the financial network against cyberattacks and technological failures by enhancing surveillance mechanisms and establishing standardised incident-reporting frameworks. Regulators continue to assess climate-related risks to the financial system by developing standards to integrate climate objectives into broader financial stability assessments.

Domestic regulators are actively implementing a series of regulatory reforms aimed at enhancing the stability, transparency and inclusiveness of the financial system in line with global best practices. These initiatives focus on combating financial and digital fraud, promoting liquidity resilience, regulating digital lending and safeguarding retail investors.

Assessment of Systemic Risk

According to the latest round of the Reserve Bank's systemic risk survey (SRS) conducted in May 2025, all major risk groups remain in the 'medium risk' category. Respondents remained optimistic about the soundness of the domestic financial system, with 92 per cent expressing higher or similar level of confidence in the Indian financial system. Around two-thirds of the respondents expressed decreasing confidence in the stability of the global financial system. Geopolitical conflicts, capital outflows and reciprocal tariff/trade slowdown were identified as major near-term risks to domestic financial stability.

Chapter I

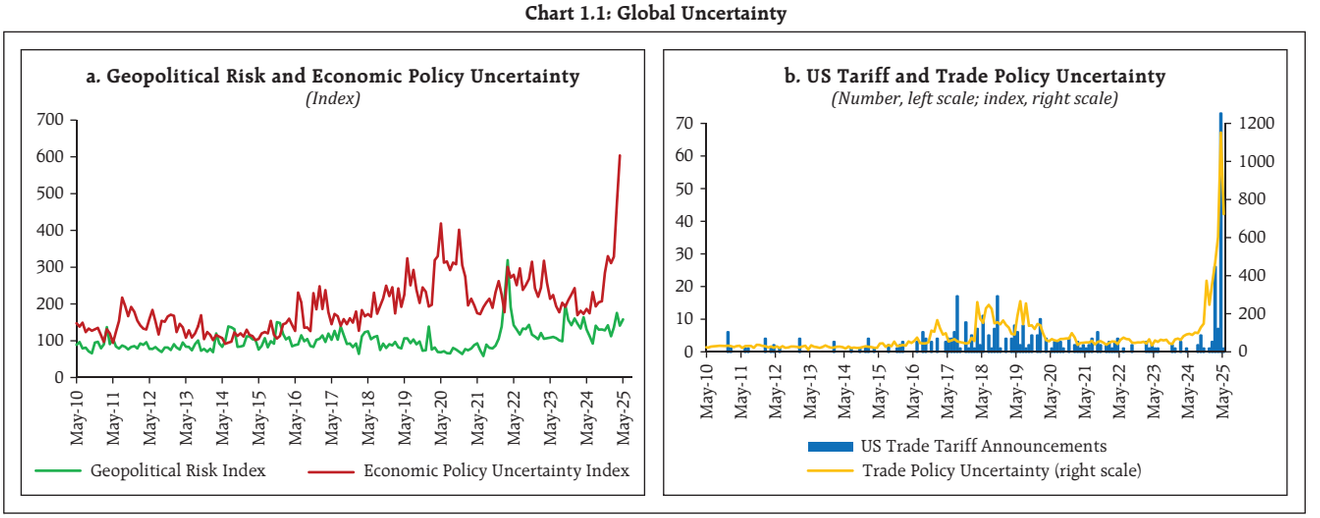
Macrofinancial Risks

An uncertain and volatile global macroeconomic environment is testing the resilience of the global financial system. Global financial stability risks have increased as heightened policy and trade uncertainties have the potential to interact with existing vulnerabilities, especially elevated public debt, and amplify adverse shocks. The Indian economy and the financial system, however, continue to exhibit resilience, aided by strong macroeconomic fundamentals and a robust financial system. Risks emanating from global spillovers and escalation in geopolitical tensions and policy uncertainties remain a key concern.

Introduction

1.1 Since the December 2024 Financial Stability Report (FSR), near-term global financial stability risks have risen significantly, driven by heightened geopolitical tensions and economic and trade policy uncertainties (Chart 1.1 a and b). Shifting US trade policies and lack of clarity surrounding its economic policies triggered a spike in volatility and sharp price declines across a range of markets. Consequently, financial conditions have tightened, and growth prospects have weakened. Though markets have recovered from the early-April lows due to sharp tariff hikes, considerable uncertainty persists about the evolution of trade patterns and economic outlook. Moreover, despite the recent market turmoil, asset valuations in several markets stay high relative to fundamentals and risks remain concentrated with exposures to a few large technology firms. Overall, global financial stability risks remain elevated, as unprecedented trade and policy uncertainties and unpredictability could potentially interact with the existing vulnerabilities - rising public debt, high leverage in the non-banking financial intermediaries (NBFIs) sector and stretched asset valuations - to amplify adverse shocks.

Chart 1.1: Global Uncertainty



Note: Economic policy uncertainty is the index of Baker, Bloom and Davis (March 2016). Geopolitical risk is the index of Caldara and Iacoviello (April 2022). Trade policy uncertainty is the index of Caldara, Iacoviello, Molligo, Prestipino and Raffo (January 2020).
Sources: Global Trade Alert and Policyuncertainty.com.

1.2 Amidst elevated global economic and trade policy uncertainties, the Indian economy continues to display resilience, underpinned by strong macroeconomic fundamentals and robust financial system. The economy is growing at a healthy pace, with the financial system meeting the financing needs of all sectors of the real economy. At the same time, domestic financial stability risks remain contained, as reflected in improving asset quality, strong capital and liquidity buffers and robust profitability of banks and non-bank lenders. The volatility in domestic financial markets also remained relatively low.

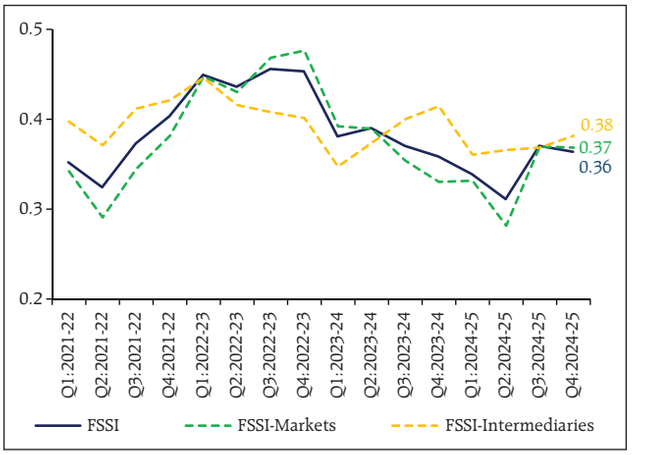
1.3 The domestic financial system, however, could be impacted by external spillovers. Growing trade disruptions and intensifying geopolitical hostilities could negatively impact domestic growth outlook and reduce the demand for bank credit, which has decelerated sharply. Moreover, it could also lead to increased risk aversion among investors and further corrections in domestic equity markets, which despite the recent correction, remain at the high end of their historical range.

1.4 Overall, while the broader financial system remains resilient, there is some build-up of stress primarily in financial markets on account of global spillovers. This is reflected in the marginal rise in the financial system stress indicator (FSSI), an indicator of the stress level in the Indian financial system, compared to its position in H1:2024-25 (Chart 1.2).

1.5 Against this backdrop, this chapter is structured into six sections. Section I.1 discusses evolving international and domestic macroeconomic developments and their implications for the near-term economic outlook. Section I.2 analyses the key trends and financial conditions across equity, bond and forex markets, while Section I.3 provides an assessment of corporate and household sector vulnerabilities. Sections I.4 and I.5 examine the stability of the banking and non-bank financial sectors, respectively. Section I.6 summarises the findings of the latest round of the systemic risk survey (SRS).

Chart 1.2: Financial System Stress Indicator

(Index)



Note: Detailed methodology is provided in Annex 2.
Sources: DBIE, Bloomberg, RBI supervisory returns and staff calculations.

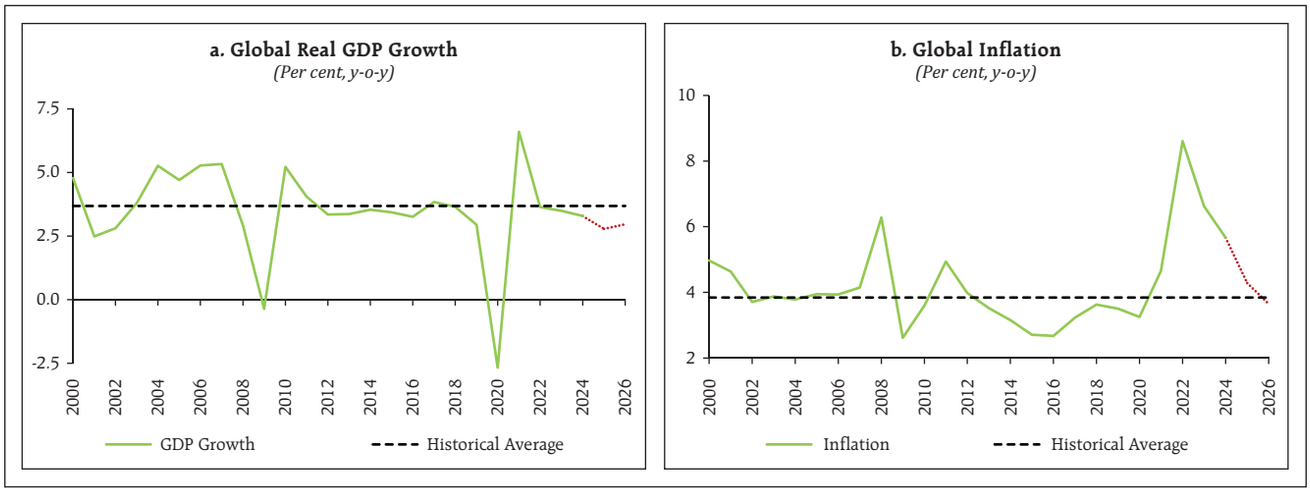
I.1 Macroeconomic Outlook

I.1.1 Global Outlook

1.6 The global macroeconomic outlook has deteriorated markedly amidst headwinds from persistent trade frictions, heightened policy uncertainty, and weak consumer sentiment. Despite some easing in tariff tensions on prospects of trade deals, the economic outlook remains fragile amidst elevated trade uncertainty. This could adversely impact consumer spending, business investment and financial conditions. The estimates of effective tariff rate on US merchandise imports have reached their highest level since 1938[1]. The impact of such tariff measures, however, may vary across countries as tariffs constitute an adverse supply shock for the

[1] As per the OECD's Economic Outlook Report, June 2025, the new tariffs introduced by the United States this year up to mid-May are estimated to have raised the (ex-ante) effective tariff rate on US merchandise imports to 15.4 per cent, from just over 2 per cent in 2024.

Chart 1.3: Growth-Inflation Dynamics vis-à-vis Historical Average



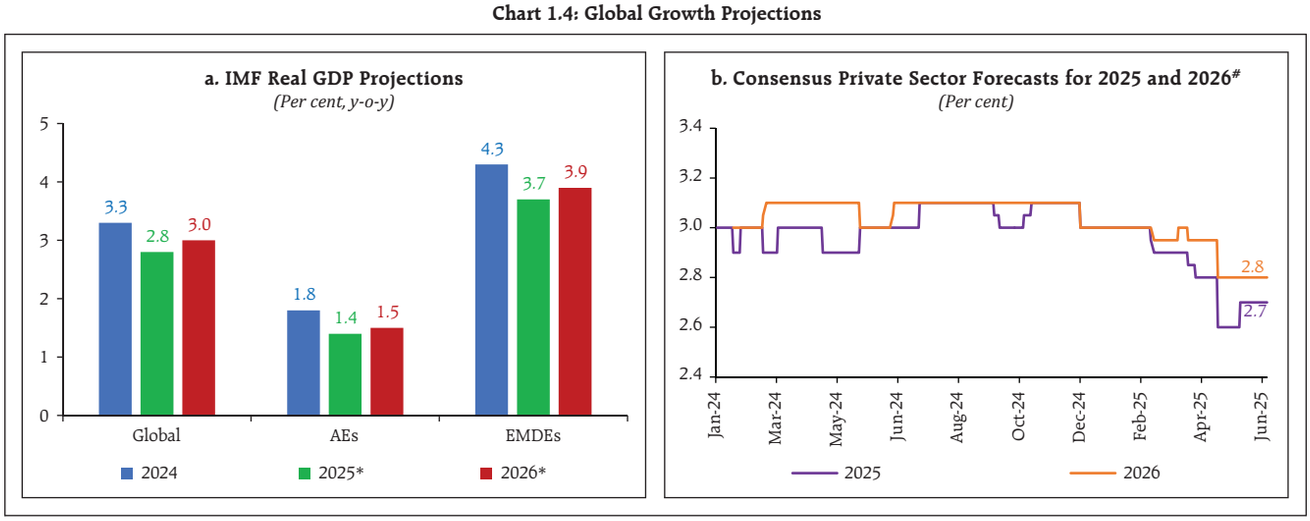
Note: Global Real GDP growth historical average (2000-2019) is 3.7 per cent, while global inflation historical average (2000-2019) is 3.8 per cent. Red dotted lines represent projections.
Source: IMF World Economic Outlook (April 2025).

implementing countries and a negative demand shock for their trading partners[2].

1.7 The global economy and the financial system have demonstrated exceptional resilience in the face of multiple shocks in recent years. However, the imposition of higher tariffs by the US has introduced a fresh shock to the global economy. The global output is, therefore, expected to remain below the historical average and inflation is projected to be above the long-term average in 2025 (Chart 1.3 a and b). Consequently, overall growth-inflation dynamics remain less than favourable relative to their long-run trends.

1.8 Citing escalation in trade tensions and elevated policy uncertainty, the International Monetary Fund (IMF) in its April 2025 World Economic Outlook has revised global growth projection downwards to 2.8 per cent in 2025 and 3.0 per cent in 2026[3] (Chart 1.4 a). Growth in both

Chart 1.4: Global Growth Projections



Notes: (1) * Projections.
(2) # Forecasts derived from the latest quarterly surveys conducted by Bloomberg.
Sources: Bloomberg and IMF World Economic Outlook (April 2025).

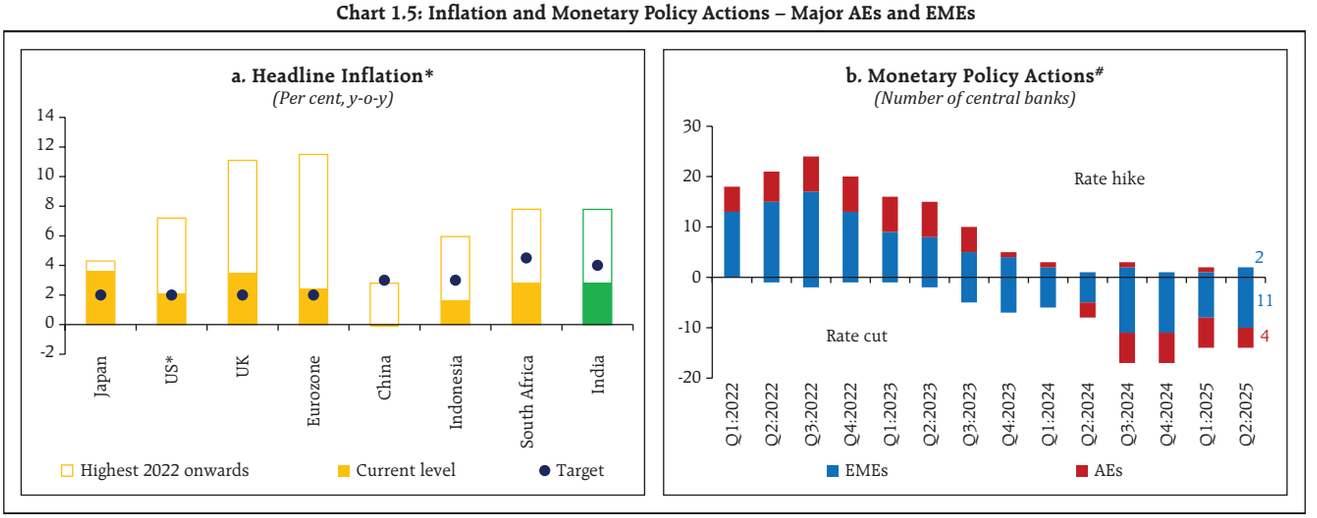
[2] Gourinchas, Pierre-Olivier (2025), "The Global Economy Enters a New Era", IMF Blog, April.
[3] International Monetary Fund (2025), "World Economic Outlook: A Critical Juncture amid Policy Shifts", April.

advanced economies (AEs) and emerging market and developing economies (EMDEs) is projected to decelerate. Consensus private sector forecasts, however, indicate a sharper deceleration in output growth (Chart 1.4 b). Furthermore, the IMF's Growth-at-Risk (GaR) model, an important metric to assess risks to growth under extreme scenarios, indicates that there is a five per cent chance that global growth could fall below 0.4 per cent in the next one year[4].

1.9 Other multilateral agencies have also lowered their global growth forecasts. The Organisation for Economic Co-operation and Development (OECD), in its Economic Outlook released in June 2025, has revised the global GDP growth forecast for 2025 by 20 basis points (bps) relative to its assessment in March 2025 report to 2.9 per cent. Similarly, the World Bank, in its June 2025 Global Economic Prospects (GEP), projected global GDP growth (using PPP weights) to decelerate from 3.3 per cent in 2024 to 2.9 per cent in 2025, lower by 30 bps relative to January 2025 projections. Moreover, the persistence of elevated trade frictions is expected to lower trade volumes going forward[5], with the deceleration disproportionately concentrated in the US, China, and their closely linked regional trading partners.

1.10 Disinflation momentum has stalled, especially in AEs, where inflation generally remains above the central bank targets. Inflation in emerging market economies (EMEs), on the other hand, is mostly ruling below the targets (Chart 1.5 a). A slower retreat in services inflation, an uptick in core goods inflation and uncertainty around the impact of tariffs pose upside risks to global inflation. Nonetheless, the progress in disinflation so far has enabled central banks to pivot to monetary policy easing cycle in most jurisdictions (Chart 1.5 b). The US, however, remains an important exception, as it has held its policy rate constant in 2025 so far and

Chart 1.5: Inflation and Monetary Policy Actions – Major AEs and EMEs



Notes: (1) * Personal Consumption Expenditures (PCE) Price Index for US and CPI Index for other countries. Data as on June 10, 2025.
(2) # Based on policy actions of 8 advanced economy central banks and 20 emerging market central banks. Positive figure denotes rate hike action and negative figure denotes rate cut action in respective quarters. Data as on June 10, 2025.

Source: Bloomberg.

[4] International Monetary Fund (2025), "Global Financial Stability Report: Enhancing Resilience amid Uncertainty", April.

[5] As per the World Bank GEP report, global trade growth is projected to decelerate to 1.8 per cent in 2025, a downward revision of 1.3 percentage points from the previous January 2025 projection.

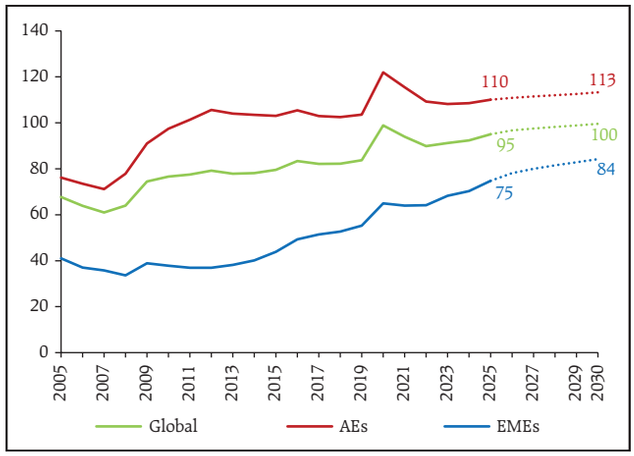
markets expect fewer rate cuts this year. Overall, monetary authorities are charting out divergent policy trajectory, as they confront different trade-offs between growth and inflation.

1.11 Rising global public debt has been a recurring issue highlighted in recent FSRs and it remains a key concern, especially in the context of elevated uncertainty, slowing growth, rising debt servicing costs and growing spending pressures. According to the IMF, global public debt as a percentage of GDP is projected to reach above 95 per cent this year and 100 per cent by the end of the decade (Chart 1.6), while it may reach 117 per cent by 2027 in a severely adverse scenario[6]. In addition, the public debt in about one-third of the countries, which makes up 80 per cent of the global GDP, is currently larger than the pre-pandemic levels, driving the increase in global public debt[7]. Furthermore, countries with high levels of debt are also running large primary deficits (Chart 1.7).

1.12 Alongside the increase in debt levels, interest expenses as a share of government revenue remain elevated for most major AEs and EMEs (Chart 1.8 a and b). With debt levels projected to increase further as countries issue more debt to support economic activity, debt sustainability in those countries will be adversely impacted. The interest rate-growth rate differential is becoming increasingly adverse for debt sustainability in both the US and Europe

Chart 1.6: Public Debt – Global, AEs and EMEs

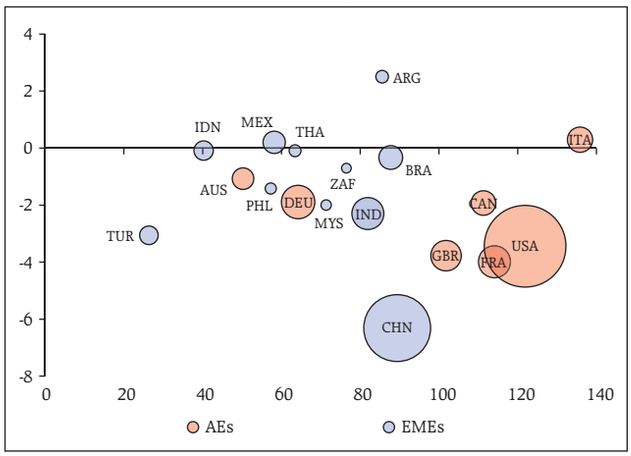
(Per cent of GDP)



Note: Dotted lines represent forecasts.
Sources: IMF World Economic Outlook (April 2025), IMF Fiscal Monitor (April 2025) and RBI staff calculations.

Chart 1.7: Public Debt and Primary Balance – Country Comparison[8]

(Primary balance as per cent of GDP in 2024, vertical scale; gross public debt as per cent of GDP in 2024, horizontal scale)



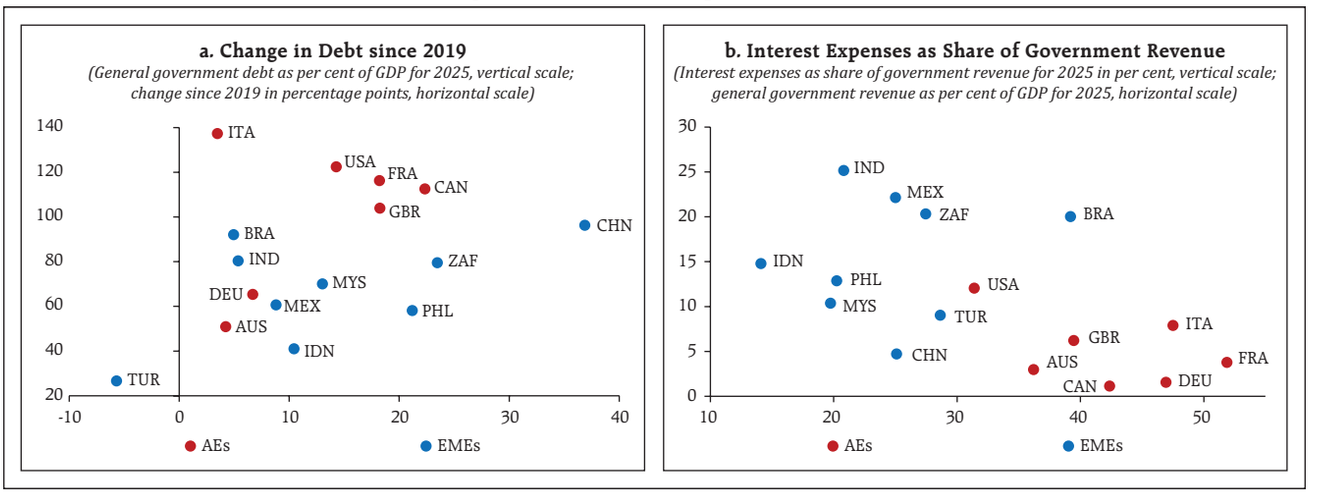
Note: Size of the bubble represents scaled GDP in US$ trillion.
Sources: IMF Fiscal Monitor (April 2025) and RBI staff calculations.

[6] Dabla-Norris, Era, Gaspar, Vitor, Poplawski-Ribeiro, Marcos (2025), "Rising Global Debt Requires Countries to Put their Fiscal House in Order", IMF Blog, April.

[7] Dabla-Norris, Era and Furceri, Davide (2025), "Debt is Higher and Rising Faster in 80 Per cent of Global Economy", IMF Blog, May.

[8] ARG: Argentina; AUS: Australia; BRA: Brazil; CAN: Canada; CHN: China; DEU: Germany; FRA: France; GBR: United Kingdom; IDN: Indonesia; IND: India; ITA: Italy; MEX: Mexico; MYS: Malaysia; PHL: Philippines; THA: Thailand; TUR: Republic of Türkiye; USA: United States; ZAF: South Africa.

Chart 1.8: Change in Debt and Interest Expenses – Select AEs and EMEs[9]

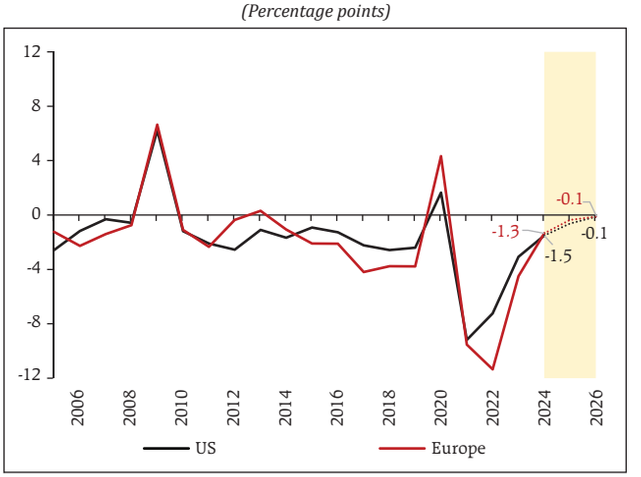


Note: Projected values for 2025 are considered.
Sources: IMF Fiscal Monitor (April 2025) and RBI staff calculations.

(Chart 1.9). The rating agency Moody's decision to downgrade the sovereign rating of the US citing sharp increase in debt, widening fiscal deficit and rising interest payments reflects this growing risk.

1.13 In this context, the smooth functioning of the sovereign bond markets, which must absorb larger bond issuances, is vital for financial stability. Sovereign bond markets are increasingly dominated by leveraged price-sensitive private investors even as constraints on banks to act as market makers and liquidity providers have tightened[10]. Thus, in times of stress, the resilience of market functioning will be tested (See paragraphs 1.23 to 1.25 for details).

Chart 1.9: Interest Rate – Growth Rate Differential (Real) – US and Europe
(Percentage points)



Notes: (1) Forecast is based on real interest rates that are derived by deducting consumer price inflation from nominal 10-year government yields. Nominal yield forecasts are based on analyst estimates provided by Bloomberg. CPI forecasts and real GDP growth projections are based on IMF estimates.
(2) Shaded region represents forecast.
Sources: Bloomberg and IMF World Economic Outlook (April 2025).

I.1.2 Domestic Outlook

1.14 The Indian economy, supported by strong macroeconomic fundamentals, remained the fastest growing major economy in the world during 2024-25. Moreover, as India's growth is largely dependent on domestic demand, the impact of

[9] AUS: Australia; BRA: Brazil; CAN: Canada; CHN: China; DEU: Germany; FRA: France; GBR: United Kingdom; IDN: Indonesia; IND: India; ITA: Italy; MEX: Mexico; MYS: Malaysia; PHL: Philippines; TUR: Turkey; USA: United States; ZAF: South Africa.

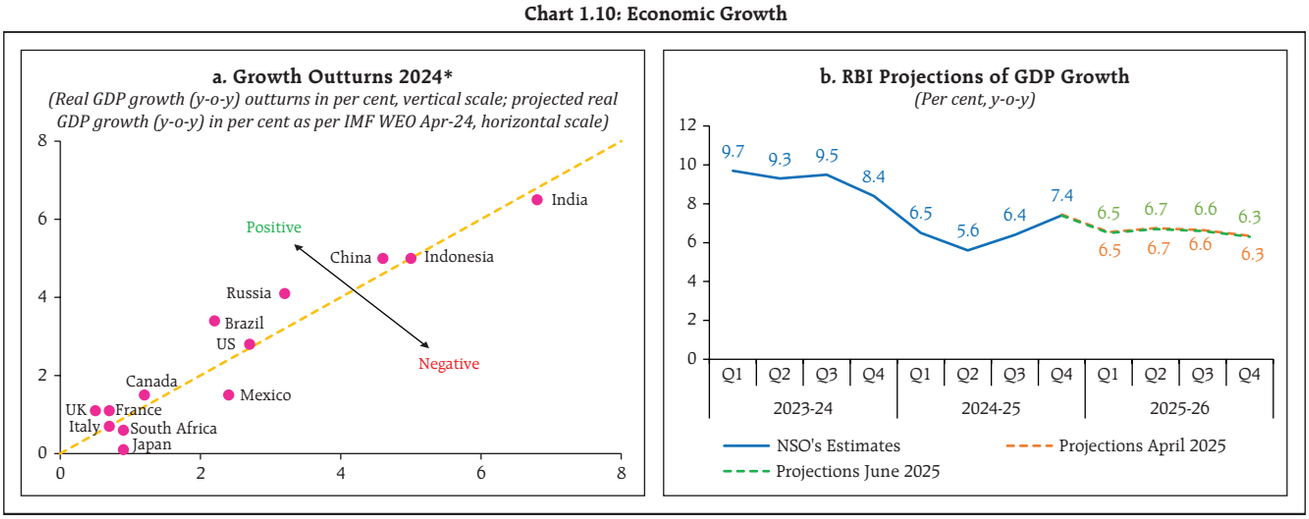
[10] Adrian, Tobias, Nikolaou, Kleopatra, Wu, Jason (2025), "Fostering Core Government Bond Market Resilience, IMF Blog, May.

external shocks remained limited. In terms of growth outturns[11] for 2024, India's actual growth rate did not deviate significantly from projections even amidst deteriorating global outlook (Chart 1.10 a). The RBI has projected the real GDP to grow at 6.5 per cent in 2025-26[12], same as in 2024-25, supported by buoyant rural demand, revival in urban demand, an uptick in investment activity on the back of above-average capacity utilisation, government's continued thrust on capex and congenial financial conditions (Chart 1.10 b). The continued momentum in various high frequency indicators of services sector, robust agricultural production and above normal southwest monsoon forecasts, and strong goods and services tax (GST) collections underscore the sustained momentum and resilience of the economy.

1.15 The headwinds from protracted geopolitical tensions, elevated uncertainty and trade disruptions, and weather-related uncertainty pose downside risks to growth. Moreover, deceleration in global growth will act as a drag on domestic output. It is estimated that a 100 basis points (bps) slowdown in global growth can, *ceteris paribus*, pull down India's growth by 30 bps[13].

1.16 Domestic inflation has been steadily declining with the headline consumer price index (CPI) inflation recording a six-year low of 2.8 per cent in May 2025 (Chart 1.11). The outlook for food inflation remains favourable on account of softening prices and robust crop production. Moreover, the risk of imported inflation largely remains low with the anticipated slowdown in global growth likely to soften commodity and crude oil prices, although the recent escalation of geopolitical tensions in the Middle East has led to heightened uncertainty. The near-term and medium-term outlook gives greater confidence of a durable alignment of headline inflation with the target of 4 per cent, and it is likely to undershoot the target at the margin as per the projections of the RBI.

Chart 1.10: Economic Growth



Note: * Growth outturn is the actual growth in 2024 compared to IMF projections in April 2024.
Sources: IMF World Economic Outlook (April 2024 and April 2025), National Statistical Office (NSO) and RBI staff calculations.

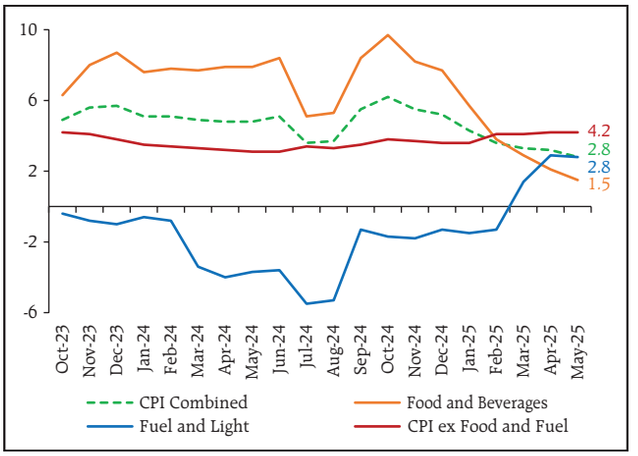
[11] Growth outturn refers to the actual economic growth compared to what was originally forecast.

[12] Reserve Bank of India (2025), "Monetary Policy Statement", June.

[13] Reserve Bank of India (2025), "Monetary Policy Report", April.

Chart 1.11: Inflation - India

(Per cent, y-o-y)

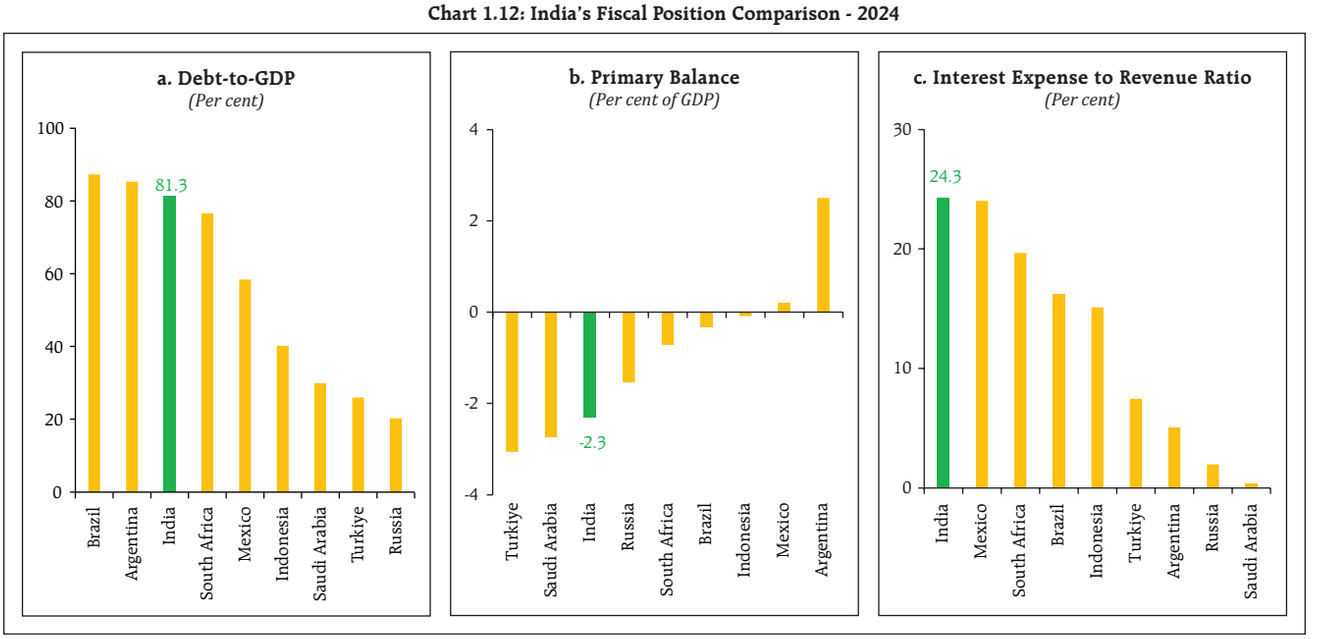


Sources: NSO and RBI staff calculations.

1.17 On the fiscal front, India's public debt levels, primary deficit and share of interest payment in government revenue have remained relatively on the higher side compared to peer EMEs (Chart 1.12 a, b and c). However, India's fiscal position and credibility has enhanced significantly in recent years on account of ongoing fiscal consolidation, improvement in the quality of expenditure and earmarking of debt-to-GDP as the nominal anchor for the central government's fiscal policy. In addition, the government debt is predominantly rupee-denominated. The weighted average maturity of outstanding stock of central government market borrowings has risen from 10.4 years in 2018-19 to 13.2 years in 2024-25[14] and around 97 per cent are issued at fixed rate[15]. Furthermore, unlike most other major economies, the flow data points to a lower debt trajectory supported by strong nominal GDP growth (Chart 1.13 a). Alongside, the favourable interest rate-growth rate differential of the central government augurs well for debt sustainability (Chart 1.13 b).

1.18 The resilience of the external sector has been a key contributing factor to India's macroeconomic and financial stability. Current account deficit (CAD) at 0.6 per cent of GDP during 2024-25 remains eminently manageable, supported by sustained buoyancy in services exports and

Chart 1.12: India's Fiscal Position Comparison - 2024

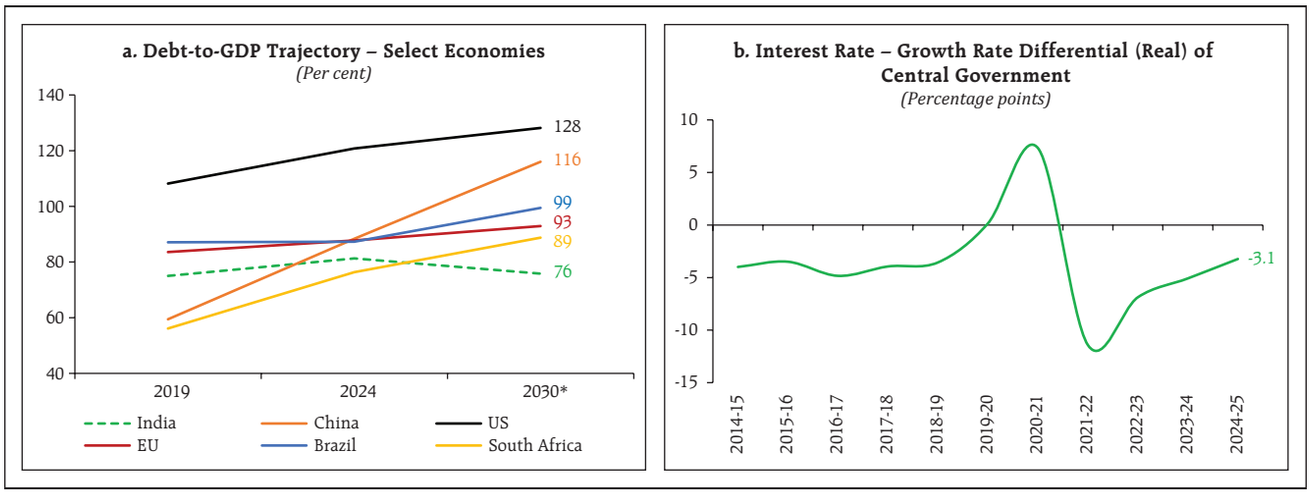


Sources: IMF Fiscal Monitor (April 2025) and RBI staff calculations.

[14] Reserve Bank of India (2025), "Annual Report", May.

[15] As on June 18, 2025.

Chart 1.13: Debt-to-GDP and Interest Rate – Growth Rate Differential

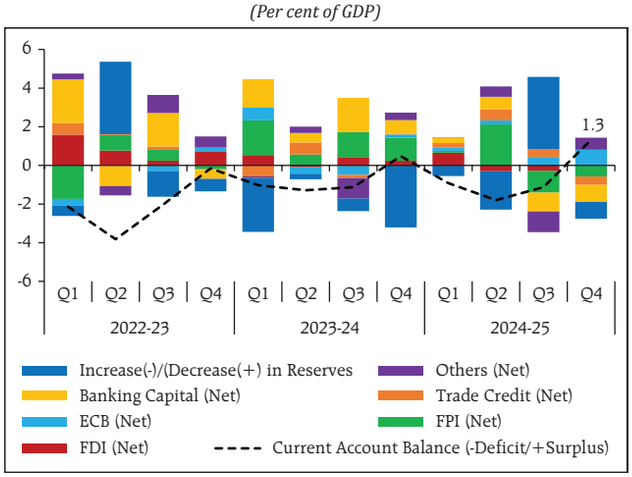


Note: * IMF April 2025 Projections.
Sources: IMF World Economic Outlook (April 2025) and RBI staff calculations.

remittances. Moreover, current account balance turned into a surplus of 1.3 per cent of GDP in Q4:2024-25 (Chart 1.14).

1.19 In the capital account, high gross foreign direct investment (FDI) during 2024-25 indicates that India continues to remain an attractive investment destination. Net FDI flows, however, moderated due to higher repatriation and net outward FDI. Foreign portfolio investments (FPI) moderated during 2024-25. On the other hand, both external commercial borrowings (ECB) and non-resident deposits recorded higher inflows compared to the previous financial year (Table 1.1). Overall, net capital flows fell short of CAD during 2024-25, leading to a depletion in foreign exchange reserves. An update of the capital flows at risk framework[16], which estimates the entire distribution of capital flows, shows that under extreme adverse shocks, with five per cent probability, the expected FPI outflows could reach 6 per cent of the GDP, while total capital outflows, that is, FPI and FDI, could be in the magnitude of about 7 per cent of GDP.

Chart 1.14: India's Balance of Payments
(Per cent of GDP)



Note: 'Others' includes external assistance, rupee debt service, other capital and errors and omissions.
Source: RBI.

Table 1.1: Capital Flows

(US$ billion)

Component	Financial Year so far			Financial Year	
	Period	2024-25	2025-26	2023-24	2024-25
FDI (net)	April	1.8	3.9	10.2	1.0
FPI to India (net)	April-June	-0.2	-0.5	44.6	3.3
ECB to India (net)	April	2.9	0.5	3.5	18.4
Non-resident Deposits (net)	April	0.8	1.1	14.7	16.2

Note: Data on FPI for financial year so far (June 26, 2025) and corresponding previous year period have been sourced from NSDL, whereas data for full year is based on BoP.
Sources: RBI and NSDL.

[16] Patra, Michael Debabrata, Behera, Harendra and Muduli, Silu (2022), "Capital Flows at Risk: India's Experience", RBI Bulletin, June.

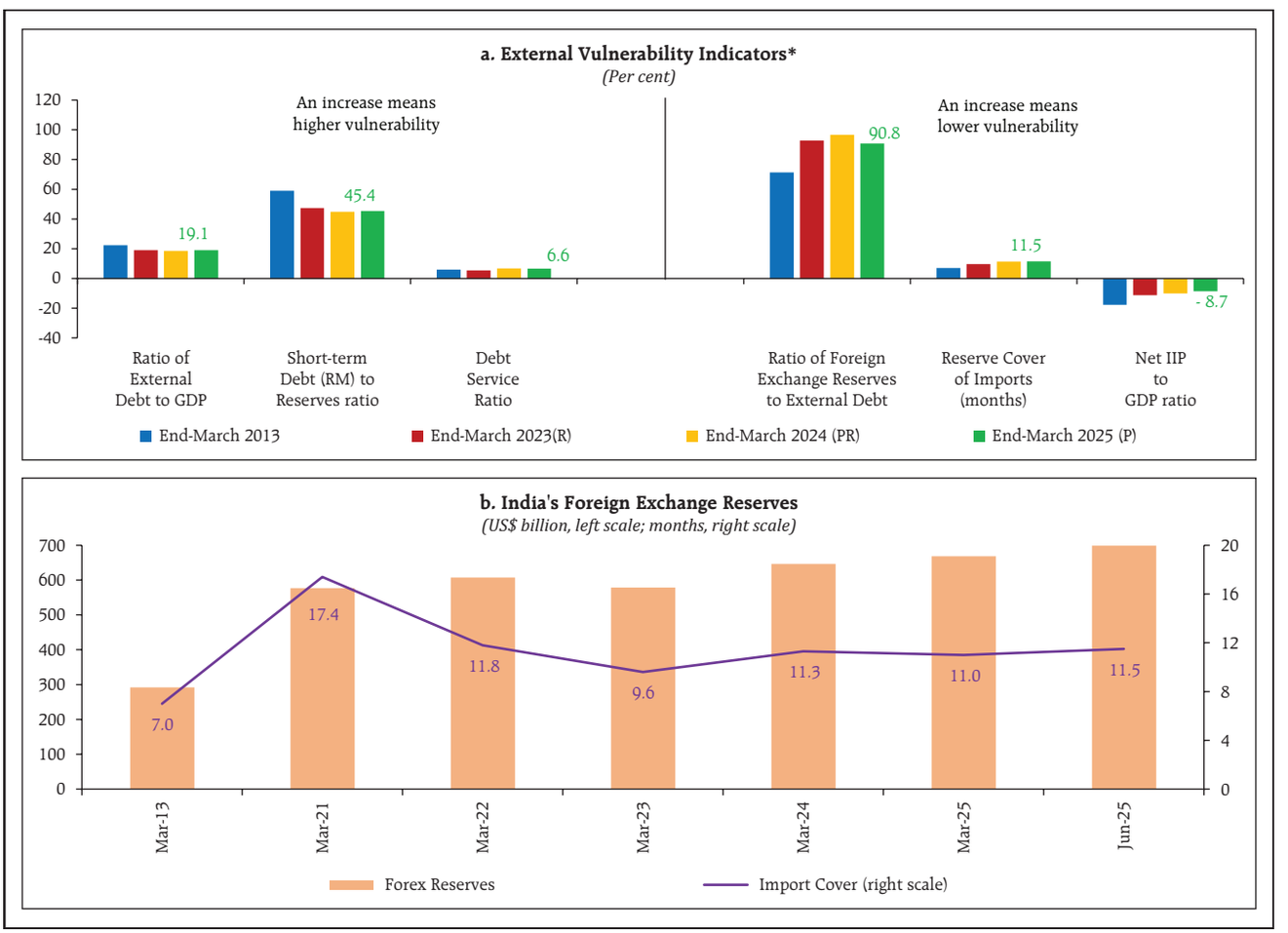
1.20 Notwithstanding the uncertainty surrounding the trade outlook, India's external vulnerability indicators remain robust and continue to show improvement. Foreign exchange reserves at US$ 697.9 billion, as on June 20, 2025, are sufficient to cover more than 11 months of merchandise imports on BoP basis; external debt stood at a moderate 19.1 per cent of GDP at end-March 2025; the share of short-term debt on residual maturity basis stood at 45.4 per cent of foreign exchange reserves at end-March 2025; and net international investment position (IIP) improved (Chart 1.15 a and b).

I.2 Financial Markets

I.2.1 Global Financial Markets

1.21 The unsettling of the global trade outlook following the announcement of tariffs by the US in April 2025 created significant turbulence in global financial markets, as concerns about uncertain economic outlook and corporate profitability led to large sell off across multiple markets. Unlike previous risk-off episodes, traditional safe-haven assets such as the US treasuries fell, and the US dollar (USD) weakened. Equity markets, especially in the US, that have outperformed most global peers in the last five years, saw a sharp sell-off after the reciprocal tariff

Chart 1.15: External Vulnerability Indicators and Foreign Exchange Reserves

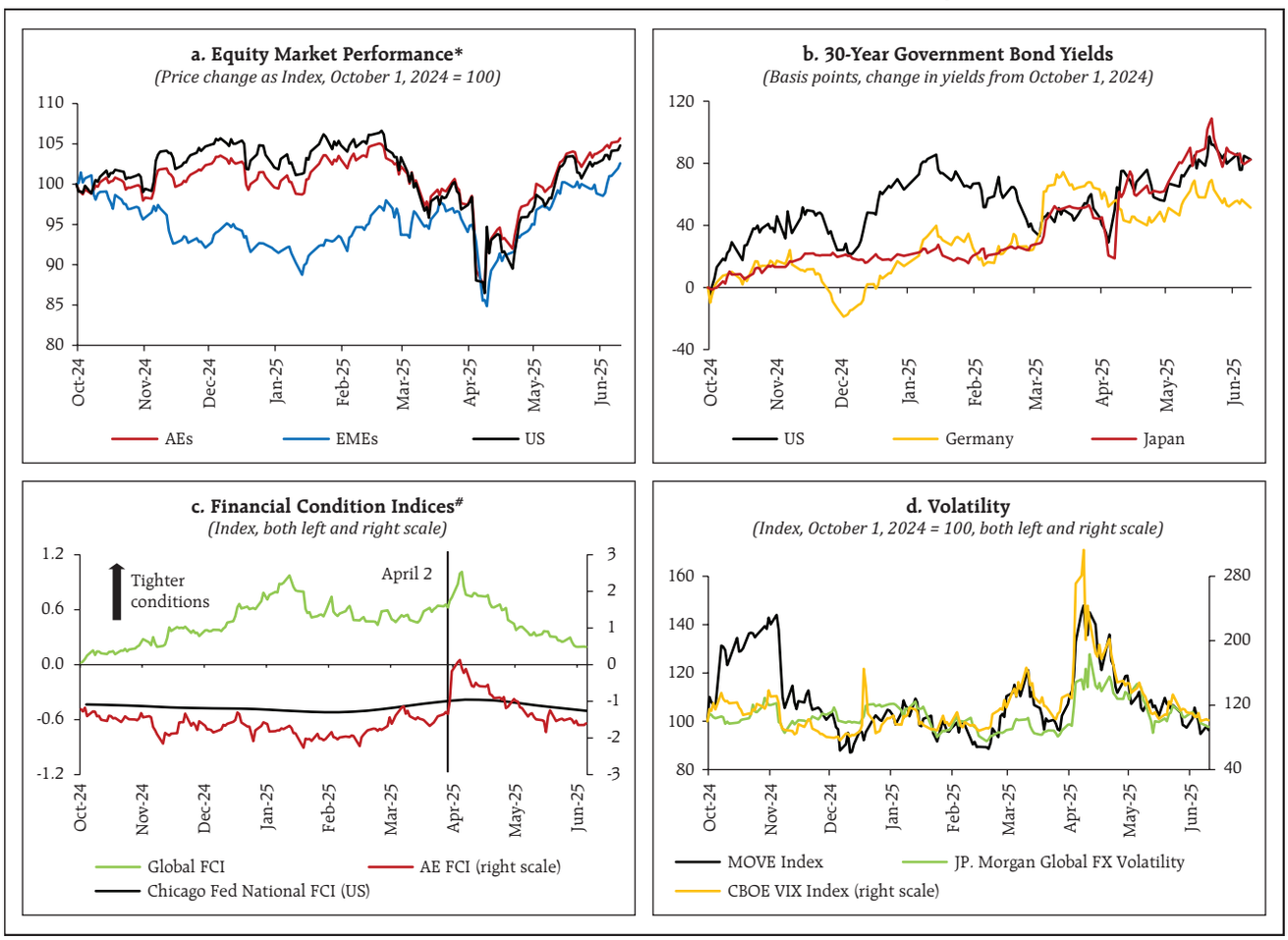


Note: * RM: Residual Maturity; R: Revised; P: Provisional; PR: Partially Revised; Reserve cover of imports is as on June 20, 2025.
Sources: RBI and Ministry of Finance.

announcement in early April along with other AEs and EMEs (Chart 1.16 a). Global equity markets have since recovered on de-escalation in trade tensions. Long-term government bond yields rose after initially declining in a flight to safety, reflecting investors' preference for cash and shorter-duration assets amid deteriorating fiscal outlook, especially in the US (Chart 1.16 b). Other segments of the financial markets were also affected by the turmoil as corporate bond spreads widened, prices of oil and copper fell, the market value of crypto assets declined, and open-ended investment funds and exchange-traded funds saw substantial outflows. This led to a tightening of financial conditions and significant bouts of volatility in financial markets, which has somewhat eased on the prospects of trade deals (Chart 1.16 c and d).

1.22 The April 2025 market turmoil brought into focus a few key market vulnerabilities. First, valuations of US stocks, which form nearly 55 per cent of global equity market[17], remain stretched by historical standards. The forward price-to-earnings (P/E) ratio – the ratio of equity prices to expected 12-month earnings – is well above the historical median (Chart 1.17 a), and equity risk premium – a

Chart 1.16: Asset Price Movements, Financial Conditions and Volatility

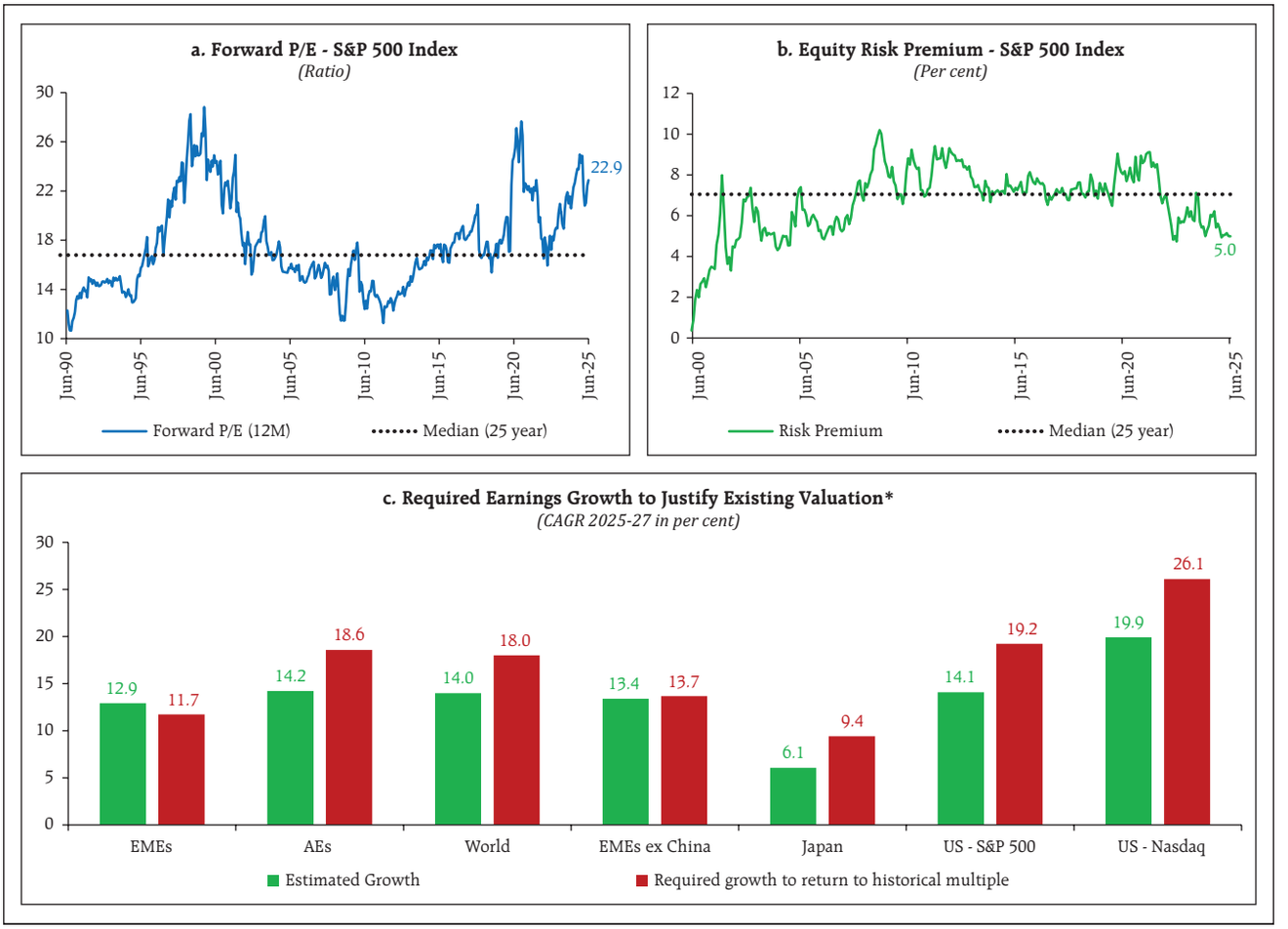


Notes: (1) * S&P 500 Index for the United States and MSCI indices for all other series.
(2) # Value for Global FCI is derived by subtracting 100 from Goldman Sachs Global FCI. Advanced economy (AE) FCI is derived as the first principal component of US, UK and Eurozone FCIs. Individual FCIs provided by Bloomberg have been multiplied by (-1).

Sources: Bloomberg, Federal Reserve Economic Data, Goldman Sachs and RBI staff calculations.

[17] Adrian, Tobias (2025), "Enhancing Financial Stability for Resilience During Uncertain Times", IMF Blog, April.

Chart 1.17: Equity Market Valuation



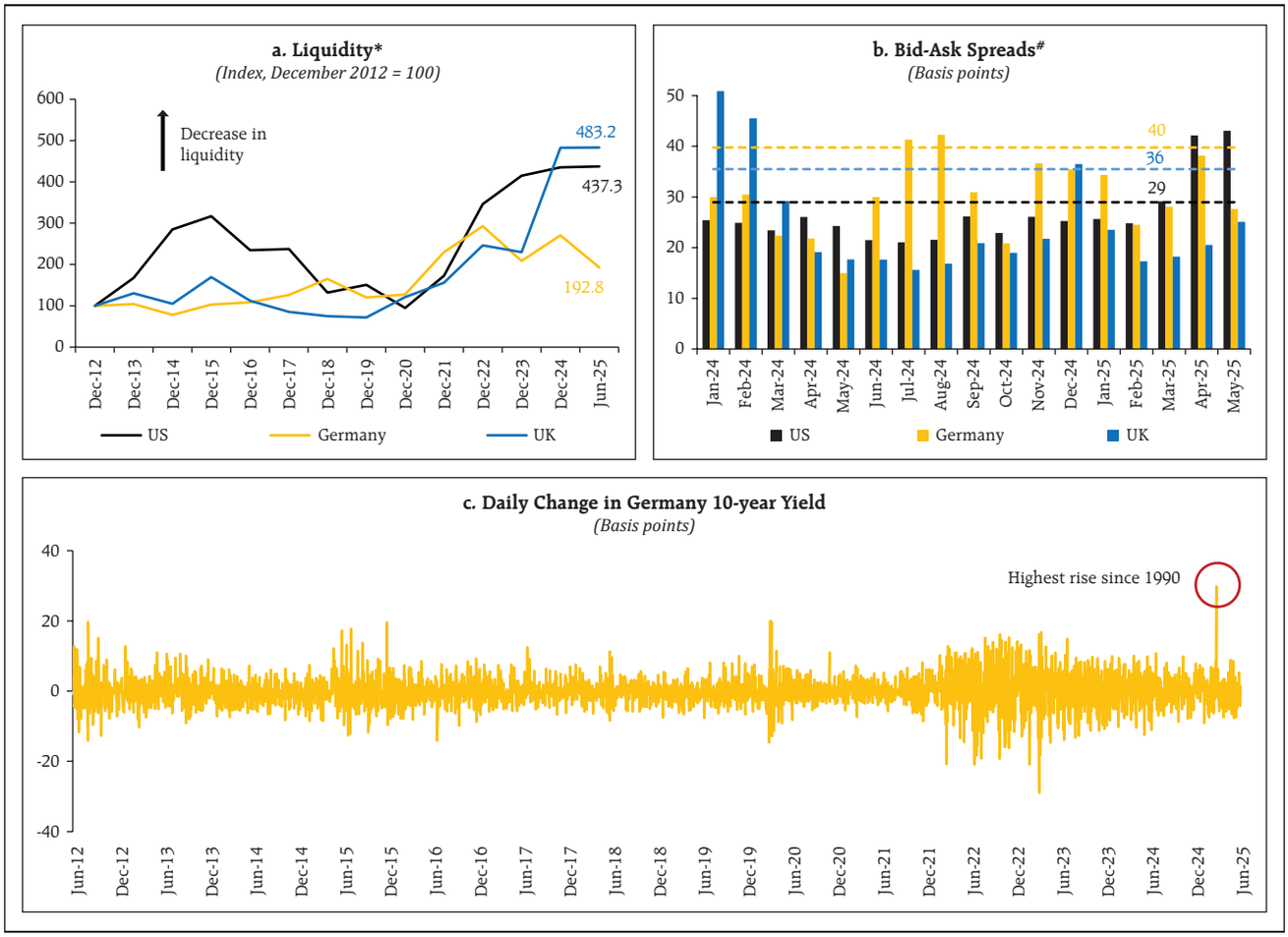
Note: * Calculations are based on analysis of 3-year forward P/E of various indices. It shows the estimated earnings per share (EPS) compounded annual growth rate of the indices (based on Bloomberg projections) and compares it with the required growth to return the 3-year forward P/E to its long-term historical multiple.
Sources: Bloomberg and RBI staff calculations.

measure of additional return investors require to buy stocks relative to risk-free bonds – has declined to decadal low levels (Chart 1.17 b). Moreover, to justify current valuations, corporate earnings must grow at a robust pace, which may be difficult in an uncertain economic environment (Chart 1.17 c). Further price corrections and elevated volatility in US equities could spill over to other markets, especially EMEs like India.

1.23 Second, the core government bond markets, which are integral to the efficient functioning of global capital markets and the financial system, are exhibiting vulnerabilities driven by deterioration in market liquidity (Chart 1.18 a), increasing footprint of highly leveraged and price-sensitive NBFIs, and elevated volatility amid high levels of global public debt. In particular, the market liquidity in the US$ 29 trillion US treasury market, the largest and the most liquid bond market in the world, has been falling and dropped further in April 2025[18]. Insufficient liquidity has the potential to amplify asset price volatility and cause significant price movements in reaction to shocks. This is also reflected in the widening bid-ask spreads as well as substantial daily change in bond yields (Chart 1.18 b and c). Alongside, the risk warehousing capacity of broker-

[18] The Federal Reserve Board (2025), "Financial Stability Report", April.

Chart 1.18: Bond Market Liquidity and Volatility



Notes: (1) * Bloomberg bond market liquidity index measures the dispersion of government bond yields from the implied fitted yield curve
(2) # Spread calculated as the difference between the bid yield and ask yield of the 10-year bond yield. Dotted lines represent average daily spread since May 2016.
Source: Bloomberg.

dealers, firms that engage in the business of buying and selling securities either on their own behalf or on behalf of their clients, has decreased in recent times when compared with the size of trade flows, even as other non-bank liquidity providers appear to retract from filling up this gap in times of stress episodes[19].

1.24 In recent years, hedge funds and other asset managers have taken on highly leveraged relative-value trades in US treasuries, such as basis trades and asset swap trades. These trades aim to take advantage of small differences in prices between the underlying cash market and derivatives market and involve in arbitraging the spread between treasury bonds and futures and treasury yields and interest rate swaps. The repo market is used for funding these trades and since price differences are small, they employ high leverage to improve returns. Due to their high leverage and exposure to spike in both futures margins and repo borrowing costs, these trades are a source of financial system vulnerability[20].

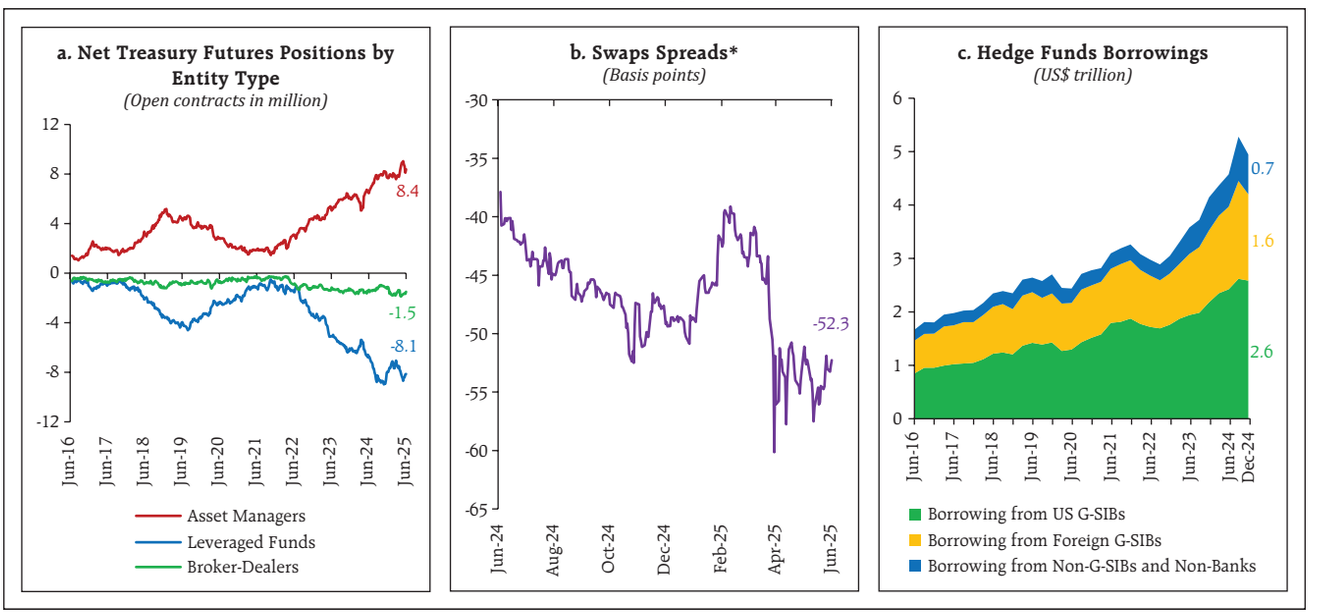
[19] Financial Stability Board (2022), "Liquidity in Core Government Bond Markets", October.

[20] Barth, Daniel, Kahn, R. Jay, and Mann, Robert (2023), "Recent Developments in Hedge Funds' Treasury Futures and Repo Positions: is the Basis Trade Back?", FEDS Notes, Washington: Board of Governors of the Federal Reserve System, August.

1.25 Basis trades have almost doubled since March 2020 and swaps trades have incurred losses as spreads have not converged to zero (Chart 1.19 a and b). Moreover, these trades remain concentrated among a handful of hedge funds[21]. Concurrently, asset managers, such as mutual funds are also tapping treasury futures to enhance interest rate exposures, incentivised by the embedded leverage and high liquidity of futures contracts[22]. Increase in volatility in response to future shocks or shifts in risk sentiments can lead to disorderly unwinding of these trades, impacting smooth functioning of global bond markets. Moreover, risks can also spillover to the banking sector as hedge funds rely on banks, particularly globally systemically important banks (GSIBs), for more than 50 per cent of their total funding[23] (Chart 1.19 c).

1.26 USD faced sharp depreciation pressure against most major currencies in the recent market turmoil (Chart 1.20 a and b). Typically, the USD tends to outperform other currencies in two entirely different scenarios; during periods of global stress as well as when the US economy exhibits exceptional growth, on the other hand it underperforms when global growth is strong relative to the US – the so-called 'dollar smile'. This has been the defining framework for forex investors for a considerable period. However, in the current episode of exceptional economic uncertainty, the prices of US financial assets, including equities, have fallen forcing global investors to rebalance their portfolio. This has contributed to the depreciation of the USD, as growth slowdown fears and fiscal worries continue to weigh on the dollar.

Chart 1.19: Net Treasury Futures Positions by Entity Type, Swap Spreads and Hedge Funds Borrowing in US



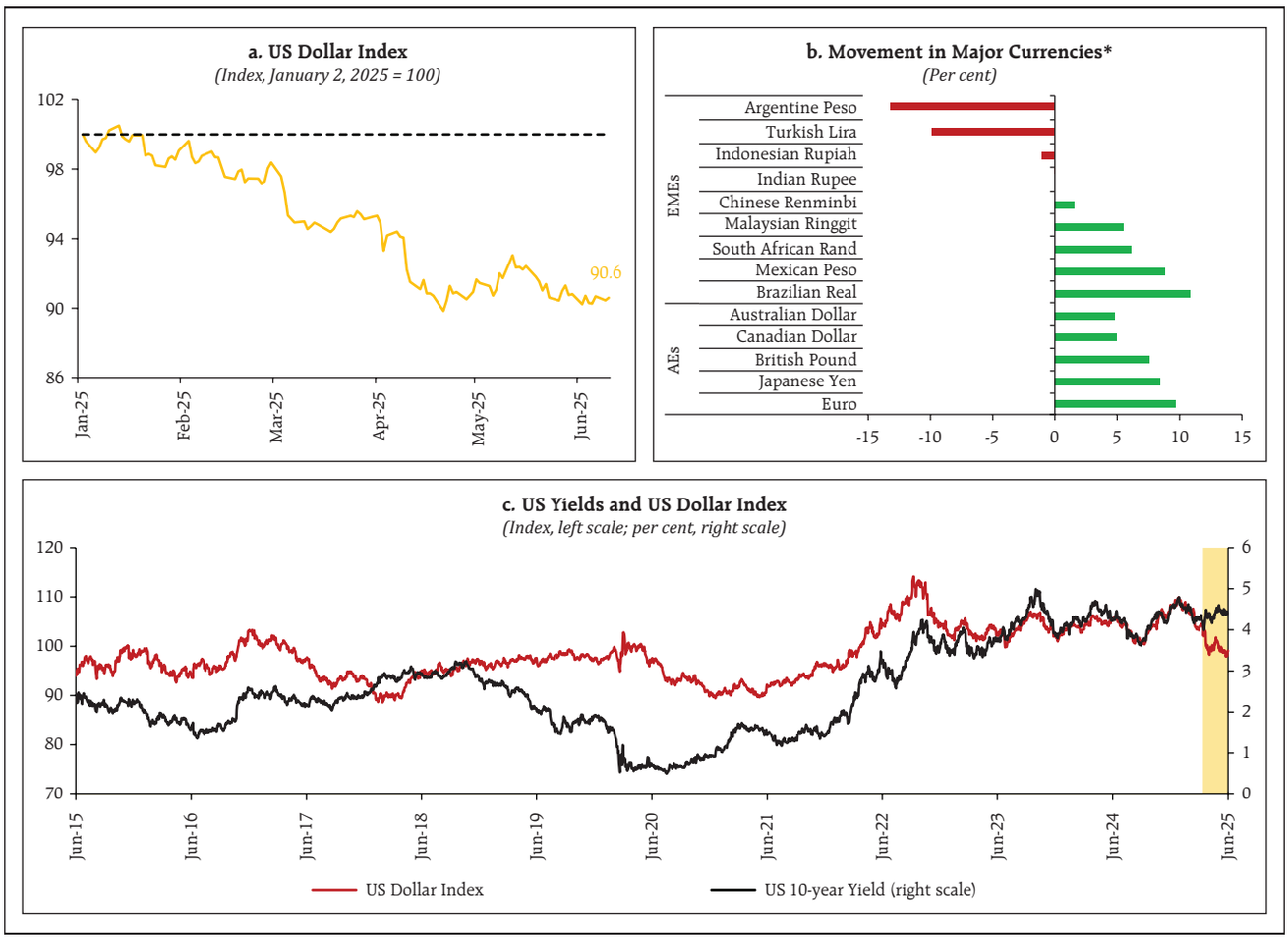
Note: * Swap spread is the spread between the 10-year SOFR OIS swaps and the 10-year US treasury yield.
Sources: Bloomberg and US Office of Financial Research.

[21] Kashyap, Anil K, Stein, Jeremy C., L. Wallen, Jonathan, and Younger, Joshua (2025), "Treasury Market Dysfunction and the Role of the Central Bank", BPEA Conference Draft, March.

[22] Iorio, Benjamin, Li, Dan, and Petrasek, Lubomir (2024), "Why Do Mutual Funds Invest in Treasury Futures?", FEDS Notes, Washington: Board of Governors of the Federal Reserve System, May.

[23] International Monetary Fund (2025), "Global Financial Stability Report: Enhancing Resilience amid Uncertainty", April.

Chart 1.20: US Dollar Performance



Note: * Change in currencies against USD from December 31, 2024 to June 10, 2025.
Source: Bloomberg.

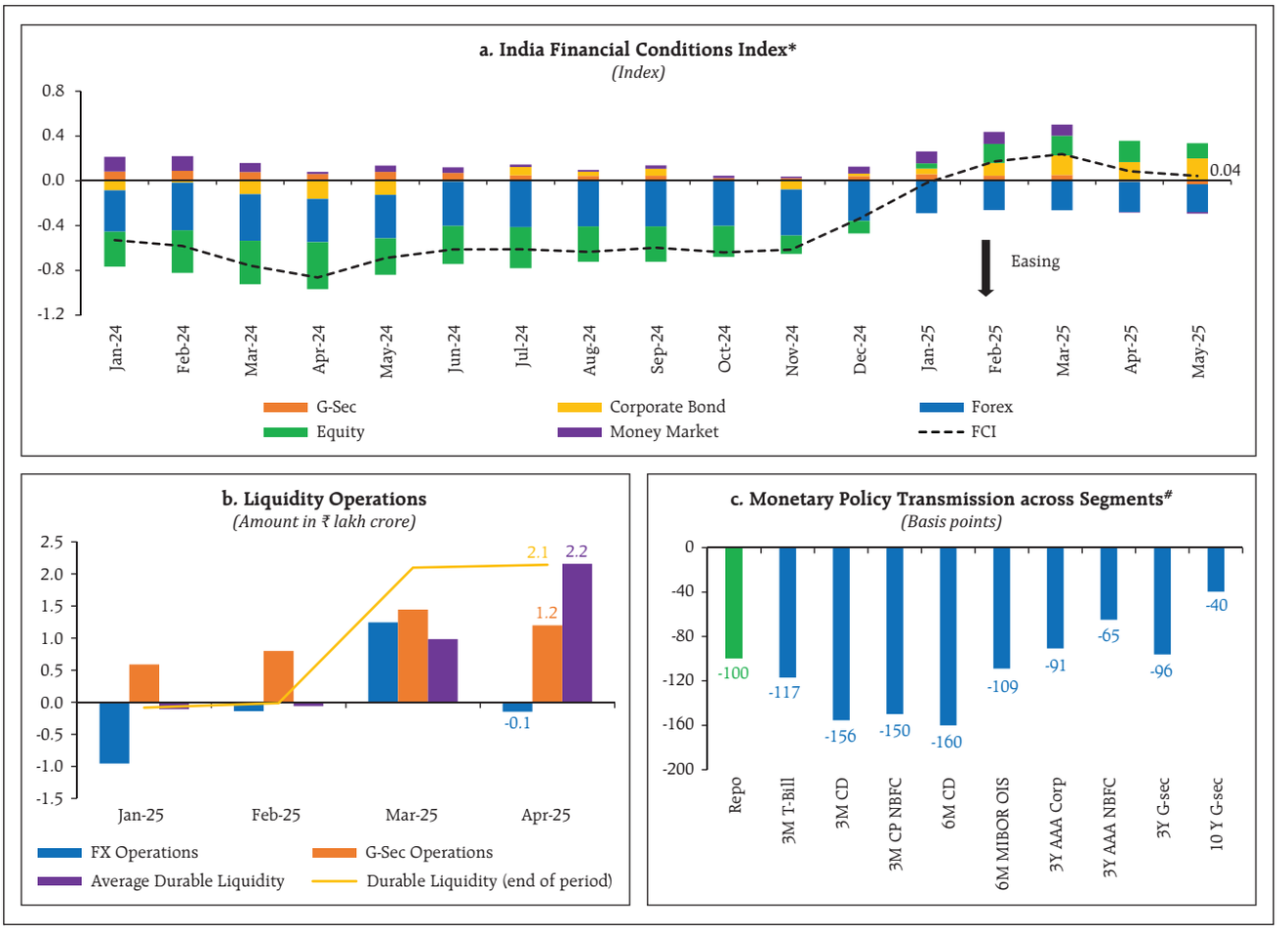
Importantly, the correlation between the USD and the US treasury bond yields has diverged since the tariff announcements in April (Chart 1.20 c). In parallel, investors are increasingly hedging their holdings in dollar-denominated assets[24], which could put further pressure on the USD. Moreover, there are structural changes happening in the global economy such as a major shift in the US trade policy and resetting of the global economic order. Thus, we could be entering uncharted territory in the global financial system as the USD's primacy and safe-haven status are being challenged.

I.2.2 Domestic Financial Markets

1.27 Domestic financial conditions tightened during January-March 2025, driven by widening of money and corporate bond market spreads (Chart 1.21 a). Since April 2025, financial conditions have eased supported by the Reserve Bank's liquidity infusion measures and policy rate cuts. The Reserve Bank has injected durable liquidity amounting to about ₹9.5 lakh crore through suite of liquidity measures (open market operation purchases, buy-sell swaps and term variable rate repos)

[24] Shin, Hyun Song, Wooldridge, Philip and Xia, Dora (2025), "US dollar's slide in April 2025: the role of FX hedging", BIS Bulletin No. 105, June.

Chart 1.21: Domestic Financial Conditions

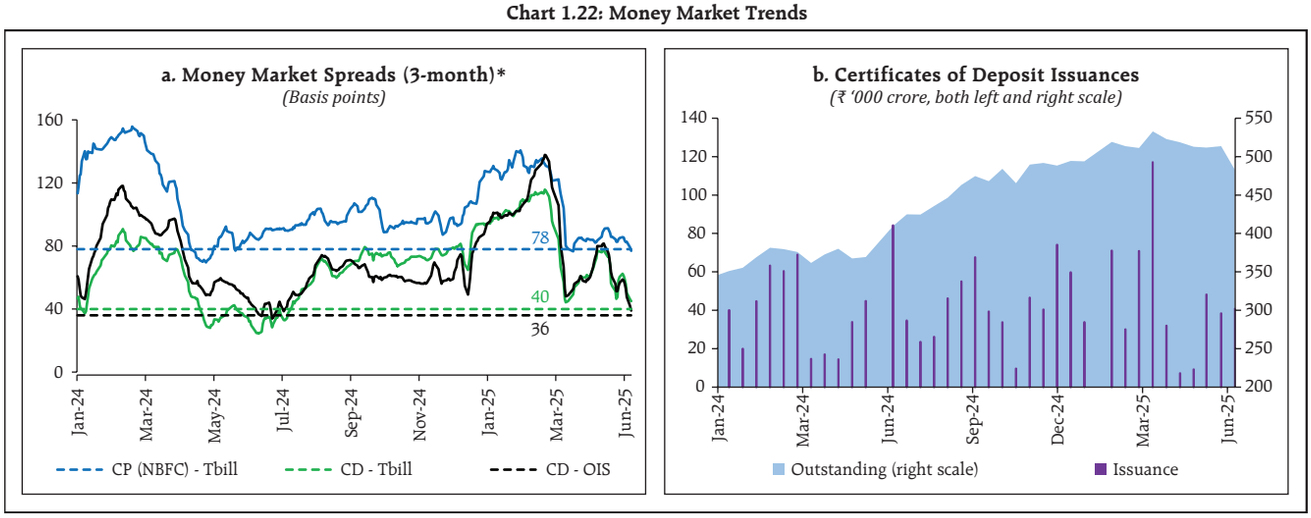


Notes: (1) * The financial conditions index (FCI) is constructed using the dynamic factor model (DFM) approach, based on the monthly average of daily frequency data from 20 Indian financial market indicators. For details, refer Box IV.2 of the Monetary Policy Report (October 2024).
(2) # Change from December 31, 2024, to June 10, 2025.
Sources: Bloomberg and RBI staff calculations.

since January 2025, which led to system liquidity transitioning from deficit to surplus at end-March 2025. Additionally, the decision to cut cash reserve ratio (CRR) by 100 bps in a staggered phase will release ₹2.5 lakh crore of primary liquidity starting September till December 2025. Cumulatively, these measures have not only turned durable liquidity into surplus but will also contribute to faster transmission of monetary policy to the financial and credit markets (Chart 1.21 b and c).

1.28 Money market spreads have eased from the highs seen during January-March 2025, remaining near their long-term averages (Chart 1.22 a). Certificate of deposit (CD) spreads widened in the initial part of 2025 due to the tightness in system liquidity and large issuances of CDs by banks to bridge asset-liability mismatches (Chart 1.22 b). However, the easing of monetary policy and infusion of durable liquidity in recent months have narrowed the money market spreads. Notably, the spread between CDs and overnight indexed swaps (OIS) of similar maturity, a key metric of money market stress, has retreated from recent high. Similarly, the spread between commercial papers (CPs) issued by non-banking financial companies

Chart 1.22: Money Market Trends

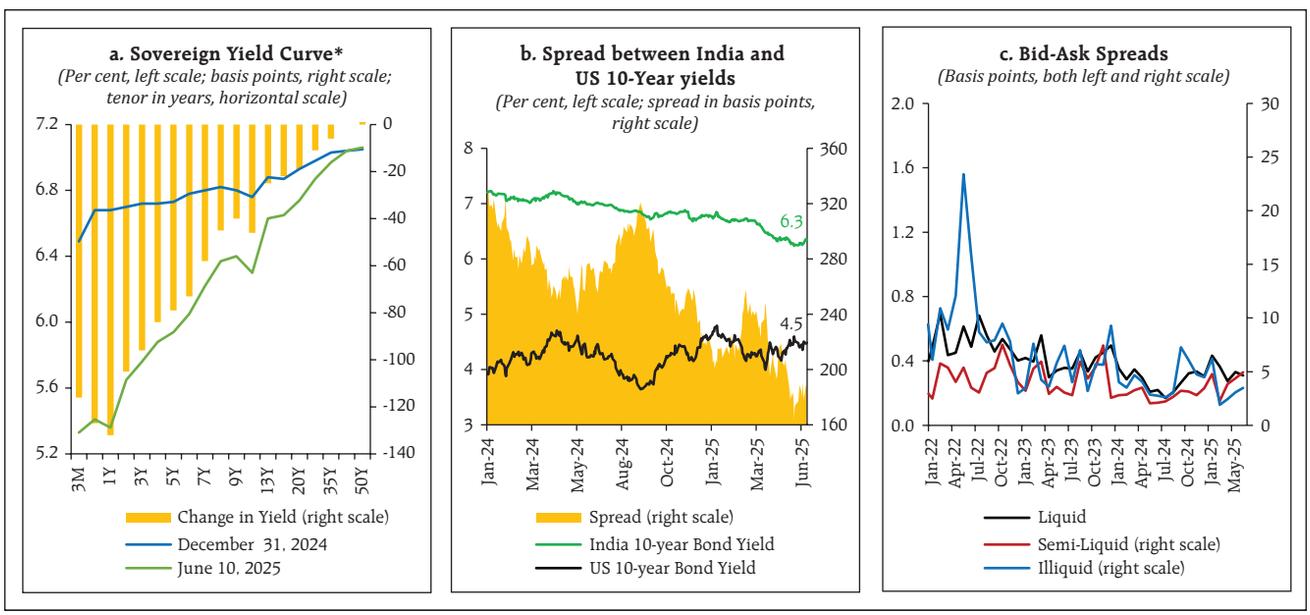


Note: * Chart plots 5-day moving average and dotted lines indicate average spread from 2018.
Sources: Bloomberg, FBIL and LSEG Workspace.

(NBFCs) and treasury bills of the same maturity also narrowed, reflecting surplus liquidity conditions.

1.29 The sovereign yield curve has bull steepened[25], driven by faster disinflation and monetary policy easing (Chart 1.23 a). Consequently, term spreads rose (between 10-year and 2-year government bonds) to an average of about 24 bps during January – June 2025 (till June 10, 2025) from 9 bps during July-December 2024. The rise in US treasury yields along with the fall in India government bond yields has narrowed the spread between India and US 10-year treasury yields to a

Chart 1.23: Government Bond Market



Note: *Semi-annual par yield curve.
Sources: FBIL, Bloomberg and CCIL.

[25] Bull steepening refers to a change in the yield curve caused by short-term interest rates falling faster than long-term rates, widening the spread between the two, that is, the term spread.

20-year low (Chart 1.23 b). The bid-ask spreads on government bonds have softened, especially among semi-liquid and illiquid securities[26], signaling improved trading conditions in the sovereign bond market (Chart 1.23 c).

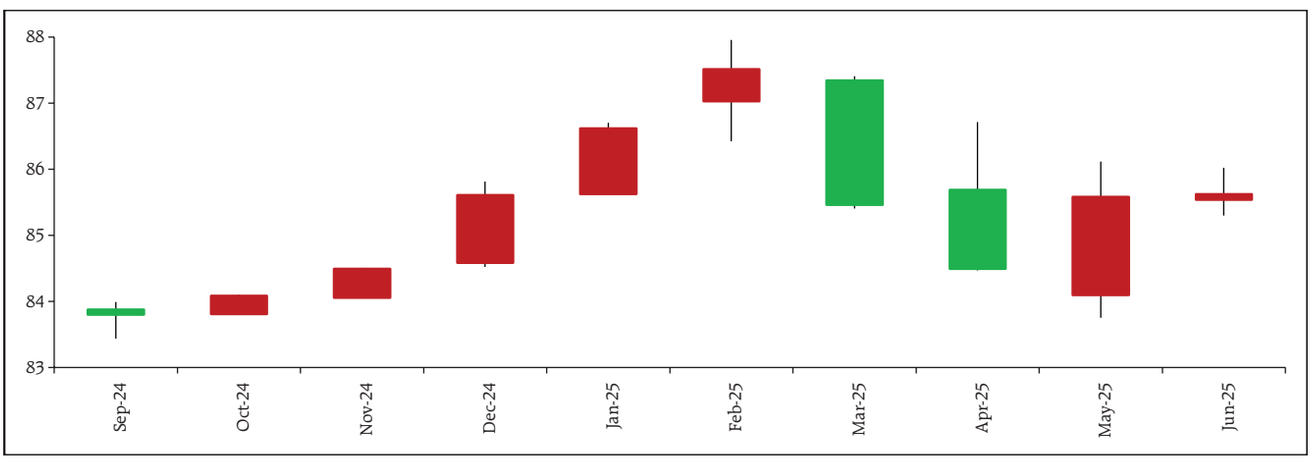
1.30 The foreign exchange market witnessed bouts of volatility even as the USD/INR exchange rate recorded sharp two-way movements during January-May 2025. The pace of rupee depreciation accelerated in late 2024 and continued till February 2025. In March and April, however, it appreciated supported by the broad-based weakness of the USD and relatively better economic outlook for India *vis-à-vis* other economies (Chart 1.24). Different indicators, such as the real effective exchange rate (REER), the exchange market pressure (EMP) index[27], implied volatility derived from option prices, and offshore-onshore spreads, continue to underscore the stability of the exchange rate (Chart 1.25 a, b, c and d).

1.31 Resource mobilisation through capital markets grew by 32.9 per cent to ₹15.7 lakh crore in 2024-25. Debt markets had the dominant share (63.5 per cent) in resource mobilisation, of which 99.2 per cent was raised through listed private placements (Table 1.2). Equity markets accounted for 27.4 per cent of total resource mobilisation.

1.32 The Indian equity market, which saw deep corrections between October 2024 and February 2025, owing to tepid earnings growth, FPI outflows and global sell-off, has largely recovered since March 2025. Nonetheless, as on June 10, 2025, most of the benchmark indices traded 3 to 8 per cent lower compared to their 52-week highs with

Chart 1.24: Movement in USD/INR Exchange Rate

(USD/INR)



Note: Each vertical line on the chart shows the price range over the month. Green bars denote appreciation in Rupee. Data as on June 10, 2025.
Source: Bloomberg.

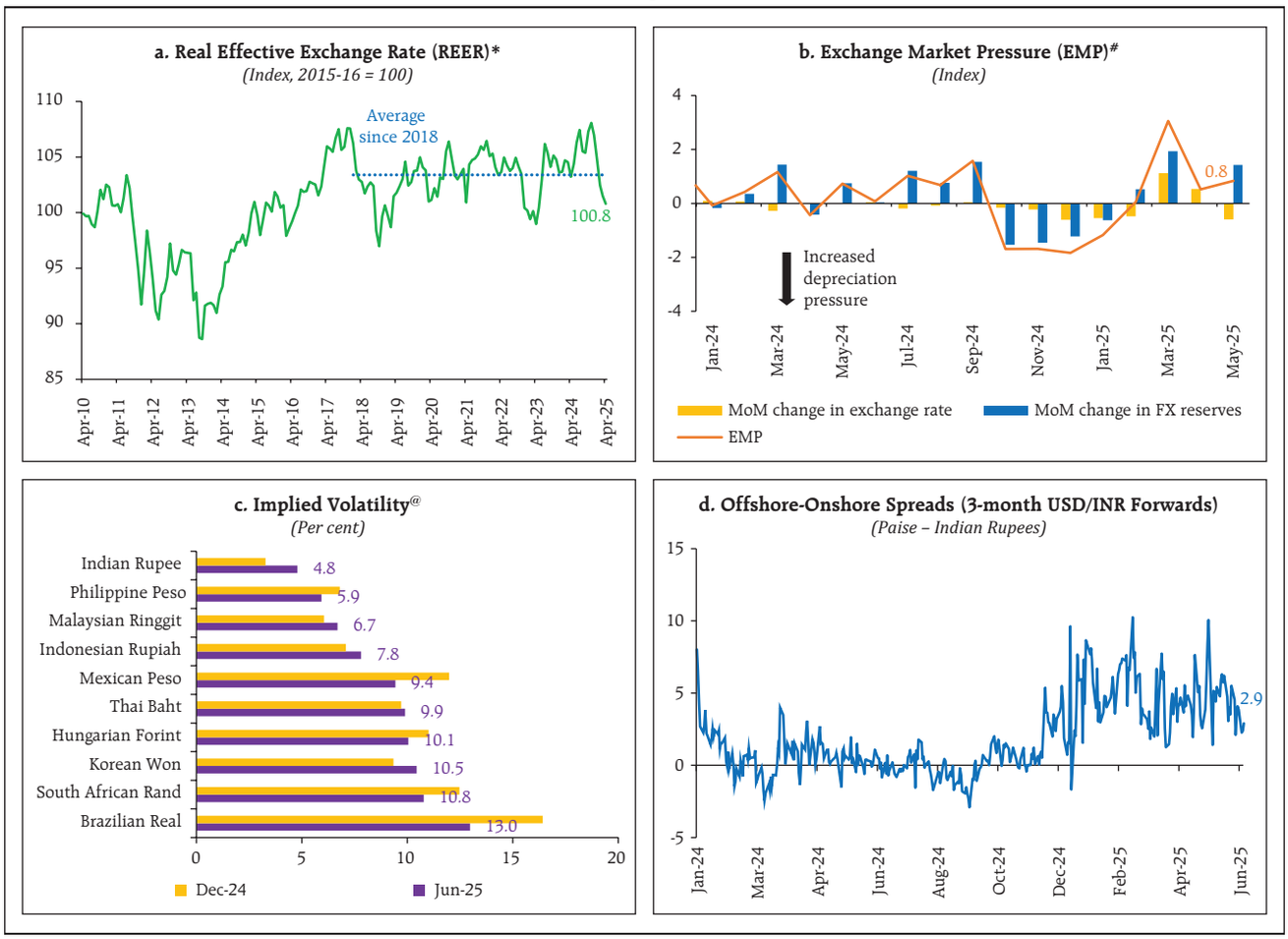
[26] Semi-liquid securities have average of 1-10 trades (of face value>=₹5 crore) per day during previous calendar month. Illiquid securities have average of less than 1 trade (of face value>=₹5 crore) per day during previous calendar month.

[27] EMP index is used to measure external pressures on the currency and is constructed as a weighted average of exchange rate movements and changes in forex reserves.

$$EMP_t = \frac{1}{\sigma_{\Delta e_t}} \Delta e_t + \frac{1}{\sigma_{\Delta r_t}} \Delta r_t$$

where Δe_t is the y-o-y percentage change in exchange rate relative to the US dollar at time t, and Δr_t is the y-o-y percentage change of foreign exchange reserves at time t as a fraction of the monetary base (M3) at time t-1. $\sigma\Delta e_t$ and $\sigma\Delta r_t$ are the historical standard deviations of the two variables respectively. For more details, see Appendix 3.1 of IMF World Economic Outlook (April 2007).

Chart 1.25: Exchange Rate Indicators



Notes: (1) * Trade weighted REER index is based on 40 currency basket (monthly average)
(2) # The exchange market pressure index uses standardised changes in exchange rates and forex reserves to measure net pressure on exchange rate. Negative number indicate increased depreciation pressures. The components have been calculated as month on month change to capture the short-term variation.
(3) @ Implied volatility is derived from At-the-Money 1-month Option prices. Data as on June 10, 2025.
Sources: Bloomberg, RBI and staff calculations.

Table 1.2: Resource Mobilisation through the Indian Capital Markets

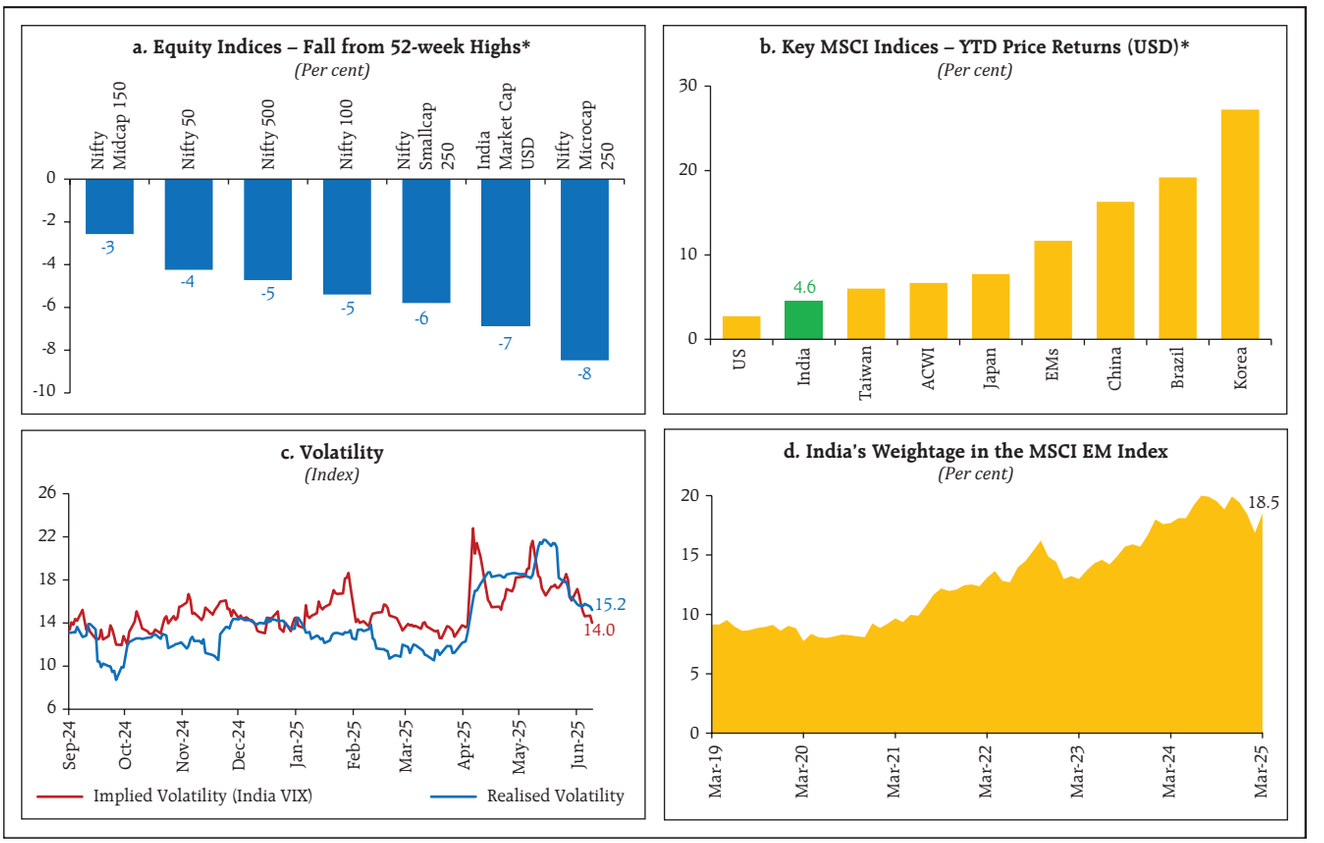
(₹ lakh crore)

Category	2023-24	2024-25
Equity-Public	0.8	2.1
Equity-Private	1.1	2.2
Debt-Public	0.2	0.1
Debt-Private (listed)	8.4	9.9
REITs	0.06	0.05
InvITs	0.3	0.3
AIFs	0.9	1.1
Total Resource Mobilisation	**11.8**	**15.7**

Note: AIFs stand for Alternative Investment Funds; REITs stand for Real Estate Investment Trusts and InvITs stand for Infrastructure Investment Trusts.
Source: SEBI.

the overall total market capitalisation down by 7 per cent from its peak in 2024 (Chart 1.26 a). Consequently, Indian equity market remained an underperformer compared to other major markets (Chart 1.26 b). Notably, despite the sharp decline in stocks, volatility remained relatively subdued until the recent spike triggered by geopolitical tensions and tariff-induced uncertainty (Chart 1.26 c). Furthermore, India's weightage in the MSCI Emerging Markets (EM) Index has remained steady at 18.5 per cent as at end-March 2025 (Chart 1.26 d).

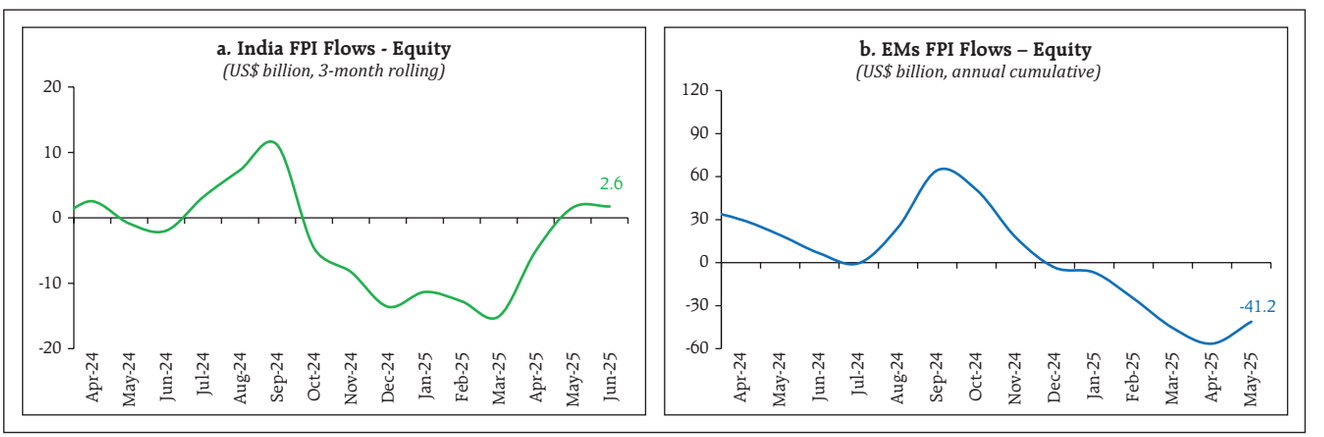
Chart 1.26: Equity Market Performance and Volatility



Note: * As of June 10, 2025.
Sources: SEBI, NSE, BSE, Bloomberg and RBI staff calculations.

1.33 Amidst a global rebalancing of funds from EMEs' equities[28] to fixed income and developed markets[29], Indian equity market, like other EMEs, saw consistent FPI outflows since October 2024 (Chart 1.27 a and b). Consequently, the foreign portfolio investors' share in Indian equities has

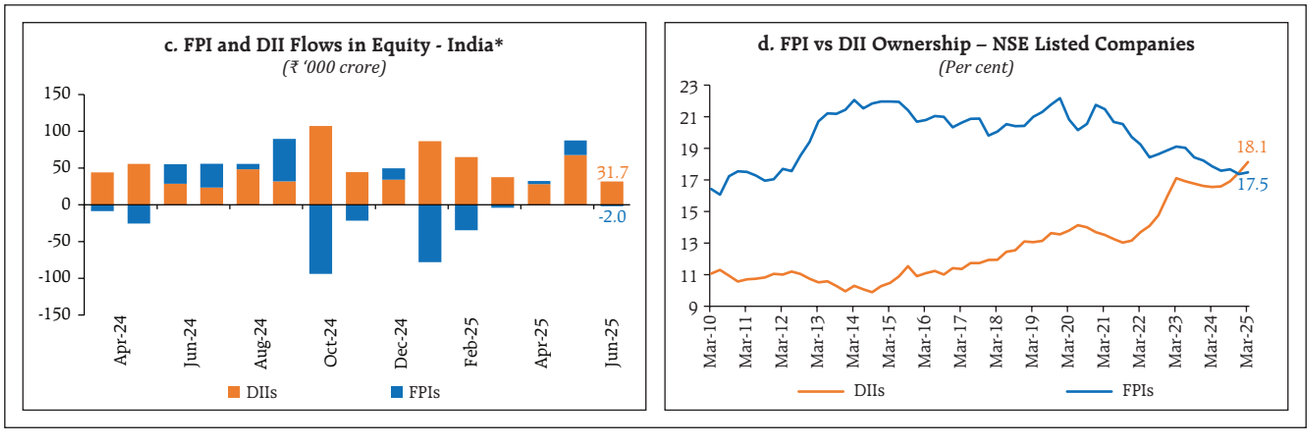
Chart 1.27: Fund Flows and NSE Listed Companies Ownership Pattern *(Contd.)*



[28] According to the Institute of International Finance (IIF), foreign portfolio outflows from EMEs at ~US$ 40 billion in the December 2024 quarter were the highest since the pandemic (Q1:2020 - US$ 62.8 billion).

[29] Institute of International Finance (2025), "Capital Flows Tracker", February.

Chart 1.27: Fund Flows and NSE Listed Companies Ownership Pattern *(Concld.)*



Notes: (1) * Data updated till June 11, 2025.
(2) DIIs - Domestic Institutional Investors (Includes Domestic MFs, Banks, Financial Institutions and Insurance Companies and Other Institutional Non-Promoter Investors).

Sources: Institute of International Finance, BSE, NSDL and NSE.

touched a decadal low, with domestic institutional investors' (DIIs) share in overall ownership in all NSE-listed companies surpassing that of foreign portfolio investors (Chart 1.27 c and d).

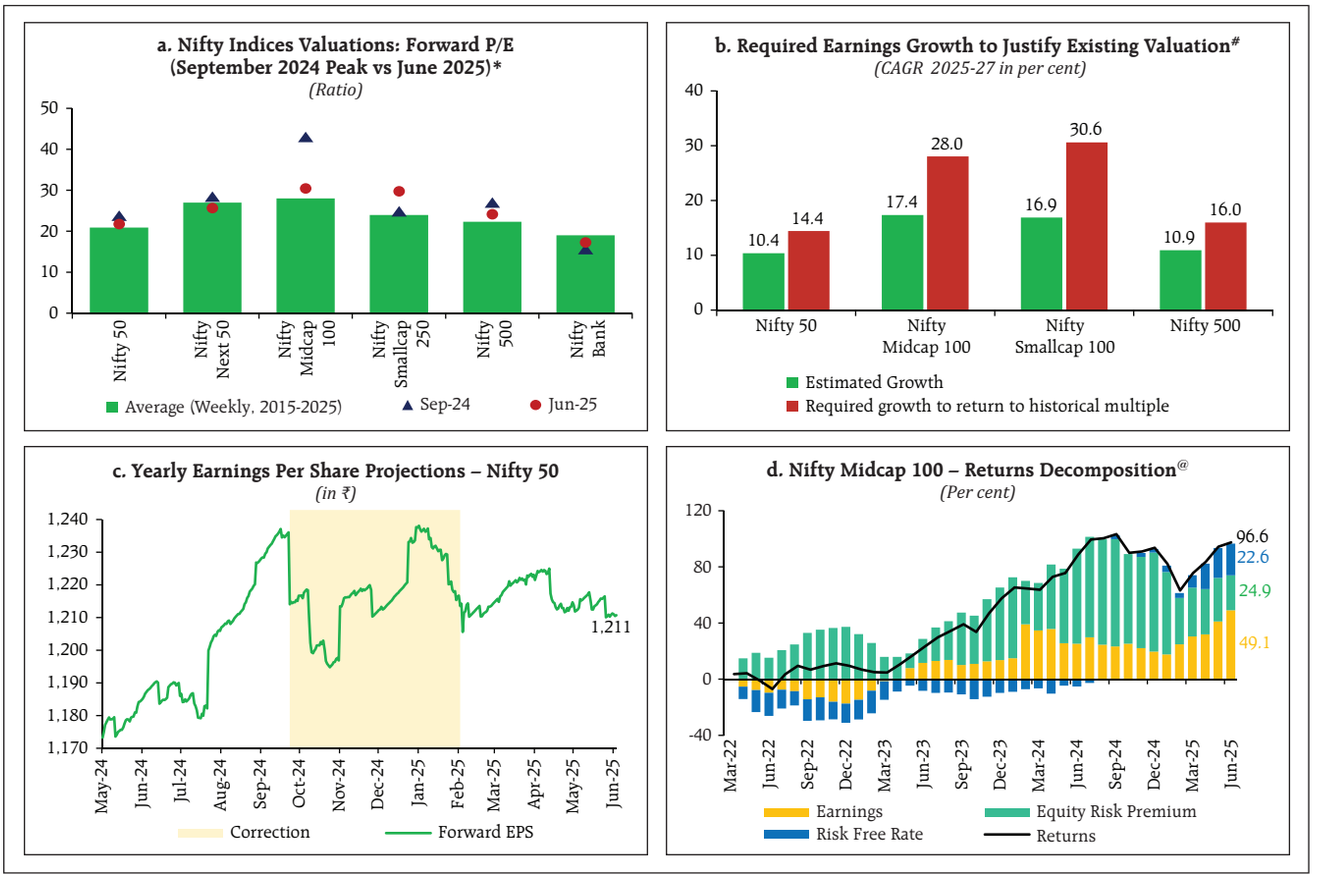
1.34 During periods of heightened volatility, risk-off sentiments and sustained selling of Indian equities by the foreign portfolio investors, DIIs and individual investors (domestic households) have been providing strong support, thereby preserving market stability.

1.35 Equity valuations have moderated from their lofty levels, though they remain at the high end of historical range, especially for the midcap and smallcap stocks (Chart 1.28 a). Consequently, the gap between estimated earnings growth and required earnings growth for returning to historical valuation multiple has also reduced (Chart 1.28 b). Nonetheless, since earnings forecast updates more slowly than market prices and they are yet to reflect the prevailing geopolitical tensions and elevated uncertainty about the direction of tariffs, the current valuations may not be reflecting the extent of overvaluation (Chart 1.28 c). Moreover, the contribution of equity risk premium to returns remains high for midcap stocks (Chart 1.28 d). Thus, between earnings revisions and valuation compression, market impact could be significant in the event of adverse shocks.

1.36 Overall, as at end-March 2025, about two-thirds of stocks were trading with their P/E ratios higher than their respective benchmark P/E ratios (Chart 1.29).

1.37 The individual participation in Indian equities has increased in the last decade and the ownership pattern shows that their investments are diversified. However, their ownership share in microcap stocks far outweigh those in large, mid

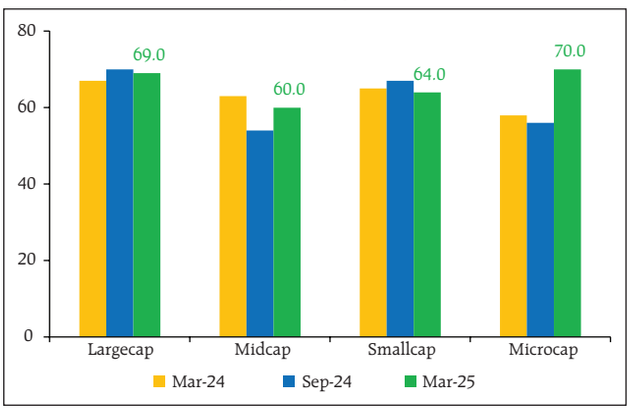
Chart 1.28: Equity Valuations



Notes: (1) * Latest value as on June 10, 2025.
(2) # Calculations are based on analysis of 3-year forward P/E of various indices. It shows the estimated earnings per share (EPS) compounded annual growth rate of the indices (based on Bloomberg projections) and compares it with the required growth to return the 3-year forward P/E to its long-term historical multiple.
(3) @ Contribution of each component to index returns from March 2022. Updated till June 10, 2025.
Sources: NSE, Bloomberg and RBI staff calculations.

Chart 1.29: Share of Stocks with P/E Ratio above Respective Benchmarks

(Per cent)

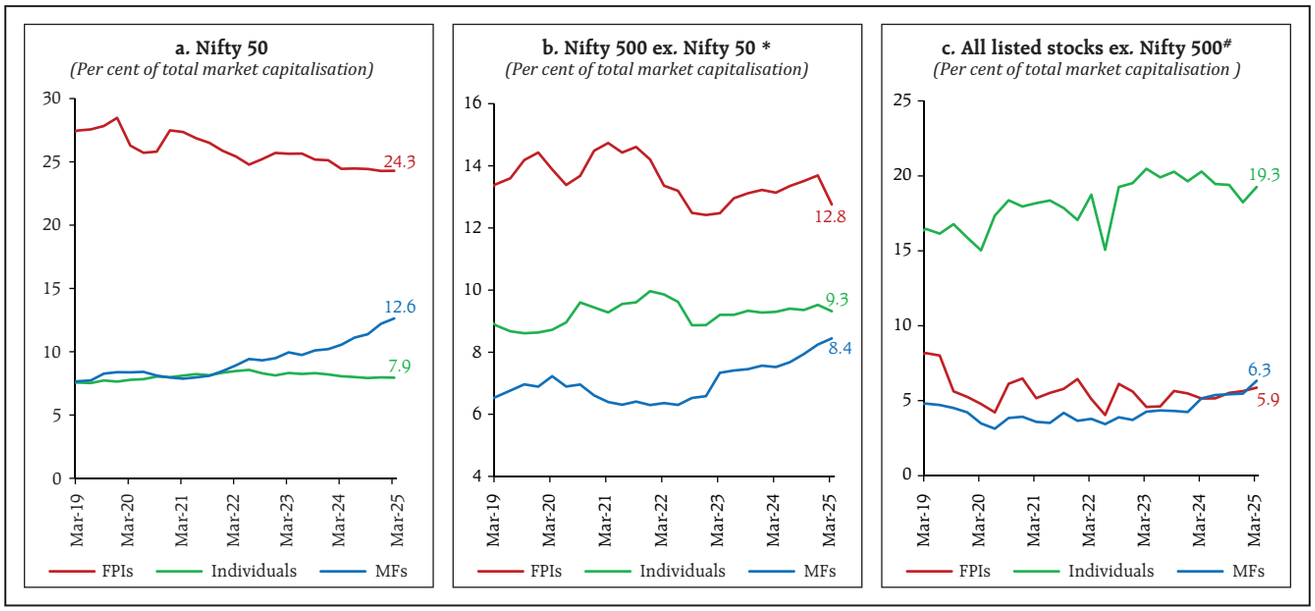


Notes: (1) Data as on March 28, 2025.
(2) Categorisation of stocks is based on AMFI classification of stocks as of December 2024. Only NSE listed stocks have been considered. P/E ratio is calculated by taking into consideration earnings reported by each company in trailing 4 quarters (consolidated financials). Where consolidated financials are not available, standalone financials for trailing 4 quarters are considered. P/E ratios are not computed for loss-making stocks.
Source: NSE.

and smallcap stocks (Chart 1.30 a, b and c). Microcap stocks have a higher beta compared to other stocks and exhibit greater sensitivity to change in economic and financial conditions. Thus, market corrections could expose retail investors to greater volatility and amplify losses.

1.38 The growing participation of individual investors and associated risks in the equity derivatives segment were highlighted in June 2024 FSR. Since then, the SEBI has taken several important measures to strengthen this market segment, including but not limited to, rationalisation of weekly index derivatives products, increase in tail risk coverage on the day of options expiry, ensuring expiry of all index derivatives products on single day of the week, increase in contract sizes, upfront collection of option

Chart 1.30: Ownership Pattern in Nifty Stocks – FPIs, Individuals and Mutual Funds

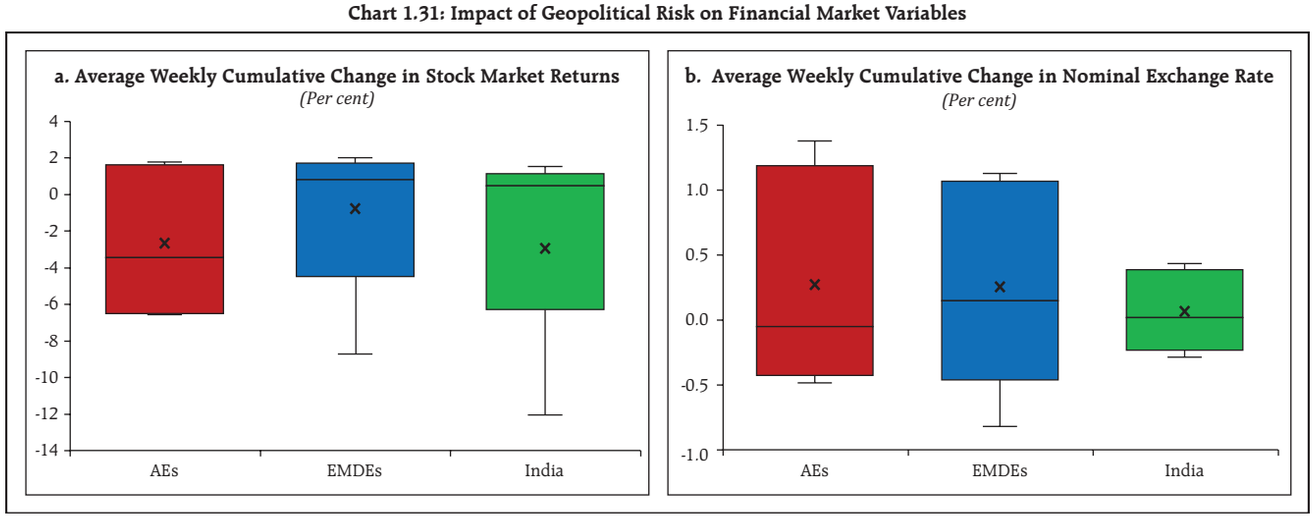


Notes: (1) * Nifty 500 ex. Nifty 50 represents Nifty Next 50, Midcap and Smallcap stocks.
(2) # All listed stocks ex. Nifty 500 represents microcap stocks.
Source: SEBI.

premium from buyers, removal of calendar spread treatment on the expiry day and intraday monitoring of position limits. Consequently, between December 2024 and March 2025, the average daily traded value by individuals and number of individuals trading per month declined by 14.4 per cent and 12.4 per cent, respectively, compared to an increase of 47.6 per cent and 101.8 per cent, respectively, between December 2023 and March 2024.

1.39 Geopolitical risk events often impact financial market variables. India's equity market performance during global geopolitical episodes generally mirrors that of EMDEs compared to AEs. However, the interquartile range is relatively wider than EMDEs, indicating that stock returns exhibit more variability (Chart 1.31 a). Exchange rate movements, on the other hand, were smaller and more stable with a narrow interquartile range

Chart 1.31: Impact of Geopolitical Risk on Financial Market Variables



Note: Figure shows the interquartile ranges of one-week cumulative changes in asset prices across major global geopolitical risk events. Cross marks and lines inside the boxes denote the average and median impact across events, respectively. Whiskers show the entire range of impacts across events.
Sources: IMF Global Financial Stability Report (April 2025) and RBI staff calculations.

(Chart 1.31 b). The event study analysis of several past events corroborates the limited impact of such episodes on financial markets in India (Box 1.1).

1.40 In the debt market, corporate bond net outstanding rose to ₹53.6 lakh crore as at end-March 2025 with the highest ever fresh issuance of

Box 1.1: Tracing Market Reactions to Geopolitical Events: An Event Study Framework

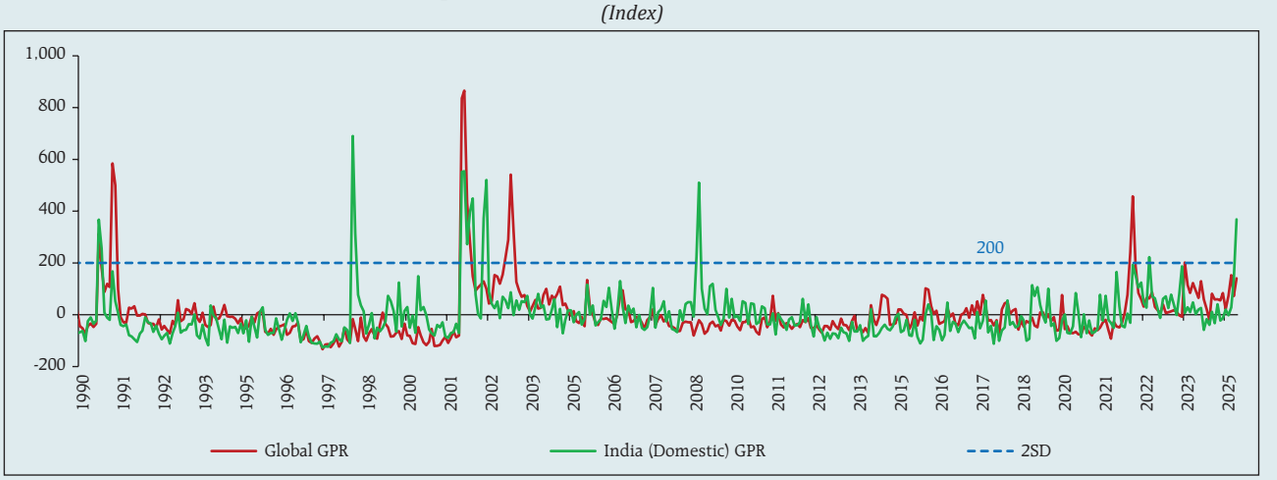
Uncertainty surrounding geopolitical events often increase market volatility, risk-off sentiments and global sell-off. Tracing historical events of geopolitical conflicts and resultant market reactions provide useful insight about potential losses and resilience of the financial system to idiosyncratic geopolitical events. From a systemic perspective, severe and prolonged geopolitical events can disrupt financial markets and threaten overall financial stability (IMF, 2025)[30]. These risks have risen in recent years and they can have discernible impact on asset prices, as major conflicts often cause sudden equity market sell-offs, capital outflows and exchange rate depreciation. A global geopolitical risk (GPR) index is used to assess the impact of major episodes of geopolitical risks - such as the Gulf War (1990), 9/11 and Iraq wars (early 2000s), the 2022 Russia-Ukraine war and the 2023 Israel–Hamas war - on Indian financial market variables. In addition, the India - specific GPR index is also used to gauge domestic geopolitical risk events, such as the 2020 India-China Border Standoff, 26/11 Mumbai Attacks and 1998 Pokhran Tests (Chart 1).

Following the approach adopted by Caldara and Iacoviello (2022), major geopolitical risk events have been identified using the GPR, both for the global and country specific events between 1990 and 2025. Based on episodes when the GPR exceeded two standard deviations from its mean, seven specific global and nine domestic geopolitical risk events have been identified.

During risk events, price movements in the Indian equity market are found more pronounced in the short-term - Nifty 50 falls on the event day and the average drop is largest over the following week. The recovery is found to be gradual and 3–6 months post-shock, cumulative returns are usually near zero or even modestly positive, reflecting a reversal of the initial sell-off (Chart 2 a). Similarly, stock market volatility spikes with the realised volatility remaining elevated by more than 50 per cent until one month before falling steadily (Chart 2 b). Exchange rates also react to major geopolitical risk events with the rupee depreciating marginally when a major event occurs (Chart 2 c and d).

Chart 1: Geopolitical Risk Indices (Standardised) – Global and India

(Index)

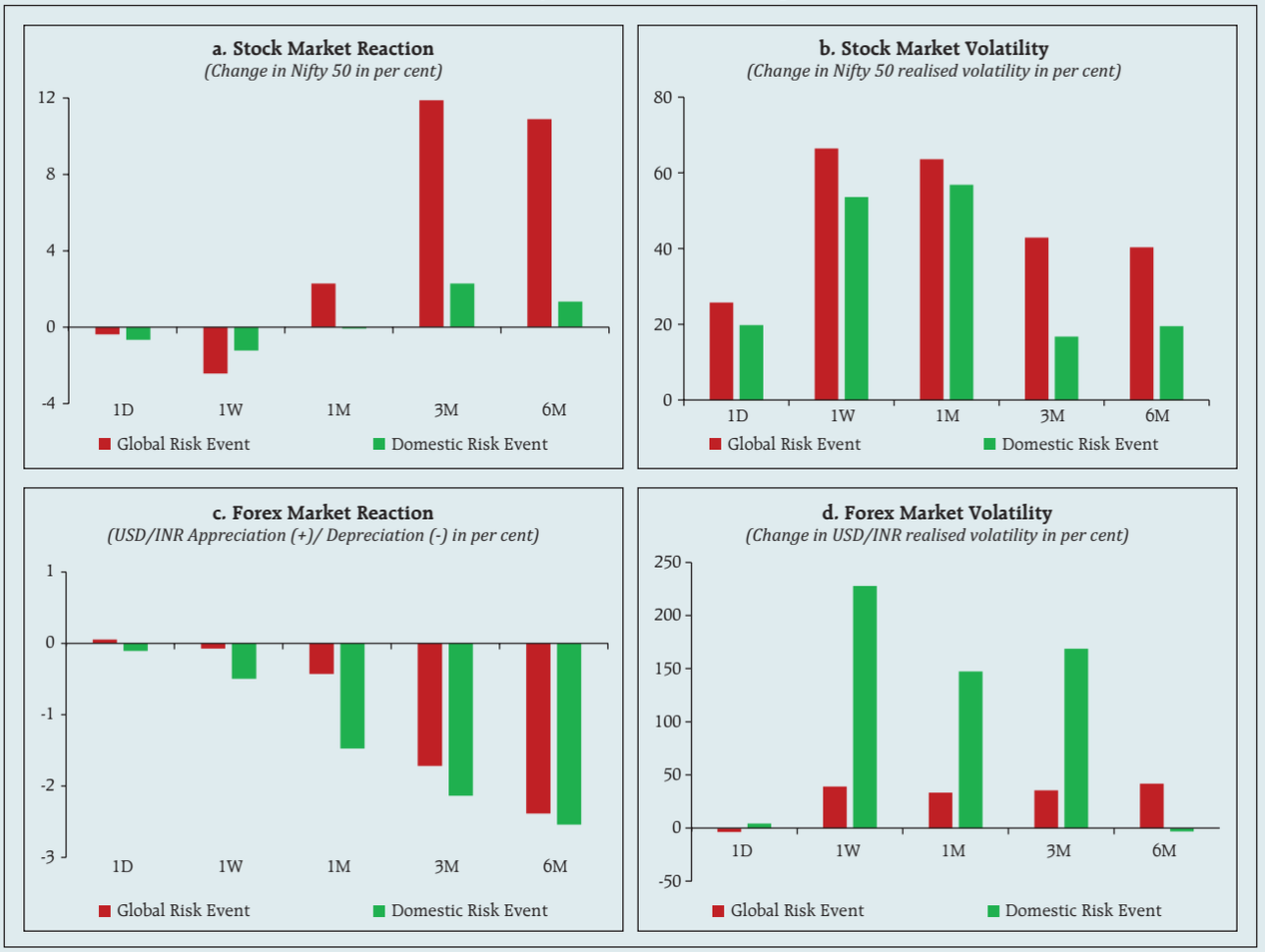


Note: Geopolitical risk is the index of Caldara and Iacoviello (April 2022).
Sources: Policyuncertainty.com and RBI staff calculations.

(Contd.)

[30] Fendoglu, Salih, Mahvash S. Qureshi, and Felix Suntheim (2025), "How Rising Geopolitical Risks Weigh on Asset Prices", IMF Blog, April.

Chart 2: Price and Volatility Reaction after Major Geopolitical Risk Event



Sources: NSE, Bloomberg and RBI staff calculations.

Event Analysis

To further understand financial market response to geopolitical shocks, an event study regression framework, following the methodology of Amiti *et al.* (2021) was employed[31]. Event study analysis aims to analyse the impact of discrete geopolitical events on equity market returns and exchange rates. The causal relationship between geopolitical events and market returns is estimated in the span of a short window (T-5 to T+5) around the event. Daily stock market returns, and USD/INR exchange rate changes are regressed on a series of dummy variables capturing the four days prior to and five days following each event. This allows for the estimation of dynamic market responses around each event window. The estimated coefficients remain relatively small across the event window, suggesting only a mild and transitory impact, if any, on financial markets (Chart 3).

In conclusion, all major geopolitical events are found to have immediate, but temporary, impact on financial market variables in India. The impact, however, is not uniform between global and domestic geopolitical risk events.

(Contd.)

[31] $\ln(R_t) = \alpha + \sum_{s=-4}^{s=5} \beta_s D_{s,t} + \varepsilon_t$, where $\ln(R_t)$ is the log daily returns of Nifty 50 (or USD/INR in the case of exchange rate dynamics). $D_{s,t} = 1$ if day t is s days relative to a geopolitical event (ranging from 4 days before to 5 days after), and 0 otherwise. β_s captures the average return impact s days from the event. ε_t is the error term.

Chart 3: Dynamics of Stock Market Returns and Exchange Rate (USD/INR) Around Geopolitical Events

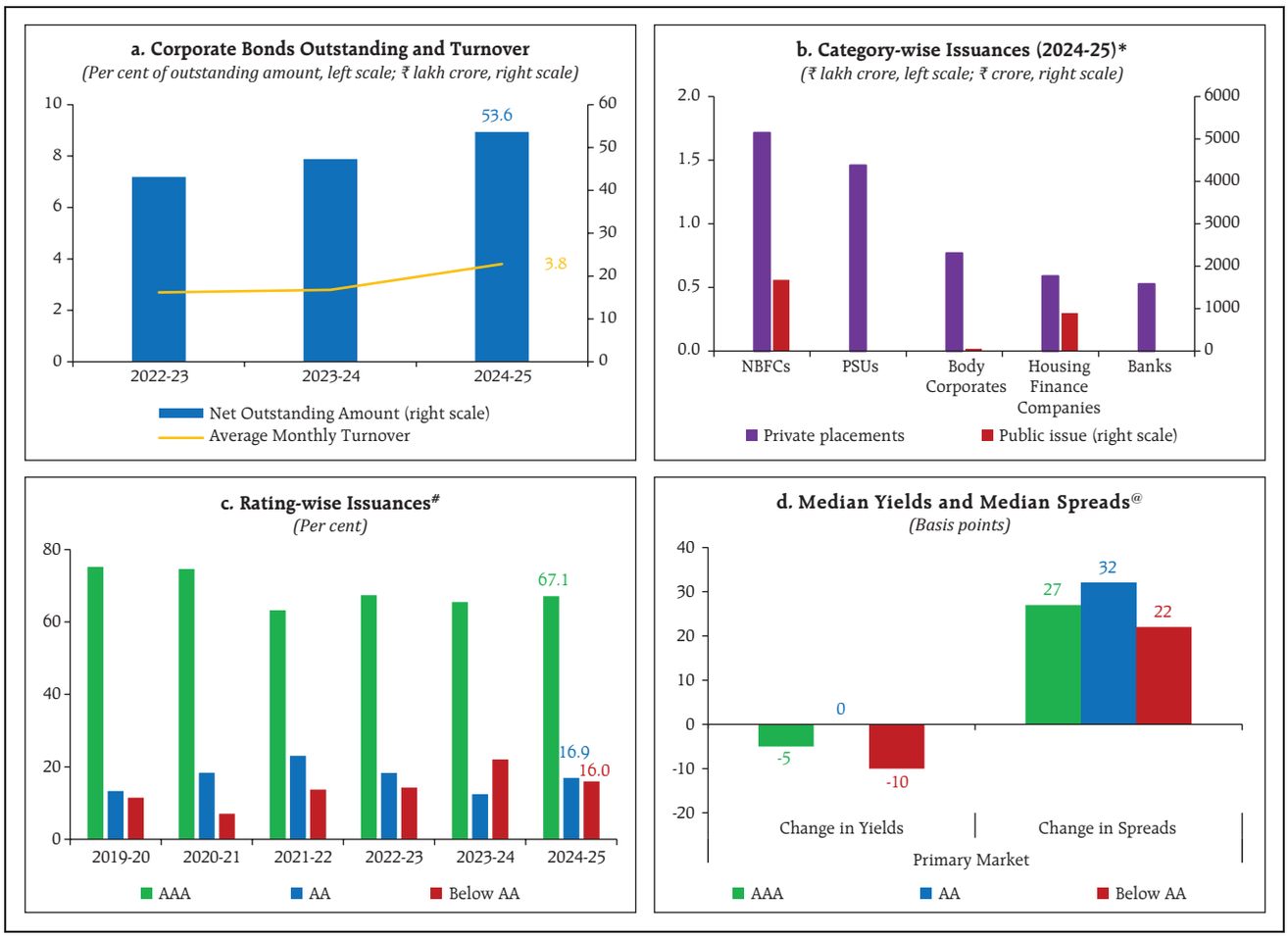
Note: This figure plots the cumulative log return of the Nifty 50 (upper panel) and USD/INR exchange rate (lower panel) around geopolitical events.
Sources: Bloomberg and RBI staff calculations.

References:

1. Caldara, Dario and Matteo Iacoviello (2022), "Measuring Geopolitical Risk," American Economic Review, April.
2. Amiti, M., Gomez, M., Kong, S.H. and Weinstein, D. (2021), "Trade Protection, Stock-Market Returns, and Welfare", Working Papers, No 28758, National Bureau of Economic Research, May.
3. International Monetary Fund (2025), "Global Financial Stability Report: Enhancing Resilience amid Uncertainty", April.

₹9.9 lakh crore during 2024-25. Secondary market, however, remained lacklustre with average monthly turnover at 3.8 per cent of outstanding value (Chart 1.32 a). Listed private placements overwhelmingly remained the preferred route for resource mobilisation, while public issuances formed only a small fraction of total issuances (Chart 1.32 b). In 2024-25, AAA-rated firms dominated issuances with firms rated below AA constituting 16.0 per cent of the total issuances (Chart 1.32 c). Corporate bond spreads widened marginally due to tighter liquidity conditions, trade related uncertainty and softer growth prospects. Median spreads across rating categories were higher by 20-30 bps, even though yields softened (Chart 1.32 d). From a financial stability perspective, a deep and liquid corporate debt market is important as it provides an alternative to bank finance, widens investor base and improves overall resilience of the financial system.

Chart 1.32: Corporate Bond Market Trends



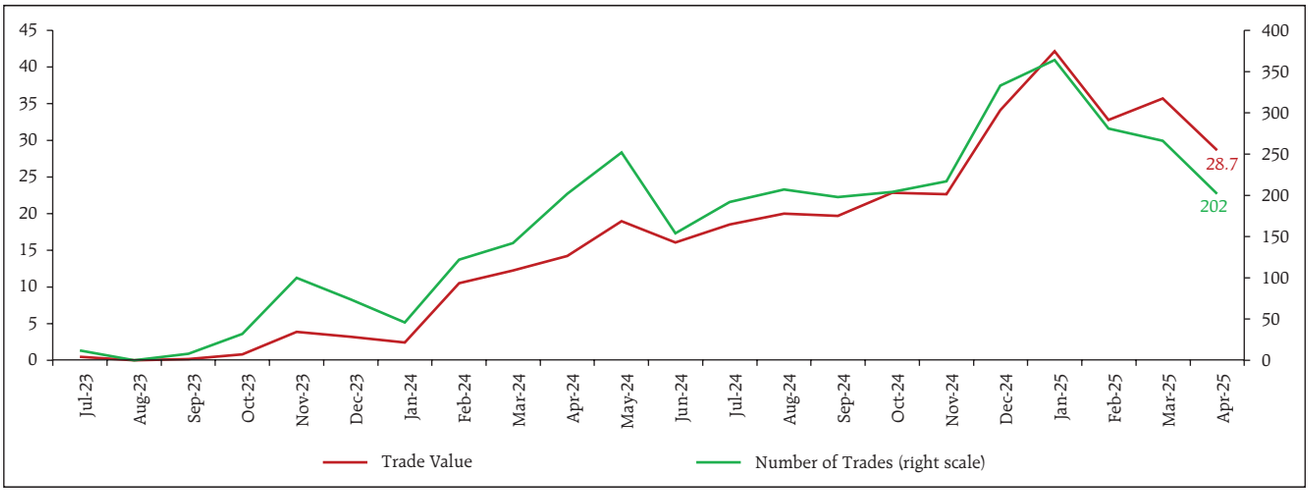
Notes: (1) * Only major issuer categories shown.
(2) # Below AA category includes bonds for which rating is not available.
(3) @ Between October 2024 to March 2025.
Sources: SEBI, Prime Database, NSDL, CDSL.

1.41 The development of a robust repo market enhances liquidity and efficiency in the corporate bond market. Accordingly, the AMC Repo Clearing Limited (ARCL) was operationalised in July 2023 as a Limited Purpose Clearing Corporation (LPCC) for providing clearing and settlement services as well as settlement guarantee for tri-party repo in corporate debt securities. The monthly trading volumes in this platform has seen robust growth (Chart 1.33). The ARCL platform also allows parties to offset their obligations through netting, and it provides a valuable tool for reducing risk, streamlining transactions and improving market efficiency.

1.42 Cyber security risk is a key vulnerability in securities markets. The expanding scale of digital financial services, cloud-based infrastructure and interconnected systems across sectors has exponentially increased the cyberattack surface. Given the systemic interconnectedness of financial entities and technology service providers, ensuring cyber resilience is critical to maintaining trust, stability and business continuity. As organisations increasingly depend on third party service providers

Chart 1.33: Monthly Trading Volumes for ARCL

(₹ '000 crore, left scale; number, right scale)



Source: ARCL.

for their business operations, vulnerabilities in the supply chain could pose systemic risk. Furthermore, the overreliance on a few major IT and cloud service providers has created dependency and vendor lock-in problems leading to concentration risks. Vulnerability in one system can quickly propagate across networks, affecting multiple entities. Phishing and social engineering attacks are evolving through Generative AI-powered methods, such as deepfakes and contextual frauds. Poorly secured Application Programming Interfaces (APIs), misconfigured databases, weak access controls and insider threats contribute to frequent data leaks and breaches, threatening both customer trust and regulatory compliance.

1.43 In this context, cybersecurity resilience will depend on the Security Operations Center (SOC) efficacy, risk-based supervision, zero-trust approaches and AI-aware defense strategies. Graded monitoring mechanisms, the use of behavioral analytics for threat detection, hands-on training, continuous learning and simulation-based exercises such as through Continuous Assessment-Based Red Teaming (CART), scenario-based resilience drills and uniform incident reporting frameworks are vital for enhancing the resilience of the digital ecosystem. Alongside, to ensure effective governance and preparedness, organisations must adopt measurable benchmarks like Cyber Capability Index and SOC Efficacy.

I.3 Corporate and Household Sector

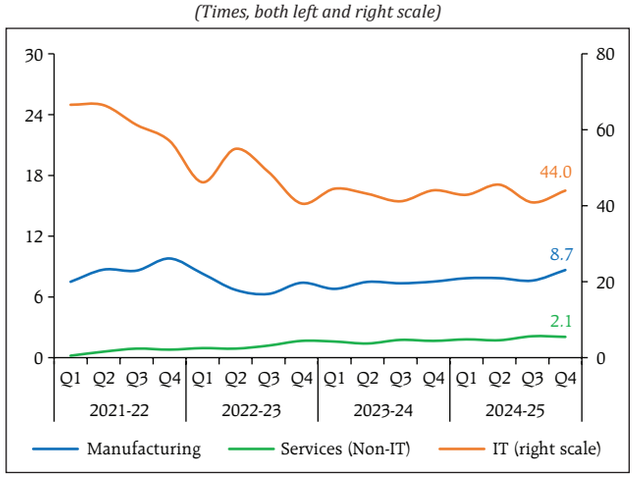
I.3.1 Corporate Sector

1.44 Indian corporate sector remained resilient even as firms are navigating heightened trade policy uncertainty. Despite the moderation in sales growth of listed private non-financial corporates (NFCs), their operating profit margin remained solid (Chart 1.34 a and b).

1.45 Listed private NFCs' debt serviceability improved as reflected in the healthy interest-coverage ratio[32] (ICR) of firms across the manufacturing, services and information technology sectors (Chart 1.35). Furthermore, NFCs' debt-service ratio[33] remained one percentage point below historical average even as weighted average lending rate has risen by 162 bps since March 2022 to December 2024 (Chart 1.36 a). Moreover, their cash buffers[34] remain sizeable (Chart 1.36 b).

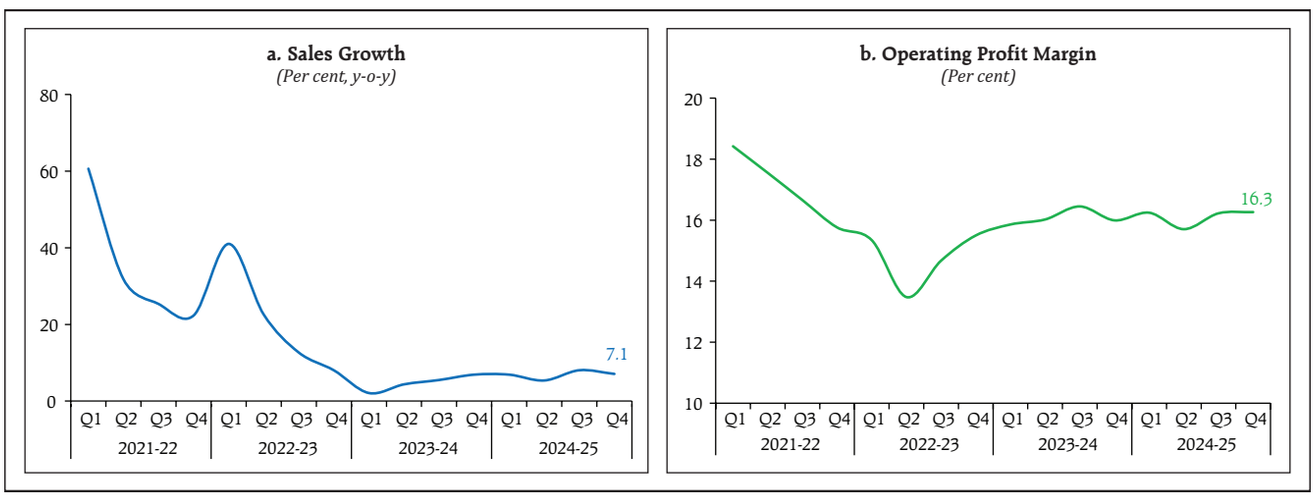
Chart 1.35: Sector-wise Trend in ICR

(Times, both left and right scale)



Sources: Capitaline and RBI staff calculations.

Chart 1.34: Sales and Profits - Listed Private NFCs



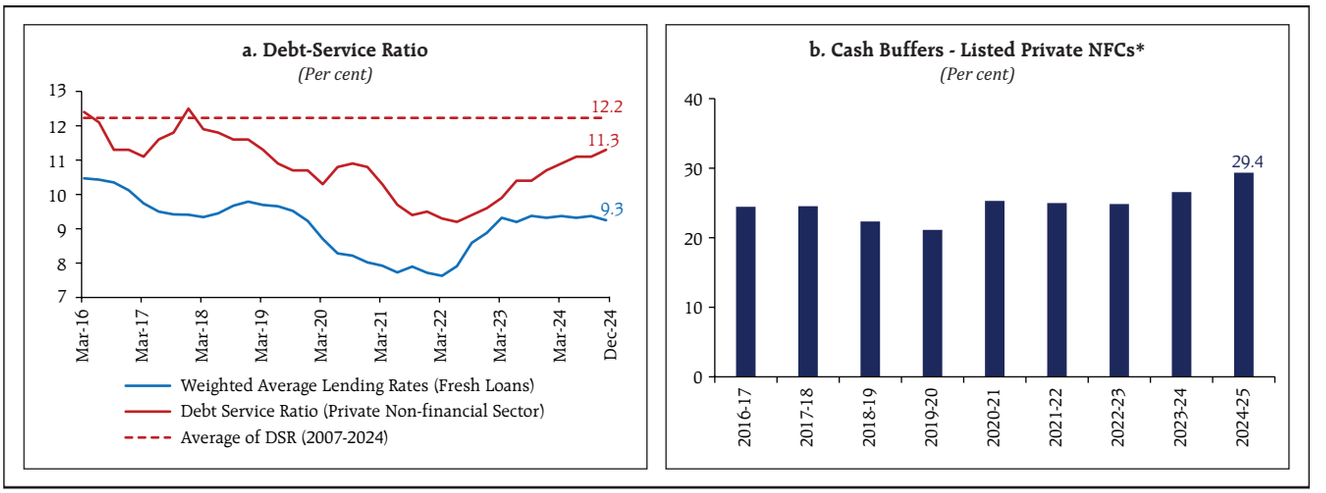
Sources: Capitaline and RBI staff calculations.

[32] The interest coverage ratio is the ratio of earnings before interest and taxes (EBIT) to interest expenses.

[33] The debt service ratio is defined as the ratio of interest payments plus amortisations to income. As such, the DSR provides a flow-to-flow comparison – the flow of debt service payments divided by the flow of income and therefore reflects the share of income used to service debt.

[34] Cash buffers are defined as cash and cash equivalent assets as a percentage of total financial liabilities.

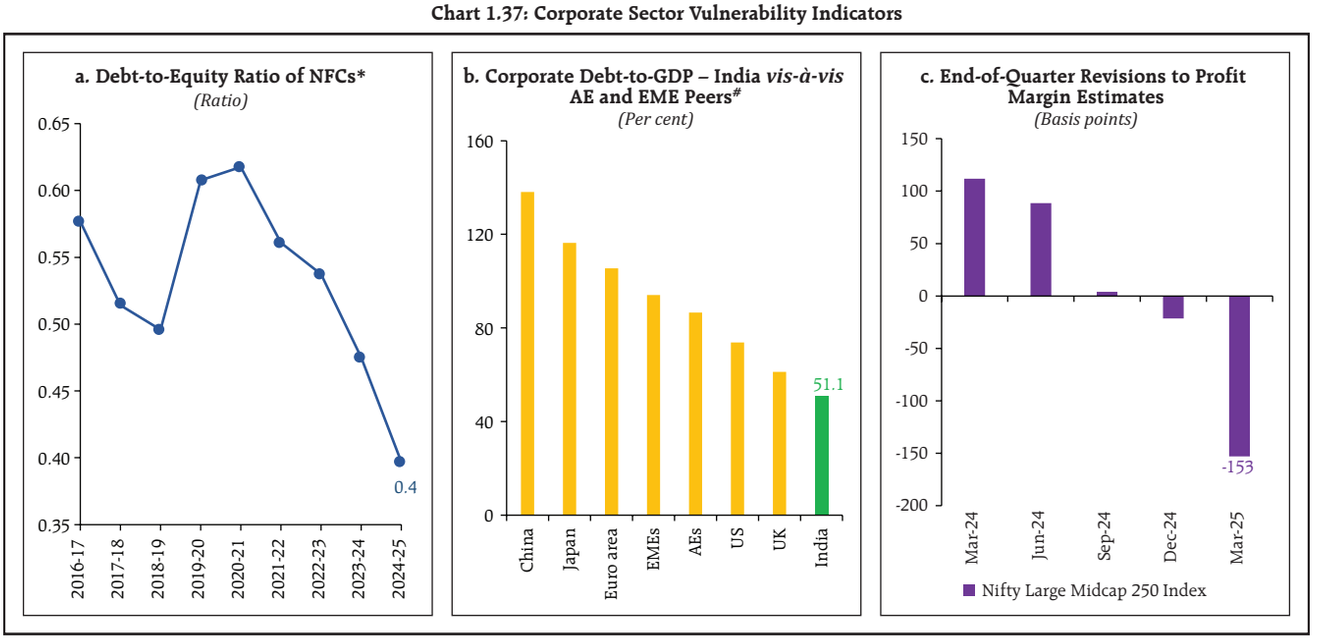
Chart 1.36: Debt-Service Ratio and Cash Buffers



Notes: (1) * The BIS database on 'Debt service ratio' reflects the share of income used to service debt for the total private non-financial sector.
(2) # Cash Buffer is defined as Cash/Total Liabilities*100, wherein Cash = 'cash and cash equivalents', 'short term loans and advances' and 'current investments'; and Total liabilities = Sum of 'total long-term borrowings' and 'total current liabilities' less 'short-term provisions'.
Sources: Bank for International Settlements (BIS), Capitaline, RBI and staff calculations.

1.46 At a broader level, vulnerabilities in the corporate sector remain contained with the debt-to-equity ratios of listed private NFCs consistently declining (Chart 1.37 a). When compared globally, India's corporate debt-to-GDP ratio has been low compared to AE and EME peers (Chart 1.37 b). Moreover, the risk from unhedged ECBs has reduced with their share falling to 26.1 per cent in March 2025 compared to 32.9 per cent in September 2024[35]. The trade policy uncertainty,

Chart 1.37: Corporate Sector Vulnerability Indicators



Notes: (1) * Debt/Equity ratio is calculated with Debt = Sum of 'long-term borrowings' and 'short-term borrowings'; and Equity = Sum of 'share capital' and 'reserves and surplus'.
(2) # Data as at end-December 2024. The BIS database on 'Credit to the non-financial sector' provides data of credit to the non-financial corporations from domestic banks, other domestic financial corporations, non-financial corporations and non-residents.
Sources: Capitaline, BIS, Bloomberg and RBI staff calculations.

[35] After adjusting for natural hedge.

however, is likely to impact earnings estimates, which have already been moderating in the recent past. The higher effective tariff rates are likely to put pressure on corporate margins going forward (Chart 1.37 c).

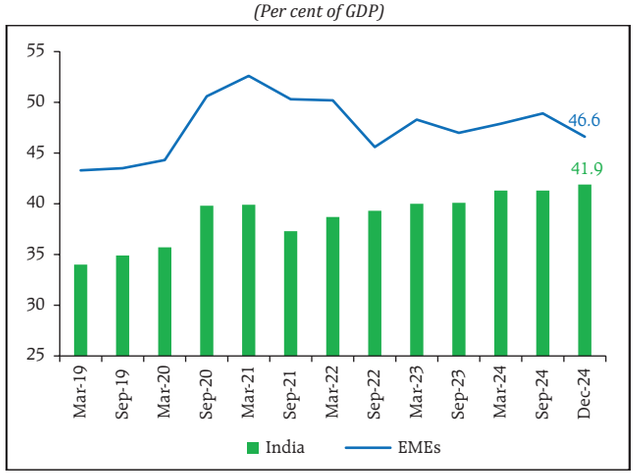
I.3.2 Household Sector

1.47 India's household debt has been increasing in recent years, driven by rising borrowing from the financial sector. However, as on end-December 2024, India's household debt at 41.9 per cent of GDP (at current market prices) was relatively low compared to other EMEs (Chart 1.38).

1.48 Among broad categories of household debt, non-housing retail loans, which are mostly used for consumption purposes[36], formed 54.9 per cent of total household debt[37] as of March 2025 and 25.7 per cent of disposable income as of March 2024 (Chart 1.39 a and b). Moreover, the share of these loans has been growing consistently over the years, and their growth has outpaced that of both housing loans and agriculture and business loans (Chart 1.39 c).

Chart 1.38: Household Debt

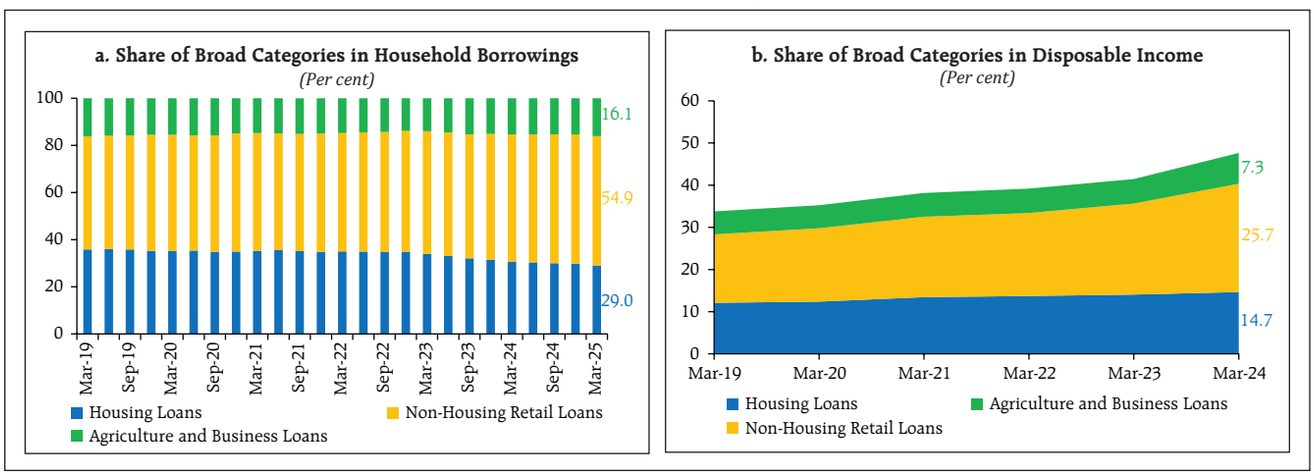
(Per cent of GDP)



Note: The BIS database on 'Credit to the non-financial sector' provides data of credit to the households (including non-profit institutions serving households) from domestic banks, other domestic financial corporations, non-financial corporations and non-residents.
Source: BIS.

1.49 Housing loans, on the other hand, formed 29.0 per cent of household debt and their growth has been steady. However, disaggregated data shows that incremental growth has been mainly driven by the existing borrowers who are availing additional loans, and their share has increased to more than a third of the housing loans sanctioned in March 2025 (Chart 1.40 a). Moreover, share of borrower accounts with loan-

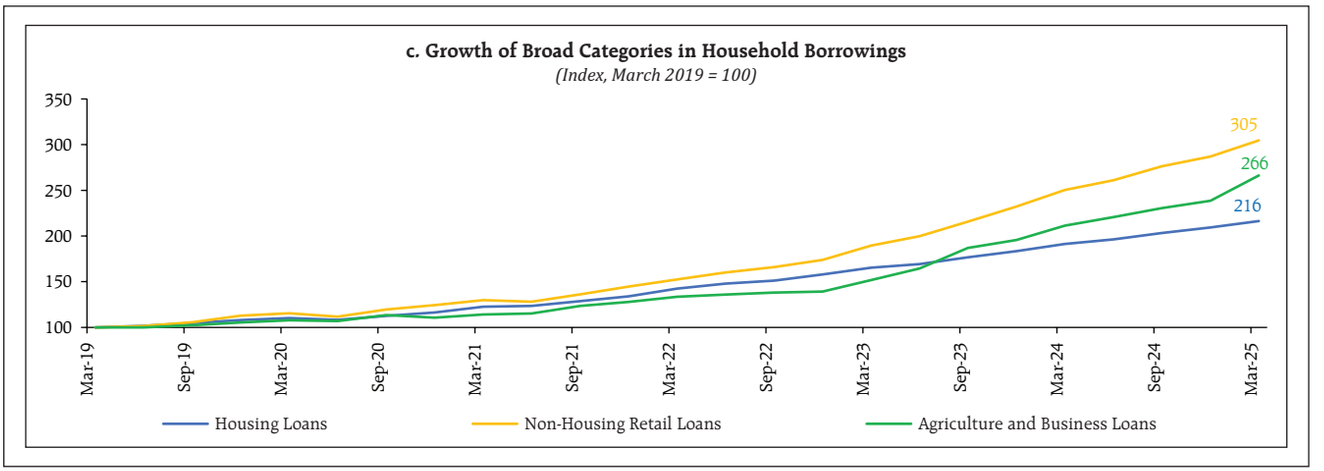
Chart 1.39: Household Borrowings *(Contd.)*



[36] Includes personal loans, credit cards, consumer durable loans and other personal loans.

[37] In this analysis, consumer segment loans are used as a proxy for the total household debt and represents about 94 per cent of total household debt as at end-December 2024. Consumer segment loans refer to credit that is extended to individuals in their personal capacity, utilised for either personal or business purposes, and is recorded in the consumer repository of credit bureau(s).

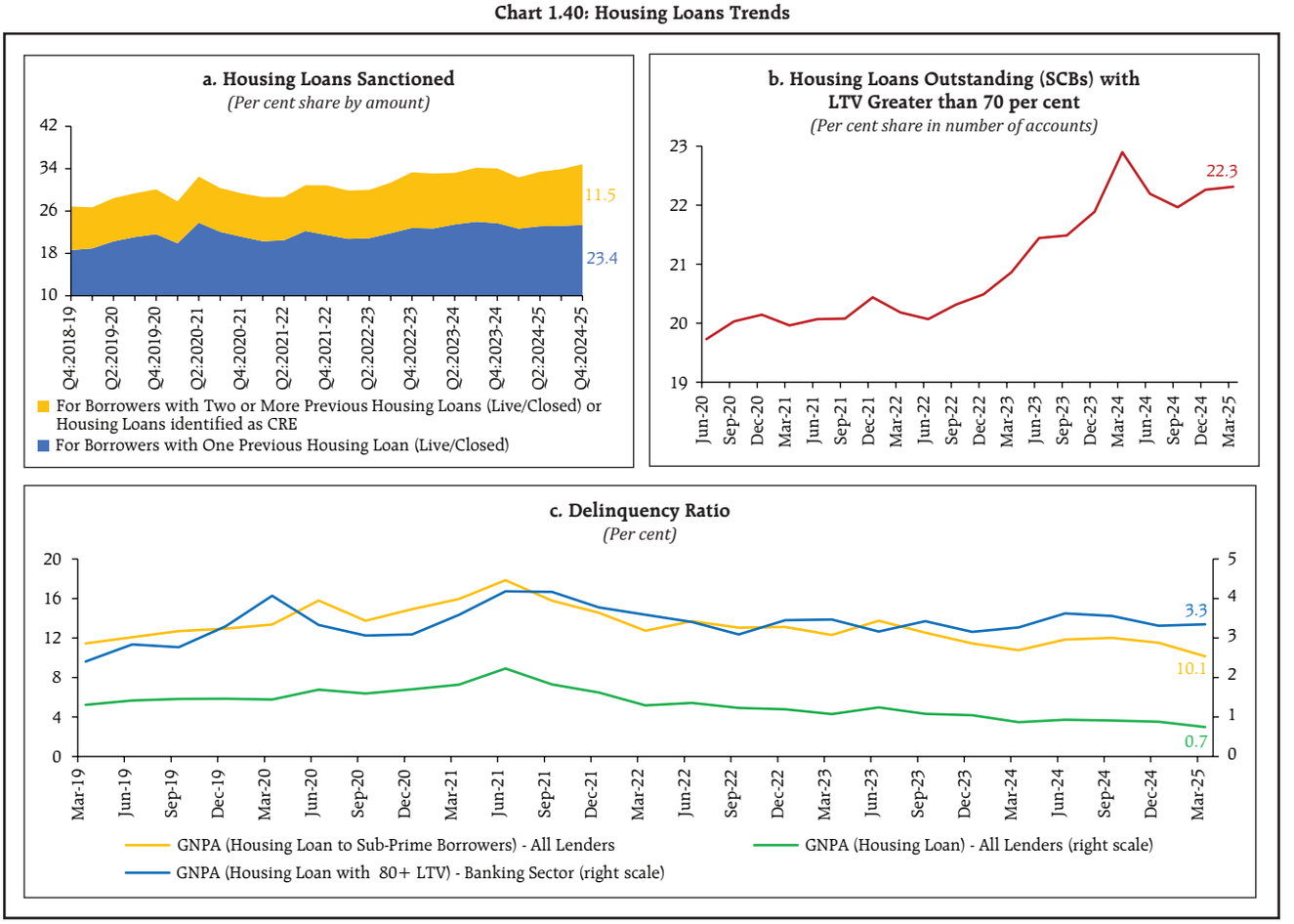
Chart 1.39: Household Borrowings *(Concld.)*



Sources: TransUnion CIBIL and MoSPI.

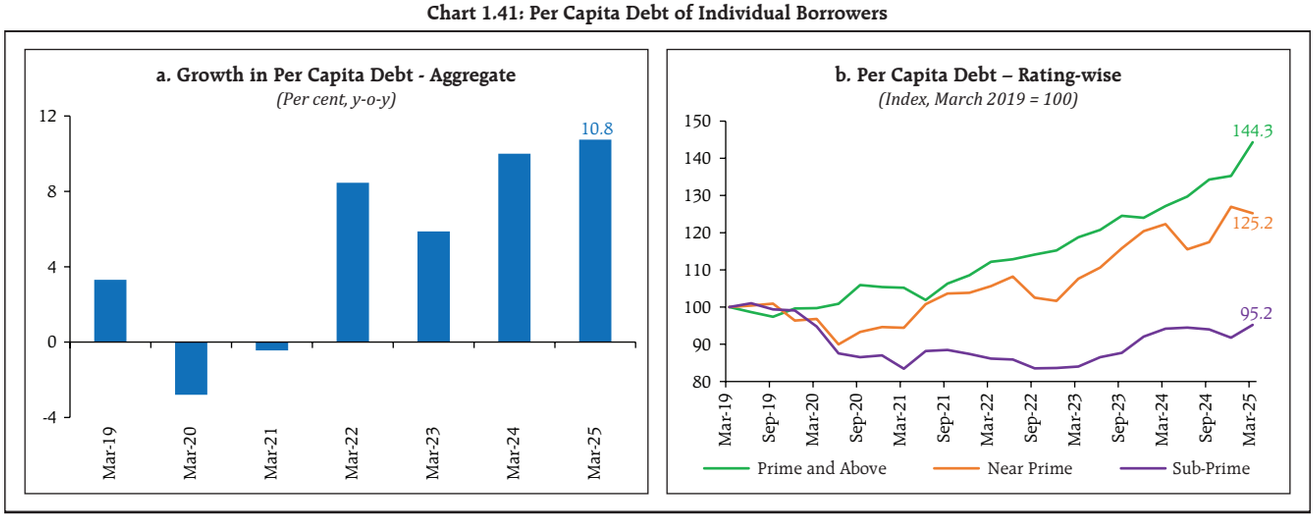
to-value (LTV) ratios greater than 70 per cent is also rising (Chart 1.40 b), and delinquency levels are higher for lower-rated and more leveraged borrowers. However, these have declined considerably from their levels during COVID-19 (Chart 1.40 c).

Chart 1.40: Housing Loans Trends



Sources: TransUnion CIBIL and individual bank submissions from a sample of 14 select banks.

Chart 1.41: Per Capita Debt of Individual Borrowers



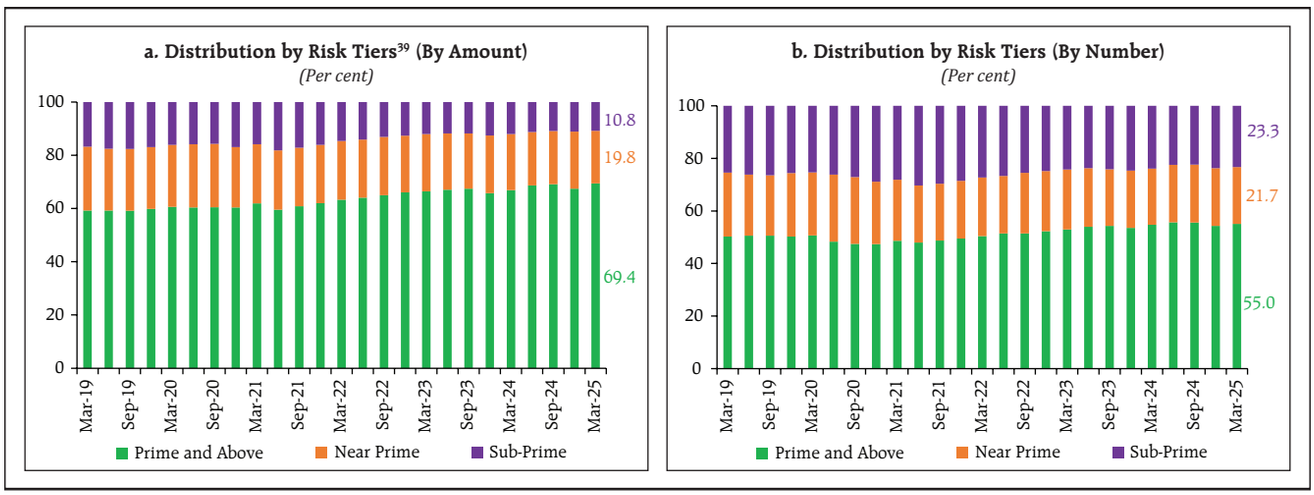
Sources: TransUnion CIBIL and RBI staff calculations.

1.50 At an aggregate level, the per capita debt of individual borrowers[38] has grown from ₹3.9 lakh in March 2023 to ₹4.8 lakh in March 2025 (Chart 1.41 a). The rise in per capita debt has been mainly led by the higher-rated borrowers (Chart 1.41 b).

1.51 The share of better-rated customers (prime and above) among total borrowers is growing, both in terms of the outstanding amount and number of borrowers (Chart 1.42 a and b). This is important from a debt serviceability and financial stability perspective, as it indicates that household balance sheets at an aggregate level are resilient.

1.52 An update of the analysis of financial wealth of Indian households[40] shows that the financial

Chart 1.42: Household-Individual Borrowings from Financial Institutions



Note: The segregation of risk tiers based on CIBIL scores is as follows - Super-Prime:791-900; Prime Plus: 771-790, Prime: 731-770; Near Prime: 681-730; and Sub-Prime: 300-680.
Source: Transunion CIBIL.

[38] Debt outstanding divided by number of live unique borrowers at the end of each period.

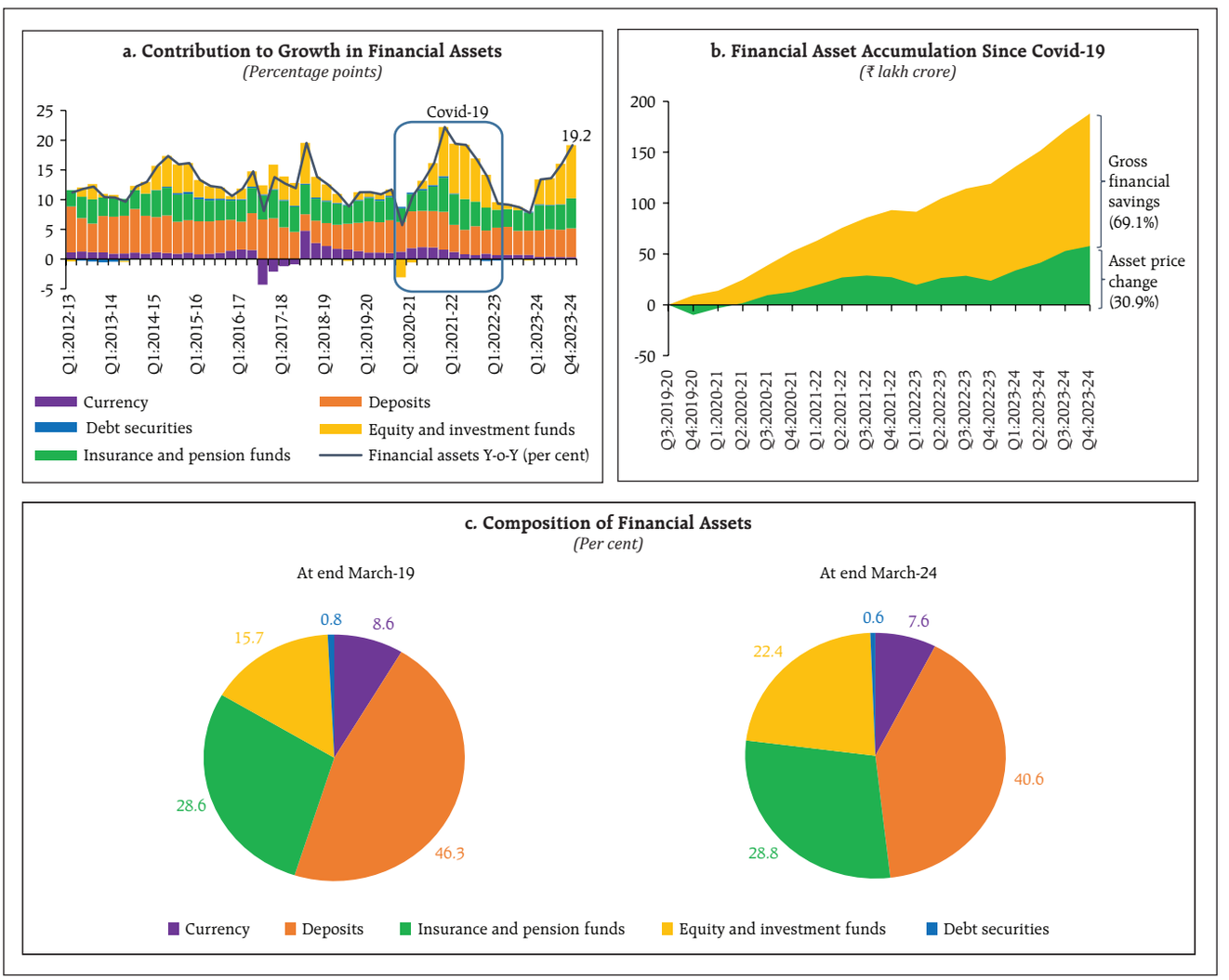
[39] The segregation of risk tiers based on CIBIL scores is as follows - Super-Prime:791-900; Prime Plus: 771-790, Prime: 731-770; Near Prime: 681-730; and Sub-Prime: 300-680.

[40] Prakash, Anupam, S, Suraj, Thakur, Ishu and Priyadarshini, Mousumi (2024), "Estimating the Financial Wealth of Indian Households", RBI Bulletin, July.

wealth of households grew sharply in 2023-24 (Chart 1.43 a). Since Q3:2019-20, asset price gains contributed to around one-third of the increase in the financial assets, while the remaining was on account of an increase in financial savings (Chart 1.43 b). Deposits and insurance and pension funds formed nearly 70 per cent of household financial wealth as at end-March 2024 even as the share of equities and investment funds has increased (Chart 1.43 c).

1.53 Overall, the risks to the Indian financial system from lending to households remain contained with easing monetary policy cycle likely to reduce debt service pressures on borrowers going forward. However, the trend in household debt accumulation, especially among lower-rated borrowers, requires close monitoring.

Chart 1.43: Household Financial Wealth



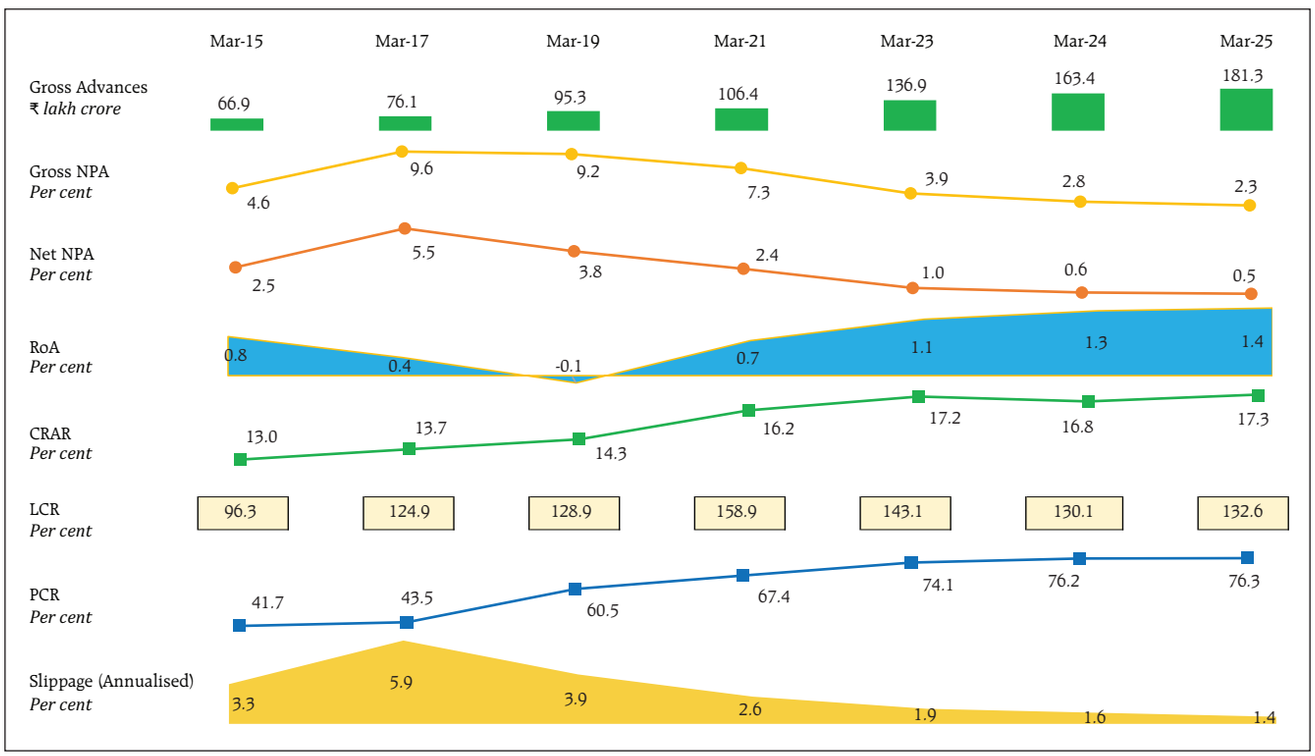
Sources: RBI and staff calculations.

I.4 Banking System[41]

1.54 The resilience of the banking system has been pivotal to the strength of the Indian financial system. This is evident in scheduled commercial banks' (SCBs) strong capital and liquidity buffers, improved asset quality and robust earnings (Chart 1.44). Adequate high quality common equity tier 1 (CET1) capital, declining loan losses and credit costs, and solid profitability lend credibility to their soundness and ability to lend to households and businesses as well as absorb losses in the event of downside risks (Chart 1.45 a, b, c and d).

1.55 Notwithstanding the solid performance of banks during the last three years, they could face some pressure in the near-term: (1) easing monetary policy cycle could impact the net interest margin (NIM) as growing share of loan book is linked to the external benchmark-based lending rate (EBLR), which is reset more frequently with change in repo rate. On the other hand, term deposits, which are also growing, have fixed contractual rates that change less frequently (Chart 1.46 a). The recent 100 bps cut in CRR, however, will cushion this

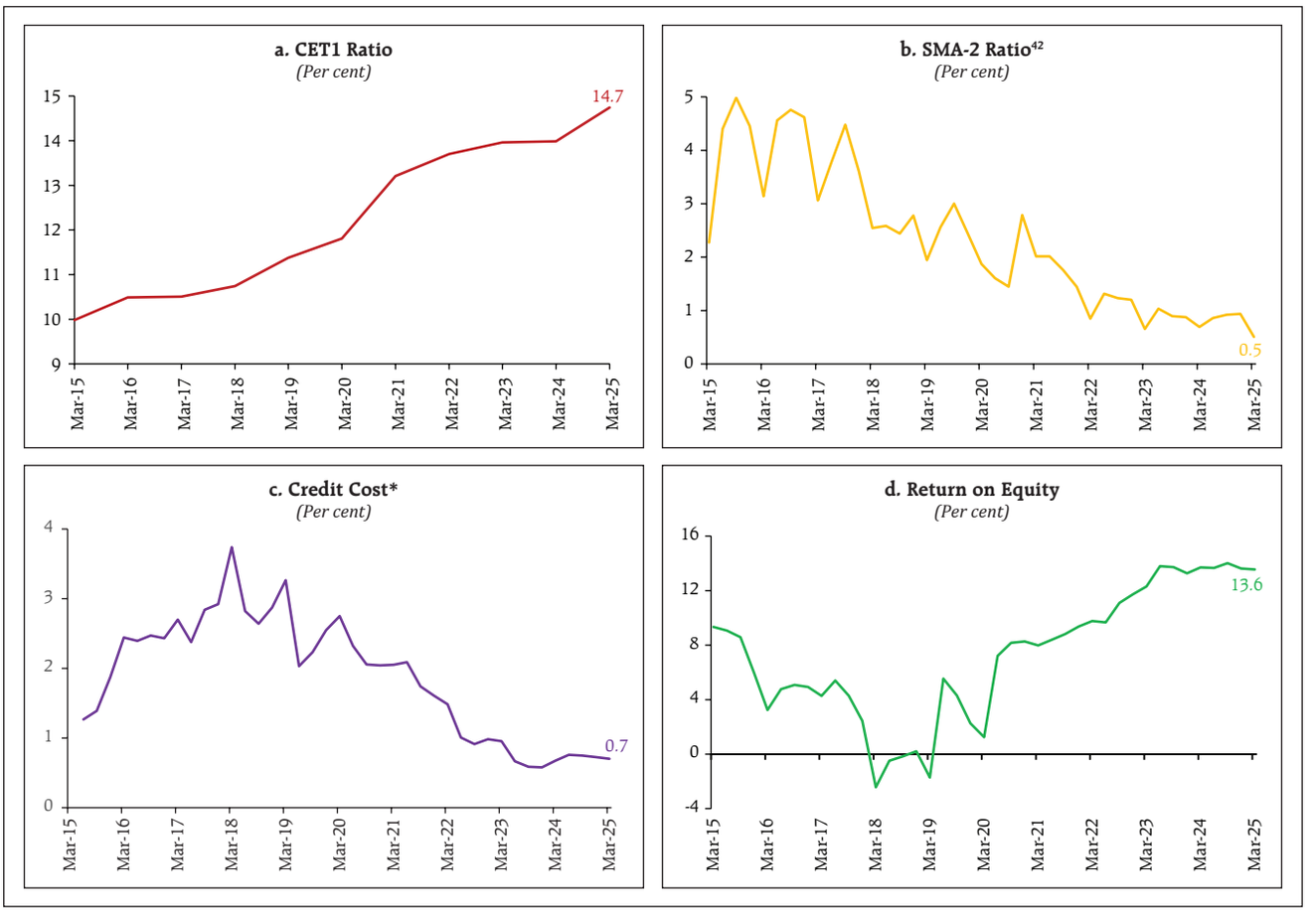
Chart 1.44: Performance of SCBs



Notes: (1) Data as on June 10, 2025.
(2) Data pertains to domestic operations of SCBs, including SFBs (except for CRAR).
Source: RBI supervisory returns.

[41] The analyses done in this section are based on domestic operations of SCBs (including SFBs), unless otherwise stated.

Chart 1.45: SCBs' Capital, Asset Quality and Profitability



Note: * Credit cost = Annualised (Risk provisions + write-offs)/ Average gross loans and advances.
Source: RBI supervisory returns.

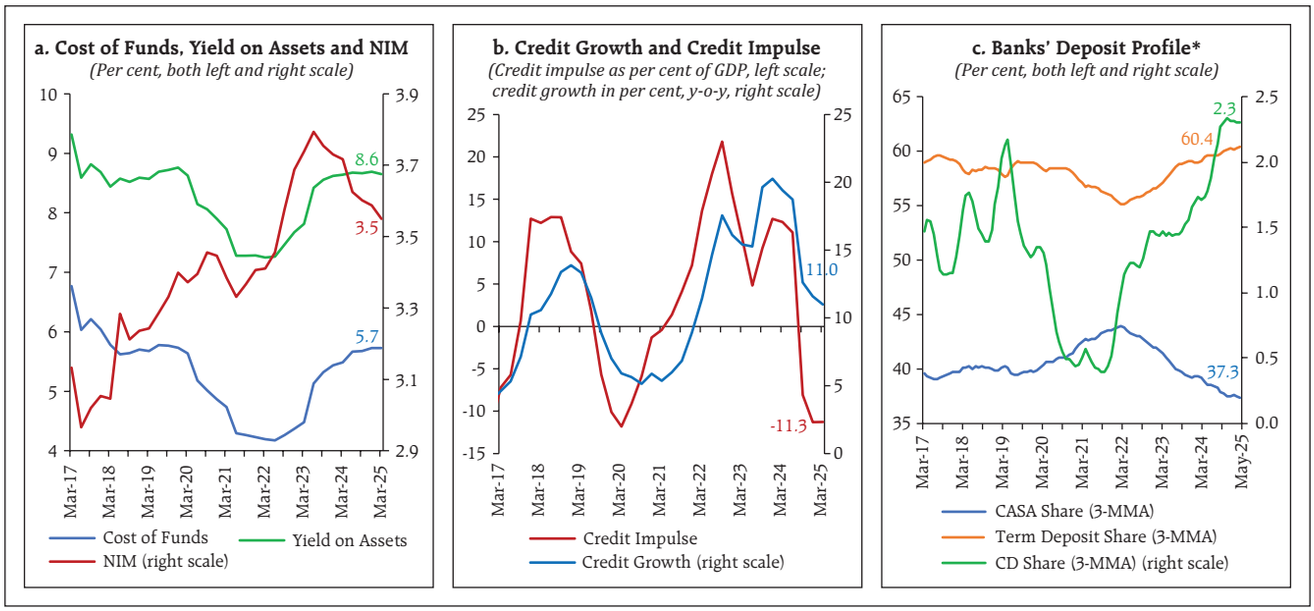
impact by releasing funds for banks and reducing their costs; (2) credit growth has slowed, and credit impulse[43] has turned negative (Chart 1.46 b). Economic slowdown, if any, amidst heightened uncertainty could drag credit demand lower, which may impact asset quality and profitability; and (3) banks' liability profile is changing with the share of higher-cost term deposits and CDs growing compared to low-cost current account and savings account (CASA) deposits (Chart 1.46 c).

1.56 Post-pandemic, bank loan growth was largely driven by lending to the retail and services sector, particularly through unsecured retail loans and lending to the NBFCs. Pursuant to the RBI's decision to increase risk weights on certain segments of consumer credit and bank lending to the NBFCs, loan growth in these two sectors has fallen sharply, contributing to a slowdown in total loan growth (Chart 1.47 a and b). Overall, a more cautious approach by lenders, improvement

[42] Special mention account (SMA) is defined as:
a) For loans with revolving facilities (e.g. cash credit/ overdraft): if outstanding balance remains continuously more than the sanctioned limit or drawing power, whichever is lower, for a period of 31-60 days - SMA-1; 61-90 days - SMA-2.
b) For loans other than revolving facilities: if principal or interest payment or any other amount wholly or partly overdue remains outstanding up to 30 days - SMA-0; 31-60 days - SMA-1; 61-90 days - SMA-2.

[43] Credit impulse is the change in new credit issued as a percentage of GDP. Essentially, it captures the change in credit between time t and (t-1), and between (t-1) and (t-2), as a percentage of four-period rolling average of quarterly GDP at time (t-1).

Chart 1.46: Profitability, Credit Growth and Deposit Profile

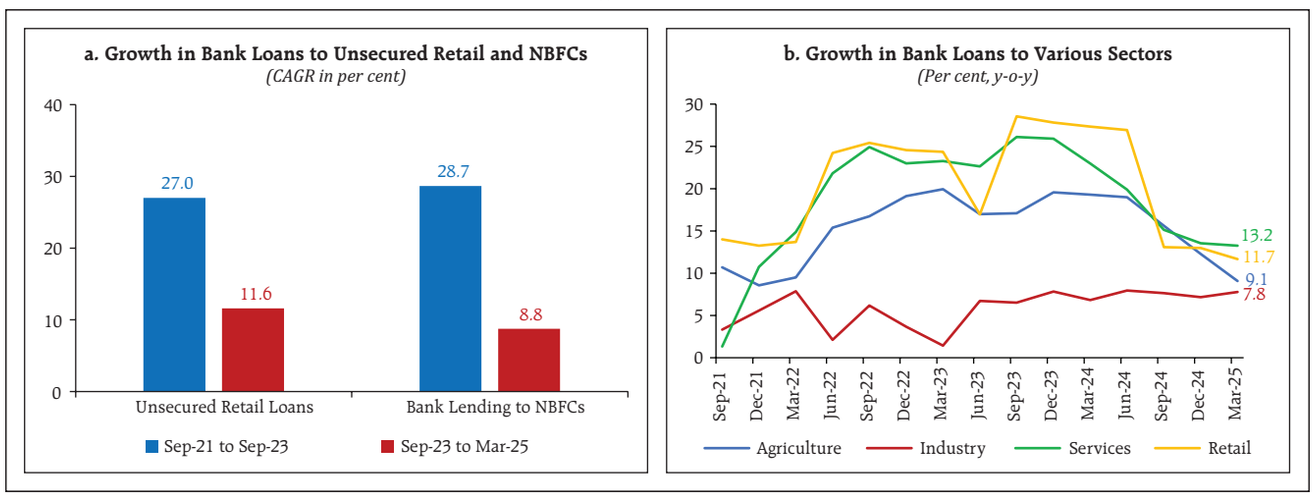


Note: * 3-MMA = 3 month moving average.
Source: RBI supervisory returns.

in lending standards, and the restoration of risk weights on bank lending to NBFCs[44] are stability-enhancing and credit positive.

1.57 Even as unsecured retail lending has moderated – it forms 25.0 per cent of retail loans and 8.3 per cent of gross advances – its asset quality has relatively weakened compared to the overall retail portfolio - gross non-performing asset (GNPA) ratio at 1.8 per cent *vis-à-vis* 1.2 per cent in March 2025 - especially in respect of private sector banks (PVBs) (Chart 1.48 a and b). On the other hand, the SMA ratio, an indicator of possible stress build-up in loan book, has risen, led by public sector banks (PSBs) (Chart 1.48 c).

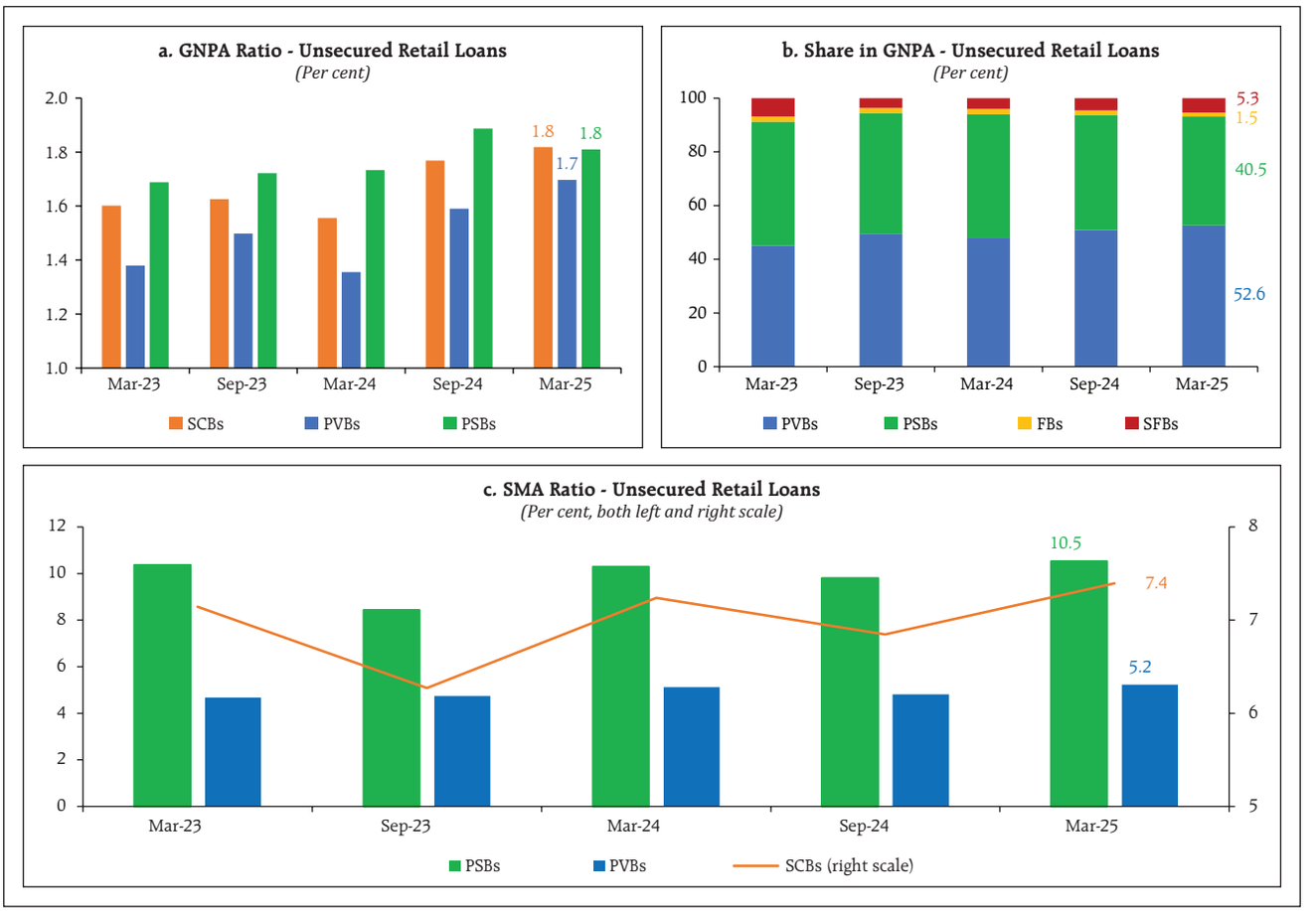
Chart 1.47: Bank Loan Growth



Source: RBI supervisory returns.

[44] RBI circular no. RBI/2024-25/120 DOR.STR.REC.61/21.06.001/2024-25 dated February 25, 2025, on "Exposures of Scheduled Commercial Banks (SCBs) to Non-Banking Financial Companies (NBFCs) – Review of Risk Weights".

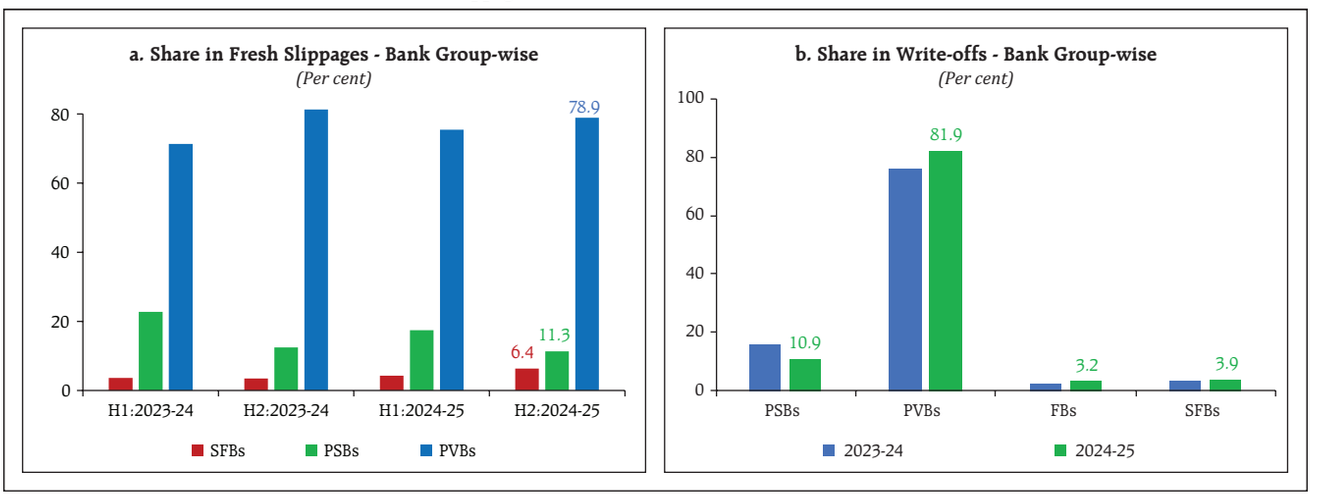
Chart 1.48: Asset Quality of Unsecured Retail Loans



Sources: RBI supervisory returns and staff calculations.

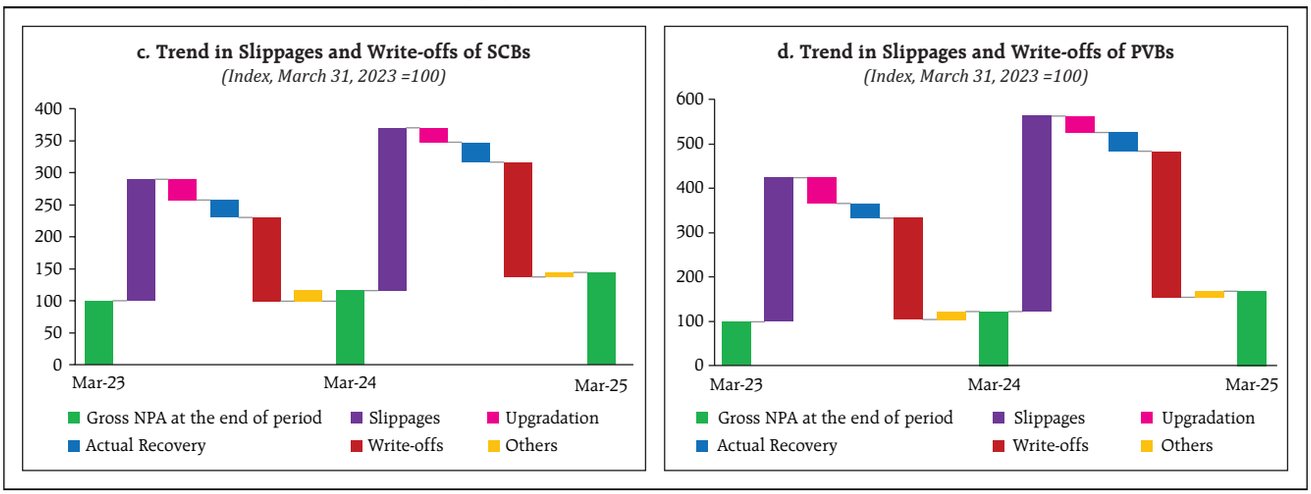
1.58 Slippages in unsecured retail loans remain elevated for PVBs. Fresh slippage in unsecured retail loans continues to dominate the overall slippage in retail loan segment with PVBs' contribution significantly higher among bank groups (Chart 1.49 a). Alongside, write-offs continue to remain

Chart 1.49: Slippages and Write-offs - Unsecured Retail Loans *(Contd.)*



Source: RBI supervisory returns.

Chart 1.49: Slippages and Write-offs - Unsecured Retail Loans *(Concld.)*



Sources: RBI supervisory returns and staff calculations.

a key contributing factor to NPA reduction in the unsecured retail portfolio, especially among PVBs (Chart 1.49 b, c and d).

1.59 The share of floating rate loans in total gross advances of fourteen select banks, accounting for around 79 per cent of the assets of SCBs (excluding SFBs and regional rural banks), has increased from 72.0 per cent in March 2023 to 75.7 per cent in March 2025. The share of floating rate loans in the retail loan category rose from 60.2 per cent to 65.1 per cent during the same period - out of this, around 90 per cent are EBLR loans (Table 1.3 and 1.4). Thus, with faster transmission of monetary policy, the debt service burden of retail borrowers is expected to ease.

Table 1.3: Share of Floating Rate Loans - Overall

(Per cent)

	PSBs (8)	PVBs (6)	SCBs (14)
Agriculture	93.0	54.5	82.8
Industry	85.5	81.5	83.9
Services	79.8	74.2	77.7
Personal (Retail) Loans	71.4	57.6	65.1
Others	89.6	74.2	85.5
Total Advances	80.9	67.5	75.7

Note: As on March 31, 2025. Number in parenthesis indicates number of banks covered in the analysis.
Source: Individual bank submissions.

Table 1.4: Distribution of Retail Loans by Interest Rate Framework

(Per cent)

	Fixed Rate	Base Rate	MCLR	EBLR	Others
Housing Loans					
PSBs	5.5	1.9	10.5	77.7	4.4
PVBs	1.1	0.5	3.1	95.1	0.2
All SCBs	3.6	1.3	7.2	85.3	2.6
Vehicle/Auto Loans					
PSBs	48.4	0.1	8.8	42.7	0.0
PVBs	99.9	0.0	0.0	0.1	0.0
All SCBs	72.6	0.1	4.7	22.7	0.0
Credit Card Receivables					
PSBs	100.0	0.0	0.0	0.0	0.0
PVBs	100.0	0.0	0.0	0.0	0.0
All SCBs	100.0	0.0	0.0	0.0	0.0
Education Loans					
PSBs	7.8	3.5	14.3	74.3	0.1
PVBs	6.8	0.1	1.6	91.5	0.0
All SCBs	7.7	3.1	12.9	76.3	0.1
Other Retail Loans					
PSBs	57.0	0.2	4.2	38.4	0.2
PVBs	63.7	0.2	1.8	32.8	1.4
All SCBs	59.9	0.2	3.2	36.0	0.7
Total Retail Loans					
PSBs	28.6	1.2	8.2	59.8	2.3
PVBs	42.4	0.3	2.0	54.7	0.5
All SCBs	34.9	0.8	5.4	57.5	1.5

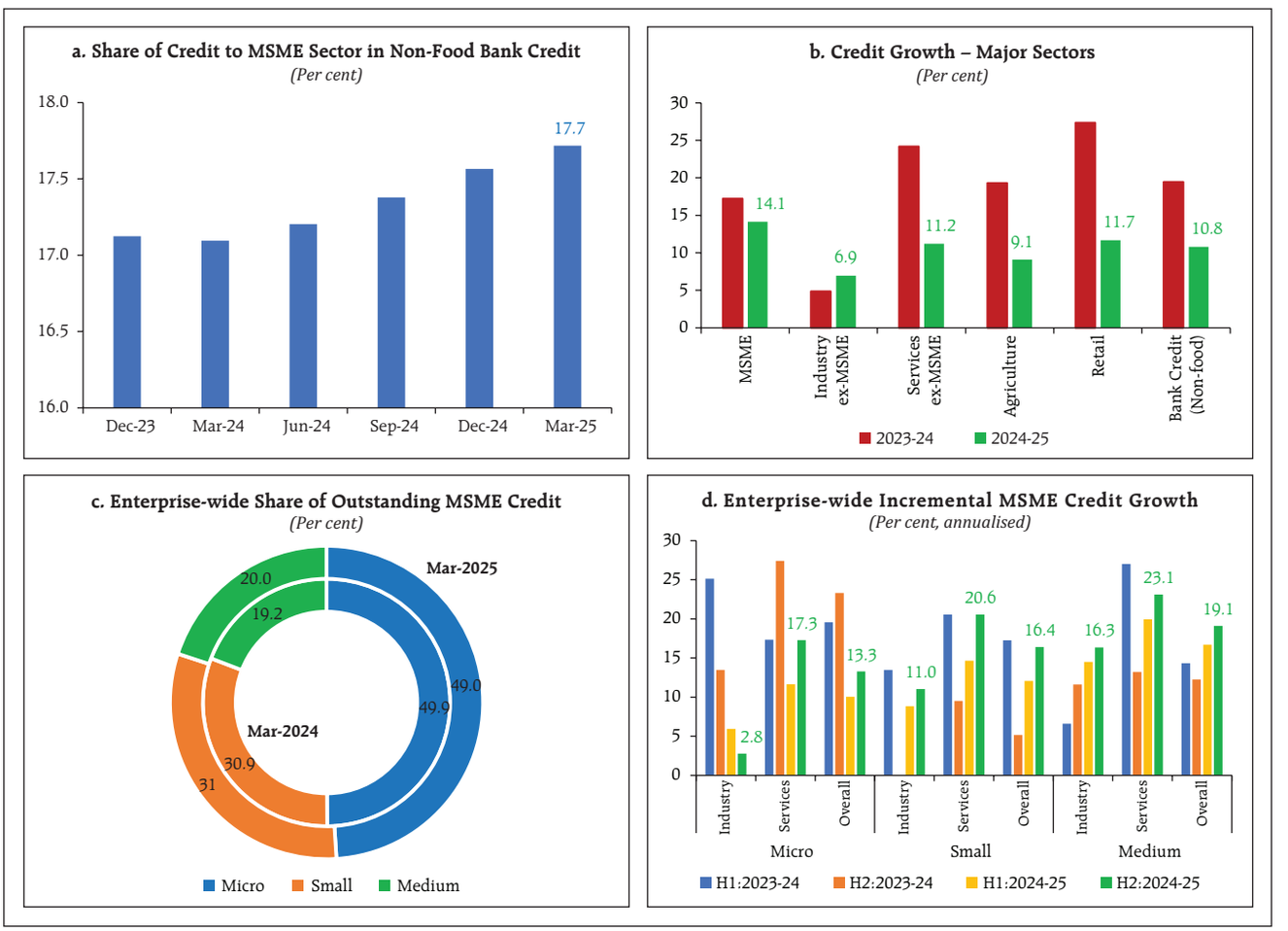
Note: As on March 31, 2025.
Source: Individual bank submissions.

1.60 Despite a broad deceleration in bank credit growth, the share of credit to the micro, small and medium enterprises (MSME) sector in total non-food bank credit has been growing steadily and its growth has outpaced that in other sectors during 2024-25 (Chart 1.50 a and b). Within the MSME sector, however, credit to the micro enterprises, which formed 49.0 per cent of total credit to the MSME sector, witnessed slower incremental growth in 2024-25 compared to small and medium enterprises (Chart 1.50 c and d).

1.61 Asset quality has shown improvement with gross NPA ratio of MSME portfolio of SCBs falling from 4.5 per cent in March 2024 to 3.6 per cent as at end-March 2025 (Chart 1.51 a). This is also reflected in the significant moderation in SMA-2 ratio, an indicator of incipient stress (Chart 1.51 b).

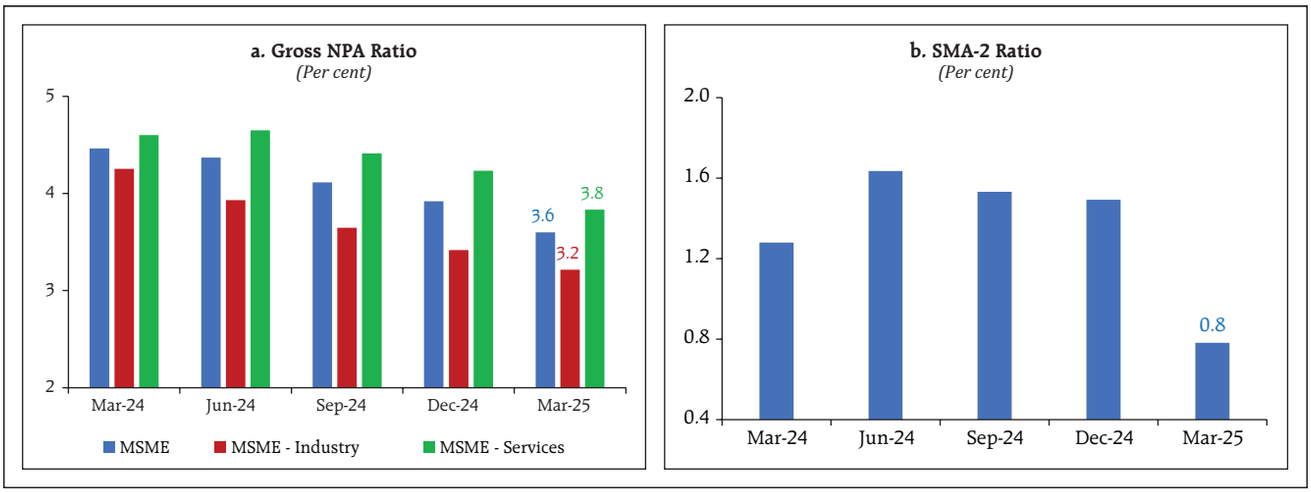
1.62 In terms of amount outstanding, the share of sub-prime borrowers in the MSME portfolio of the SCBs has decreased from 33.5 per cent in June 2022 to 23.3 per cent in March 2025. PSBs, however,

Chart 1.50: Bank Credit to the MSME Sector



Sources: RBI supervisory returns and staff calculations.

Chart 1.51: Asset Quality of Bank Credit to the MSME Sector



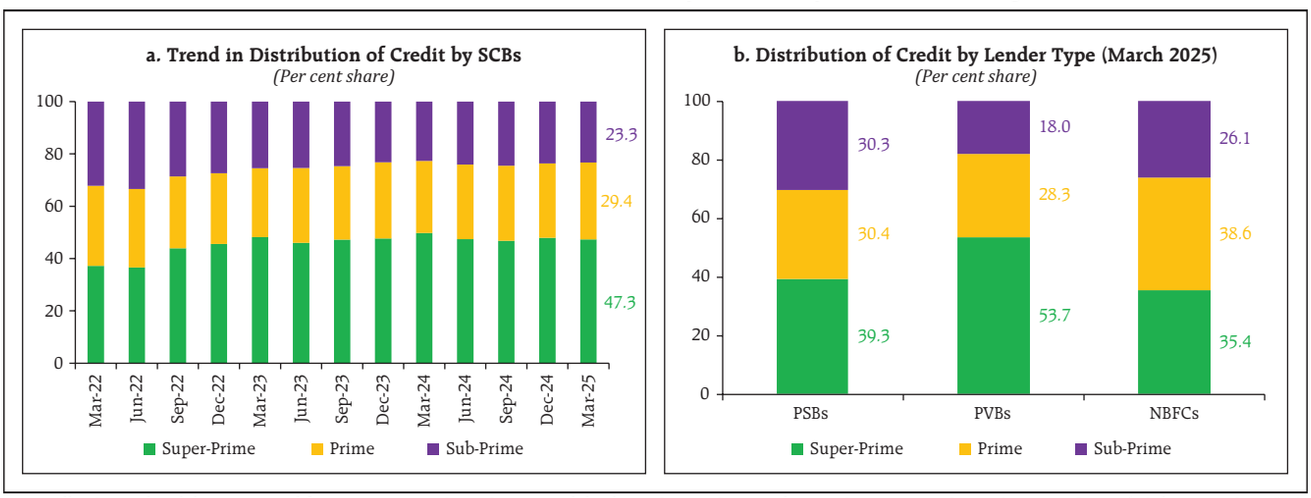
Sources: RBI supervisory returns and staff calculations.

had a higher share of sub-prime borrowers in their MSME portfolio compared to PVBs and NBFCs (Chart 1.52 a and b).

1.63 The government's credit guarantee schemes improved flow of credit to the MSME sector, especially vulnerable enterprises, with approximately ₹6.28 lakh crore guaranteed under two flagship schemes, *viz.*, the Credit Guarantee Fund for Micro Units (CGFMU) and the Emergency Credit Line Guarantee Scheme (ECLGS). The NPA ratio in both schemes remains contained despite the riskiness of borrowers (Chart 1.53).

1.64 Consumer segment loans grew at a CAGR of 20.4 per cent between March 2021 and March

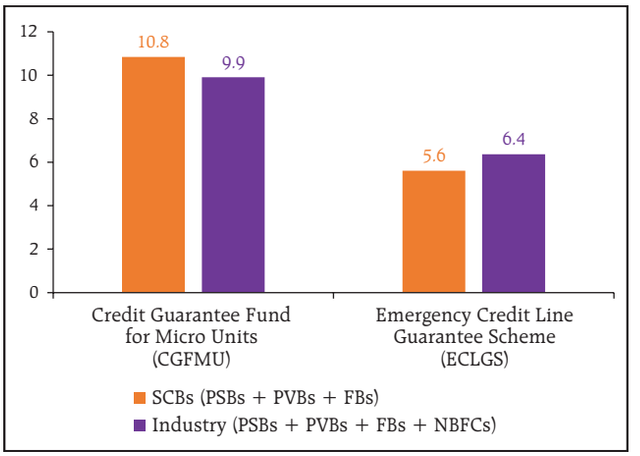
Chart 1.52: Share of Credit to MSME Sector by Risk Tiers (By Amount Outstanding)



Note: All MSME related data is sourced from TransUnion CIBIL Commercial database. CIBIL MSME Ranking is: Super-Prime: CMR 1-3; Prime: CMR 4-6, Sub-Prime: CMR 7-10.
Source: TransUnion CIBIL.

Chart 1.53: NPA Ratio of Credit Extended under Select Guarantee Schemes

(Per cent)

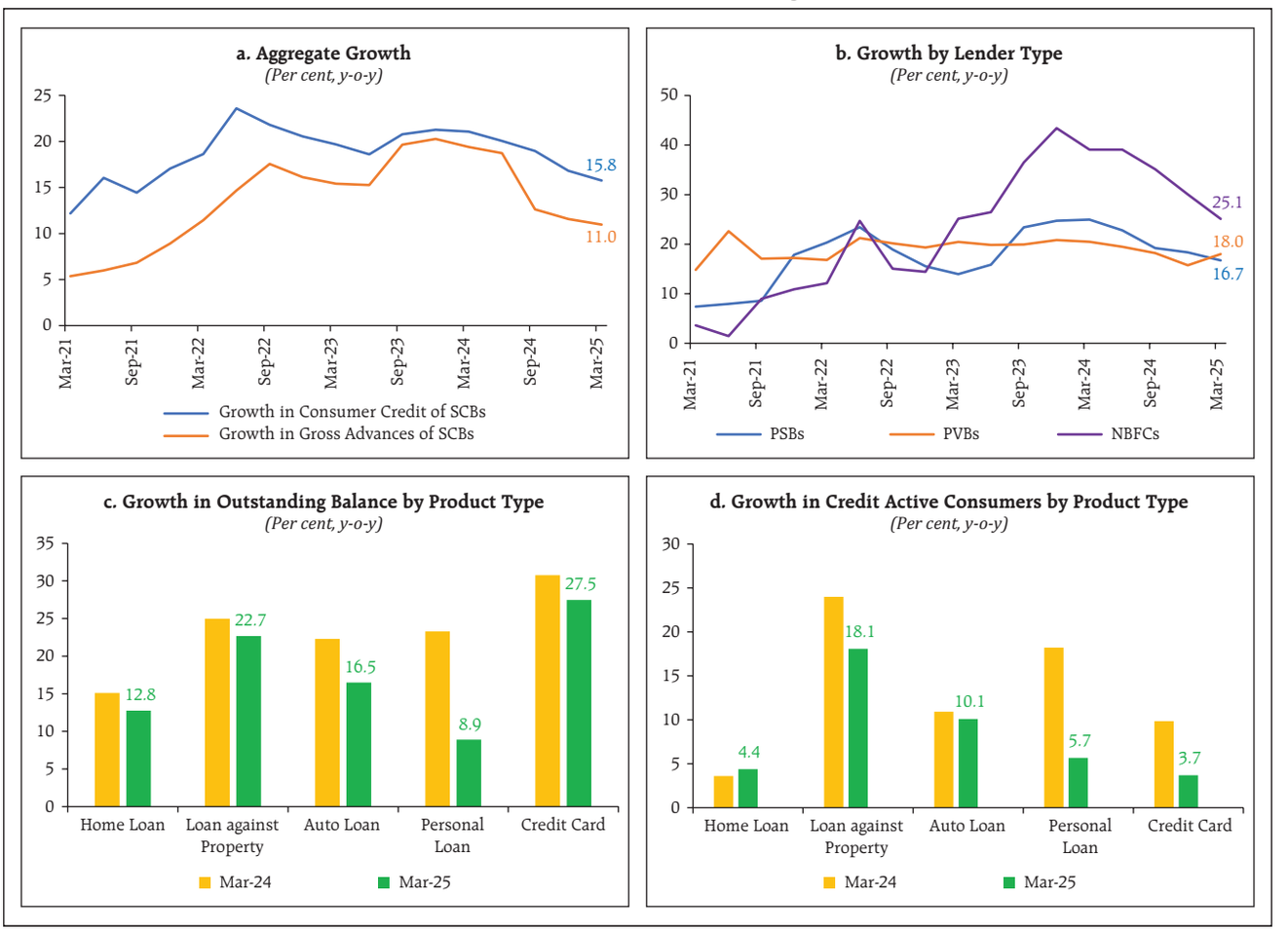


Note: As on March 31, 2025.
Source: National Credit Guarantee Trustee Company Limited.

2025 compared to 14.6 per cent growth in the overall loans. During this period, loans extended by banking sector to this segment grew at a CAGR of 18.8 per cent (Chart 1.54 a). Consumer segment loan growth, however, has slowed following the implementation of regulatory measures by the RBI in Q3:2023-24, across lender types, product types and credit active consumers (Chart 1.54 b, c and d).

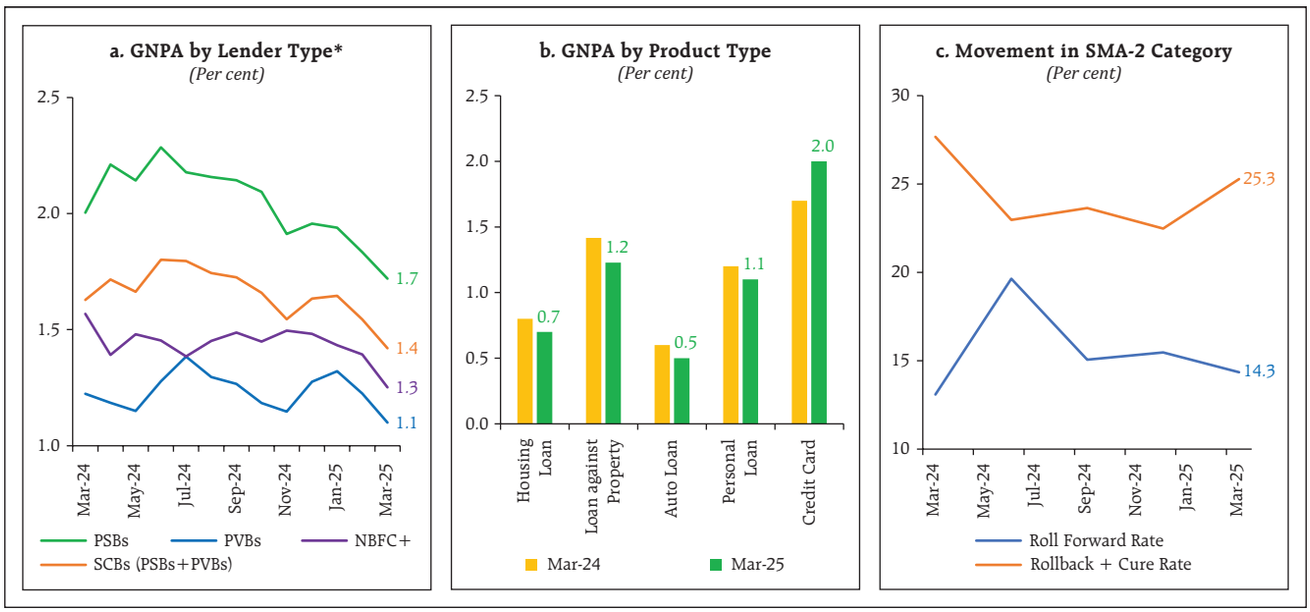
1.65 Even as loan growth to consumer segment slowed down, the quality of the portfolio has improved. Delinquency levels, except credit cards, have decreased, upgradations from SMA-2 accounts have risen, and slippages from SMA-2 accounts have fallen (Chart 1.55 a, b and c). The GNPA ratio of the SCBs' consumer segment loans stood at 1.4 per cent in March 2025. Moreover, in a sign of improving

Chart 1.54: Loan Growth in Consumer Segment



Sources: TransUnion CIBIL and RBI supervisory returns.

Chart 1.55: Consumer Segment Asset Quality

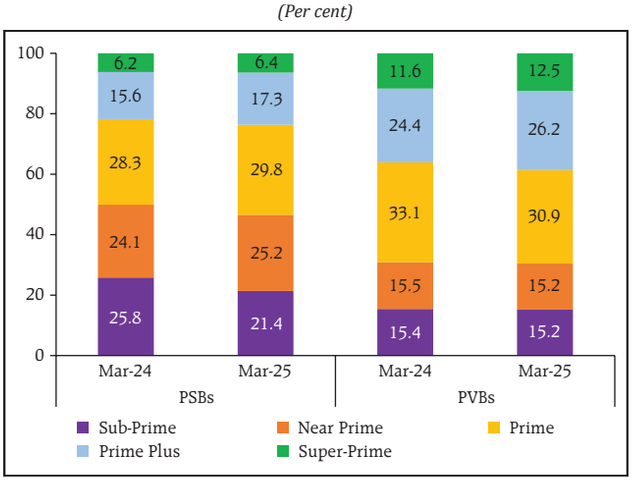


Notes: (1) * NBFC+: NBFCs including HFCs.
(2) Roll Forward rate is the percentage change (by amount) from SMA-2 category (61-90 dpd) in the current month, which moved to NPA category (90+dpd) in the next month (aggregated quarterly).
(3) Rollback + Cure rate is the percentage change (in amount) in SMA-2 category in the current month, which rolled back to SMA-1/ SMA-0/ 0 dpd in the next month (aggregated quarterly).
Source: TransUnion CIBIL.

underwriting standards, the share of borrowers rated prime and above increased for both PSBs and PVBs (Chart 1.56).

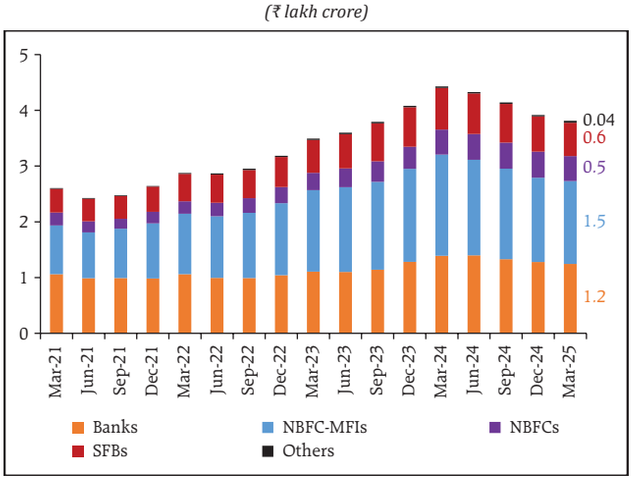
1.66 With the microfinance sector under stress, credit to the sector decreased by 13.9 per cent in 2024-25 (Chart 1.57). Adoption of tighter underwriting standards by the lenders was the primary driver behind deceleration in credit growth, which also resulted in a decrease in total

Chart 1.56: Share of Borrowers by Risk Tier in Consumer Segment
(Per cent)



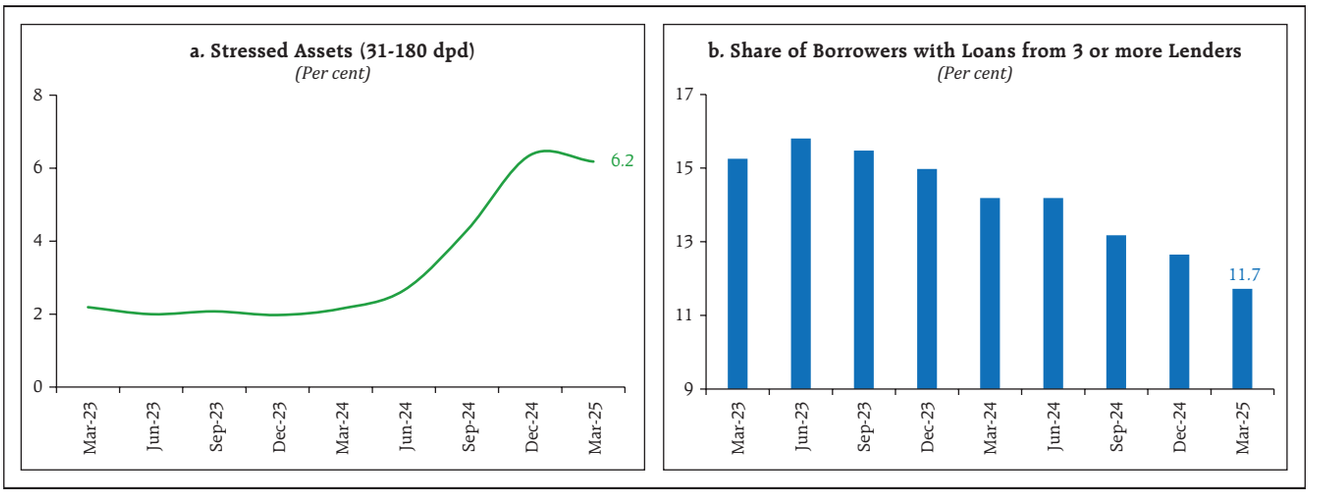
Source: TransUnion CIBIL.

Chart 1.57: Credit to the Microfinance Sector
(₹ lakh crore)



Notes: (1) NBFC-MFI (microfinance institution) is a non-deposit taking NBFC which has a minimum of 75 per cent of its total assets deployed towards microfinance loans.
(2) NBFCs are the entities that do not qualify as NBFC-MFIs and can extend microfinance loans up to 25 per cent of their total assets.
(3) Updated as on May 16, 2025.
Source: CRIF High Mark.

Chart 1.58: Stressed Assets and Indebtedness in the Microfinance Sector



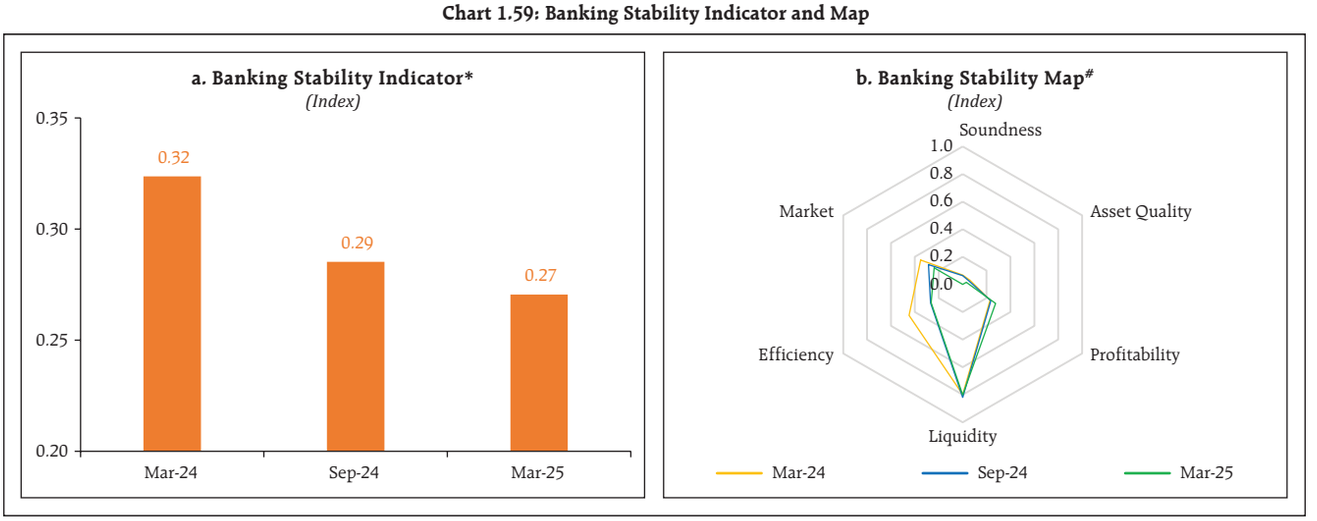
Source: CRIF High Mark.

active borrowers by 40 lakhs. Bank credit[45] to the sector, which forms 48.3 per cent of total credit outstanding to the sector, contracted by 13.8 per cent in 2024-25.

1.67 The ratio of stressed assets in the microfinance sector increased in H2:2024-25, with 31-180 days past due (dpd) rising from 4.3 per cent in September 2024 to 6.2 per cent in March 2025 (Chart 1.58 a). The banking sector also saw an increase in stress in their microfinance loan book with 31-180 dpd rising from 4.7 per cent in September 2024 to 6.5 per cent in March 2025. However, borrower indebtedness, measured by the share of borrowers availing loans from three or more lenders, is showing a declining trend (Chart 1.58 b).

1.68 Overall, the resilience of the banking system has improved, as indicated by the banking stability indicator (BSI), which strengthened during H2:2024-25 (Chart 1.59 a). All the dimensions of the BSI, except profitability, improved during the period (Chart 1.59 b).

Chart 1.59: Banking Stability Indicator and Map



Notes: (1) * Lower values indicate improvement.
(2) # Away from the centre indicates increase in risk.
Sources: RBI supervisory returns and staff calculations.

[45] Including small finance banks (SFBs).

I.5 Non-Bank Financial Intermediaries (NBFIs)

I.5.1 Global NBFIs

1.69 Over the last two decades, the non-bank financial sector has become an important provider of financial intermediation, and the assets of NBFIs have grown substantially relative to banks (Chart 1.60). According to the Financial Stability Board (FSB), of the estimated US$ 486.4 trillion global financial assets as at end-December 2023, the share of NBFIs rose to 49.1 per cent, growing at more than double the pace of banking sector[46].

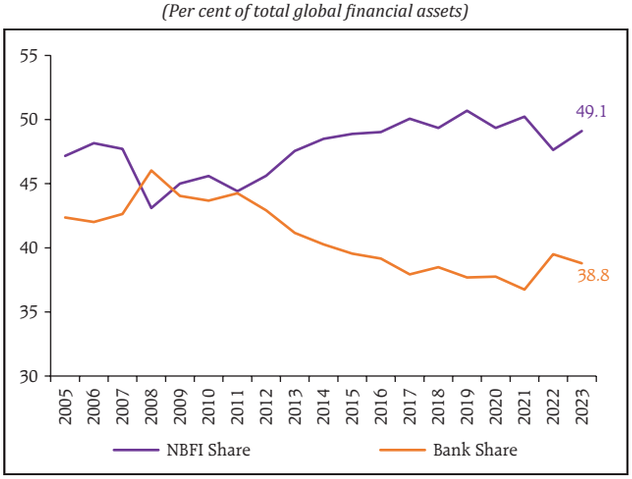
1.70 The rapid growth in the non-bank financial sector, however, has been accompanied by excessive use of leverage. Global hedge funds have significantly increased their use of synthetic leverage through derivatives over the past decade, which stands above 20 for multiple strategies (Chart 1.61). Similarly, asset managers, another prominent set of NBFIs, have also increased their leverage through long futures positions in the US treasury and equity markets to enhance their returns.

1.71 The recent market turmoil following April 2 tariff announcement, like previous market stress episodes such as the dash-for-cash episode of March 2020, has once again exposed risks posed by NBFIs globally due to their high leverage. Sudden shocks can trigger forced unwinding of leveraged positions, bringing to the fore hidden fragilities, and cause broader market disruptions[47].

1.72 As the prominence of NBFIs in intermediation has grown globally, their growing interconnectedness and interdependence with the banking sector is a source of systemic risk (Chart 1.62 a and b). The growth of NBFIs has coincided with increasing asset-liability dependencies with banks[48]. Banks extend credit to or invest in NBFIs even as NBFIs rely on banks for their liquidity needs. Moreover, as banks and NBFIs

Chart 1.60: Global NBFI Share

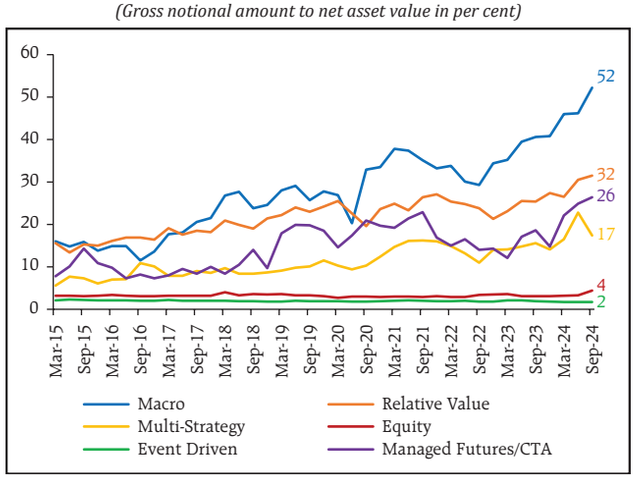
(Per cent of total global financial assets)



Note: Global NBFIs are composed of all financial institutions that are not central banks, banks, or public financial institutions.
Source: FSB Global Monitoring Report on Non-Bank Financial Intermediation (December 2024).

Chart 1.61: Hedge Funds' Synthetic Leverage by Strategy

(Gross notional amount to net asset value in per cent)



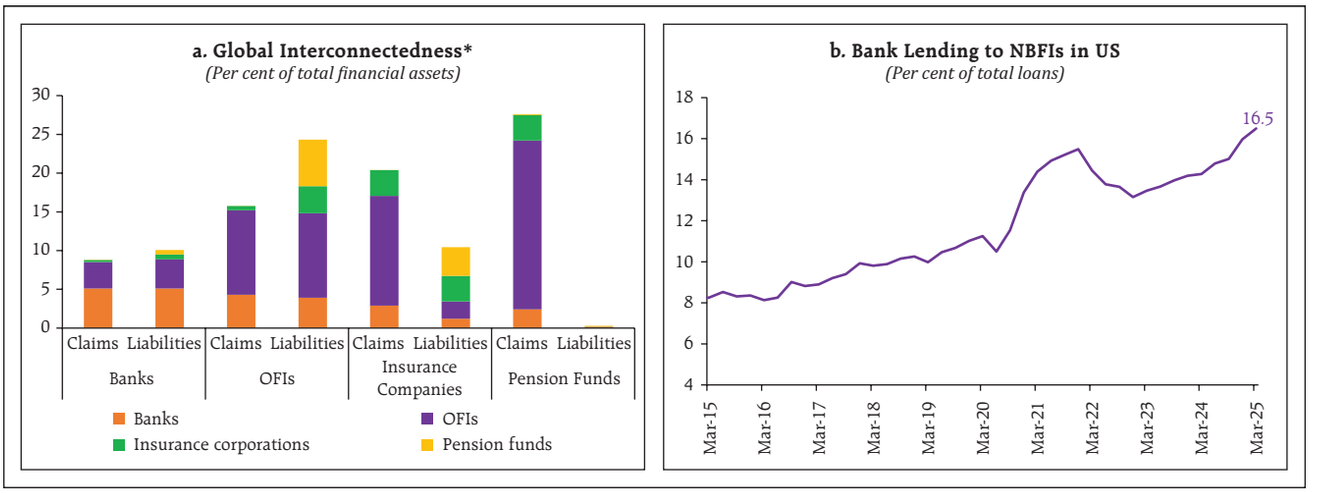
Source: US Securities and Exchange Commission.

[46] FSB (2024), "Global Monitoring Report on Non-Bank Financial Intermediation 2024", December.

[47] International Monetary Fund (2025), "Global Financial Stability Report: Enhancing Resilience amid Uncertainty", April.

[48] Acharya, Viral V., Cetorelli, Nicola and Tuckman, Bruce (2024), "Where do Banks End and NBFIs Begin?", NBER Working Paper 32316, April.

Chart 1.62: Bank-NBFI Interconnectedness



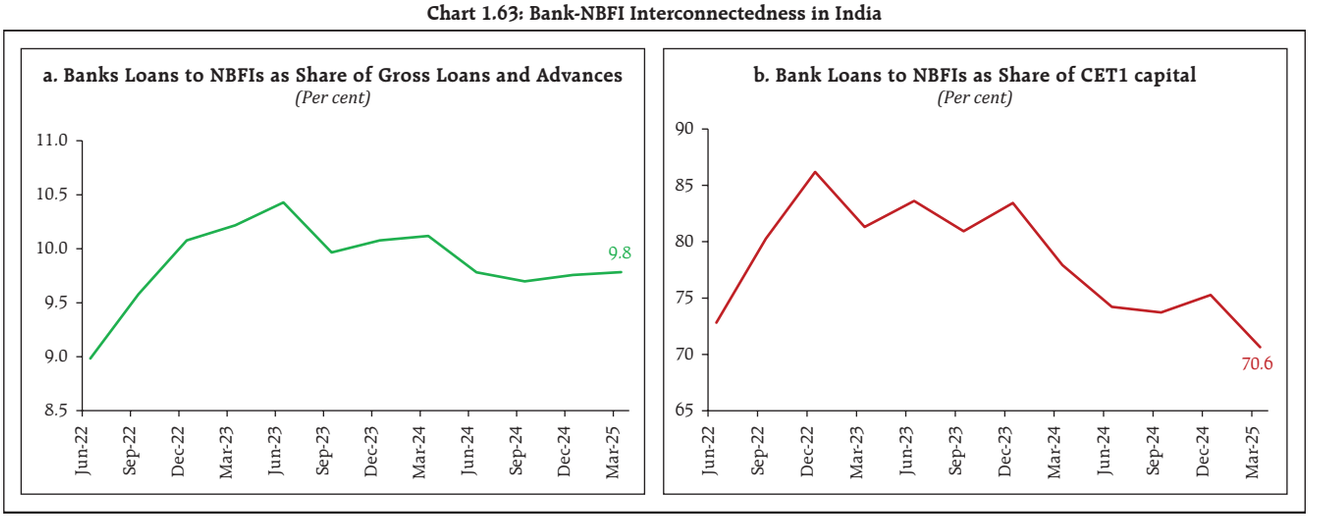
Note: * As at end-December 2023. Other financial intermediaries (OFIs) are a subset of the NBFI sector, excluding insurance corporations, pension funds and financial auxiliaries.
Sources: FSB Global Monitoring Report on Non-Bank Financial Intermediation (December 2024) and S&P Capital IQ.

adopt similar business models, the commonality of exposures of banks and NBFIs could amplify market stress[49], especially if NBFIs resort to fire-sales as seen in the September 2022 pension fund crisis in the U.K. Thus, there are risks of both spillovers and spillbacks due to the growing bank-NBFI interconnectedness.

I.5.2 Domestic NBFIs

1.73 The bank-NBFI interconnectedness in India has also grown as the footprint of NBFIs increased over the years. However, prudent and proactive regulatory policies have ensured that the build-up of bank-NBFI connections remain contained (Chart 1.63 a and b).

Chart 1.63: Bank-NBFI Interconnectedness in India



Notes: (1) Domestic NBFIs are composed of (1) NBFCs (including MFIs and HFIs), (2) mutual funds, (3) insurance and pension funds, (4) DFIs and (5) other financial intermediation activities.
(2) Lending by PSBs and PVBs.
Sources: RBI supervisory returns and staff calculations.

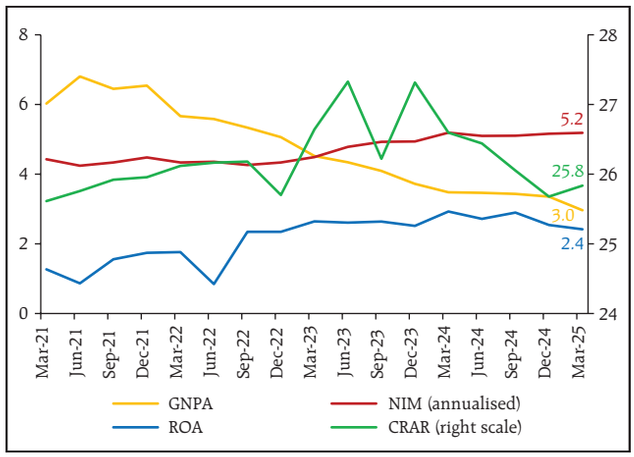
[49] Cetorelli, Nicola, Landoni, Mattia, and Lu, Lina (2023), "Non-Bank Financial Institutions and Banks' Fire-Sale Vulnerabilities", Federal Reserve Bank of New York Staff Reports, No. 1057, March.

1.74 The NBFC sector[50] remains healthy with strong capital buffers, robust interest margins and earnings and low levels of impairment (Chart 1.64). Loan growth moderated as the effects of regulatory measures to increase risk weights on certain segments of consumer credit as well as on bank lending to NBFCs continued to weigh on their lending activities (Chart 1.65 a, b and c). The restoration of risk weights on bank lending and easing of financial conditions, however, are expected to improve credit prospects.

1.75 NBFCs, including housing finance companies (HFCs), and fintech[51] firms account for 84.3 per cent of personal loans below ₹50,000 (Chart 1.66 a). Around 10 per cent of the borrowers availing a personal loan under ₹50,000 had an overdue personal loan. Moreover, a little over two-thirds of borrowers who have availed personal loan in the last quarter had more than three live loans at the time of origination (Chart 1.66 b).

Chart 1.64: NBFC Sector – Key Financial Parameters

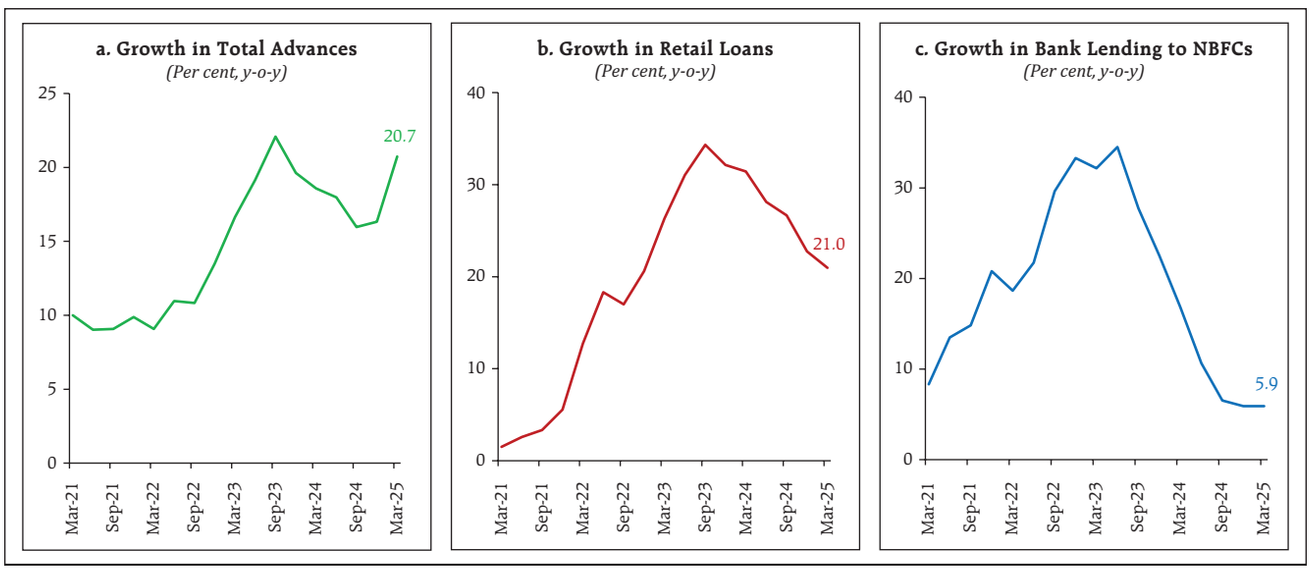
(Per cent, both left and right scale)



Sources: RBI supervisory returns and staff calculations.

1.76 Combined credit from NBFCs and NBFC-MFIs to the microfinance sector, which comprise 50.7 per cent of total credit outstanding to the sector, contracted by 14.5 per cent during 2024-25. Furthermore, the share of stressed assets of NBFCs (including NBFC-MFIs) increased from 3.9 per cent in September 2024 to 5.9 per cent in March 2025.

Chart 1.65: NBFC Credit and Bank Lending to NBFCs

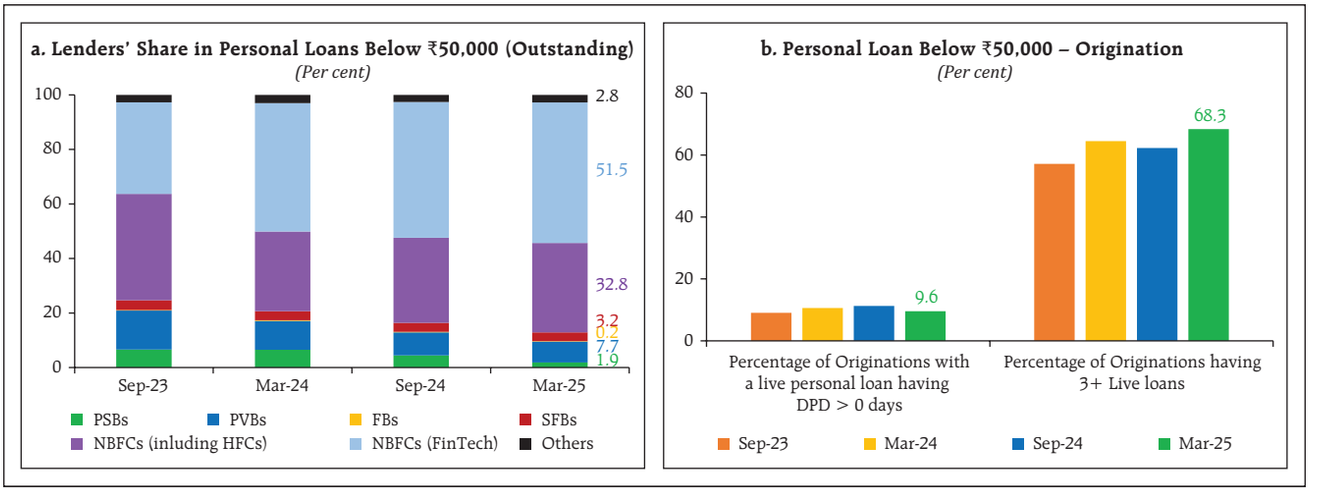


Sources: RBI supervisory returns and staff calculations.

[50] The analyses done in this section are based on NBFCs in upper and middle layers but excludes housing finance companies (HFCs), core investment companies (CICs) and standalone primary dealers (SPDs), but includes NBFCs presently under resolution; data based on provisional data available as of June 10, 2025.

[51] The methodology for classifying NBFCs as Fintech is based on TransUnion CIBIL's market knowledge that they have a digital first approach for its lending business and/or are members of industry bodies like FACE, UFF and IAMAI.

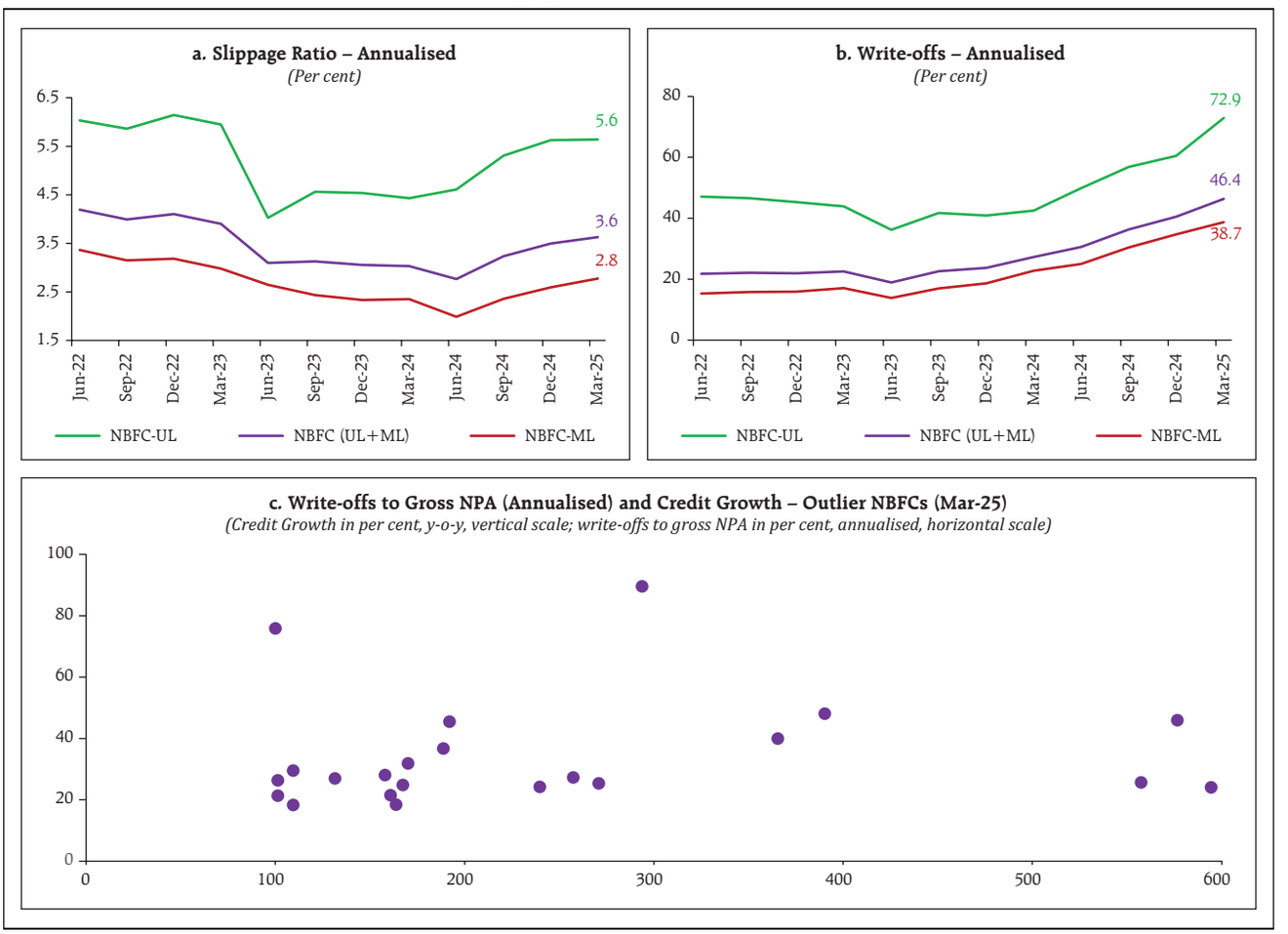
Chart 1.66: Personal Loans – Lenders' Share and Loan Origination



Source: Transunion CIBIL.

1.77 Slippage ratios have been trending upwards, especially in respect of upper layer NBFCs (Chart 1.67 a). Alongside, the write-offs are also growing (Chart 1.67 b). There are a few outlier NBFCs that have been registering sharper growth even as their write-offs remain high (Chart 1.67 c).

Chart 1.67: Slippage Ratio, Write-offs and Outlier NBFCs



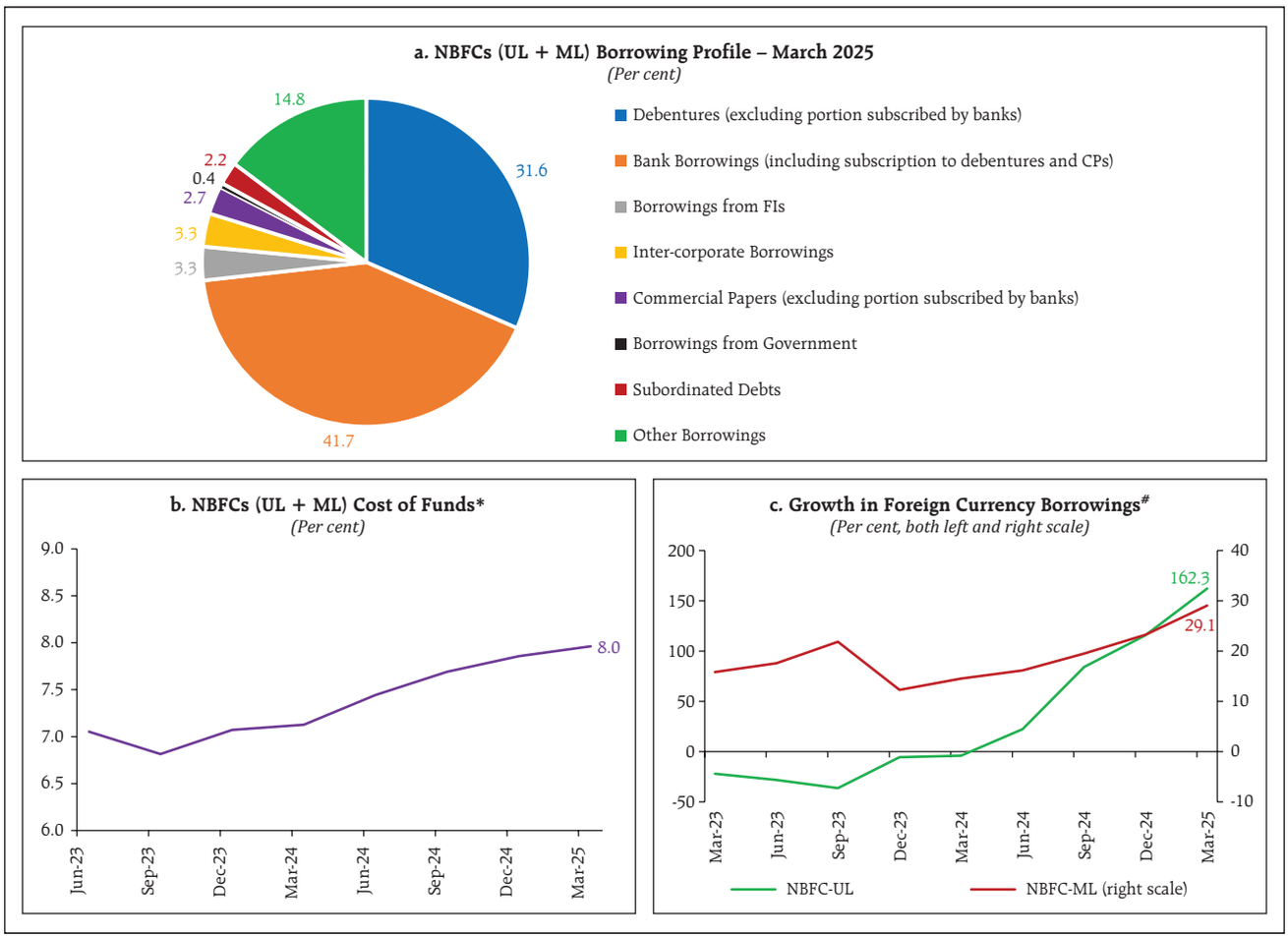
Sources: RBI supervisory returns and staff calculations.

1.78 Despite decrease in bank lending to NBFCs, bank finance remains the dominant source of funding for NBFCs (Chart 1.68 a). The decline in borrowings from banks increased overall cost of funds (Chart 1.68 b). Many NBFCs have increased their foreign currency borrowings to diversify funding sources and manage their costs (Chart 1.68 c). Importantly, close to 80 per cent of these borrowings are hedged.

1.79 There has been a marginal deterioration in the non-banking stability indicator (NBSI)[52] since the December 2024 FSR, as two of the five dimensions showed an increase in risk (Chart 1.69 a and b).

1.80 Overall, the NBFC sector remains resilient, and the sector is well positioned to support economic growth aided by healthy balance sheets. The sector, however, remains vulnerable to stress in household balance sheets with attendant consequences for asset quality (retail loan GNPA stood at 3.1 per cent compared to 1.2 per cent for banks in March 2025) and a rise in funding cost due to difficulty in diversifying funding sources, especially for lower-rated companies.

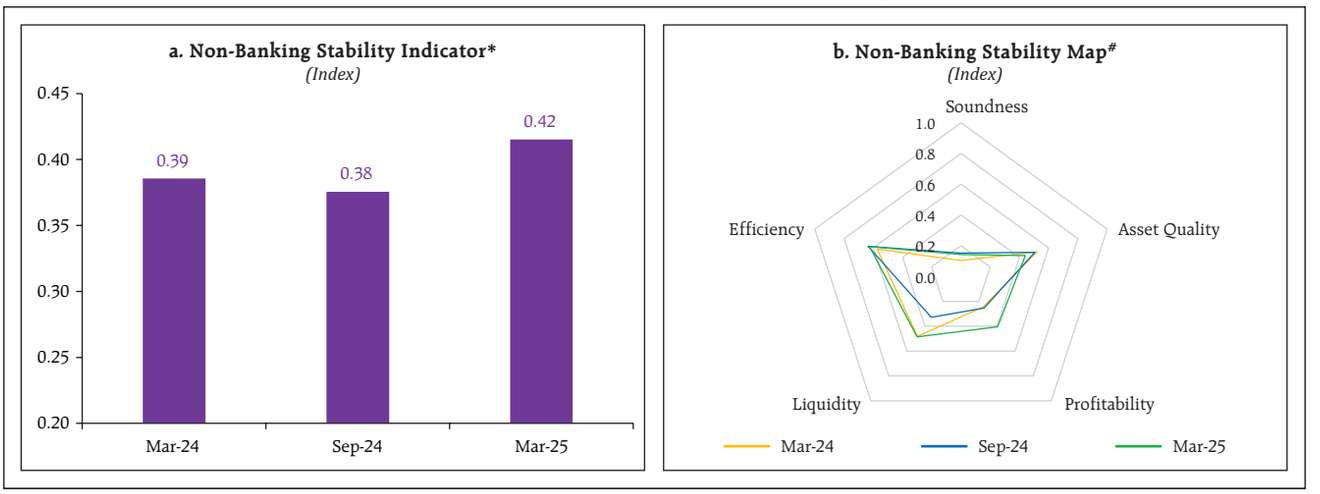
Chart 1.68: NBFCs (UL + ML) Borrowing and Funding Profile



Notes: (1) * Cost of funds = Annualised Interest Expense and Other Financing Cost/ (Average Total Borrowings + Average Public Deposits).
(2) # Includes borrowings through bonds and debentures.
Sources: RBI supervisory returns and staff calculations.

[52] See Annex 2 for detailed methodology and variables used.

Chart 1.69: Non-Banking Stability Indicator and Map



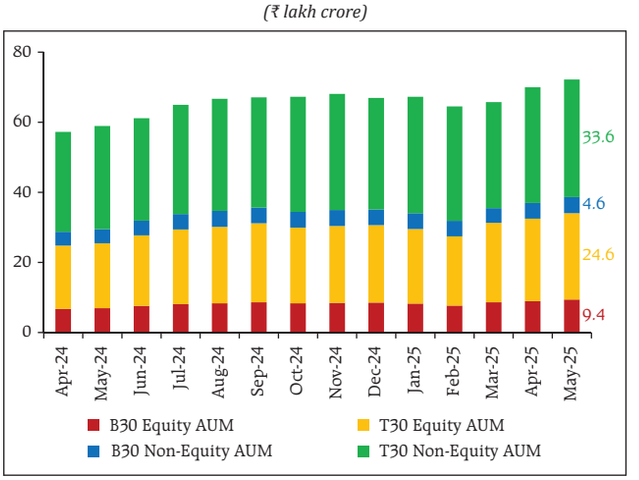
Notes: (1) * Lower values indicate improvement.
(2) # Away from the centre indicates increase in risk.
Sources: RBI supervisory returns and staff calculations.

Mutual Funds

1.81 The assets under management (AUM) of the domestic mutual funds industry continued to grow and reached a record high of ₹72.2 lakh crore in May 2025 (Chart 1.70). Systematic investment plans (SIPs), on the other hand, saw some slowdown in recent months, both in terms of net contributions and accounts (Chart 1.71). The decline in accounts could be attributed to asset management companies (AMCs), pursuant to a SEBI directive, considering the failed SIPs[53] as closed/cancelled from the month of January 2025.

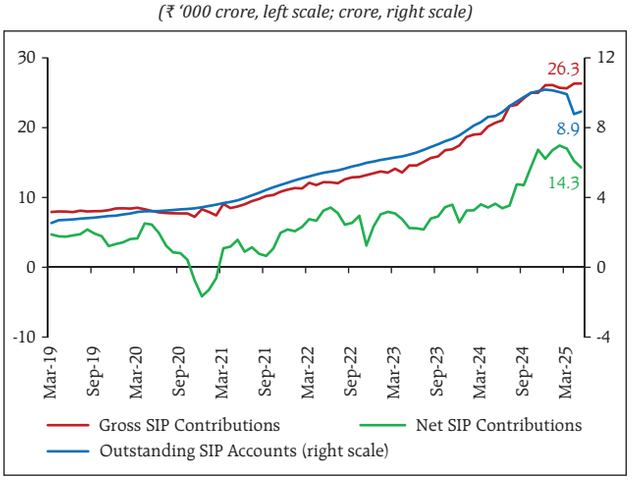
1.82 Among different equity-oriented schemes, sectoral/thematic funds have attracted largest inflows over the last year and half, except in the last three months (Chart 1.72 a and b). In debt-

Chart 1.70: Trends in the AUM of the B30 and T30 Cities of the Domestic Mutual Fund Industry
(₹ lakh crore)



Note: T30 refers to the top 30 geographical locations in India and B30 refers to the locations beyond the top 30 cities.
Source: SEBI.

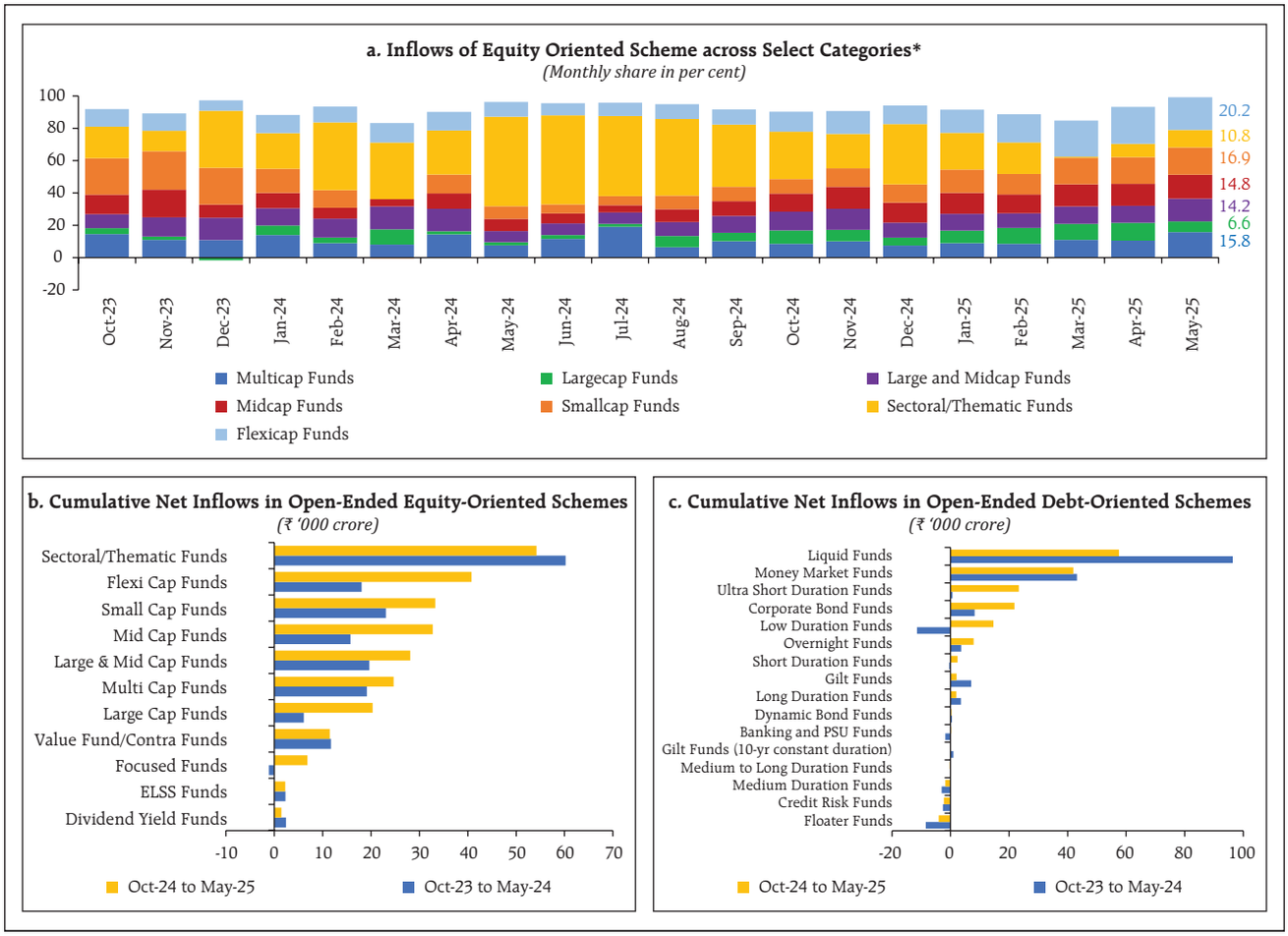
Chart 1.71: Trends in Monthly SIP Contributions and Outstanding SIP Accounts
(₹ '000 crore, left scale; crore, right scale)



Source: SEBI.

[53] The failed SIPs mean SIPs where 3 consecutive instalments with respect to daily, weekly, fortnightly, and monthly intervals and 2 consecutive instalments with respect to bi-monthly, quarterly or longer intervals have failed.

Chart 1.72: Inflows in Open-ended Mutual Fund Schemes



Note: * Rest of the share in inflows is accounted by Value Funds/Contra Funds, Focused Funds, ELSS Funds and Dividend Yield Funds.
Sources: SEBI, Association of Mutual Funds in India and RBI staff calculations.

oriented schemes, on the other hand, liquid and money market funds attracted more inflows during October 2024 to May 2025 (Chart 1.72 c).

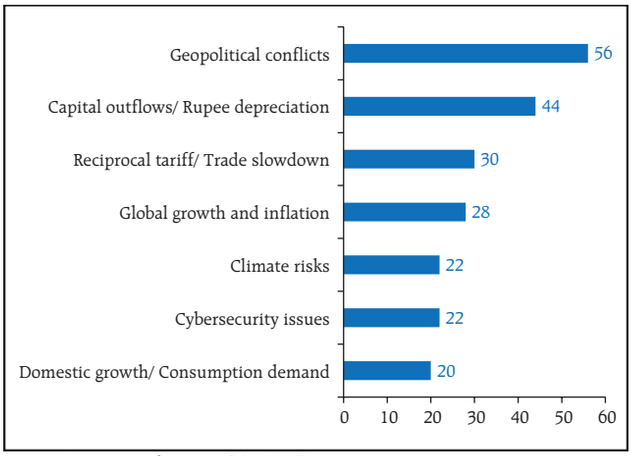
I.6 Systemic Risk Survey (SRS)

1.83 According to the latest round of the Reserve Bank's systemic risk survey (SRS) conducted in May 2025, all major risk groups remain in the 'medium-risk' category. Global and institutional risks were perceived to have increased compared with the previous survey round, whereas macroeconomic and financial market risks registered a marginal decline. At sub-category level, the risk perception of global growth and geopolitical conflict/ geoeconomic fragmentation recorded the most significant increase and were assessed as 'high-risk'. Other major risks perceived to be in the 'high-risk' category include equity price volatility, climate risk and cyber risk. Overall, the survey respondents viewed geopolitical conflicts, capital outflows and reciprocal tariff/ trade slowdown as major near-term potential risks to financial stability (Chart 1.73).

1.84 Around two-thirds of the respondents expressed decreasing confidence in the stability of the global financial system. On the other hand, over 90 per cent of the participants expressed higher or similar confidence in the Indian financial system, with three-fourths expecting trade tension

Chart 1.73: Potential Risks to Financial Stability

(Share of respondents in per cent)



Source: Systemic risk survey (May 2025).

and protectionist policies to have moderate impact on India's financial stability. Respondents assessed that export-dependent manufacturing sectors (*e.g.*, textiles, readymade garments, electronics), MSMEs in export clusters and shipping and logistics industry would be the most affected by the global trade disruption.

1.85 About 80 per cent of the respondents perceived that the prospects of Indian banking sector have either improved or remain unchanged, underlining the resilience and strength of the sector. Almost 60 per cent of participants expected the asset quality of the banking sector to improve or remain unchanged in the following six months. Majority of the respondents perceived the trade slowdown to have a moderate to low impact on banking sector asset quality. Around 53 per cent of the respondents assessed the demand for credit to improve in the near-term owing to uptick in rural demand, better business sentiments and improved health of banks. Detailed survey results are provided in Annex 1.

Chapter II

Financial Institutions: Soundness and Resilience

The Indian banking sector remained robust with capital buffers at a record high, non-performing loans ratios at multi-decadal low, and improved operational performance. Macro stress tests reaffirm the resilience of banks to adverse scenarios. The resilience of the NBFC sector is bolstered by enhanced asset quality and healthy capital buffers. Interconnectedness among financial sector entities, as reflected in their bilateral exposures, continued to grow in double-digits.

Introduction

2.1 The Indian financial sector remained strong and resilient amidst global headwinds. Banks and non-banking financial companies (NBFCs) reinforced their capital and liquidity buffers, while improving their asset quality. Bank credit growth decelerated and moved closer to deposit growth, narrowing the gap between both. The credit expansion by NBFCs was supported by improving credit quality and strong capital buffers. A favourable interest rate environment, conditioned by monetary policy easing, is expected to catalyse credit offtake, going forward.

2.2 This chapter presents stylised facts and analyses on latest developments in the domestic financial sector. Section II.1 outlines the performance of scheduled commercial banks (SCBs) in India through various parameters, *viz.*, business mix; asset quality; concentration of large borrowers; capital adequacy; earnings; and profitability. Results of macro stress tests, sensitivity analyses and bottom-up stress tests performed to evaluate the resilience of SCBs under adverse scenarios are also presented. Sections II.2 and II.3 examine the financial parameters of urban cooperative banks (UCBs) and NBFCs, respectively, including their resilience under various stress scenarios. Sections II.4, II.5 and II.6 examine the soundness and resilience of the mutual funds, clearing corporations and insurance sector, respectively. Section II.7 concludes the chapter with a detailed analysis of the network structure and connectivity of the Indian financial system as well as contagion analysis under stress scenarios.

II.1 Scheduled Commercial Banks (SCBs)[1][2][3][4]

2.3 SCBs' aggregate deposits grew at 10.7 per cent (y-o-y) during 2024-25, notwithstanding a deceleration in respect of private sector banks (PVBs) and foreign banks (FBs) (Chart 2.1 a). Growth in term deposits continued to outpace that in current and savings account deposits (Chart 2.1 b). As on June 13, 2025, SCBs' y-o-y deposits growth stood at 10.5 per cent.

[1] Analyses are mainly based on data reported by banks through RBI's supervisory returns covering only domestic operations of SCBs, except in the case of data on large borrowers, which are based on banks' global operations. For this exercise, SCBs include public sector banks, private sector banks, foreign banks and small finance banks.

[2] The analyses done in the chapter are based on the provisional data available as of June 10, 2025.

[3] Private sector banks' data for September 2023 quarter onwards are inclusive of merger of a large housing finance company with a private bank and, therefore, the data may not be comparable to past periods before the merger (applicable for all charts and tables).

[4] Personal loans refer to loans given to individuals and consist of (a) consumer credit, (b) education loan, (c) loans given for creating/enhancement of immovable assets (e.g. housing, *etc.*) and (d) loans given for investment in financial assets (shares, debentures, *etc.*).

2.4 SCBs' credit growth decelerated in 2024-25 across bank groups (Chart 2.1 c). Credit growth of public sector banks (PSBs) outpaced that of PVBs during the year, after more than a decade. As on June 13, 2025, y-o-y credit growth of SCBs moderated to 9.6 per cent. The shares of agricultural and industrial loans in aggregate credit have contracted, while those of services and personal loans have expanded over the last fiscal year (Chart 2.1 d). Growth (y-o-y) in agriculture, services and personal loans has moderated over the last few quarters, while a marginal uptick is observed in the growth of industrial loans in March 2025 (Chart 2.1 e). Personal loans segment recorded broad-based deceleration in y-o-y growth, barring an uptick in the growth of *other personal loans* (Chart 2.1 f). Personal loans

Chart 2.1: Deposit and Credit Profile of SCBs *(Contd.)*

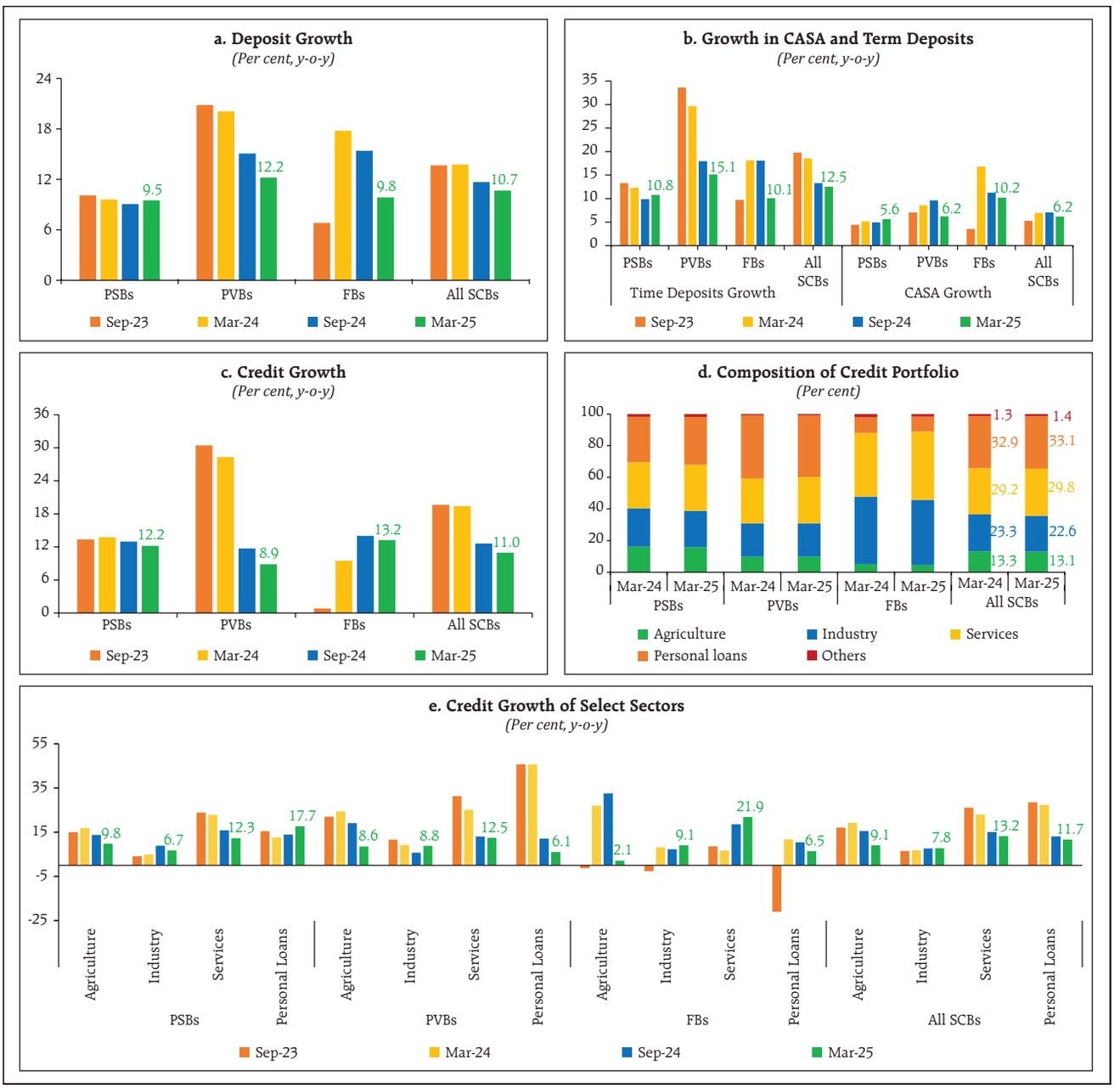
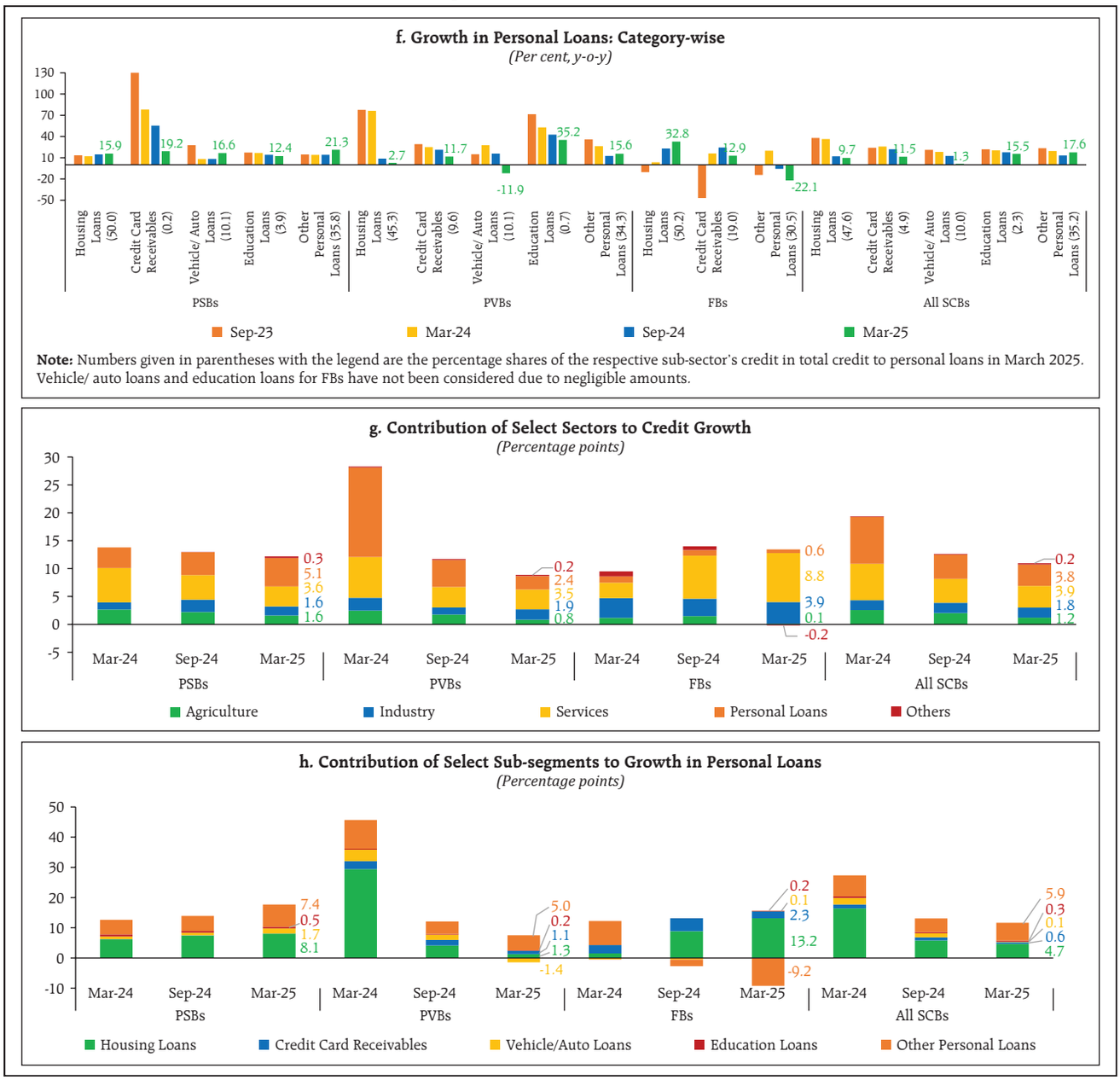


Chart 2.1: Deposit and Credit Profile of SCBs *(Concld.)*



Notes: Transfer of retail business of a FB to a PVB in March 2023 has impacted the growth rates of PVBs and FBs. The spurt in housing loans of PVBs from September 2023 is partly attributable to the merger of a large housing finance company with a private bank.
Sources: RBI supervisory returns and staff calculations.

and services loans continued to remain the top two contributors to the overall credit growth of SCBs (Chart 2.1 g). Within personal loans, *other personal loans* have been the standout contributor, followed by *housing loans* (Chart 2.1 h).

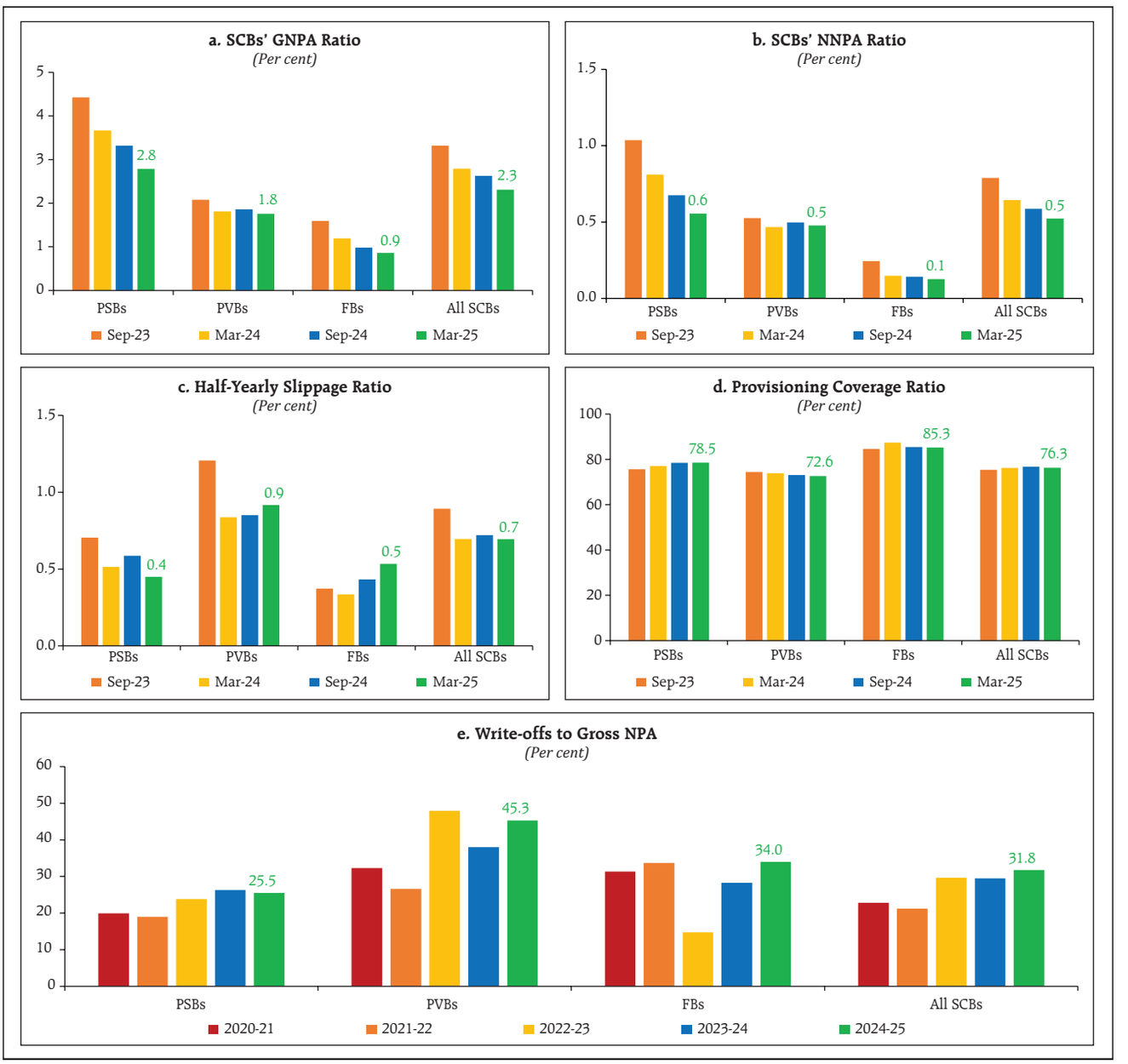
II.1.1 Asset Quality

2.5 SCBs continued to record improvement in their asset quality, with the GNPA ratio and NNPA ratio[5] declining to multi-decadal lows of 2.3 per cent and 0.5 per cent, respectively (Chart 2.2 a and b). The

[5] NNPA ratio is the proportion of net non-performing assets in net loans and advances.

half-yearly slippage ratio, measuring new accretions to NPAs as a share of standard advances at the beginning of the half-year, remained stable at 0.7 per cent (Chart 2.2 c). The provisioning coverage ratio (PCR)[6] of SCBs at 76.3 per cent in March 2025 (Chart 2.2 d) was marginally lower than that in September 2024. The write-offs to GNPA ratio[7] for SCBs moved up marginally to 31.8 per cent in 2024-25 from 29.5 per cent in the previous year, led by PVBs and FBs, while write-offs by PSBs exhibited a marginal decline (Chart 2.2 e). Disaggregation of NPA movements revealed that write-offs[8] were a major component of NPA reduction over the last 5 years (Chart 2.2 f).

Chart 2.2: Select Asset Quality Indicators *(Contd.)*

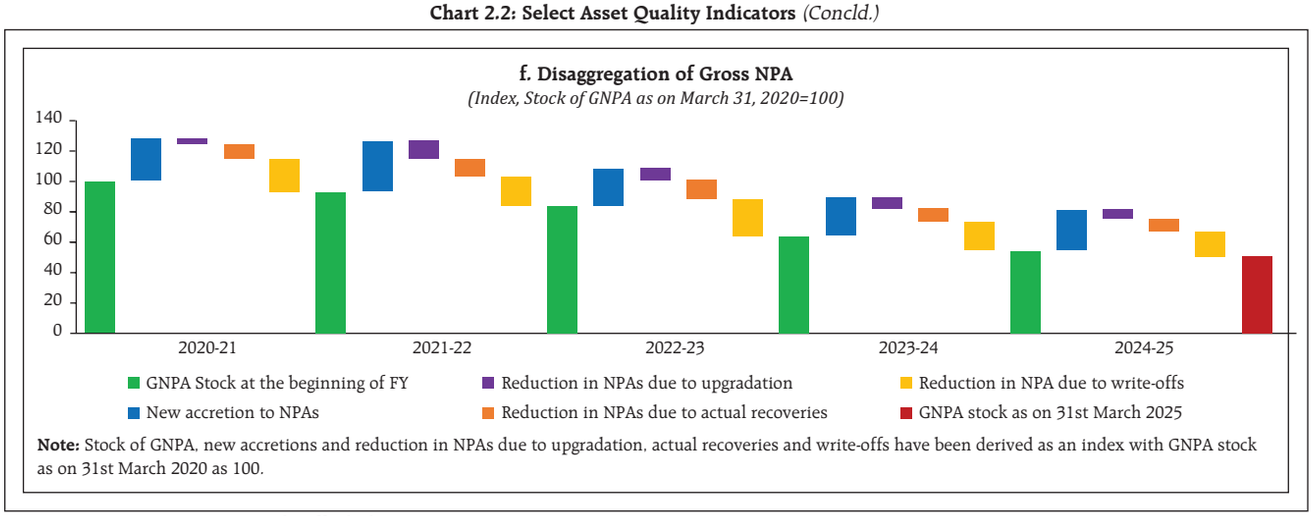


[6] PCR is the ratio of NPA provisions to GNPA.

[7] Ratio of write-offs during the period to GNPA at the beginning of the period.

[8] Write-offs include technical/prudential write-offs and compromise settlement, and may be subject to future recovery.

Chart 2.2: Select Asset Quality Indicators *(Concld.)*



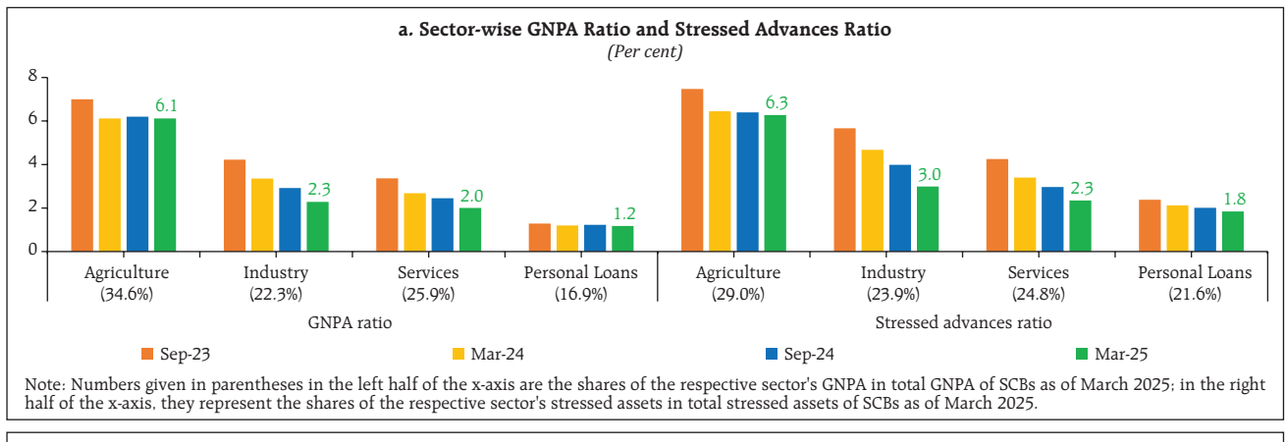
Note: Stock of GNPA, new accretions and reduction in NPAs due to upgradation, actual recoveries and write-offs have been derived as an index with GNPA stock as on 31st March 2020 as 100.

Sources: RBI supervisory returns and staff calculations.

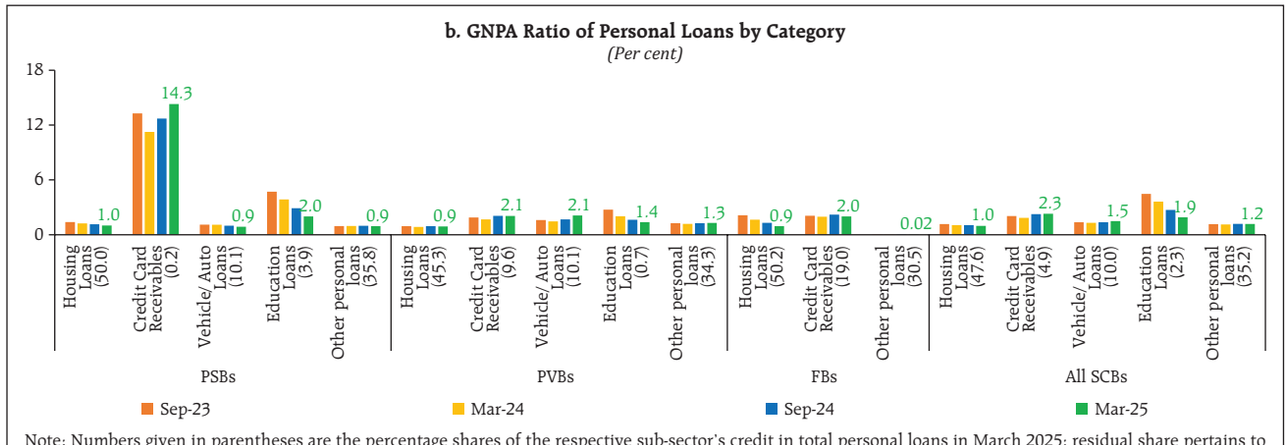
II.1.2 Sectoral Asset Quality

2.6 SCBs' asset quality exhibited broad-based improvement across bank groups in all major sectors, in terms of both GNPA ratio and stressed advances ratio[9] (Chart 2.3 a). Agriculture sector continued to record the highest GNPA ratio and

Chart 2.3: Sectoral Asset Quality Indicators *(Contd.)*



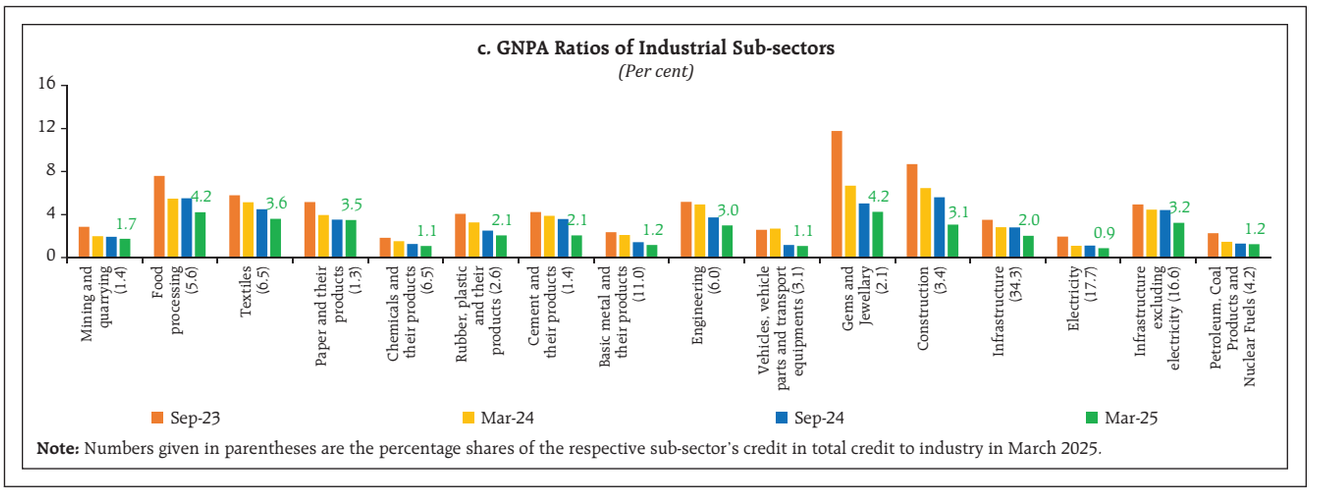
Note: Numbers given in parentheses in the left half of the x-axis are the shares of the respective sector's GNPA in total GNPA of SCBs as of March 2025; in the right half of the x-axis, they represent the shares of the respective sector's stressed assets in total stressed assets of SCBs as of March 2025.



Note: Numbers given in parentheses are the percentage shares of the respective sub-sector's credit in total personal loans in March 2025; residual share pertains to other personal loans. Vehicle/auto loans and education loans for FBs have not been considered due to negligible amounts.

[9] Stressed advances ratio is the ratio of total non-performing and standard restructured advances to total loans and advances.

Chart 2.3: Sectoral Asset Quality Indicators *(Concld.)*



Note: Numbers given in parentheses are the percentage shares of the respective sub-sector's credit in total credit to industry in March 2025.

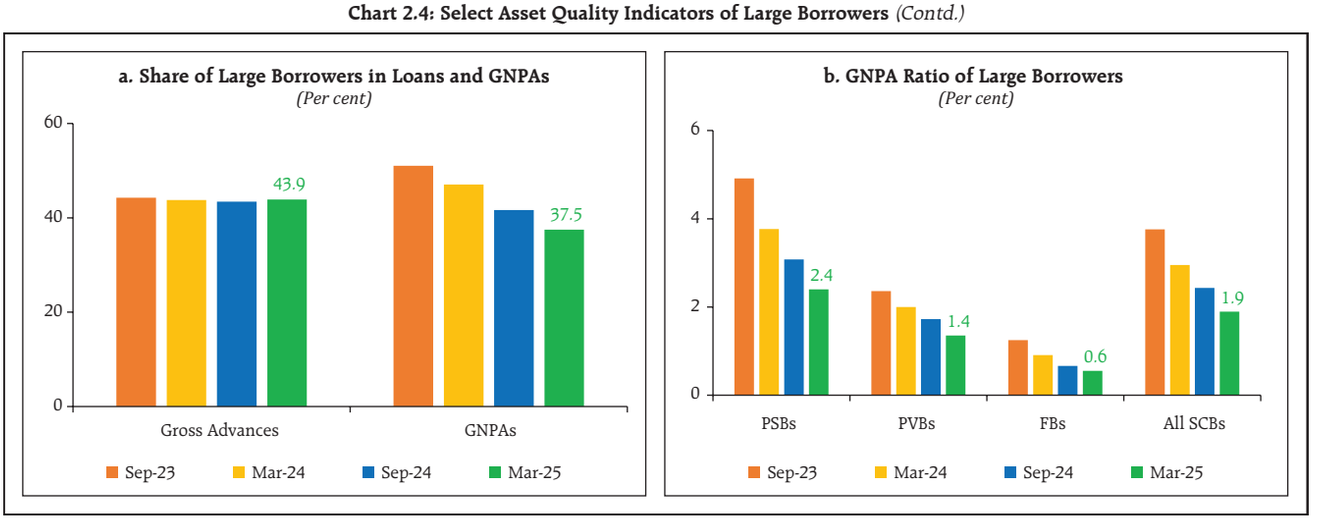
Sources: RBI supervisory returns and staff calculations.

was the major contributor to the overall stock of GNPA. In the personal loans segment, asset quality remained broadly stable across major subsegments (Chart 2.3 b). Within the industrial sector, asset quality exhibited sustained improvement across all sub-sectors (Chart 2.3 c).

II.1.3 Credit Quality of Large Borrowers[10]

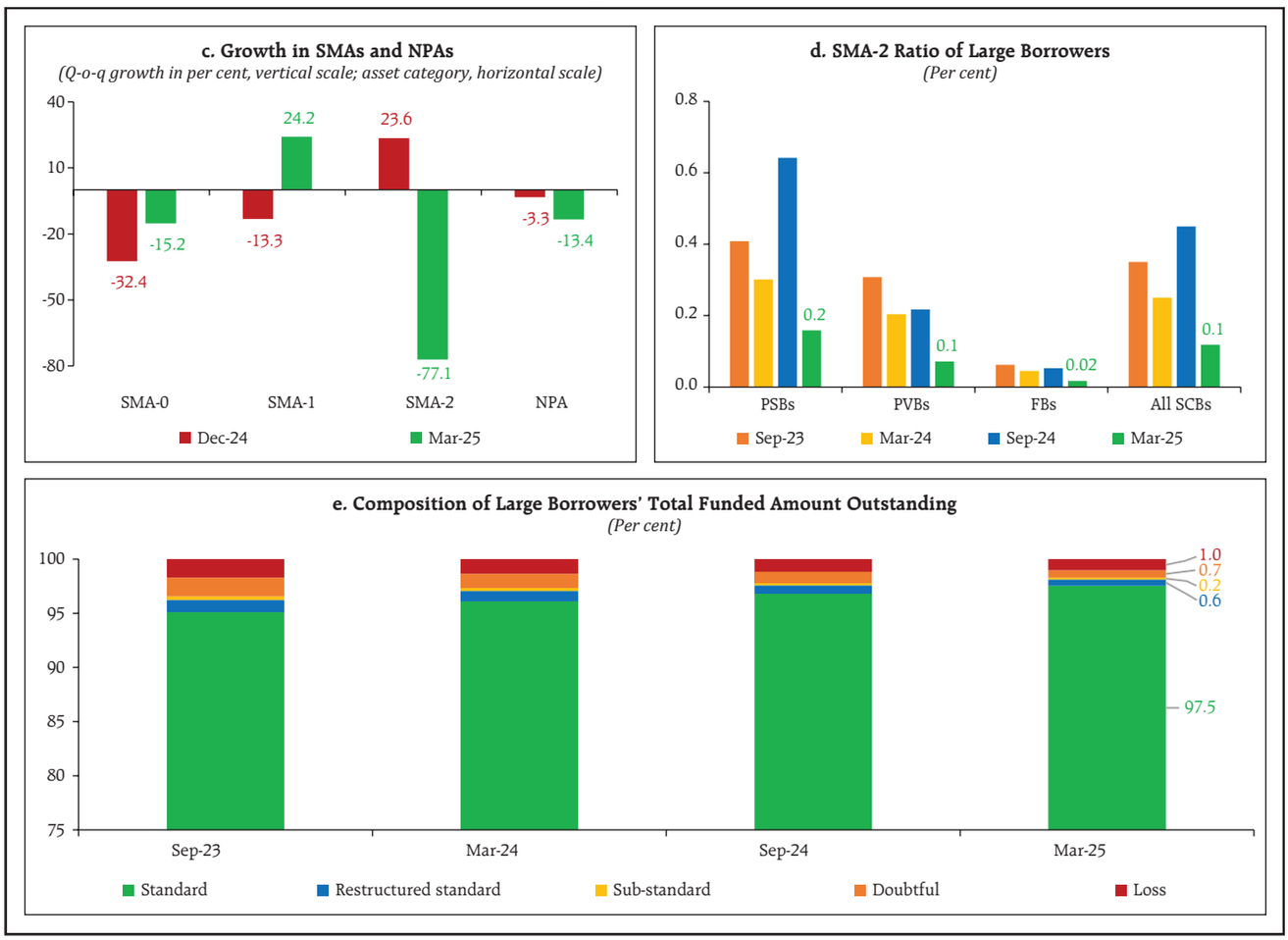
2.7 The credit quality of larger borrowers has improved steadily over the last few years and their share in total GNPAs of SCBs stood at 37.5 per cent in March 2025, while their share in overall credit of SCBs stood at 43.9 per cent (Chart 2.4 a). The large

Chart 2.4: Select Asset Quality Indicators of Large Borrowers *(Contd.)*



[10] A large borrower is defined as one who has aggregate fund-based and non-fund-based exposure of ₹5 crore and above to any single SCB. This analysis is based on SCBs' global operations.

Chart 2.4: Select Asset Quality Indicators of Large Borrowers *(Concld.)*



Sources: RBI supervisory returns and staff calculations.

borrower cohort's GNPA ratio declined from 3.8 per cent in September 2023 to 1.9 per cent in March 2025 (Chart 2.4 b). On a quarter-on-quarter (q-o-q) basis, while volume of SMA-1 loans increased, that of SMA-0 and SMA-2[11] loans and NPAs declined during March 2025 quarter (Chart 2.4 c). Correspondingly, SMA-2 ratio of large borrowers, that rose significantly in September 2024, led by PSBs, recorded a sharp decline in March 2025 (Chart 2.4 d). The proportion of standard assets to total funded amount outstanding has consistently improved over the past few years, reaffirming the positive shift in asset quality (Chart 2.4 e). The share of top 100 borrowers in total advances of SCBs remained stable at 15.2 per cent in March 2025 and none of them were classified as NPA.

II.1.4 Capital Adequacy

2.8 As of March 2025, the capital to risk weighted assets ratio (CRAR) of SCBs increased to a record high of 17.3 per cent (Chart 2.5 a). All bank groups reported higher CRAR in March 2025, compared to

[11] Special mention account (SMA) is defined as:

a) Loans in the nature of revolving facilities like cash credit/overdraft: if outstanding balance remains continuously in excess of the sanctioned limit or drawing power, whichever is lower, for a period of 31-60 days - SMA-1; 61-90 days - SMA-2.

b) Loans other than revolving facilities: if principal or interest payment or any other amount wholly or partly overdue remains outstanding up to 30 days - SMA-0; 31-60 days - SMA-1; 61-90 days - SMA-2.

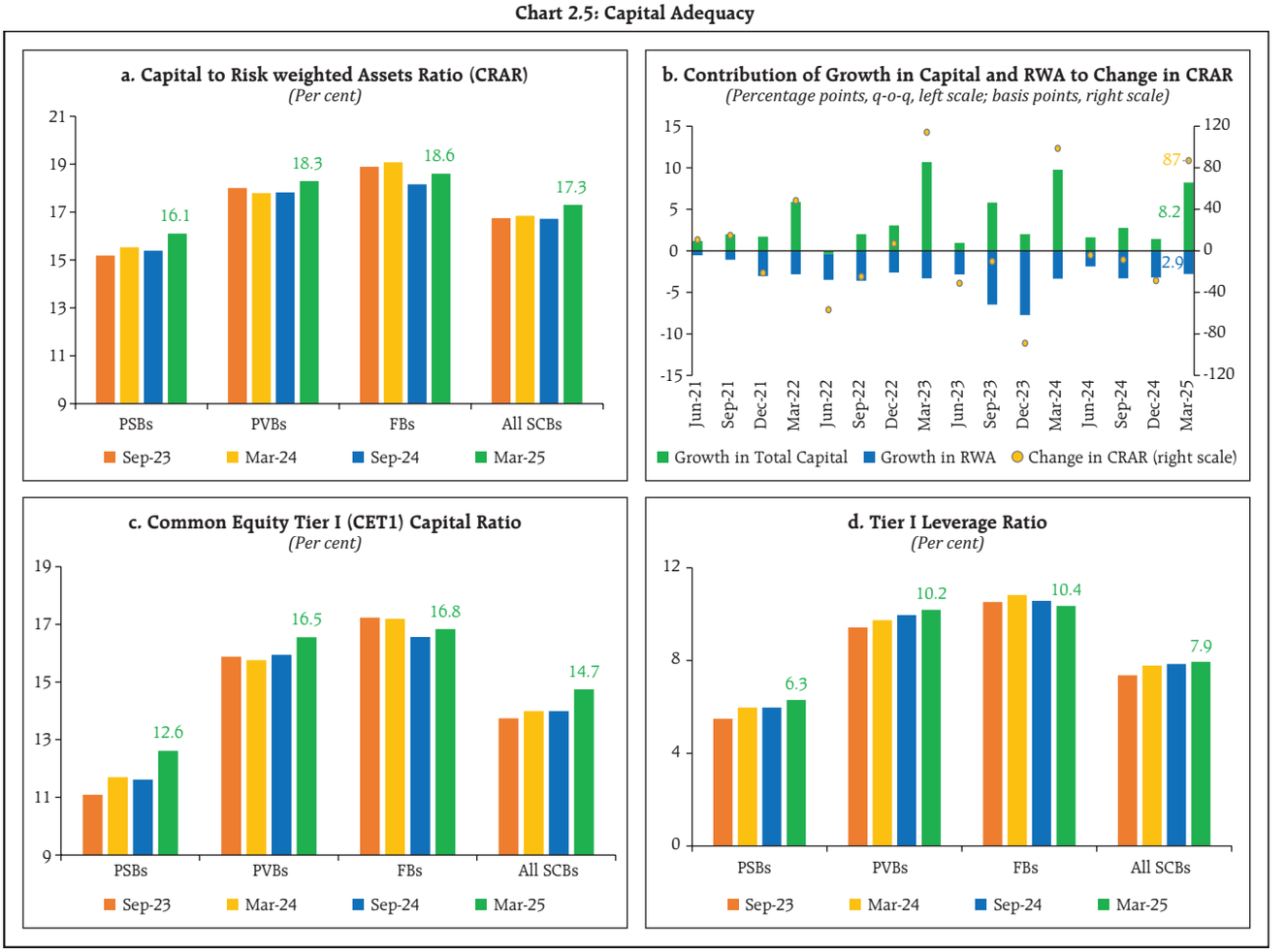
their September 2024 positions. The increase in CRAR during the quarter ending March 2025 can be attributed to higher growth in total capital relative to the growth in RWA during this period (Chart 2.5 b). CET1 capital ratio also increased across bank groups, indicating accretion of high-quality capital by banks (Chart 2.5 c). The overall tier 1 leverage ratio[12] remained stable at 7.9 per cent (Chart 2.5 d).

II.1.5 Earnings and Profitability

2.9 The profitability of SCBs remained strong in 2024-25, with profit after tax (PAT) increasing by 16.9 per cent (y-o-y). PAT of PSBs recorded a robust growth of 31.8 per cent, compared to much lower growth (9.2 per cent) for PVBs. PSBs' higher profitability was primarily driven by a rise in their other operating income. On the other hand, higher growth in operating expenses was the key contributor to the relatively lower profitability of PVBs (Chart 2.6 a).

2.10 Net interest margin (NIM) declined driven by cost of funds even as yield on assets has remained stable (Chart 2.6 b, c and d). Both return on equity (RoE) and return on assets (RoA) ratios have declined in March 2025 (Chart 2.6 e and f).

Chart 2.5: Capital Adequacy



Note: SCBs in all panels of Chart 2.5 exclude SFBs.
Sources: RBI supervisory returns and staff calculations.

[12] Tier I leverage ratio is the ratio of Tier I capital to total exposure.

Chart 2.6: Select Performance Indicators of SCBs *(Contd.)*

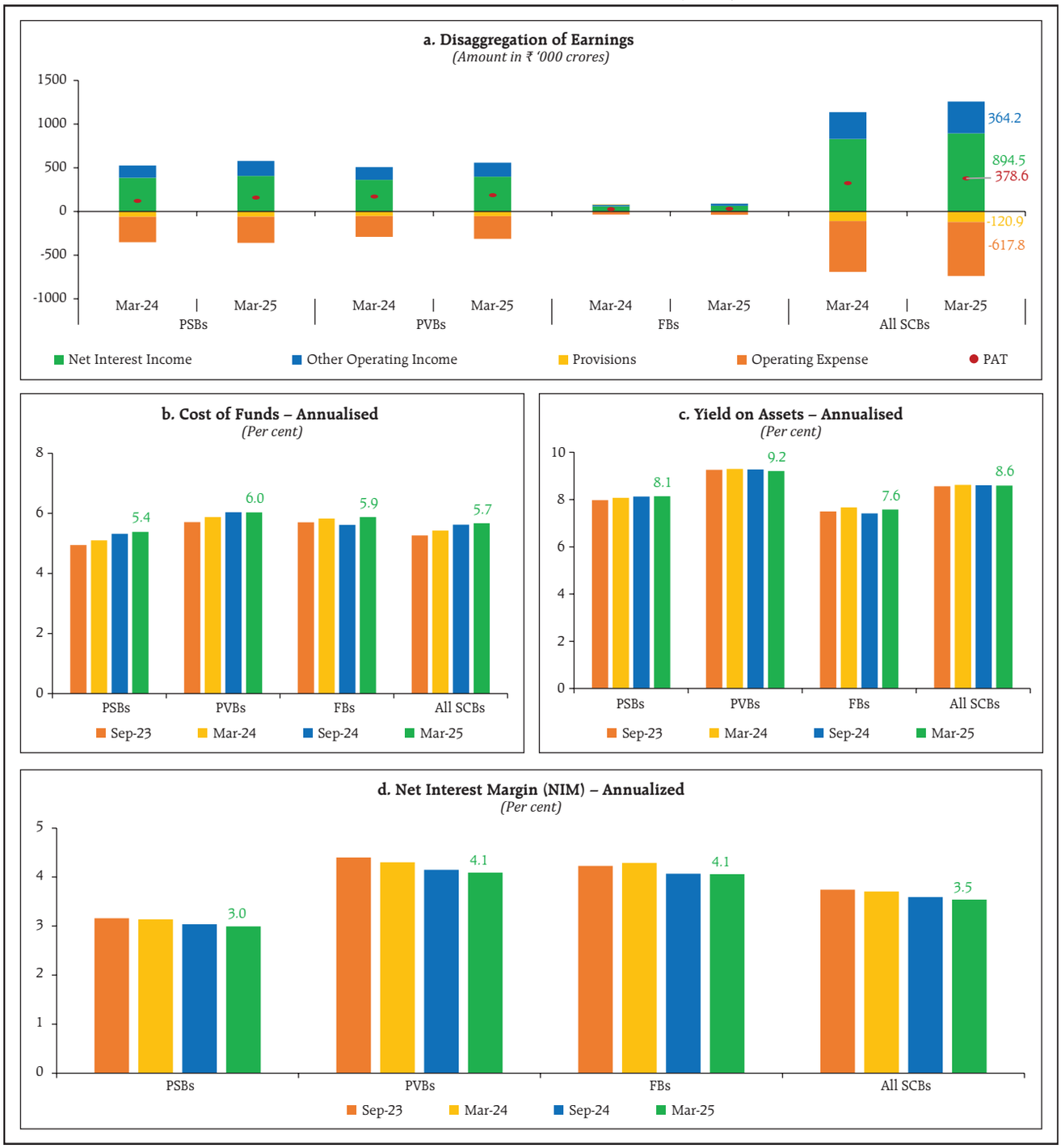
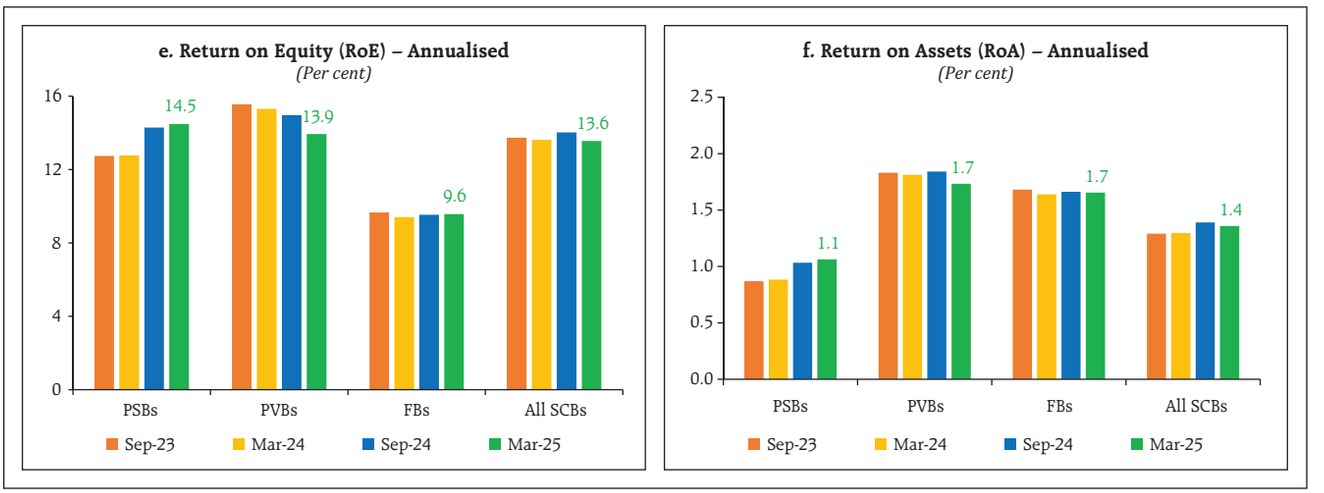


Chart 2.6: Select Performance Indicators of SCBs *(Concld.)*



Sources: RBI supervisory returns and staff calculations.

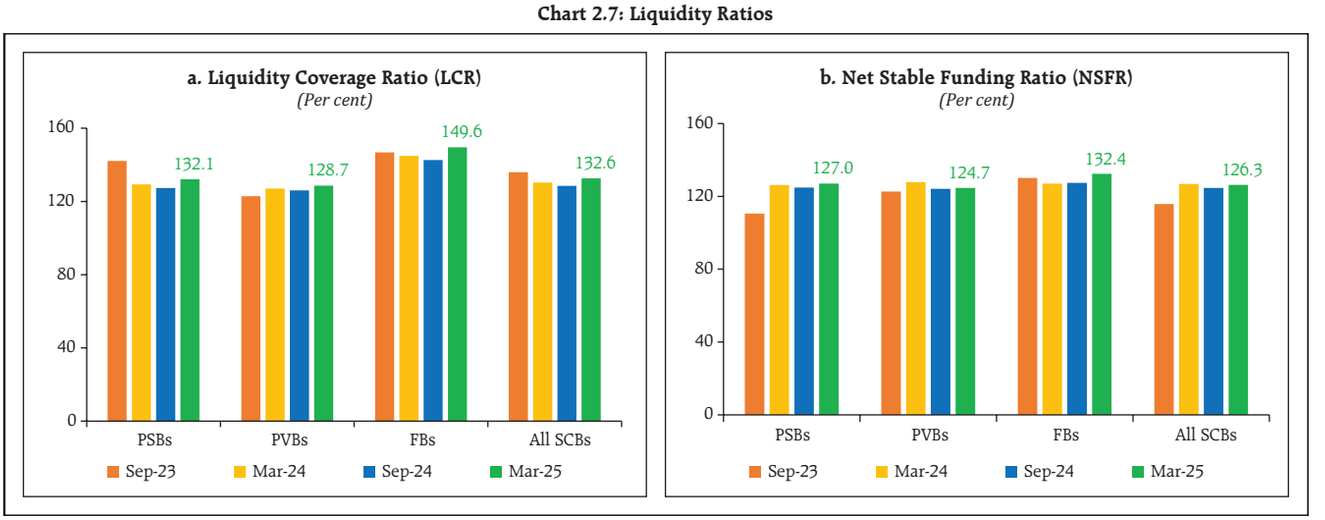
II.1.6 Liquidity

2.11 SCBs have further improved their liquidity positions in March 2025, as evident from the strengthening of both liquidity coverage ratio (LCR)[13] and net stable funding ratio (NSFR)[14]. Both LCR and NSFR have been comfortably above the regulatory minimum of 100 per cent across bank groups (Chart 2.7 a and b).

II.1.7 Resilience – Macro Stress Tests

2.12 Macro stress tests aim to assess the resilience of the banking system[15] to macroeconomic shocks. The tests project capital ratios of banks under three scenarios - a baseline and two adverse macro scenarios over a two-year horizon, incorporating credit risk, market risk and interest rate risk in the banking book in the framework. The capital

Chart 2.7: Liquidity Ratios



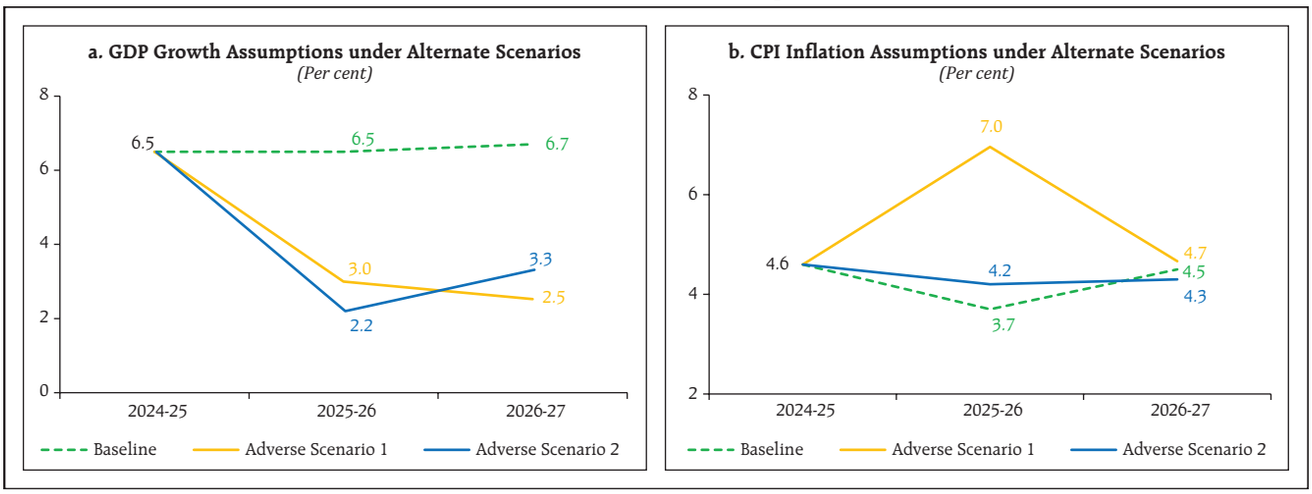
Sources: RBI supervisory returns and staff calculations.

[13] Liquidity coverage ratio is defined as the ratio of stock of high-quality liquid assets (HQLA) to the total net cash outflow over the next 30 calendar days.

[14] Net stable funding ratio is defined as the ratio of available net stable funding to required net stable funding.

[15] Macro stress tests were conducted on a sample of 46 SCBs accounting for 98 per cent of the total assets of SCBs (excluding RRBs).

Chart 2.8: Macro Scenario Assumptions



Sources: RBI staff calculations.

projections do not take into account any further planned recapitalisation by stake-holders or any future regulatory changes. While the baseline scenario is derived from the forecasted path of macroeconomic variables, the two adverse scenarios[16] are hypothetical stringent stress scenarios derived by performing simulations using a VARX[17] model (Chart 2.8).

(i) ***Adverse Scenario 1 (Geopolitical risk scenario):*** This scenario assumes a volatile global environment with heightened geopolitical risks and escalation of global financial market volatility. Supply chain disruptions adversely affect the commodity prices leading to rise in domestic inflation. The scenario further assumes that the domestic monetary policy tightens and the spread between lending rates and policy rate widens due to market instability.

(ii) ***Adverse Scenario 2 (Global growth slowdown scenario):*** This scenario assumes a synchronised sharp growth slowdown in key global economies. Spillovers through trade and financial channels as well as market fragmentation dent domestic GDP growth. As a result, monetary policy eases to support growth. The scenario further assumes widening of lending spread due to higher uncertainty.

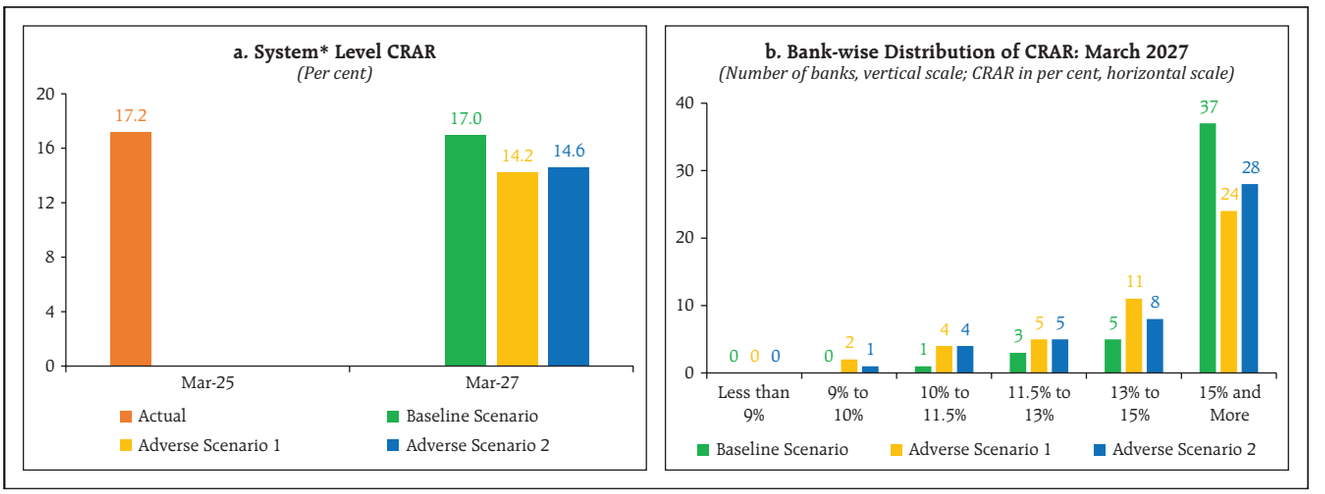
2.13 The macro stress tests results emphasise the resilience of SCBs to macroeconomic shocks. The results revealed that the aggregate CRAR of 46 major SCBs may marginally dip to 17.0 per cent by March 2027 from 17.2 per cent in March 2025, under the baseline scenario. It may decline to 14.2 per cent under adverse scenario 1, and to 14.6 per cent under adverse scenario 2. However, none of the banks would fall short of the regulatory minimum requirement of 9 per cent even under the adverse scenarios (Chart 2.9).

2.14 The CET1 capital ratio of the select 46 banks may rise from 14.6 per cent in March 2025 to 15.2 per cent by March 2027 under the baseline scenario. However, it may fall to 12.5 per cent under adverse scenario 1, and to 12.9 per cent under adverse scenario 2. None of the banks would breach the regulatory minimum requirement of 5.5 per cent under any of these scenarios (Chart 2.10).

[16] The shocks designed under adverse hypothetical scenarios are extreme but plausible.

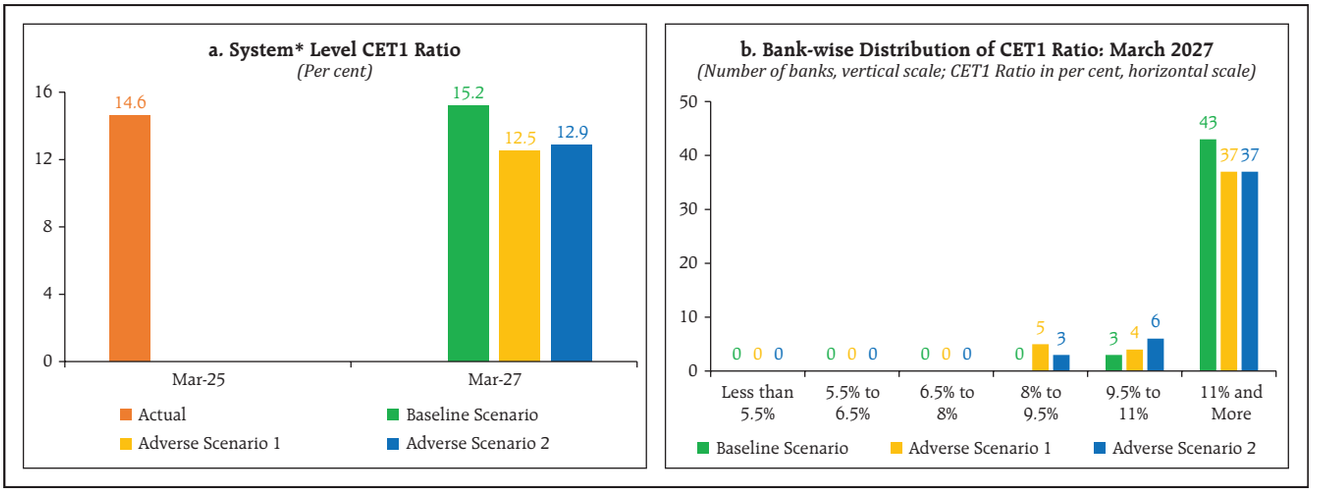
[17] VARX stands for Vector Autoregression with Exogenous Variables. See Annex-2 for detailed methodology.

Chart 2.9: CRAR Projections under Stress Scenarios



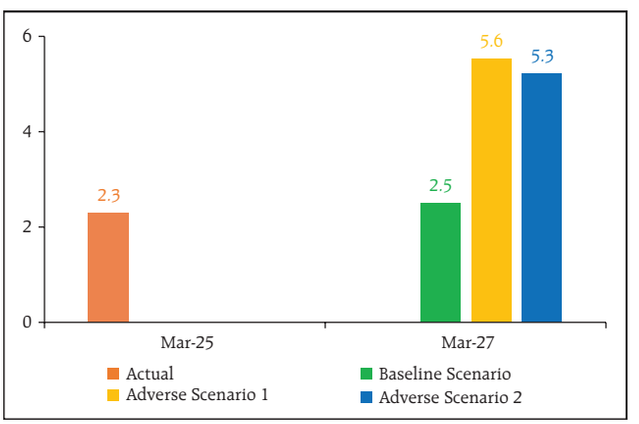
Note: * For a system of 46 select banks.
Sources: RBI supervisory returns and staff calculations.

Chart 2.10: Projection of CET1 Ratio under Stress Scenarios



Note: * For a system of 46 select banks.
Sources: RBI supervisory returns and staff calculations.

Chart 2.11: Projection of GNPA Ratio under Stress Scenarios
(Per cent)



Sources: RBI supervisory returns and staff calculations.

2.15 The aggregate GNPA ratio of the 46 banks may marginally rise from 2.3 per cent in March 2025 to 2.5 per cent in March 2027 under the baseline scenario and to 5.6 per cent and 5.3 per cent, under adverse scenario 1 and adverse scenario 2, respectively (Chart 2.11).

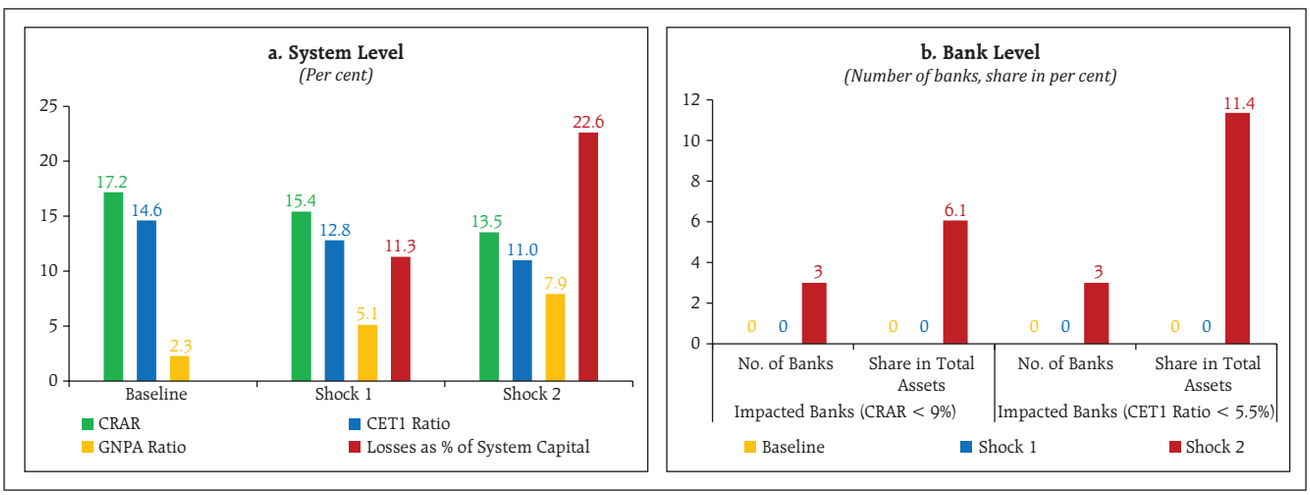
II.1.8 Sensitivity Analysis[18]

2.16 Unlike macro stress tests, in which the shocks are applied in terms of adverse macroeconomic conditions, in sensitivity analyses, shocks are applied to single factors like GNPA, interest rate, equity prices and deposits, one shock at a time. This sub-section presents the results of top-down sensitivity analyses involving several single-factor shocks to assess the vulnerabilities of SCBs to simulated credit, interest rate, equity and liquidity risks under various stress scenarios[19], based on their March 2025 position.

a. Credit Risk

2.17 Credit risk sensitivity has been analysed under two scenarios wherein the system level GNPA ratio as of March 2025, is assumed to rise from its prevailing level by (i) one standard deviation (SD)[20]; and (ii) two SD in a quarter. Under a severe shock of two SD: (a) the aggregate GNPA ratio of 46 select SCBs moves up from 2.3 per cent to 7.9 per cent; (b) the system-level CRAR depletes by 370 bps from 17.2 per cent to 13.5 per cent; and (c) the CET1 capital ratio declines from 14.6 per cent to 11.0 per cent but remains well above the respective regulatory minimum levels. The system level capital impairment could be 22.6 per cent in this case (Chart 2.12 a). The reverse stress test showed that a shock of 4.6 SD would be required to bring down the system-level CRAR below the regulatory minimum of 9 per cent. A shock of 6.6 SD will be required to bring down the system-level CET1 capital ratio below the prescribed regulatory minimum of 5.5 per cent. Bank-level stress tests indicated that under the severe shock scenario (two SD), three banks with a share of 6.1 per cent in SCBs' total assets may breach the regulatory minimum level of CRAR (Chart 2.12 b).

Chart 2.12: Credit Risk – Shocks and Outcomes



Note: For a system of select 46 SCBs
1 SD and 2 SD shocks are applied on GNPA ratio under shock 1 and 2, respectively.
Sources: RBI supervisory returns and staff calculations.

[18] Detailed methodology is provided in Annex 2.

[19] Single factor sensitivity analyses are conducted for a sample of 46 SCBs accounting for 98 per cent of the total assets of SCBs (excluding RRBs). The shocks designed under various hypothetical scenarios are extreme but plausible.

[20] The SD of the GNPA ratio is estimated by using quarterly data for the last 10 years.

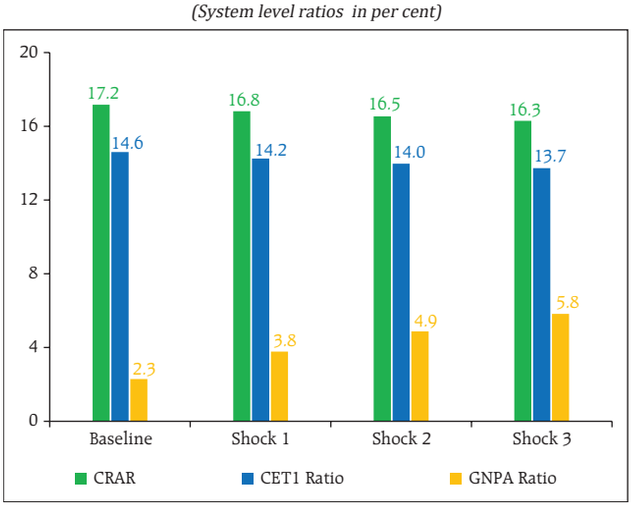
b. Credit Concentration Risk

2.18 Stress tests on banks' credit concentration – considering top individual borrowers according to their standard exposures – show that in the extreme scenario of the top three individual borrowers of respective banks defaulting[21], the system level CRAR would decline by 90 bps (Chart 2.13) and no bank would face a situation of a drop in CRAR below the regulatory minimum of 9 per cent. In this extreme scenario, four banks would experience a fall of more than two percentage points in their CRARs.

2.19 Under the extreme scenario of the top three group borrowers in the standard category failing to repay[22], the system level CRAR would decline by 130 bps. No bank would witness a drop in CRAR below the regulatory minimum of 9 per cent (Chart 2.14).

Chart 2.13: Credit Concentration Risk: Individual Borrowers – Exposure

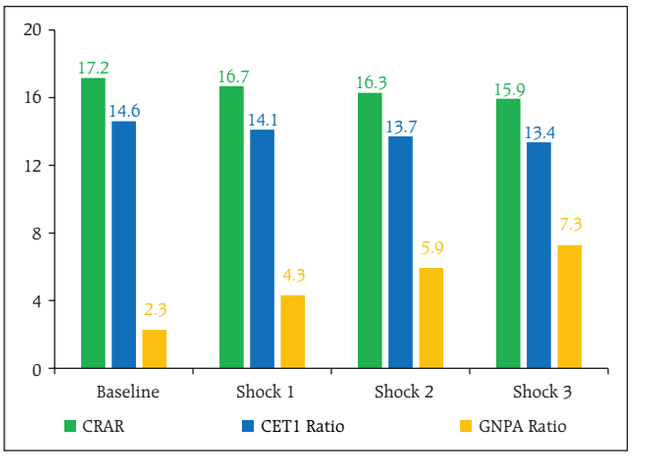
(System level ratios in per cent)



Note: For a system of select 46 SCBs
Default of top 1, 2 and 3 individual borrowers to meet payment commitments are assumed under Shock 1, 2 and 3, respectively
Sources: RBI supervisory returns and staff calculations.

Chart 2.14: Credit Concentration Risk: Group Borrowers – Exposure

(System level ratios in per cent)

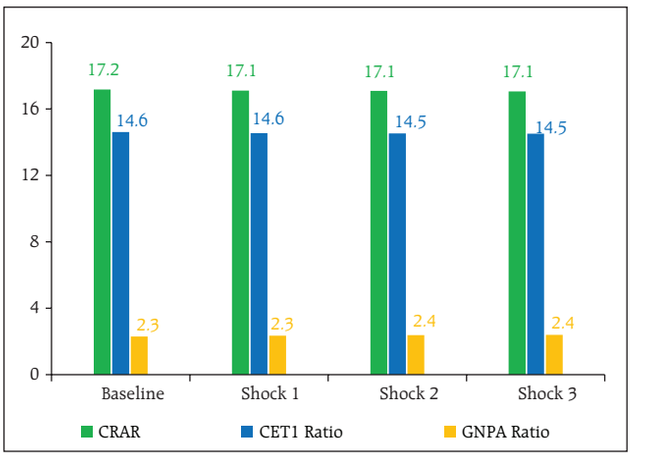


Note: For a system of select 46 SCBs
Default of top 1, 2 and 3 group borrowers to meet payment commitments are assumed under Shock 1, 2 and 3, respectively.
Sources: RBI supervisory returns and staff calculations.

2.20 In the extreme scenario of the top three individual stressed borrowers of respective banks failing to repay[23], the system level CRAR would decline by 10 bps (Chart 2.15).

Chart 2.15: Credit Concentration Risk: Individual Borrowers – Stressed Advances

(System level ratios in per cent)



Note: For a system of select 46 SCBs
Default of top 1, 2 and 3 stressed borrowers (in sub-standard or restructured category) to meet payment commitments are assumed under Shock 1, 2 and 3, respectively.
Sources: RBI supervisory returns and staff calculations.

[21] In the case of default, the individual borrower in the standard category is considered to move to the sub-standard category.

[22] In the case of default, the group borrower in the standard category is considered to move to the sub-standard category.

[23] In case of failure, the borrower in sub-standard or restructured category is considered to move to the loss category.

2.21 Credit concentration risk assessment, described above, evaluates banks' resilience by considering defaults of top individual or group borrowers of respective banks and estimating impact on their CRARs. While this approach presents a conservative scenario by assuming that top borrowers of all banks default simultaneously, it does not explicitly capture the system-wide impact which a large borrower can cause as multiple banks can have exposure to a single entity. Box 2.1 provides a complimentary approach to address this scenario.

Box 2.1: System-wide Concentration Risk from Large Borrowers

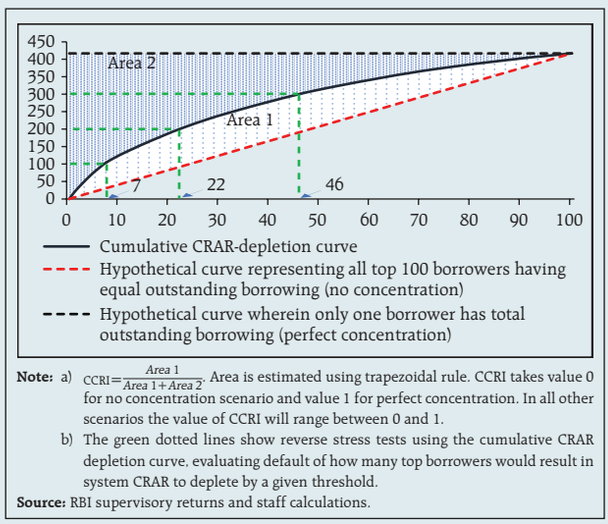
The large borrowers weave a system-wide network through their credit relationships with multiple banks. To assess the system-wide impact of concentration of borrowers, sequential default of the 100 largest individual borrowers is simulated, measuring the cumulative depletion in system-level CRAR at default of each borrower[24]. This analysis does not take into account any possible regulatory interventions in stressed scenarios. The resulting function of cumulative CRAR depletion for each incremental default is a concave increasing curve (Chart 1).

To quantify the associated systemic risk, a novel metric *viz.* credit concentration risk index (CCRI) based on the shape of the curve is constructed. Formally, CCRI is defined as the ratio of (i) the area between the empirical CRAR depletion curve and a straight line from the origin to its endpoint, to (ii) the total area above this straight line[25]. A higher CCRI will indicate higher concentration among the large borrowers, that is, only a few large borrowers may account for a disproportionately large share of total systemic capital stress. On the other hand, a low value of CCRI will indicate lower concentration and more equitable distribution of systemic capital stress among the borrowers. A time-series plot of CCRI will provide policymakers and supervisors an objective view of credit concentration risk at system level varying over time and, therefore, may also serve as an early warning indicator for potential financial stress.

Using the cumulative CRAR depletion curve, a reverse stress test on credit concentration risk can also be performed to find out how many top borrowers' default would result in the breach of specific thresholds of system-level CRAR[26].

Chart 1: Cumulative CRAR-depletion curve (March 2025)

(Depletion in system level CRAR in basis points, vertical scale; number of top borrowers sequentially defaulting, horizontal scale)



Note: a) $CCRI = \frac{Area\ 1}{Area\ 1 + Area\ 2}$. Area is estimated using trapezoidal rule. CCRI takes value 0 for no concentration scenario and value 1 for perfect concentration. In all other scenarios the value of CCRI will range between 0 and 1.

b) The green dotted lines show reverse stress tests using the cumulative CRAR depletion curve, evaluating default of how many top borrowers would result in system CRAR to deplete by a given threshold.

Source: RBI supervisory returns and staff calculations.

Conventional measures of concentration like Gini coefficient or Herfindahl-Hirschman index (HHI) are also considered. Taking inspiration from these metrics, separate CRAR depletion curve and the CCRI are constructed to measure the impact of concentration on the capital. The conventional indices are used to check robustness of the trend observed from CCRI.

Key observations:

To ensure consistency, the analysis is performed on the same set of 46 banks on which macro stress tests and sensitivity analyses are performed. These banks account for more than 99 per cent of the total funded amount outstanding to the top 100 borrowers.

(Contd.)

[24] The impact on the CRAR is estimated using additional provisioning needs and loss of interest income resulting from assets turning non-performing.

[25] Chart 1 provides a visual explanation of CCRI calculation.

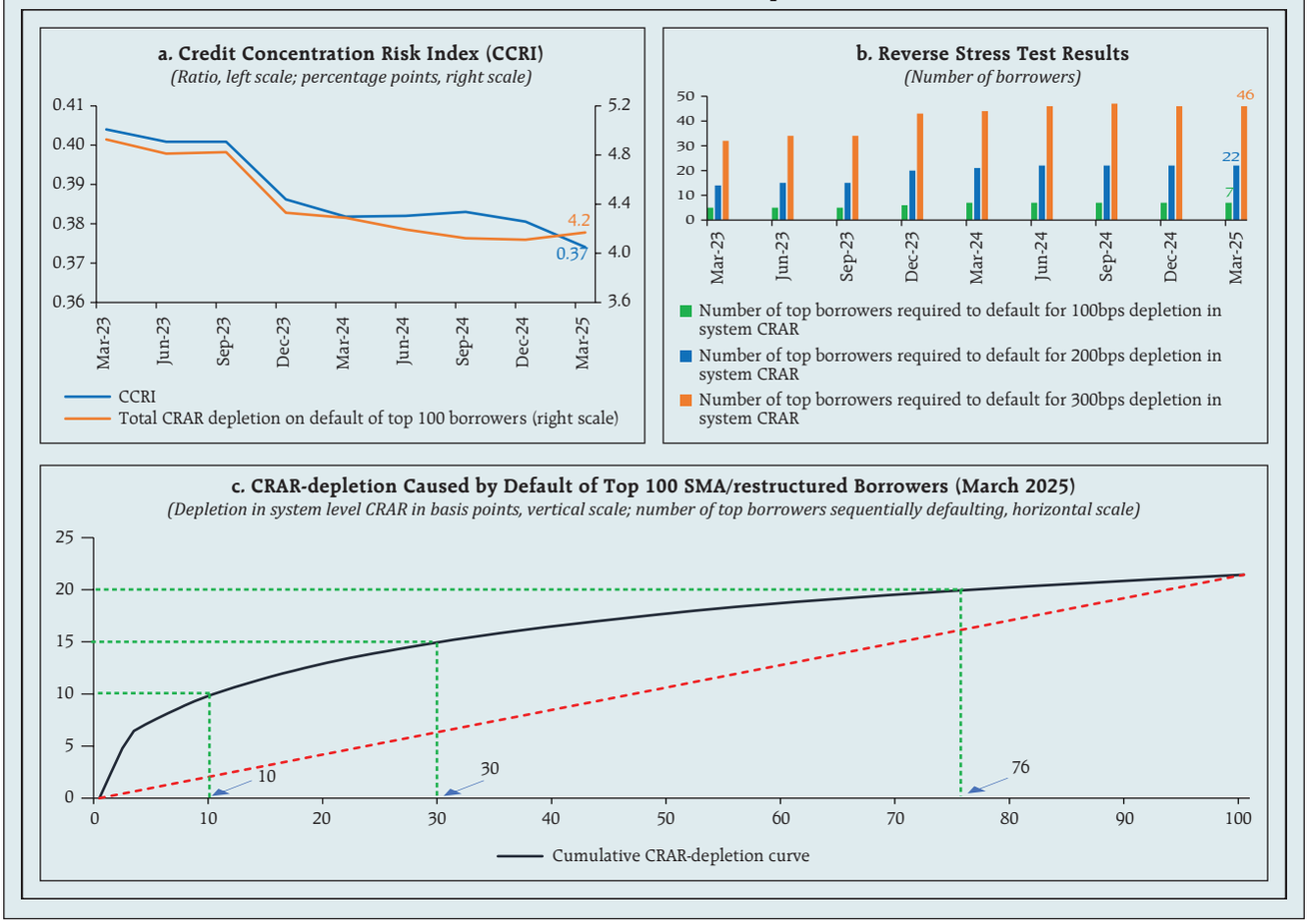
[26] Chart 1 provides a visual explanation of reverse stress test using the curve.

Over the past two years, the CCRI showed a declining trend, suggesting a structural improvement of concentration risk in the Indian banking system (Chart 2 a). This would indicate an ongoing shift towards a more resilient financial system, wherein the tail risk of failure of a few individual large borrowers poses comparatively less systemic threat. This shift may be due to improved credit diversification through deliberate portfolio rebalancing by banks, or enhanced supervisory oversight. This has important implications for macroprudential oversight, as it suggests that the probability of severe contagion triggered by borrower-specific shocks is decreasing, potentially reducing the systemic amplification of idiosyncratic credit events. Under the hypothetical scenario of top 100 borrowers defaulting, the aggregate CRAR would decline by 4.2 percentage points.

Reverse stress test using the cumulative CRAR-depletion curve for March 2025 revealed that it would take the top 7, 22 and 46 borrowers to default to deplete the system level CRAR by 100, 200 and 300 basis points, respectively. Trends observed in reverse stress test results for the earlier quarters reemphasize the observation that credit concentration risk has improved over the last two years (Chart 2 b).

Considering that the borrowers with facilities classified as SMA and / or with restructured advances have higher likelihood of default, a similar CRAR depletion curve was constructed with the top 100 borrowers who have been classified as SMA or restructured by at least one bank. The impact of default of top 100 such borrowers is limited to 22 basis points depletion in system level CRAR (Chart 2 c).

Chart 2: Time-trend of the observed parameters



c. Sectoral Credit Risk

2.22 Shocks applied based on volatility of industry sub-sector-wise GNPA ratios indicate varying magnitudes of impact. By and large, sectoral credit risk remains muted — a two SD shock to basic metals and energy sub-sectors would reduce the system-level CRAR by 17 bps and 12 bps, respectively, whereas the impact of shocks on the rest of the sub-sectors is negligible (Table 2.1).

Table 2.1: Decline in System Level CRAR

(Basis points, in descending order for top 10 most sensitive sectors)

	1 SD	2 SD
Basic Metal and Metal Products (1302 per cent)	9	17
Infrastructure - Energy (788 per cent)	6	12
Infrastructure - Transport (231 per cent)	3	6
All Engineering (283 per cent)	3	5
Textiles (158 per cent)	2	4
Food Processing (105 per cent)	1	3
Construction (229 per cent)	1	2
Vehicles, Vehicle Parts and Transport Equipment (725 per cent)	1	2
Chemicals (277 per cent)	1	2
Mining and Quarrying (520 per cent)	1	1

Note: (1) For a system of select 46 SCBs.
(2) Numbers in parentheses represent the growth in GNPA of that sub-sector due to 1 SD shock to the sub-sector's GNPA ratio.

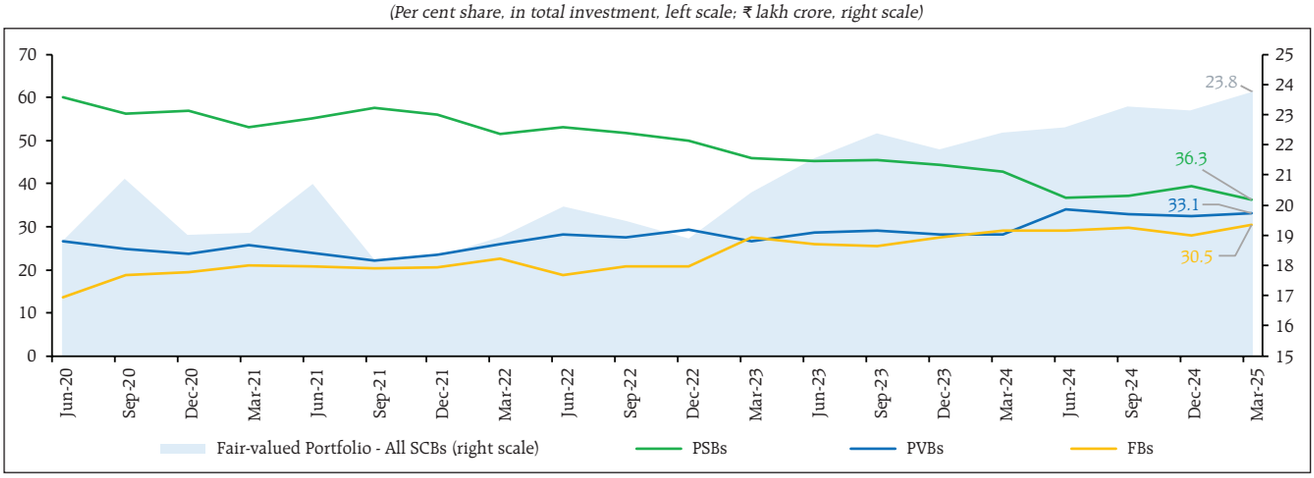
Sources: RBI supervisory returns and staff calculations.

d. Interest Rate Risk[27] [28]

2.23 For the sample of 46 SCBs under assessment, the market value of investments subject to fair value has been on the rise and stood at ₹23.8 lakh crore in March 2025. Within the fair-valued investment portfolio, SCBs increased their allocation under the 'fair value through profit and loss (FVTPL)' category to 37.0 per cent in March 2025, and the remaining fair value portfolio (63.0 per cent in March 2025) was under the 'available for sale (AFS)' category. The rise in the share of the FVTPL portfolio under the revised framework[29] is primarily attributable to a clearly identifiable held for trading (HFT) book which accounted for 90.9 per cent of the FVTPL portfolio. PSBs' share in the fair-valued investment portfolio of SCBs continued its decreasing trend in the post-pandemic period with a sharp fall recorded immediately after framework revision, while the share of other bank groups witnessed an increasing trend (Chart 2.16).

Chart 2.16: AFS and FVTPL (including HFT) Portfolios: Bank-group wise

(Per cent share, in total investment, left scale; ₹ lakh crore, right scale)



Sources: Individual bank submission and staff calculations.

[27] Prior period consistency and comparability may be limited as historical data hasn't been recast using the updated accounting standards.

[28] The analysis in this portion is restricted to investments in India by the domestic operations of SCBs. Only interest rate related instruments for HTM, AFS and FVTPL (including HFT) portfolios and both interest and non-interest related investments for "Investment in Subsidiaries, Associates and Joint Ventures" are taken into account.

[29] "Master Direction - Classification, Valuation and Operation of Investment Portfolio of Commercial Banks (Directions)" dated September 12, 2023.

2.24 Though the modified duration increased, the sensitivity (PV01[30]) of the AFS portfolio of SCBs diminished in March 2025, predominantly on account of decrease in AFS portfolio size as compared to September 2024. The PV01 of FVTPL (including HFT) portfolios of all banking groups increased because of a significant increase in market value of securities held in the portfolio (Table 2.2). The modified duration of the FVTPL portfolio decreased for all the banking cohorts. Variation in PV01 was higher for FBs.

2.25 An assessment of the impact of a parallel upward shift of 250 bps in the yield curve on the fair-valued portfolio (AFS and FVTPL (including HFT)) showed that the system level CRAR and CET1 capital ratio would reduce by 115 and 116 bps, respectively (Table 2.3).

2.26 All banking cohorts reported a sequential rise in trading profits in Q4:2024-25. The earnings from securities trading by PSBs and FBs was significant, as in the previous year, strengthening net operating income (Table 2.4).

2.27 Both the PSBs and PVBs have increased their holding of state development loans (SDLs)/ state government securities (SGSs) while paring their holdings in central government securities (G-Secs) and other HTM-eligible securities (Chart 2.17).

2.28 As at end-March 2025, the notional MTM gains in the HTM books of PSBs and PVBs together increased to ₹64,148 crore from ₹40,187 crore in September 2024. During the March 2025 quarter, unrealised gains rose across all categories of HTM book, benefiting from the falling yield curve. The unrealised gains of PSBs were predominantly in

Table 2.2: PV01 of AFS and FVTPL (including HFT) Portfolios

(in ₹ crore)

	AFS Portfolio		FVTPL (including HFT) Portfolio	
	Sep-24	Mar-25	Sep-24	Mar-25
PSBs	209.1	234.6	48.5	51.3
PVBs	93.6	90.3	101.6	107.5
FBs	82.7	56.4	275.3	330.3
Total	**385.4**	**381.3**	**425.4**	**489.1**

Sources: Individual bank submissions and staff calculations.

Table 2.3:Interest Rate Risk – Bank-groups - Shocks and Impacts

(Under shock of 250 basis points parallel upward shift of the INR yield curve)

	PSBs		PVBs		FBs		All SCBs	
	AFS	FVTPL (incl. HFT)	AFS	FVTPL (incl. HFT)	AFS	FVTPL (incl. HFT)	AFS	FVTPL (incl. HFT)
Modified Duration (year)	3.4	3.1	2.0	3.3	1.7	8.6	2.5	5.6
Share in total Investments (per cent)	17.7	4.2	18.3	13.0	41.2	46.7	20.5	12.0
Reduction in CRAR (bps)	80		58		608		115	
Reduction in CET1 (bps)	81		59		611		116	

Note: Share of total investments has been computed excluding investment in associates, subsidiaries and JVs.
Sources: Individual bank submissions and staff calculations.

Table 2.4: Other Operating Income – Profit / (Loss) on Securities Trading

(in ₹ crore)

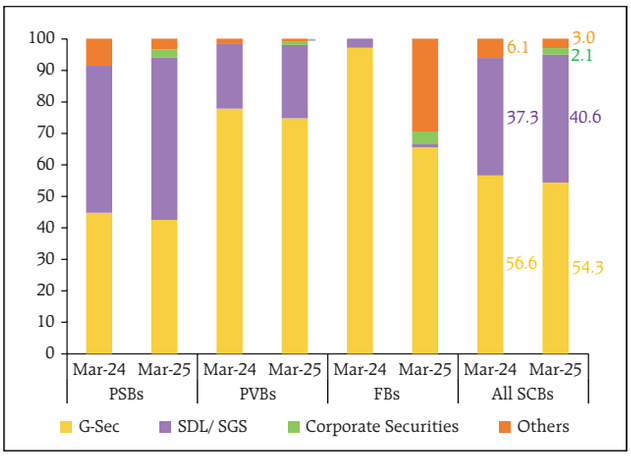
	Q4: 2023-24	Q1: 2024-25	Q2: 2024-25	Q3: 2024-25	Q4: 2024-25
PSBs	7,449 (11.0)	4,883 (7.5)	9,134 (12.6)	5,477 (8.5)	12,245 (16.1)
PVBs	10,459 (13.7)	4,960 (6.6)	3,803 (5.1)	2,020 (2.7)	2,761 (3.7)
FBs	1,546 (17.6)	968 (8.0)	4,363 (33.7)	-1,270 (-10.1)	2,846 (20.8)

Note: Figures in parentheses represent other operating income (OOI)-Profit/ (Loss) on securities trading as a percentage of net operating income.
Source: RBI supervisory returns.

[30] PV01 is a measure of sensitivity of the absolute value of the portfolio to a one basis point change in the interest rate.

Chart 2.17: HTM Portfolio – Composition

(Per cent)

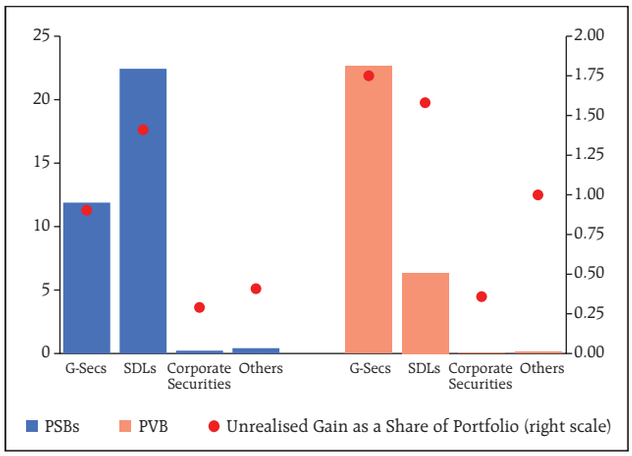


Note: Prior to April 1, 2024, corporate securities were not eligible to be included in HTM book.

Sources: Individual bank submissions and staff calculations.

Chart 2.18: HTM Portfolio – Unrealised Gain/ Loss as on March 31, 2025

(₹ '000 crore, left scale; per cent, right scale)



Sources: Individual bank submissions and staff calculations.

SDLs/ SGSs, as against those in G-Secs for PVBs (Chart 2.18).

2.29 If a shock of 250 bps parallel upward shift in the yield curve is applied, the MTM impact on the HTM portfolio of banks excluding unrealised gains/losses would reduce the system level CRAR and CET1 capital ratio by 313 bps each. However, no bank would witness a reduction in CRAR and CET1 capital ratio below the respective regulatory limits.

2.30 An assessment of the interest rate risk of banks[31] using traditional gap analysis (TGA) on the rate sensitive global assets and liabilities and off-balance sheet items as of March 2025 showed that in a scenario of a 200 bps increase in interest rate, the earnings at risk (EAR) for PSBs and PVBs would be 13.3 per cent and 11.4 per cent of NII, respectively (Table 2.5). The impact would be minimal for FBs and SFBs. While the impact of an interest rate rise (fall) on earnings would be positive (negative) for PSBs, PVBs and FBs due to positive cumulative gap[32] at bank group level, the impact for SFBs would be the opposite as the cumulative gap was negative.

2.31 As per the duration gap analysis[33] (DGA) on the rate sensitive global assets, liabilities and off-balance sheet items, the market value of equity (MVE) for PVBs, FBs and SFBs would fall (rise) from an upward (downward) movement in the interest rate, while the effect on PSBs would be muted and the opposite. The MVE for SFBs would be particularly weighed down by an interest rate rise (Table 2.6).

Table 2.5: Earnings at Risk (EAR) - Traditional Gap Analysis (TGA)

Bank Group	Earnings at Risk (up to one year time bucket) as percentage of net interest income (NII) on interest rate rise	
	100 bps increase	200 bps increase
PSBs	6.6	13.3
PVBs	5.7	11.4
FBs	1.3	2.6
SFBs	- 0.8	- 1.7

Sources: RBI supervisory returns and staff calculations.

[31] In terms of circular on "Guidelines on Banks' Asset Liability Management Framework – Interest Rate Risk" dated November 04, 2010.

[32] Gap refers to rate sensitive assets (RSA) minus rate sensitive liabilities (RSL). Advances, investments, swaps/ forex swaps and reverse repos are major contributors to RSA whereas deposits, swaps/ forex swaps and repos are observed to be the main elements under RSL.

[33] The DGA involves bucketing of all RSA and RSL as per residual maturity/ re-pricing dates in various time bands and computing the Modified Duration Gap (MDG).

Table 2.6: Market Value of Equity (MVE) - Duration Gap Analysis (DGA)

Bank Group	Market value of equity (MVE) as percentage of equity on interest rate rise	
	100 bps increase	200 bps increase
PSBs	0.5	1.0
PVBs	-1.3	-2.5
FBs	-3.2	-6.4
SFBs	-5.8	-11.6

Sources: RBI supervisory returns and staff calculations.

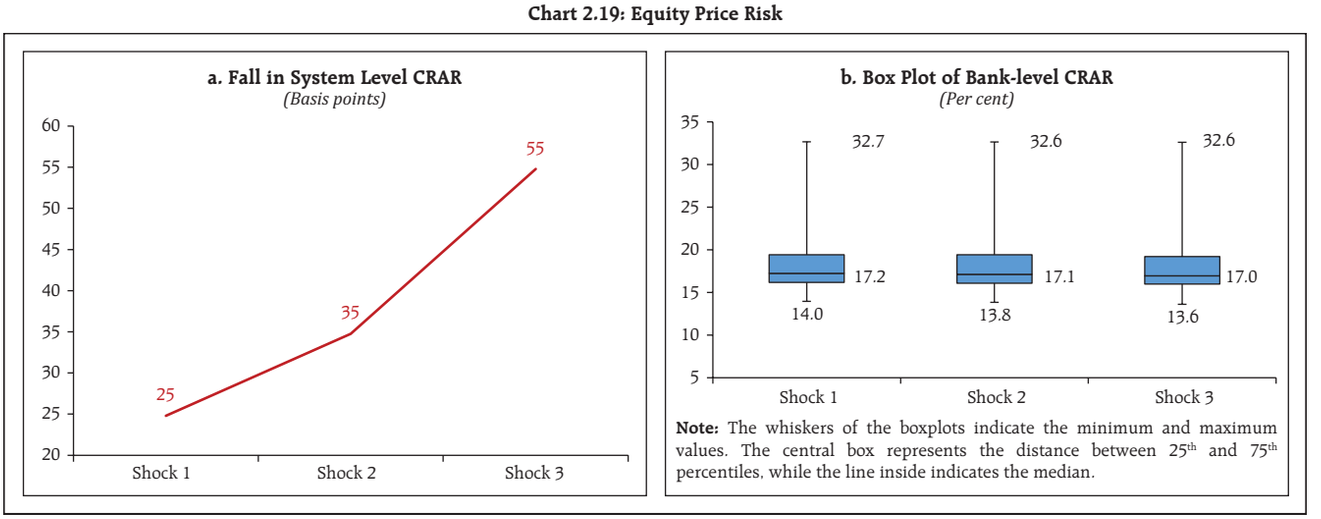
e. Equity Price Risk

2.32 As banks have limited direct capital market exposures owing to regulatory prescriptions, any impact of a possible significant fall in equity prices on banks' CRAR would be low for the sample of 46 banks. Under scenarios of 25 per cent, 35 per cent and 55 per cent drop in equity prices, the system level CRAR would reduce by 25 bps, 35 bps and 55 bps, respectively (Chart 2.19 a). In the adverse scenario (shock 3), the lowest CRAR at bank level would be 13.6 per cent (Chart 2.19 b). Even if the entire capital market exposure is wiped out, the system level CRAR declines by 100 bps and CRARs of individual banks remain above the regulatory minimum level.

f. Liquidity Risk

2.33 Liquidity stress test attempts to assess the impact of a shock on liquidity positions of the select 46 SCBs, caused by plausible run on deposits, and increased demand for unutilised portions of committed credit and liquidity facilities. The baseline scenario for the stress test applies weights to each component as prescribed by the RBI guidelines on LCR computation[34]. Two stress scenarios are designed by applying higher weights (run-off rates) to certain cash outflow components[35]. The results showed that the aggregate LCR of the SCBs would fall from 132.1 per cent in the baseline scenario to 124.5 per cent in stress scenario 1 and further to 117.9 per cent in stress scenario 2

Chart 2.19: Equity Price Risk

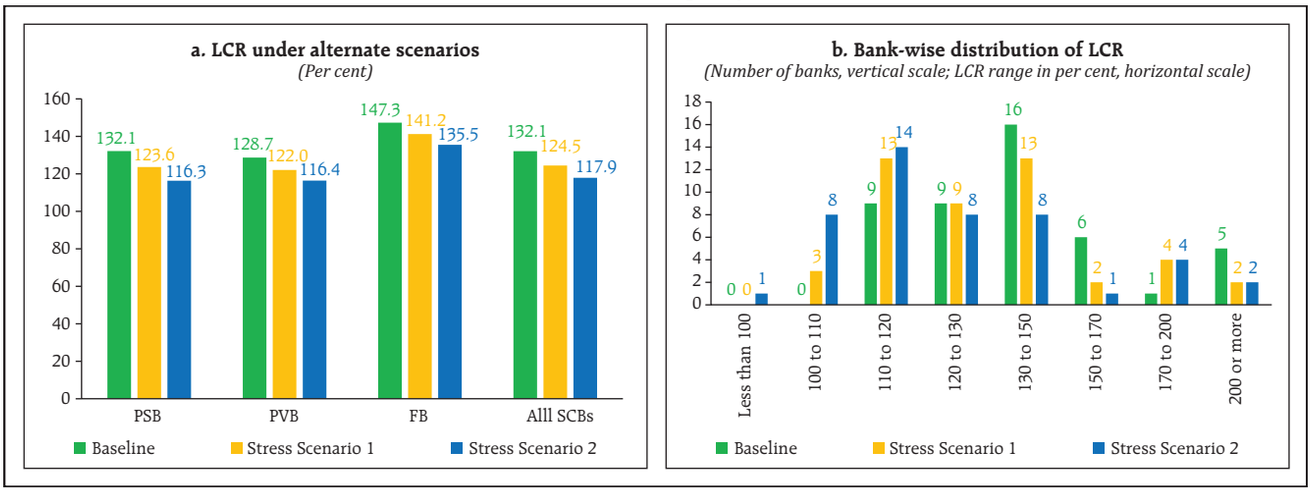


Note: For a system of select 46 SCBs.
Drop in equity prices by 25, 35 and 55 per cent is considered under Shock 1, 2 and 3 respectively.
Sources: RBI supervisory returns and staff calculations.

[34] RBI circular no. RBI/2013-14/635 DBOD.BP.BC.No.120/21.04.098/2013-14 dated June 09, 2014, on "Basel III Framework on Liquidity Standards – Liquidity Coverage Ratio (LCR), Liquidity Risk Monitoring Tools and LCR Disclosure Standards".

[35] The stress scenarios are described in Annex 2.

Chart 2.20: LCR-based Liquidity Stress Test



Sources: RBI supervisory returns and staff calculations.

(Chart 2.20 a). Individually, all banks would be able to maintain LCR above the minimum requirement of 100 per cent in stress scenario 1, while one bank would marginally fall short to meet the same in stress scenario 2 (Chart 2.20 b).

II.1.9 Sensitivity Analysis of Small Finance Banks

2.34 Small Finance Banks (SFBs) consist of 11 entities whose collective share in total credit and total deposits[36] are 1.5 per cent and 1.4 per cent, respectively, as of end-March 2025. Because of their small size, they are not represented in the list of 46 banks on which sensitivity analyses is typically performed. However, similar sensitivity analyses on credit risk and credit concentration risk performed separately for SFBs show that each SFB would remain resilient under stress scenarios.

II.1.10 Bottom-up Stress Tests: Derivatives Portfolio

2.35 A series of bottom-up stress tests (sensitivity analyses) were conducted by select banks[37], subjecting their derivatives portfolios as of March 2025 to four different shocks *viz.* two each based on interest rate and foreign exchange rate. In line with the trend observed in the recent past, the FBs maintained a significantly negative net MTM position as a proportion to CET1 capital at (-) 17 per cent in March 2025 compared with (-) 6 per cent in September 2024. For PSBs and PVBs, net MTM position was muted (Chart 2.21). For the overall system, the extent of negative MTM position increased in the half-year ending March 2025.

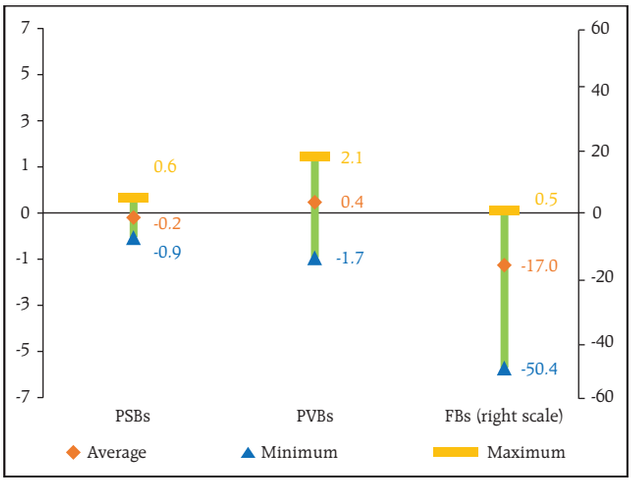
2.36 The impact of the interest rate shocks on the derivatives portfolios of the select banks, in terms of change in net MTM position, was found to

[36] Percentage of the total credit and deposit of SCBs (excluding RRBs) as of March 31, 2025.

[37] Stress tests on derivatives portfolio are conducted by a sample of 36 banks (10 more banks have been included in the sample in this FSR to enhance the coverage considering that these banks had Rs 1,000 crore or more 'Total Derivative Exposure' on a continuous basis over the quarters), constituting active authorised dealers and interest rate swap counterparties. Details of test scenarios are given in Annex 2.

Chart 2.21: MTM Position of Total Derivatives Portfolio of Select Banks – March 2025

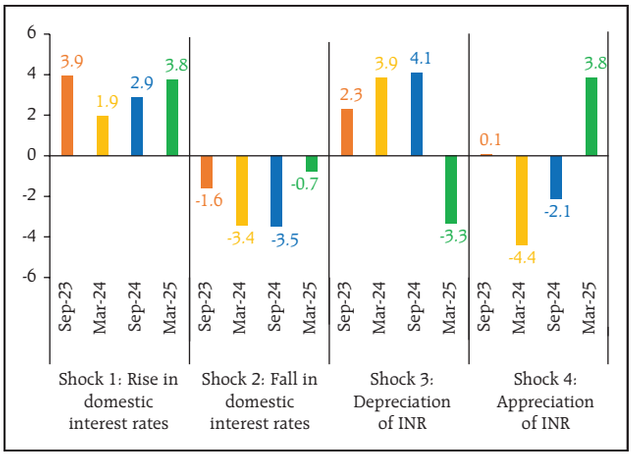
(Per cent of CET1 Capital, both left and right scales)



Source: Results submitted by the select banks

Chart 2.22: MTM Impact of Shocks on Derivatives Portfolio of Select Banks

(Change in net MTM position on application of a shock, vis-à-vis baseline as per cent of total capital)



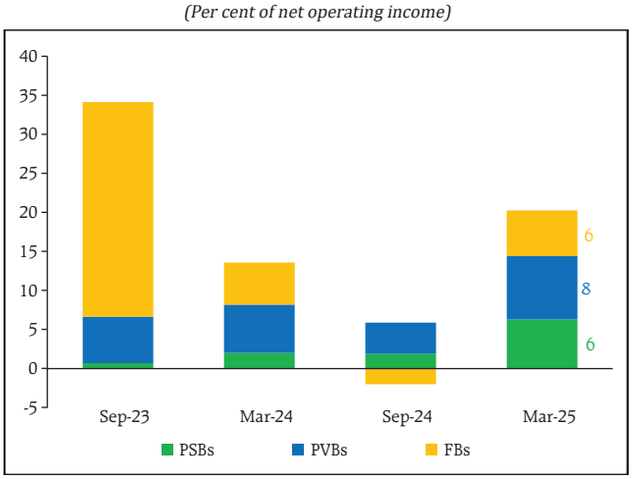
Note: Change in net MTM due to an applied shock is with respect to the baseline.
Source: Results submitted by select banks.

increase in March 2025 over that in September 2024. The stress test results on the portfolios as of March 2025 showed that for the select banks, gain from an interest rate rise would be higher than loss from an interest rate fall of similar magnitude (Chart 2.22). As regards shocks of the rupee exchange rate on exposures to forex derivatives, the impact was noted to be reversed in March 2025 from that seen in September 2024.

2.37 The income from the derivatives portfolio includes changes in net MTM positions and the realised income. The contribution of the derivatives portfolio to the net operating income (NOI) of banks has increased significantly for all the bank groups in March 2025 as compared to September 2024. In particular, the realised income of FBs from derivatives portfolio formed a reasonable portion of their NOI despite their net negative MTM positions (Chart 2.23). Based on the notional principal amount, FBs had more diversified counterparties while most of the positions taken by PVBs and PSBs were with other banks.

Chart 2.23: Income from the Derivatives Portfolio

(Per cent of net operating income)



Source: Results submitted by the select banks.

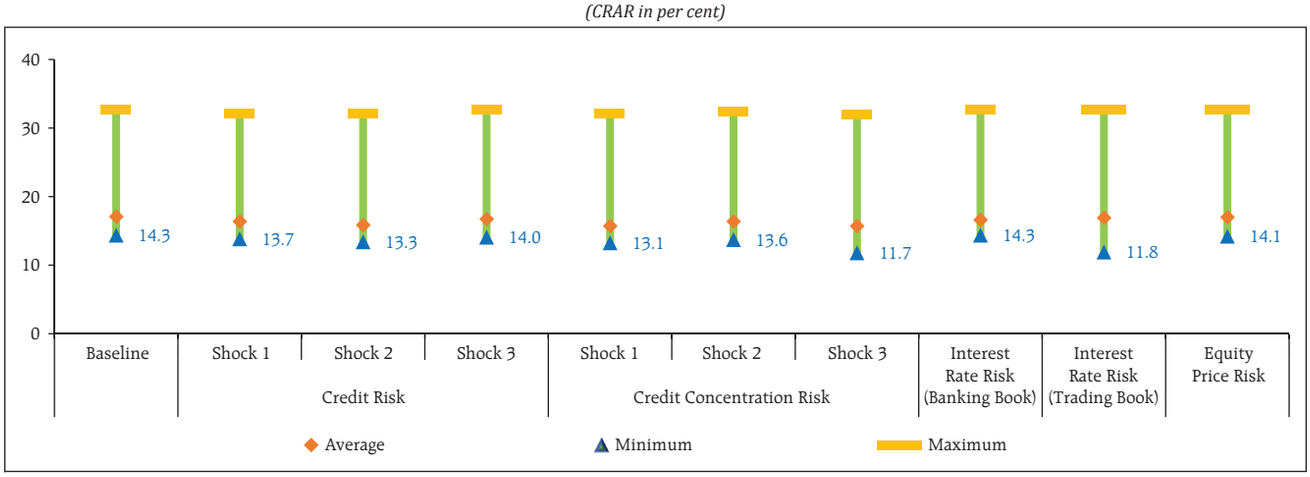
II.1.11 Bottom-up Stress Tests: Credit, Market and Liquidity Risk

2.38 A suite of bottom-up stress tests (sensitivity analyses) was conducted by 37 select banks[38] on their end-March 2025 position. The results affirmed the resilience of these banks to multiple types and magnitudes of shocks. All the sample banks would be able to meet the regulatory minimum requirement of CRAR under these scenarios (Chart 2.24).

2.39 The bottom-up stress test for liquidity risk revealed that liquid assets ratios[39] of all the sample banks would remain positive under alternate shock scenarios, emphasising the adequacy of their HQLAs to withstand liquidity pressure from sudden and unexpected withdrawal of deposits. Under the scenarios of (i) a 10 per cent deposit run-off in 1-2 days and (ii) a 3 per cent deposit run-off for five consecutive days, the average liquid assets ratio of the select banks would drop from 23.0 per cent to 16.2 per cent and 12.5 per cent, respectively (Chart 2.25).

Chart 2.24: Credit and Market Risks

(CRAR in per cent)



Credit Risk: Gross Credit	Shock1	NPAs increase by 50 per cent
	Shock2	Uniform downgrade of all borrowers by one notch for corporate book
	Shock3	5 percentage points increase in NPAs in each top 5 sector / industry
Credit Risk: Concentration	Shock1	The top three individual borrowers' default into sub-standard category
	Shock2	The top largest group defaults into sub-standard category
	Shock3	The largest borrower of each of top five industries/ sectors defaults into sub-standard category
Interest Rate Risk – Banking Book	Shock	Parallel upward shift in INR yield curve by 2.5 percentage points
Interest Rate Risk – Trading Book	Shock	Parallel upward shift in INR yield curve by 2.5 percentage points
Equity Price Risk	Shock	Equity price index drops by 40 per cent

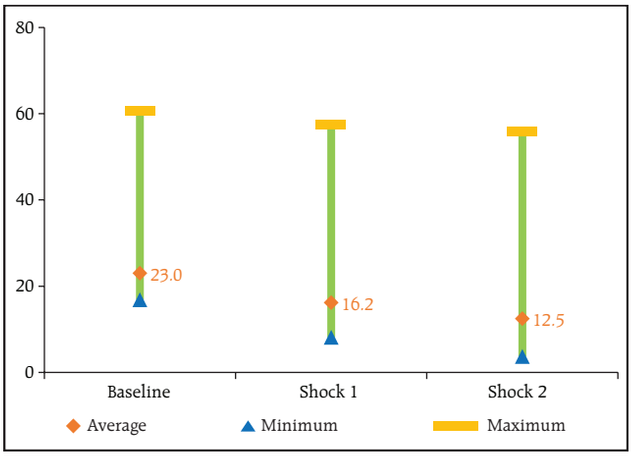
Source: Select banks (Bottom-up stress tests).

[38] Stress tests are conducted by a sample of 37 banks (10 more banks have been included in the sample in this FSR to enhance the coverage).

[39] Liquid Assets Ratio= $\frac{Liquid\ Assets}{Total\ Assets} \times 100$

Chart 2.25: Liquidity Risk - Liquid Assets Ratio

(Per cent)



Liquid Assets Definitions	
High Quality Liquid Assets (HQLAs) as per Liquidity Coverage Ratio (LCR) guidelines.	
Liquidity Shocks	
Shock1	10 per cent deposits withdrawal (cumulative) during a short period (say 1 or 2 days)
Shock2	3 per cent deposits withdrawal (each day) within 5 days

Source: Select banks (Bottom-up stress tests).

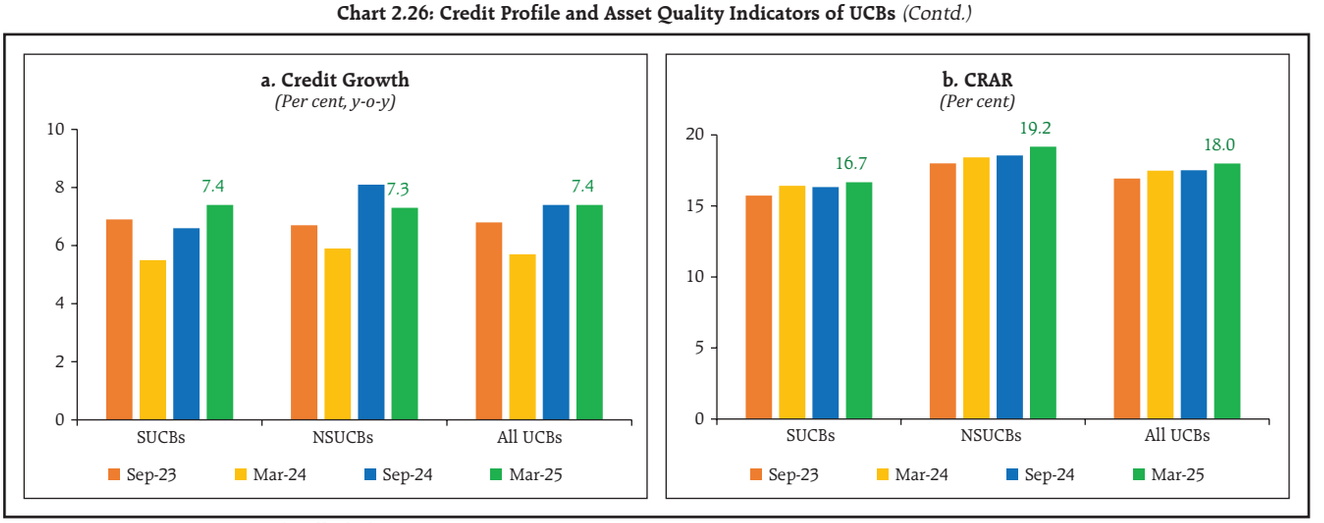
II.2 Primary (Urban) Cooperative Banks (UCBs)[40]

2.40 Credit extended by primary urban cooperative banks (UCBs)[41] registered a higher y-o-y growth of 7.4 per cent in March 2025 than that in March 2024 (Chart 2.26 a). Both scheduled UCBs (SUCBs) and non-scheduled UCBs (NSUCBs) witnessed acceleration in credit growth.

2.41 The capital position of UCBs continued to strengthen in the post-pandemic period, with their CRAR rising to 18.0 per cent in March 2025. The strengthening of capital position has been broad based - across SUCBs and NSUCBs, as well as across all tiers[42] - barring marginal dip for the Tier 1 UCBs (Chart 2.26 b and c).

2.42 The GNPA and NNPA ratios of UCBs, both SUCBs and NSUCBs, decreased significantly in March 2025 compared to September 2024 (Chart 2.26 d and e). A similar trend was observed in the GNPA ratio of large borrowers who account for 23.2 per cent of the UCBs' loan book (Chart 2.26 f). The PCR also improved, rising from its levels in both March and September 2024, driven primarily by NSUCBs (Chart 2.26 g). Asset quality of UCBs improved across all tiers, alongside increase in PCR (Chart 2.26 h).

Chart 2.26: Credit Profile and Asset Quality Indicators of UCBs *(Contd.)*



Sources: RBI supervisory returns and staff calculations.

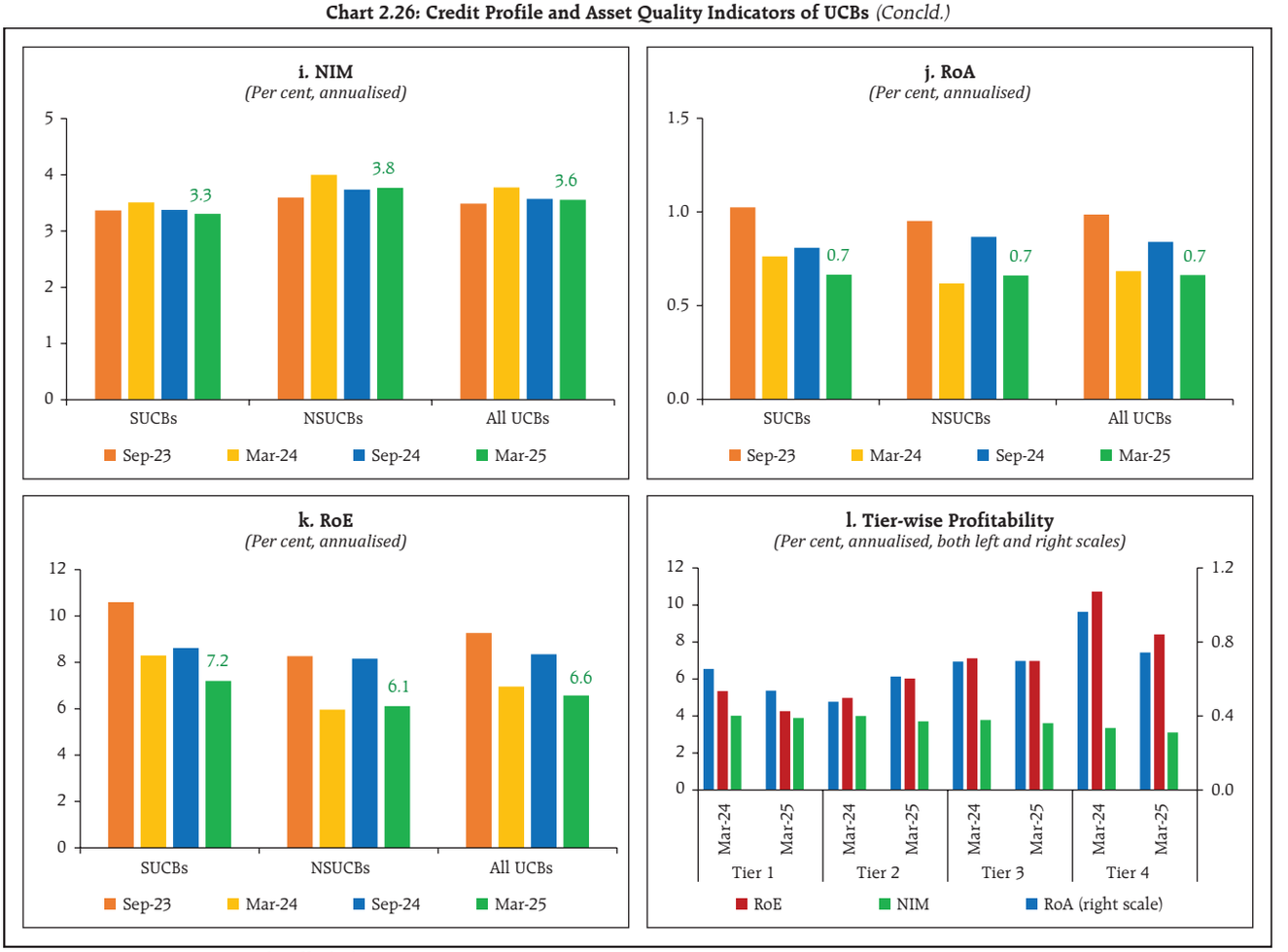
[40] Data are provisional and based on submission by UCBs through RBI supervisory returns.

[41] Based on common sample of 1,294 UCBs covering over 90 per cent of gross loans extended by all UCBs.

[42] Revised Regulatory Framework for Urban Co-operative Banks (UCBs) – Net Worth and Capital Adequacy (circular DOR.CAP.REC.No.86/09.18.201/2022-23 dated December 01, 2022 and DOR.CAP.REC. No.109/09.18.201/2022-23 dated March 28, 2023).

Chart 2.26: Credit Profile and Asset Quality Indicators of UCBs *(Contd.)*

Chart 2.26: Credit Profile and Asset Quality Indicators of UCBs *(Concld.)*



Source: RBI supervisory returns and staff calculations.

2.43 UCBs' net interest margin remained the same in March 2025 as in September 2024, though it was slightly lower than the level recorded a year earlier (Charts 2.26 i). The RoA and RoE, however, declined compared to September 2024 as well as from their levels a year ago (Charts 2.26 j and k). In terms of tier-wise performance, RoA and RoE declined for Tier 1 and Tier 4 UCBs in March 2025, while both indicators saw an increase for Tier 2 UCBs (Chart 2.26 l).

II.2.1 Stress Testing

2.44 Stress tests were conducted on a select set of UCBs[43] to assess credit risk (default risk and concentration risk), market risk (interest rate risk in trading book and banking book) and liquidity risk, based on their reported financial positions as of March 2025.

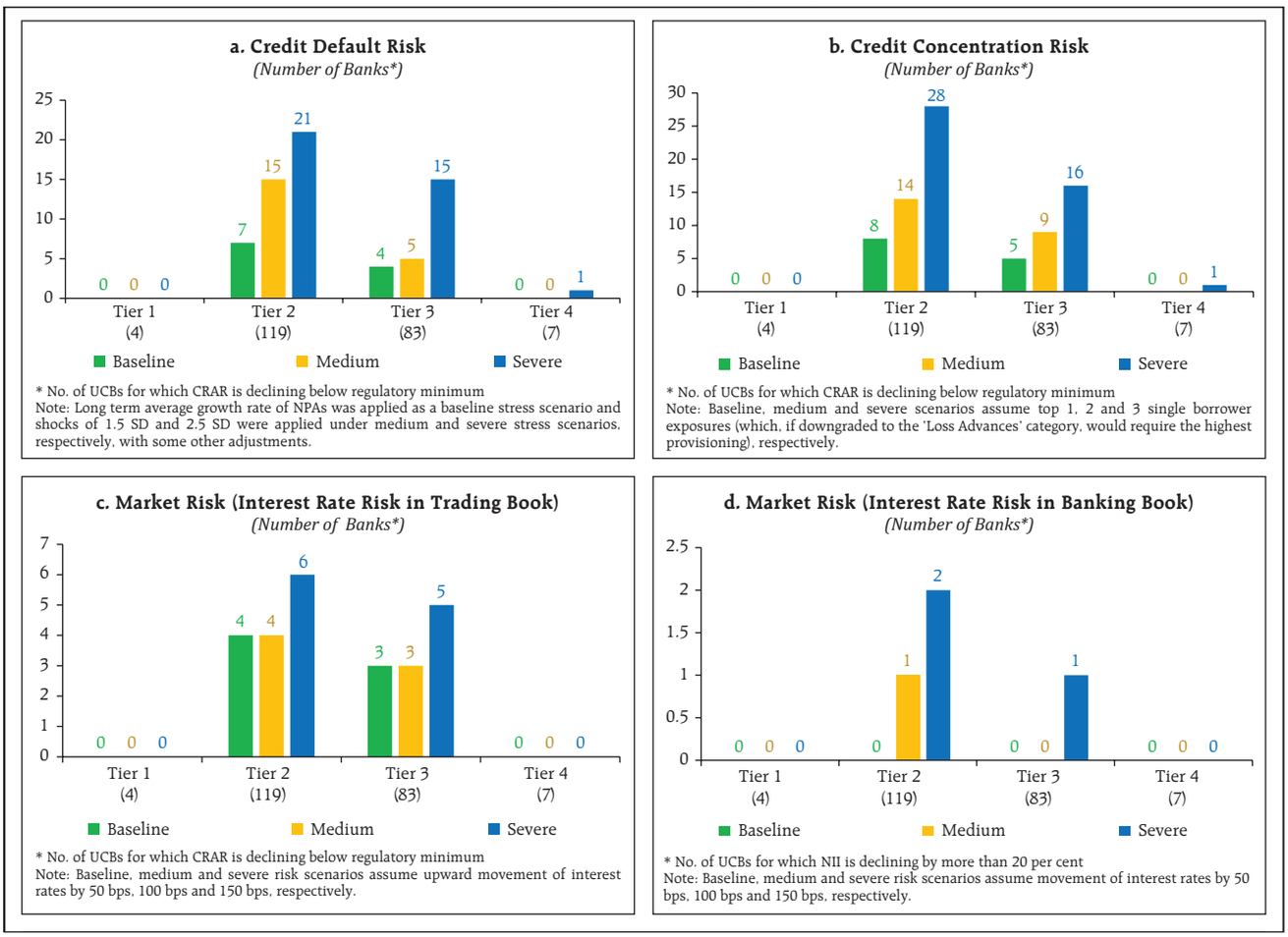
2.45 Under the severe stress scenario of credit default risk, credit concentration risk and interest rate risk in the trading book, the system level CRAR

[43] The stress test is conducted with reference to the financial position of March 2025 for select 213 UCBs with asset size of more than ₹500 crore, excluding banks under the Reserve Bank's All Inclusive Directions (AID). These 213 UCBs together cover around 72 per cent of the total assets of the UCB sector. The detailed methodology used for stress test is given in Annex 2.

would reduce from the pre-shock position of 17.4 per cent to 15.6 per cent, 14.1 per cent and 16.4 per cent, respectively. A severe interest rate shock in the banking book would reduce NII by 7.0 per cent at the system level. At the system level, the consolidated cumulative liquidity mismatch in 1-28 days' time bucket would remain positive under severe stress.

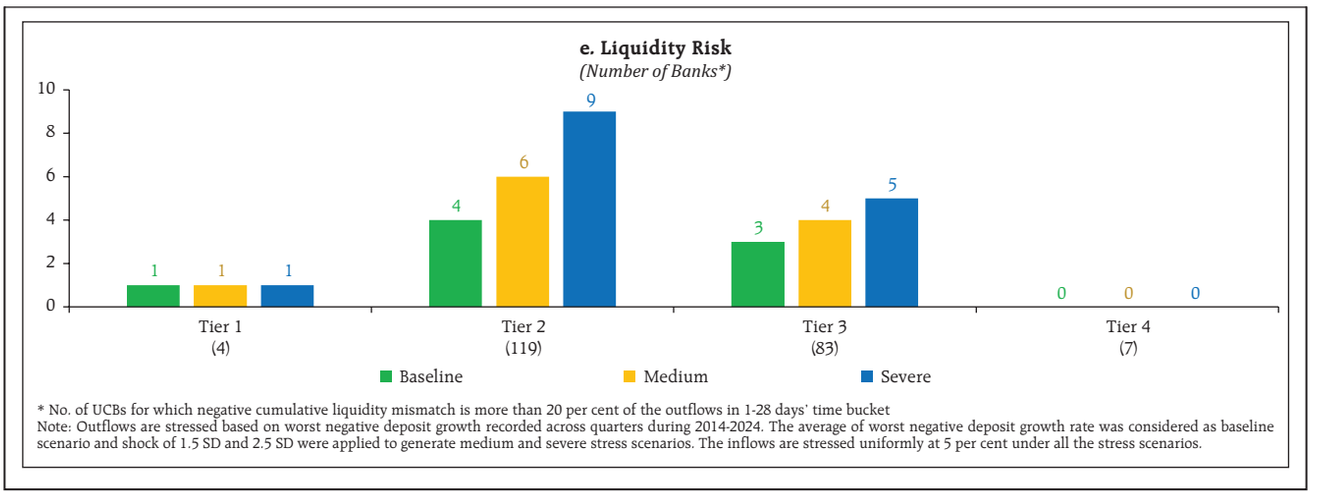
2.46 One bank in the Tier 4 UCB sample - the largest category of UCBs with deposits above ₹10,000 crore - would not be able to meet the regulatory minimum requirement[44] of 11 per cent CRAR under a severe stress scenario for credit default risk as well as for credit concentration risk. For Tier 2 and Tier 3 UCBs, the impact of credit risk and credit concentration risk under severe stress would be significant (Chart 2.27 a and b). None of the Tier 1 and Tier 4 UCBs would breach regulatory thresholds on CRAR under the interest rate shock scenarios applied to their trading book or face more than 20 per cent decline in NII from their banking books. Further, the impact on UCBs in other tiers would remain minimal (Chart 2.27 c and d). The smallest UCBs (Tier 1) exhibited resilience for all risk factors, except liquidity risk (Chart 2.27 e).

Chart 2.27: Stress Test of UCBs *(Contd.)*



[44] The regulatory minimum CRAR for Tier 1 UCBs is 9 per cent and for the UCBs in Tier 2, Tier 3 and Tier 4 is 11 per cent. Further, UCBs in Tier 2, Tier 3 and Tier 4 shall achieve the CRAR of at least 12 per cent by March 31, 2026.

Chart 2.27: Stress Test of UCBs *(Concld.)*



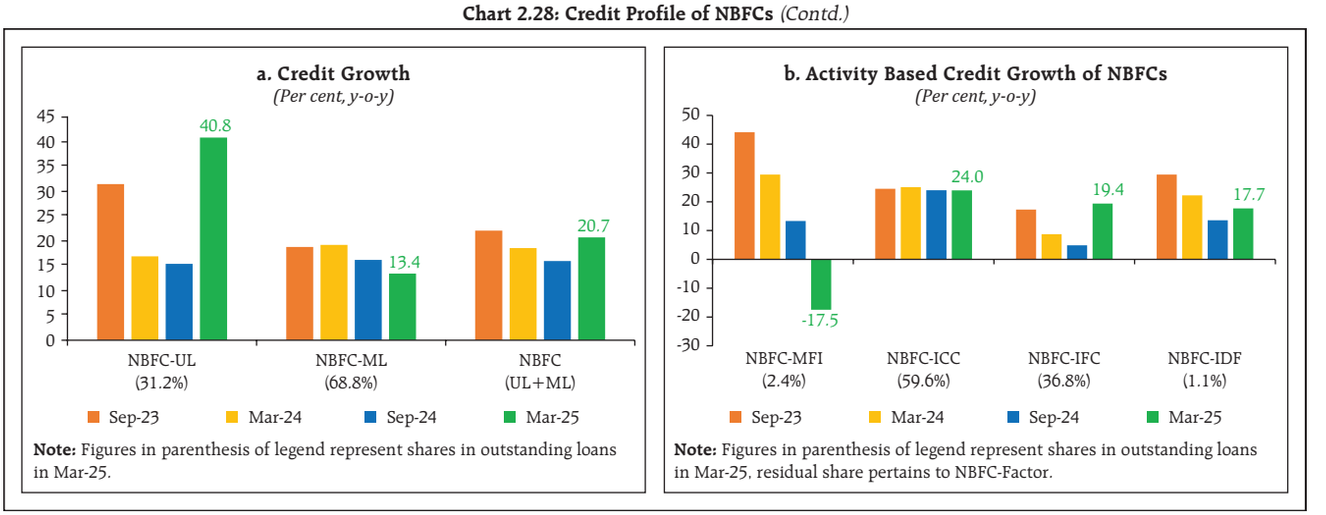
Notes: Figures in brackets represent numbers of UCBs in that Tier, in the sample for stress test.
Sources: RBI supervisory returns and staff calculations.

II.3 Non-Banking Financial Companies (NBFCs)[45]

2.47 The credit growth of NBFCs (Upper and Middle Layers) rose to 20.7 per cent (y-o-y) in March 2025 from 16.0 per cent in September 2024 but remained lower than the level observed in September 2023 (Chart 2.28 a). The acceleration in credit growth in March 2025 compared to the preceding half-year was driven by NBFC-UL. The surge in credit growth of NBFC-UL was partly on account of conversion of a housing finance company (HFC) to an upper layer NBFC, and merger of a middle layer NBFC with an upper layer NBFC.

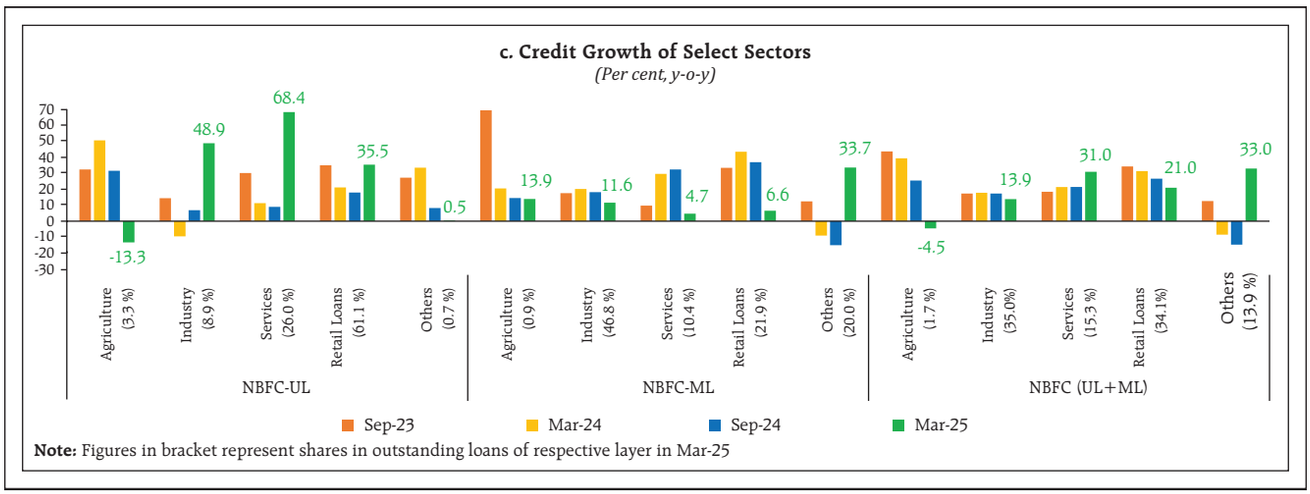
2.48 Considering activity-based classification, credit growth for the second largest category of NBFCs (in terms of outstanding loans), *viz.*, NBFC-IFCs has risen, *vis-à-vis* March 2024. NBFC-MFI's portfolio contracted in H2:2024-25 as lenders exercised prudence in response to the stress in the portfolio (Chart 2.28 b).

Chart 2.28: Credit Profile of NBFCs *(Contd.)*



[45] The analyses done in this section are based on the provisional data available for NBFCs in Upper Layer and Middle Layer excluding CICs, HFCs and SPDs, but includes companies presently under resolution as of June 10, 2025. Prior period consistency and comparability may be limited as NBFC data has been reclassified based on scale-based regulation. The effect of mergers and reclassifications, if any, has not been considered for recasting historical data.

Chart 2.28: Credit Profile of NBFCs *(Concld.)*

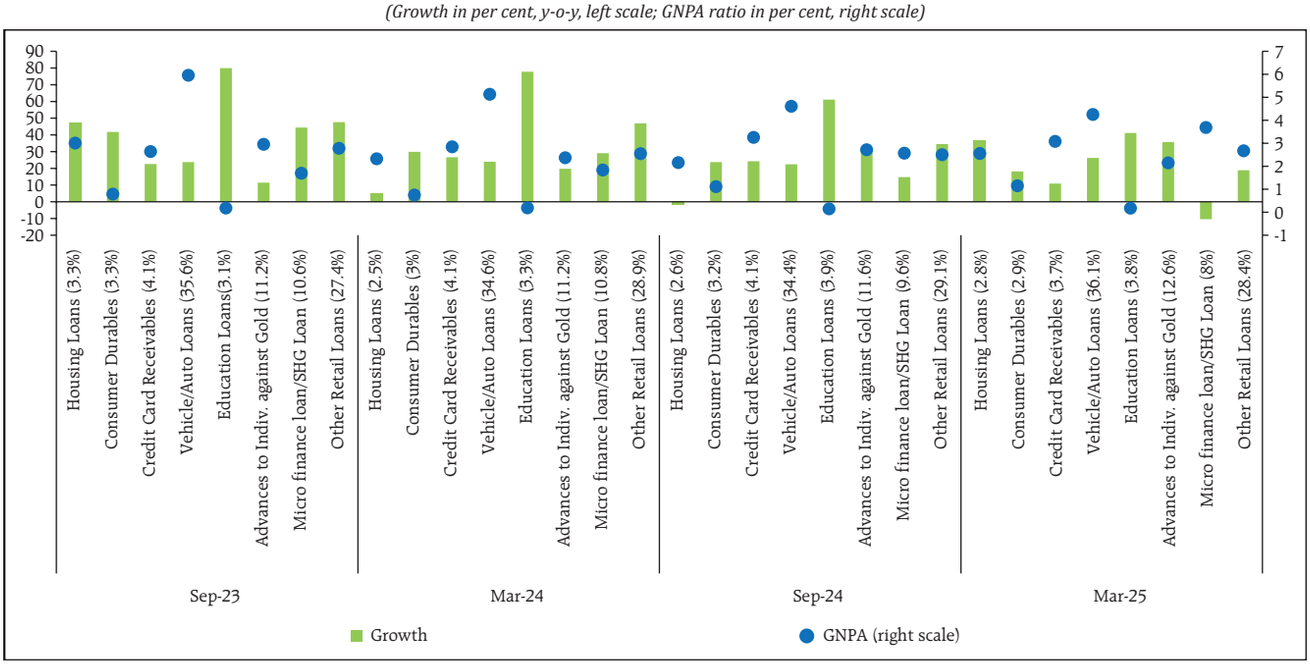


Note: Figures in bracket represent shares in outstanding loans of respective layer in Mar-25
Sources: RBI supervisory returns and staff calculations.

2.49 Credit growth weakened across all major sectors excluding services and 'others', in H2:2024-25 (Chart 2.28 c). The credit in agriculture sector contracted. The rate of credit expansion by the NBFC-ML significantly declined across sectors in 2024-25, except 'others' category.

2.50 Credit growth in the unsecured personal loan segment has slowed down significantly since September 2023. Microfinance/SHG loans within the retail advances category has contracted in March 2025. Gold loans, on the other hand, have clocked rapid growth since September 2023 (Chart 2.29).

Chart 2.29: Growth and Delinquency of Components of Retail Loans
(Growth in per cent, y-o-y, left scale; GNPA ratio in per cent, right scale)



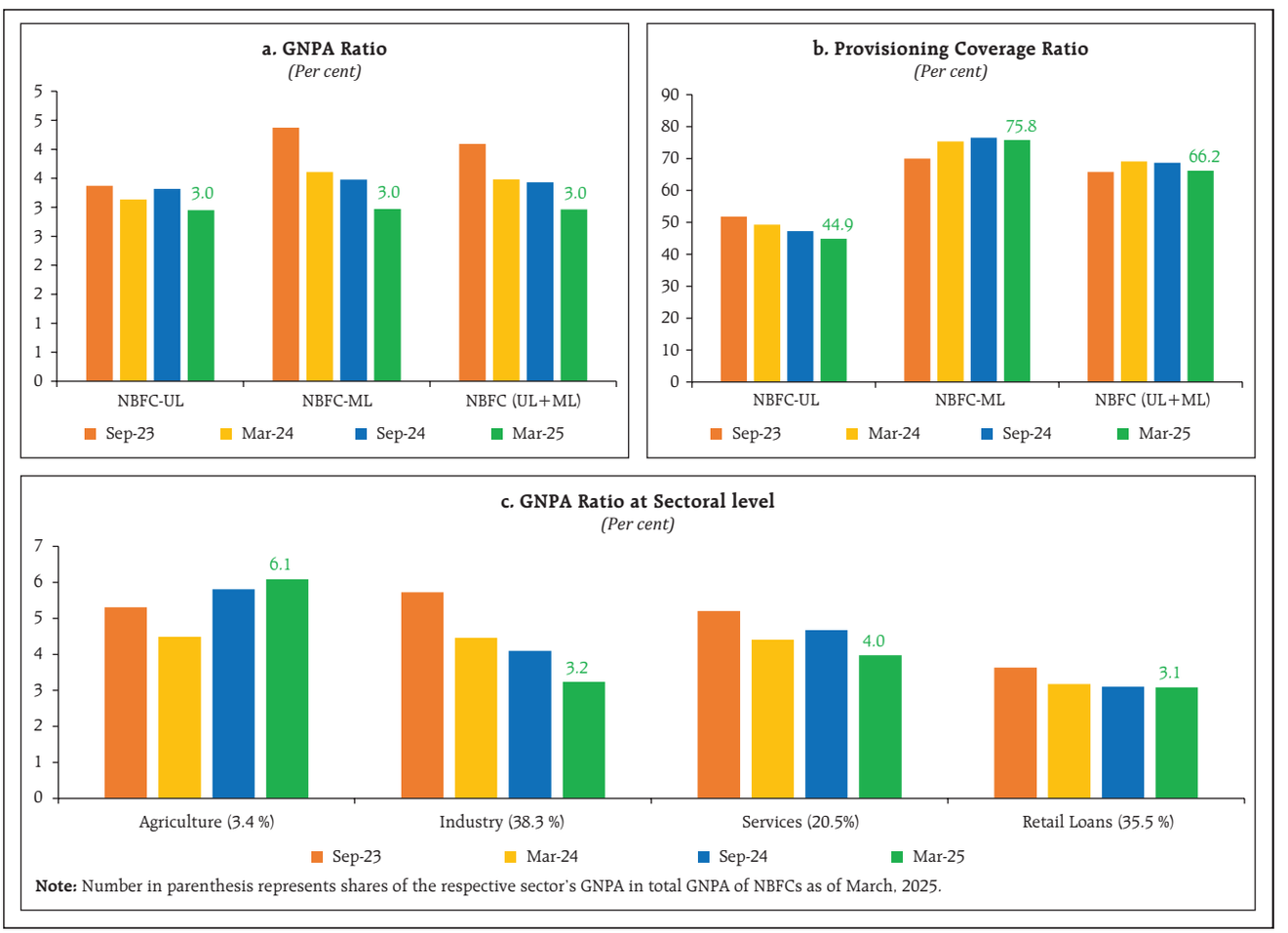
Note: Figure in parenthesis represents share of respective category of loans within retail sector at the end of each period. Residual share represents small loan categories like (i) advances against fixed deposits and (ii) advances to individuals against shares, bonds, *etc.*
Sources: RBI supervisory returns and staff calculations.

2.51 Delinquency level in both NBFC-UL and NBFC-ML improved (Chart 2.30 a). NBFC-ML continued to maintain higher PCR than NBFC-UL (Chart 2.30 b). GNPA ratio of Government-owned NBFCs (58.7 per cent share in advances by NBFC-ML) improved to 1.4 per cent while that of privately owned NBFCs of NBFC-ML remained at similar level (5.2 per cent) as in September 2024. At sectoral level, asset quality improved except in agriculture which contributed 3.4 per cent of the NBFCs' GNPA (Chart 2.30 c).

2.52 The system level CRAR of NBFCs was healthy at 25.8 per cent in March 2025. NBFC-UL were consistently maintaining an elevated NIM at around 8 per cent, as against around 4 per cent by NBFC-ML. Consequently, profitability of NBFC-UL was much higher than that of NBFC-ML in terms of ROA and ROE. Profitability of NBFC-ML has declined significantly in H2:2024-25 as a few large MFIs in this layer recorded significant amount of loss in the second half of the year (Chart 2.31).

2.53 On the liquidity front, upper layer NBFCs were more vulnerable, given that they had a higher proportion of short-term liabilities to total assets in comparison with NBFC-ML. The share of long-term assets in total assets of NBFC-UL stood at 55.0 per cent as against nearly two-thirds for NBFC-ML. Higher share in case of NBFC-ML is due to the presence of NBFC-IFCs in this layer which predominantly lend for longer term projects and

Chart 2.30: Asset Quality of NBFCs

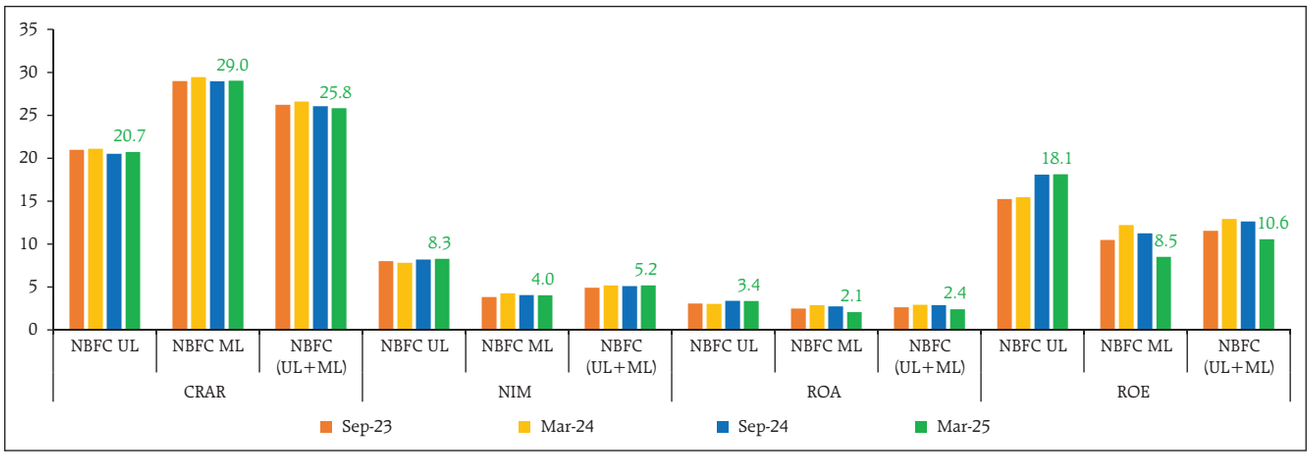


Note: Number in parenthesis represents shares of the respective sector's GNPA in total GNPA of NBFCs as of March, 2025.

Sources: RBI supervisory returns and staff calculations.

Chart 2.31: Capital Adequacy and Profitability

(Per cent)



Note: NIM = (Interest Income - Interest Expense) / Average (Gross loans and advances + Total Investments)
Sources: RBI supervisory returns and staff calculations.

account for more than half of NBFC-ML's loans (Chart 2.32).

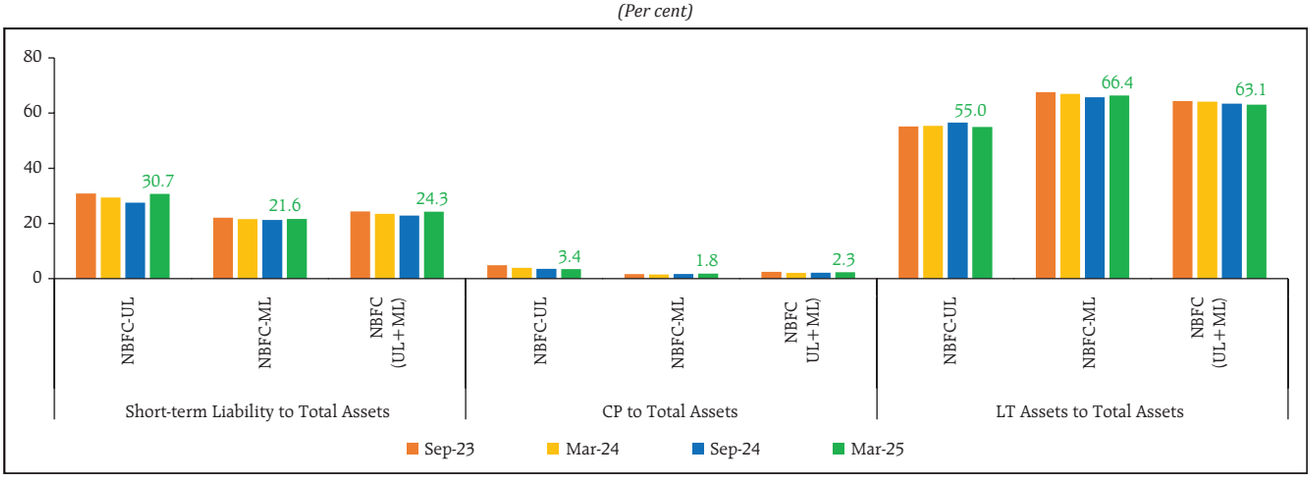
2.54 The reliance of NBFCs on bank funding decreased over the last year as the impact of higher risk weight on bank lending to NBFCs played out. Dependence of NBFC-UL on bank borrowings and public deposits was higher than NBFC-ML (Table 2.7).

II.3.1 Stress Test[46] - Credit Risk

2.55 System level stress test under a baseline and two stress scenarios was conducted on a sample of 158 NBFCs[47] over a one-year horizon for assessing the resilience of NBFC sector to credit risk shocks. While the baseline scenario was based on assumptions of business as usual, the medium and severe risk scenarios were derived by applying 1 SD and 2 SD shocks, respectively, to GNPA ratio.

Chart 2.32: Liquidity Stock Measures

(Per cent)



Sources: RBI supervisory returns and staff calculations.

[46] The detailed methodology used for stress tests of NBFCs is provided in Annex 2.

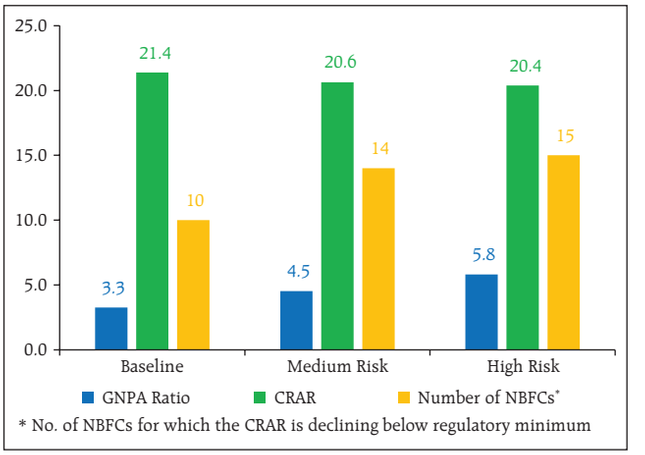
[47] The sample comprised of 158 NBFCs in the Upper Layer and Middle Layer with total advances of ₹26.94 lakh crore as of March 2025, which form around 95 per cent of total advances of non-Government NBFCs. The sample for stress test excluded Government NBFCs, companies presently under resolution, stand-alone primary dealers and investment focused companies.

Table 2.7: NBFCs' Sources of Funds
(Per cent)

Item Description	NBFC-UL		NBFC-ML		NBFC-(UL+ML)	
	Mar-24	Mar-25	Mar-24	Mar-25	Mar-24	Mar-25
1. Share Capital, Reserves and Surplus	19.0	18.6	24.0	24.5	22.8	22.8
2. Total Borrowings	69.1	71.1	67.6	67.5	68.0	68.5
Of which:						
2 (i) Borrowing from banks	30.1	29.9	25.0	24.0	26.3	25.7
2(ii) CPs subscribed by banks	0.8	0.8	0.2	0.2	0.3	0.4
2(iii) Debentures subscribed by banks	3.5	3.2	2.1	2.1	2.4	2.4
Total from banks [2(i)+2(ii)+2(iii)]	**34.4**	**33.8**	**27.3**	**26.4**	**29.0**	**28.6**
2(iv) CPs excluding 2(ii)	3.2	2.6	1.3	1.6	1.7	1.9
2(v) Debentures excluding 2(iii)	16.0	16.3	23.7	23.8	21.8	21.6
3. Public Deposits	7.2	6.0	0.5	0.5	2.1	2.1
4. Others	4.7	4.3	7.9	7.5	7.1	6.6
Total	**100**	**100**	**100**	**100**	**100**	**100**

Sources: RBI supervisory returns and staff calculations.

Chart 2.33: Credit Risk in NBFCs - System Level
(Per cent for GNPA ratio and CRAR, count for number of NBFCs)



Sources: RBI supervisory returns and staff calculations.

2.56 Under the baseline scenario, the system-level GNPA ratio of the sample NBFCs may rise from 2.9 per cent in March 2025 to 3.3 percent in March 2026. Consequently, their aggregate CRAR may dip to 21.4 per cent in March 2026 from 23.4 per cent in March 2025 (Chart 2.33). Under the baseline scenario, 10 NBFCs (all in middle layer) having a share of 2.1 per cent of total advances of all NBFCs (UL + ML) may breach the regulatory minimum capital requirement of 15 per cent. Under the medium and severe risk scenarios, income loss and additional provision requirements may further reduce the CRAR compare to the baseline by additional 80 bps and 100 bps, respectively. Under the high-risk scenario, fifteen NBFCs (all in middle layer), having a share of 3.7 per cent of total advances of all NBFCs (UL + ML), may not be able to meet the regulatory minimum CRAR.

II.3.2 Stress Test[48] - Liquidity Risk

2.57 The resilience of the NBFC sector to liquidity shocks was assessed by estimating the impact of assumed increase in cash outflows coupled with decline in cash inflows[49]. The results revealed that number of NBFCs which may experience negative cumulative liquidity mismatch of over 20 per cent in the next one year would be 1, 2 and 3 under the three scenarios, respectively (Table 2.8).

II.4 Stress Testing of Mutual Funds

2.58 The Securities and Exchange Board of India (SEBI) has mandated that asset management companies (AMCs) should carry out stress testing of all open-ended debt schemes (except overnight schemes) every month to evaluate the impact of various risk parameters (*viz.*, interest rate risk,

[48] The detailed methodology used for stress tests of NBFCs is provided in Annex 2.

[49] Stress testing based on liquidity risk was performed on a sample of 244 NBFCs in the Upper Layer and the Middle Layer. The total asset size of the sample was ₹ 36.01 lakh crore, comprising around 99 per cent of total assets of non-government, non-CIC NBFCs in the sector.

Table 2.8: Liquidity Risk in NBFCs

Cumulative mismatch as percentage of outflows over the next one year	No. of NBFCs having Negative Mismatch		
	Baseline	Medium	High
Over 50 per cent	0 (0.0)	0 (0.0)	0 (0.0)
Between 20 to 50 per cent	1 (0.0)	2 (0.4)	3 (0.7)
Between 15 and 20 per cent	1 (0.4)	1 (0.3)	12 (3.4)
Between 10 and 15 per cent	0 (0.0)	0 (0.0)	8 (4.7)
Between 5 and 10 per cent	1 (0.3)	12 (3.4)	11 (4.9)
Upto 5 per cent	0 (0.0)	6 (4.6)	10 (11.5)

Note: (i) Baselines scenario is based on projected outflows and inflows over the next one year; medium risk scenario assumes 5 per cent decrease in inflows and 5 per cent increase in outflows while high risk scenario assumes 10 per cent decrease in inflows and 10 per cent increase in outflows.
(ii) Figures in parentheses represent percentage share in asset size of the sample.
Sources: RBI supervisory returns and staff calculations.

credit risk, liquidity risk) related to such schemes on their net asset values (NAVs). The Association of Mutual Funds in India (AMFI) and each AMC specify the thresholds of impact for the risk parameters: breach of either the AMFI or the AMC threshold requires reporting and remedial action.

2.59 In April 2025, risk level of 43 open-ended debt schemes with total assets under management (AUM) of ₹2.25 lakh crore breached the AMFI or AMC prescribed threshold (Table 2.9). In this respect, all the mutual funds (MFs) have reported initiation of remedial action to be completed within the prescribed timeframe.

Table 2.9: Stress Testing of Open-Ended Debt Schemes of Mutual Funds – Summary Findings – April 2025

	Risk above Threshold	Risk below Threshold	Total
No. of AMCs	17	31	48
No. of Schemes	43*	269	312
AUM (₹ crore)	2,25,426	14,58,610	16,84,036

Note: * The number of schemes showing interest rate risk, credit risk and liquidity risk above the prescribed threshold are 35, 7 and 1, respectively, while total number of unique schemes showing risk is 43.
Source: SEBI.

2.60 Furthermore, as part of liquidity risk management for open-ended debt schemes, two types of liquidity ratios, *viz.*, (i) redemption at risk (LR-RaR), which represents likely outflows at a given confidence interval, and (ii) conditional redemption at risk (LR-CRaR), which represents the behaviour of the tail at the given confidence interval, have been used. All AMCs are mandated to maintain these liquidity ratios above the threshold limits which are derived from scheme type, scheme asset composition and potential outflows (modelled from investor concentration in the scheme). MFs are required to carry out backtesting of these liquidity ratios for all open-ended debt schemes (except overnight funds, gilt funds and gilt funds with 10-year constant duration) on a monthly basis.

2.61 The LR-RaR and LR-CRaR computed by top 10 AMCs (based on AUM) for 13 categories of open-ended debt schemes for March 2025 were well above the respective threshold limits for most of the MFs. A few instances of the ratios falling below the threshold limits were addressed by the respective AMCs in a timely manner (Chart 2.34).

2.62 Stress tests results and liquidity analysis of midcap and smallcap equity schemes of all MFs, published by AMFI, reveal that in April 2025, the number of days to liquidate 25 per cent of the portfolio for the top 5 schemes (in terms of AUM) ranged from 4 to 20 days for midcap schemes and 13 to 35 days for smallcap schemes (Table 2.10).

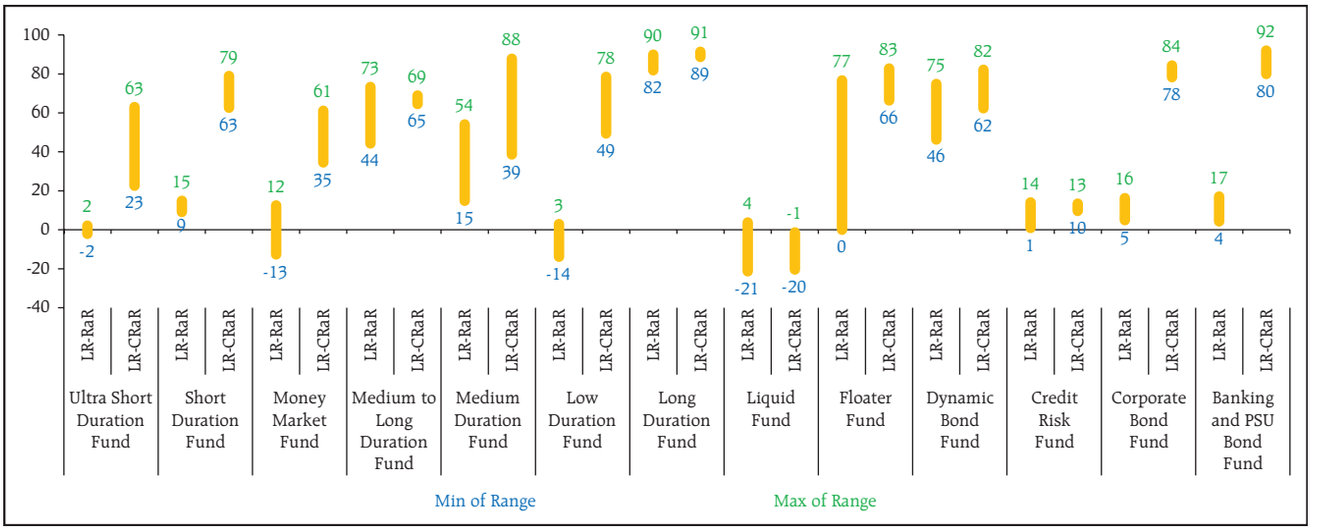
II.5 Stress Testing Analysis at Clearing Corporations

2.63 Stress testing[50] has been carried out at clearing corporations (CCs) to determine the segment-wise minimum required corpus (MRC), which needs to be contributed by clearing members (CMs) to the core settlement guarantee fund

[50] The methodology used for stress testing at clearing corporations is given in Annex 2.

Chart 2.34: Range (Surplus (+)/ Deficit (-)) of LR-RaR and LR-CRaR Maintained by AMCs over AMFI Prescribed Limits

(Per cent)



Note: Data pertains to top 10 AMCs based on AUM as on March 31, 2025.
Source: SEBI.

(Core SGF). MRC is determined for each segment (*viz.*, equity cash, equity derivatives, currency derivatives, commodity derivatives, debt and tri-party repo segment) every month, based on stress testing.

2.64 The actual MRC for any given month is determined as the higher of the MRC of the month and the MRC arrived at any time in the past. Stress test analysis for the half-year during October 2024 to March 2025 indicated that the actual MRC requirement remained the same for most of the segments, except for the equity derivatives segment wherein the MRC requirement increased significantly due to the revised Circular by SEBI ensuring higher buffer to the probable losses in more adverse scenarios[51] (Table 2.11).

Table 2.10: Summary of Stress Tests and Liquidity Analysis of MF Midcap and Smallcap Schemes

Schemes/Month		Midcap Schemes					Smallcap Schemes				
		Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25
No. of days to liquidate 25 per cent of portfolio-range for top 5 schemes w.r.t. AUM		5 to 22	4 to 24	4 to 23	4 to 22	4 to 20	12 to 36	14 to 32	15 to 31	13 to 32	13 to 35
Concentration - Assets side (AUM held in per cent)	Largecap	12.2	12.9	11.6	11.8	11.3	7.4	7.6	8.2	8.1	8.2
	Midcap	68.9	65.6	67.0	67.4	67.9	11.1	12.0	11.6	11.5	11.3
	Smallcap	14.0	15.4	14.6	14.0	13.7	75.3	73.9	71.2	73.0	73.0
	Cash	4.9	6.1	6.7	6.8	7.1	6.3	6.5	9	7.4	7.6

Source: AMFI.

[51] As per SEBI Circular on "Review of Stress Testing Framework for Equity Derivatives Segment for Determining the Corpus of Core Settlement Guarantee Fund (Core SGF)" dated October 01, 2024, SEBI introduced additional stress testing scenarios / methodologies for determining the Minimum Required Corpus (MRC) of Core SGF in the equity derivatives segment. The increase in values of MRC and Average Stress Test Losses observed from October 2024 in the Equity Derivatives Segments is due to such additional stress testing scenarios / methodologies. SEBI, vide letter dated May 03, 2024, had advised Clearing Corporation 1 to augment its Core-SGF in equity derivatives segment to at least ₹10,500 crore within six months. This was done after the study conducted by Clearing Corporation 1 which projected that its stress test losses could significantly rise over next three years.

Table 2.11: Minimum Required Corpus of Core SGF Based on Stress Testing Analysis at Clearing Corporations

(Amount in ₹ crore)

Segment	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25
Clearing Corporation 1						
Average Stress Test Loss						
Equity Cash Segment	60	67	55	50	63	66
Equity Derivatives Segment	8,351	7,310	7,715	7,202	7,334	6,721
Currency Derivatives Segment	138	143	155	161	156	125
Debt Segment	0	0	0	0	0	0
Tri-Party Repo Segment	0	0	0	0	0	0
Commodity Derivatives Segment	3	1	2	6	4	2
Total	8,552	7,521	7,926	7,418	7,556	6,914
Actual MRC Requirement						
Equity Cash Segment	388	388	388	388	388	388
Equity Derivatives Segment	2,616	10,500	10,500	10,500	10,500	10,500
Currency Derivatives Segment	242	242	242	242	242	242
Debt Segment	4	4	4	4	4	4
Tri-Party Repo Segment	17	17	17	17	17	17
Commodity Derivatives Segment	10	10	10	10	10	10
Total	3,277	11,161	11,161	11,161	11,161	11,161
Clearing Corporation 2						
Average Stress Test Loss						
Equity Cash Segment	20	17	25	17	26	29
Equity Derivatives Segment	423	555	494	426	522	549
Currency Derivatives Segment	0	1	2	0	3	1
Debt Segment	0	0	0	0	0	0
Tri-Party Repo Segment	0	0	0	0	0	0
Commodity Derivatives Segment	0	0	0	0	0	0
Total	443	573	520	444	551	579
Actual MRC Requirement						
Equity Cash Segment	194	194	194	194	194	194
Equity Derivatives Segment	74	74	423	555	555	555
Currency Derivatives Segment	388	388	388	388	388	388
Debt Segment	0	0	0	0	0	0
Tri-Party Repo Segment	0	0	0	0	0	0
Commodity Derivatives Segment	14	14	14	14	14	14
Total	670	670	1019	1151	1151	1151
Clearing Corporation 3 (Commodity Derivatives Segment)						
Average Stress Test Loss	63	63	69	76	74	73
Actual MRC requirement	124	124	124	124	124	124
Clearing Corporation 4 (Commodity Derivatives Segment)						
Average Stress Test Loss	429	461	521	537	354	388
Actual MRC requirement	626	626	626	626	626	626

Note: Average Stress Test Loss calculated for a month M is applicable, as MRC, from the month M+2.

Source: Clearing Corporations.

II.6 Insurance Sector

2.65 The solvency ratio of an insurance company assesses the ability of the insurer to meet its obligations towards policyholders by reflecting the level of its assets over and above its liabilities. The minimum solvency ratio prescribed by the Insurance Regulatory and Development Authority of India (IRDAI) for insurance companies in India is 150 per cent. As insurance liabilities are contingent upon future events, a higher solvency ratio implies resilience of the insurer to withstand future uncertainties.

2.66 As of December 2024, and the previous three quarters, the aggregate solvency ratio for insurance companies remained above the prescribed threshold (Table 2.12). The solvency ratio of the life insurance companies remained at 204 per cent, while non-life insurance companies maintained a solvency ratio of 166 per cent as of December 2024.

II.7 Interconnectedness

2.67 Interconnections among financial institutions involve funding gaps arising due to liquidity mismatches and maturity transformation, payments processes, and risk transfer mechanisms. The financial system can be visualised as a network where financial institutions act as nodes and the bilateral exposures among them serve as links connecting these nodes. These links could be in the form of loans to, investments in, or deposits with each other, which act as a source of funding,

Table 2.12: Solvency Ratio of Insurance Sector

(Per cent)

Solvency Ratio as at	Life Insurance Sector	Non-life Insurance Sector
Mar-24	200	166
Jun-24	202	167
Sep-24	201	169
Dec-24	204	166

Source: IRDAI.

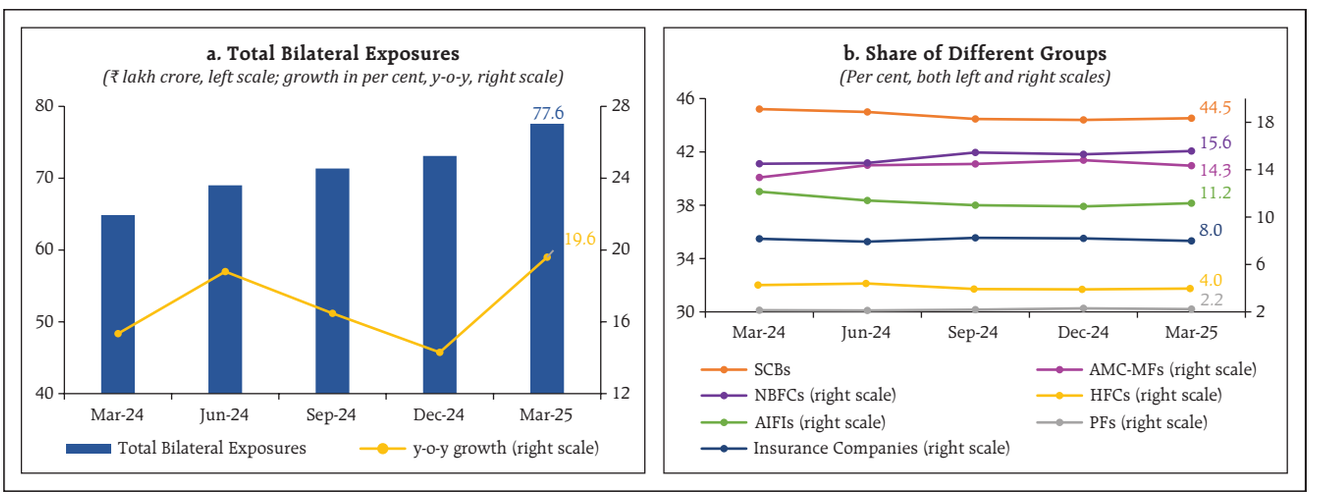
liquidity, investment and risk diversification. While these links enable gains in efficiency and diversification of risks, they can become conduits of risk transmission and amplification in a crisis. Understanding the nuances in propagation of risk through networks is useful for devising appropriate policy responses for safeguarding financial and macroeconomic stability.

II.7.1 Financial System Network[52 53]

2.68 The total outstanding bilateral exposures[54] among the select 229 entities in the Indian financial system expanded at a growth rate of 19.6 per cent in March 2025 (Chart 2.35 a and b).

2.69 Long-term (LT) funding – primarily loans and advances, equity and LT debt instruments – was the key conduit for bilateral exposure in the system (Chart 2.36). A segment-wise analysis indicates that, in general, (a) LT loans continued to be mainly provided by SCBs to NBFCs; (b) AMC-MFs continued to be major investors in the equities issued by PVBs and NBFCs; (c) in the LT debt market, insurance companies held majority of instruments issued by PVBs, NBFCs and HFCs. In short-term (ST) funding, the inter-bank ST loans and deposits, CPs and CDs continued to be dominant. AMC-MFs continued to be the largest providers of funds in both the CP and CD markets. While AIFIs, NBFCs and HFCs were the largest receivers of fund in the CP market, PSBs, PVBs and AIFIs were the largest receivers in the CD market.

Chart 2.35: Bilateral Exposures between Entities in the Financial System



Note: Exposures between entities of the same group as well as different groups are included.
Sources: Supervisory returns of various regulators and RBI staff calculations.

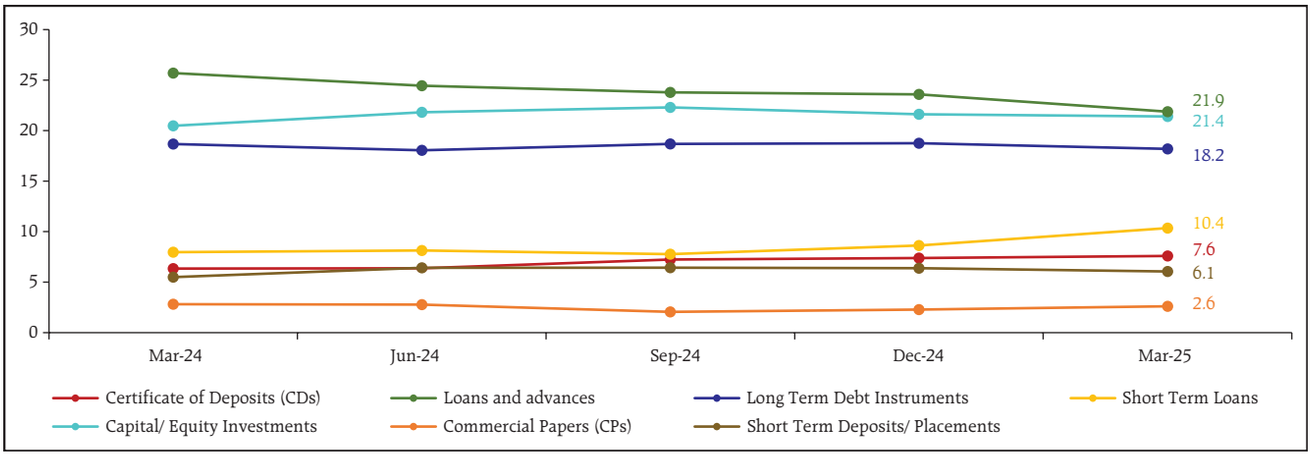
[52] The network model used in the analysis has been developed by Professor Sheri Markose (University of Essex) and Dr. Simone Giansante (Bath University) in collaboration with the Financial Stability Department, RBI.

[53] The analyses are based on data of 229 entities from the following eight categories: SCBs, scheduled UCBs (SUCBs), AMC-MFs, NBFCs, HFCs, insurance companies, pension funds and AIFIs. Number of entities included are 88 SCBs, 20 SUCBs; 25 AMC-MFs (which cover more than 98 per cent of the AUMs of the mutual fund sector); 42 NBFCs (both deposit taking and non-deposit taking systemically important companies, which represent about 70 per cent of total NBFC assets); 22 insurance companies (which cover more than 95 per cent of assets of the sector); 17 HFCs (which cover more than 80 per cent of total HFC assets); 10 PFs and 5 AIFIs (NABARD, EXIM Bank, NHB, SIDBI and NaBFID).

[54] Includes exposures between entities of the same group as well as different groups. Exposures are outstanding position as on March 31, 2025 and are broadly divided into fund-based and non-fund-based exposure. Fund-based exposure includes money market instruments, deposits, loans and advances, long-term debt instruments and equity investments. Non-fund-based exposure includes letter of credit, bank guarantee and derivative instruments (excluding settlement guaranteed by CCIL).

Chart 2.36: Instrument-wise Exposure among Entities in the Financial System

(Per cent)



Note: Exposures between entities of the same group as well as different groups are included.
Sources: Supervisory returns of various regulators and RBI staff calculations.

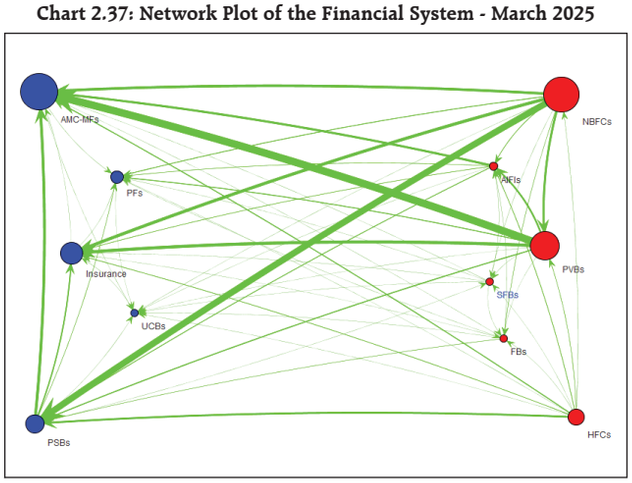
2.70 In terms of inter-sectoral net exposures[55], AMC-MFs, insurance companies and PSBs remained the largest fund providers in the system and NBFCs, PVBs and HFCs were the largest receivers of funds. Among bank groups, PSBs and UCBs had net receivable positions whereas PVBs, FBs and SFBs had net payable positions *vis-à-vis* the entire financial sector (Chart 2.37).

2.71 The net receivable and net payable positions of leading fund providers and receivers recorded a gradual rise in March 2025 over a year ago (Chart 2.38).

a. Inter-Bank Market

2.72 Inter-bank exposures stood at 3.4 per cent of the total assets of the banking system in March

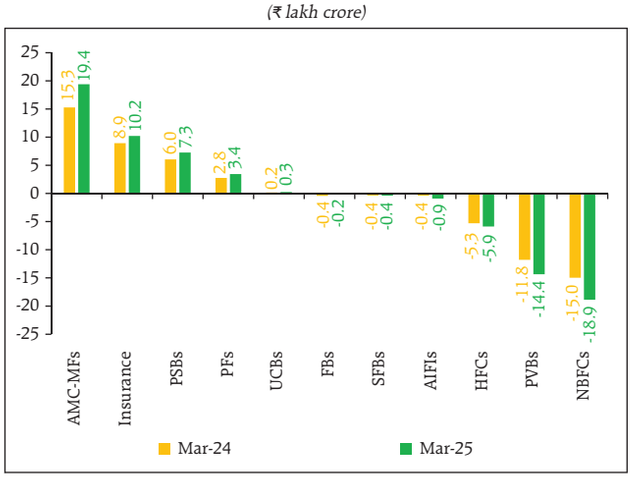
Chart 2.37: Network Plot of the Financial System - March 2025



Note: Receivables and payables do not include transactions among entities of the same group. Red circles are net payable institutions and the blue ones are net receivable institutions.
Sources: Supervisory returns of various regulators and RBI staff calculations.

Chart 2.38: Net Receivables (+ve)/ Payables (-ve) by Institutions

(₹ lakh crore)

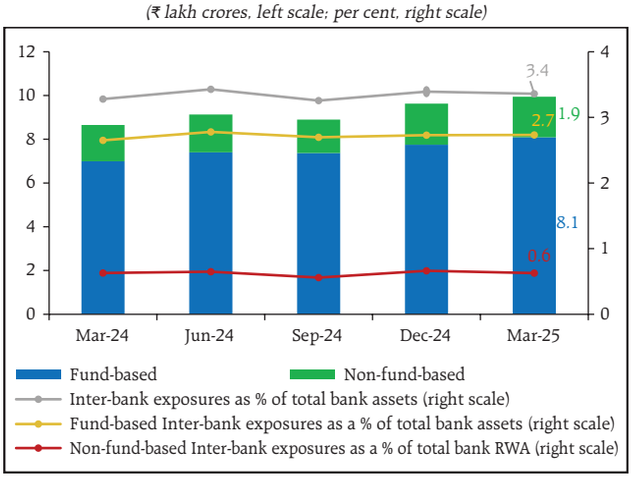


Note: Receivables and payable do not include transactions among entities of the same group.
Sources: Supervisory returns of various regulators and RBI staff calculations.

[55] Inter-sectoral exposures do not include transactions among entities of the same sector in the financial system.

Chart 2.39: Inter-Bank Market

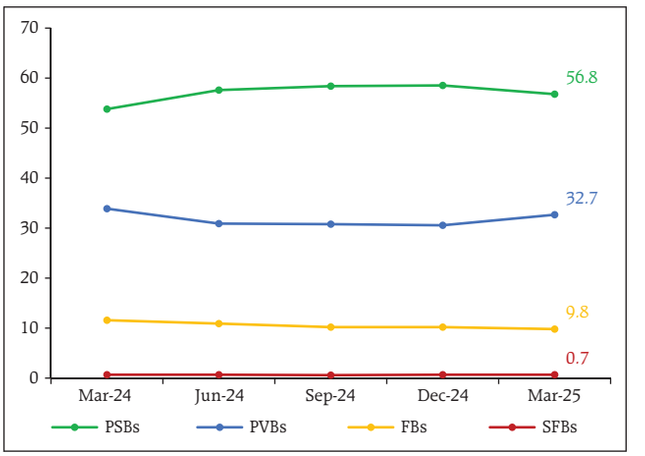
(₹ lakh crores, left scale; per cent, right scale)



Sources: RBI supervisory returns and staff calculations.

Chart 2.40: Contribution of Different Bank Groups in the Inter-Bank Market

(Per cent)



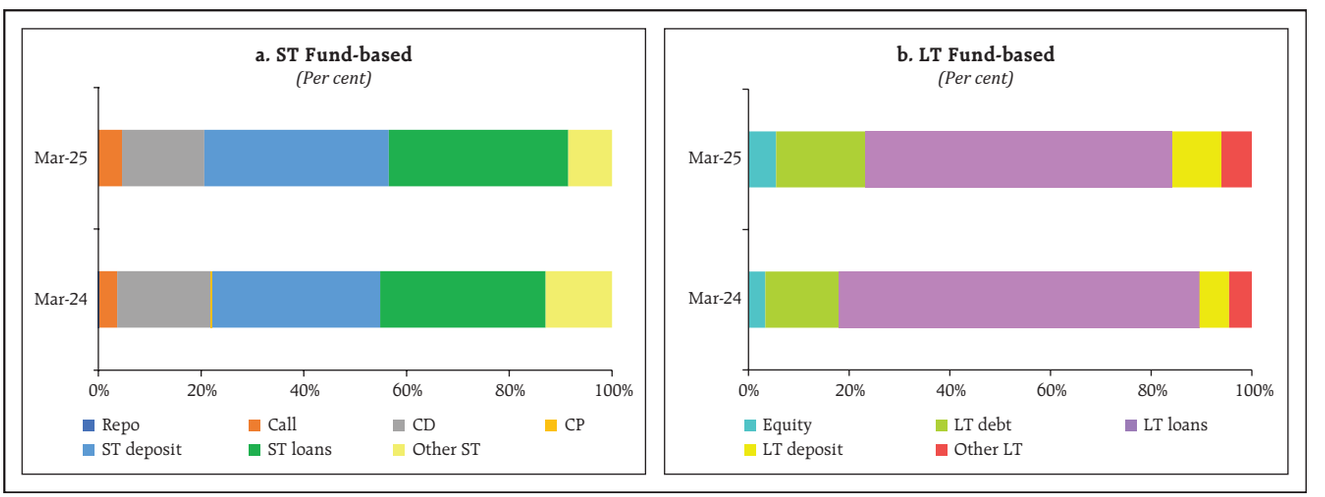
Sources: RBI supervisory returns and staff calculations.

2025, at around the same level as in the past quarters. During H2:2024-25, fund-based exposure witnessed a significant increase, though its share in total bank assets remained stagnant, while non-fund-based exposures rose marginally (Chart 2.39).

2.73 PSBs continued to dominate the inter-bank market with more than 50 per cent share. The share of PSBs and FBs moderated with corresponding increase in the share of PVBs in H2:2024-25 (Chart 2.40).

2.74 Contrary to the dominance of the LT fund-based exposures in the overall financial network, the inter-bank market continued to rely heavily on ST funding – to the tune of 77 per cent of the fund-based inter-bank market as of March 2025. ST deposits and ST loans constituted more than 70 per cent of ST funds, while LT loans and LT Debt comprised a major share of LT funds (Chart 2.41 a and b).

Chart 2.41: Composition of Fund-based Inter-Bank Market



Sources: RBI supervisory returns and staff calculations.

b. Inter-Bank Market: Network Structure and Connectivity

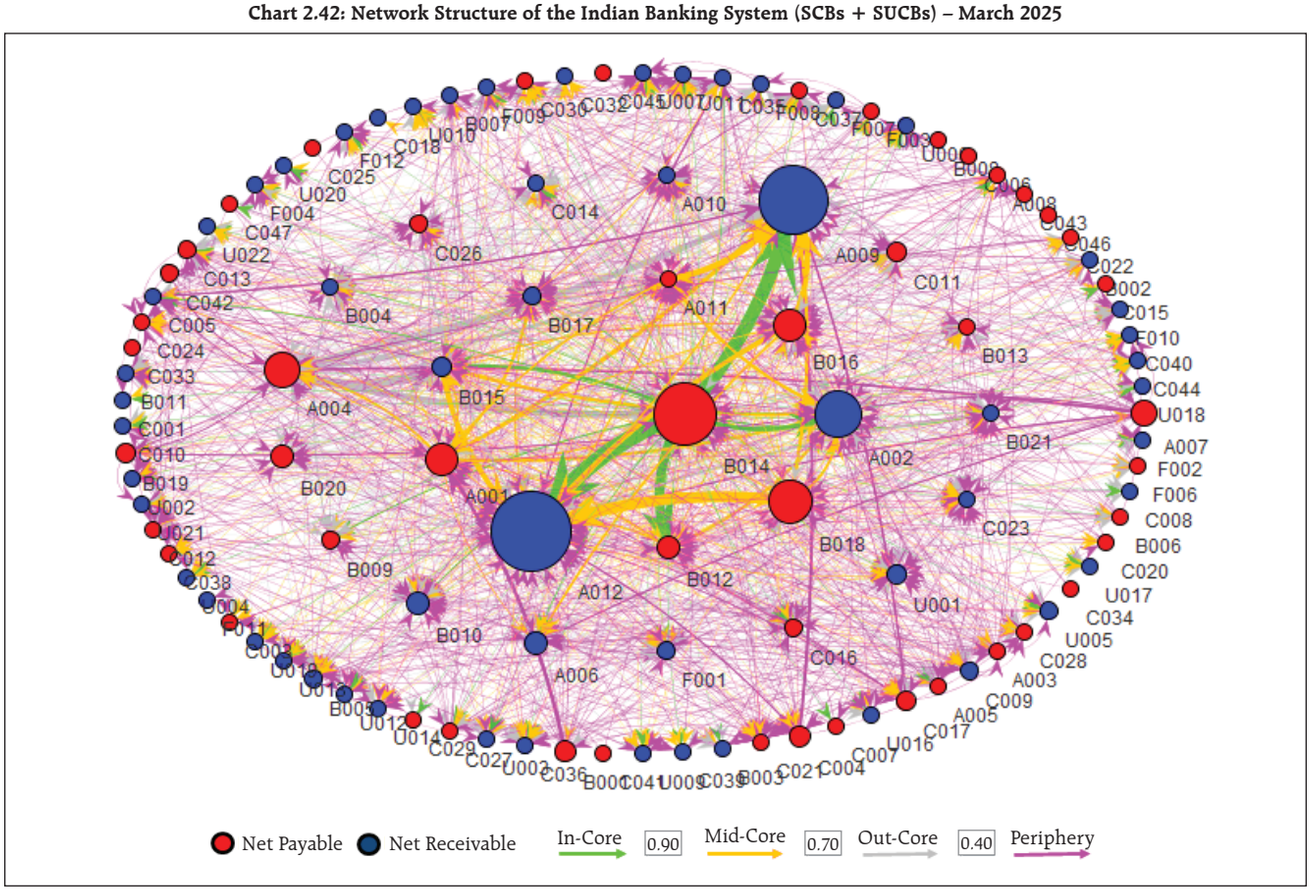
2.75 The interconnection between entities in the inter-bank market network was highly skewed, with majority of banks having few links and few banks having many links, as reflected by the typical core-periphery network structure[56] [57]. As of end-March 2025, one bank was in the inner-most core and nine banks in the mid-core circle consisting of PSBs and PVBs (Chart 2.42).

2.76 While the degree of interconnectedness among SCBs, measured by the connectivity ratio, remained unchanged in H2:2024-25, their local interconnectedness in terms of the cluster coefficient increased marginally (Chart 2.43).

c. Exposure of AMCs-MFs

2.77 Gross receivables of AMC-MFs, the largest fund providers, stood at ₹20.68 lakh crore (around 32 per cent of their average AUM) in March 2025 as against their gross payables of ₹1.26 lakh crore. SCBs

Chart 2.42: Network Structure of the Indian Banking System (SCBs + SUCBs) – March 2025



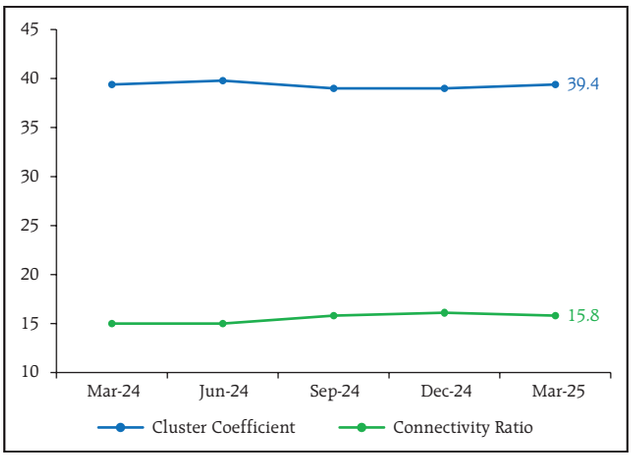
Sources: RBI supervisory returns and staff calculations.

[56] The diagrammatic representation of the network of the banking system is that of a tiered structure, in which different banks have different degrees or levels of connectivity with others in the network. The most connected banks are in the inner-most core (at the centre of the network diagram). Banks are then placed in the mid-core, outer core and the periphery (concentric circles around the centre in the diagram), based on their level of relative connectivity. The colour coding of the links in the tiered network diagram represents borrowings from different tiers in the network (for example, the green links represent borrowings from the banks in the inner core). Each ball represents a bank and they are weighted according to their net positions *vis-à-vis* all other banks in the system. The lines linking each bank are weighted on the basis of outstanding exposures.

[57] 88 SCBs and 20 SUCBs were considered for this analysis.

Chart 2.43: Connectivity Statistics of the Banking System (SCBs)

(Ratio)



Sources: RBI supervisory returns and staff calculations.

(primarily PVBs) remained the major recipients of funds from AMC-MFs, followed by NBFCs, AIFIs and HFCs. More than half of the funding by the AMC-MFs continued to be in the form of equity holdings (Chart 2.44 a and b).

d. Exposure of Insurance Companies

2.78 With gross receivables at ₹11.12 lakh crore against gross payables at ₹0.91 lakh crore, insurance companies were the second largest net providers of funds to the financial system as at end-March 2025. SCBs (primarily PVBs) were the largest recipients of their funds, followed by NBFCs and HFCs. Insurance companies provided funds mostly through LT debt and equity, accounting for 90 per cent of receivables, with limited exposure to ST instruments (Chart 2.45 a and b).

e. Exposure to NBFCs (non-HFC)

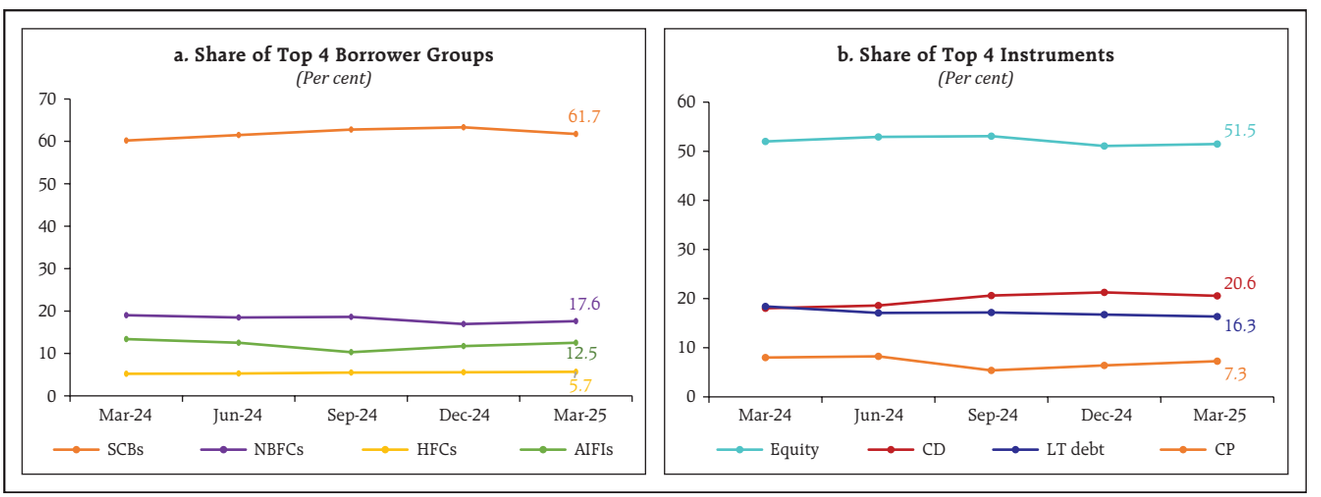
2.79 NBFCs (non-HFCs) were the largest net borrowers of funds from the financial system, with gross payables at ₹21.15 lakh crore against gross receivables at ₹2.26 lakh crore as at end-March 2025. More than half of their funds continued to be sourced from SCBs, followed by insurance companies and AMC-MFs (Chart 2.46 a).

2.80 NBFCs (non-HFCs) garnered more than 70 per cent of funds through LT Loans and LT Debt, though the share of both continued to decline in H2:2024-25. The share of ST funding instruments (ST Loans and CPs) increased during the same period (Chart 2.46 b).

f. Exposure to HFCs

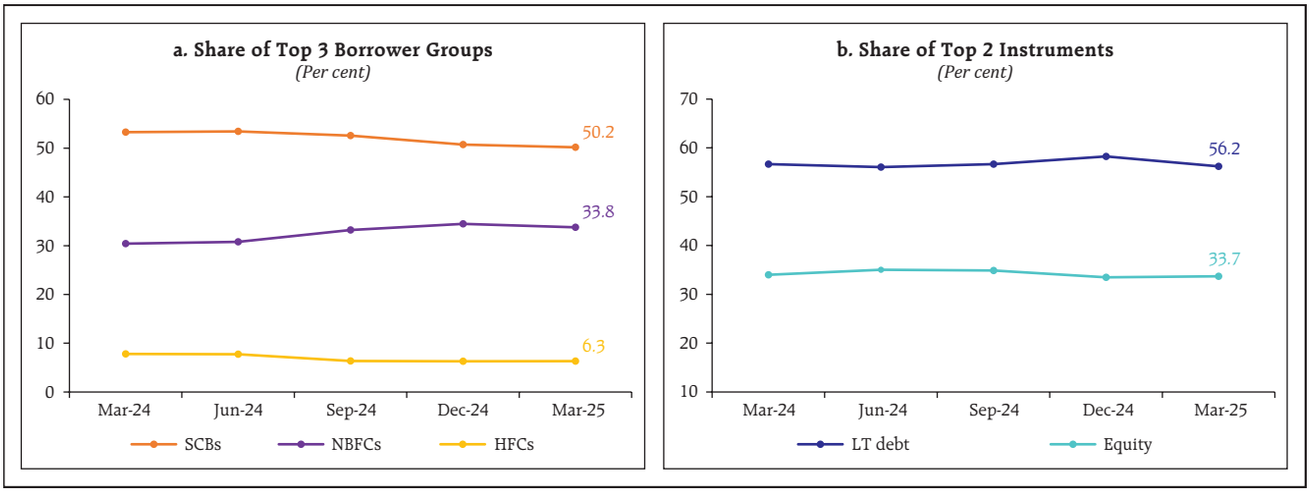
2.81 HFCs, the third largest net borrowers, had gross payables at ₹6.00 lakh crore as against gross

Chart 2.44: Gross Receivables of AMC-MFs from the Financial System



Sources: Supervisory returns of various regulators and RBI staff calculations.

Chart 2.45: Gross Receivables of Insurance Companies from the Financial System



Sources: Supervisory returns of various regulators and RBI staff calculations.

receivables of ₹0.14 lakh crore in March 2025. While SCBs continued to be the top fund providers, their share was seen to gradually decline with corresponding increase in funding from AMC-MFs. About 75 per cent of HFCs' funds was sourced through LT loans and LT debt instruments (Chart 2.47 a and b).

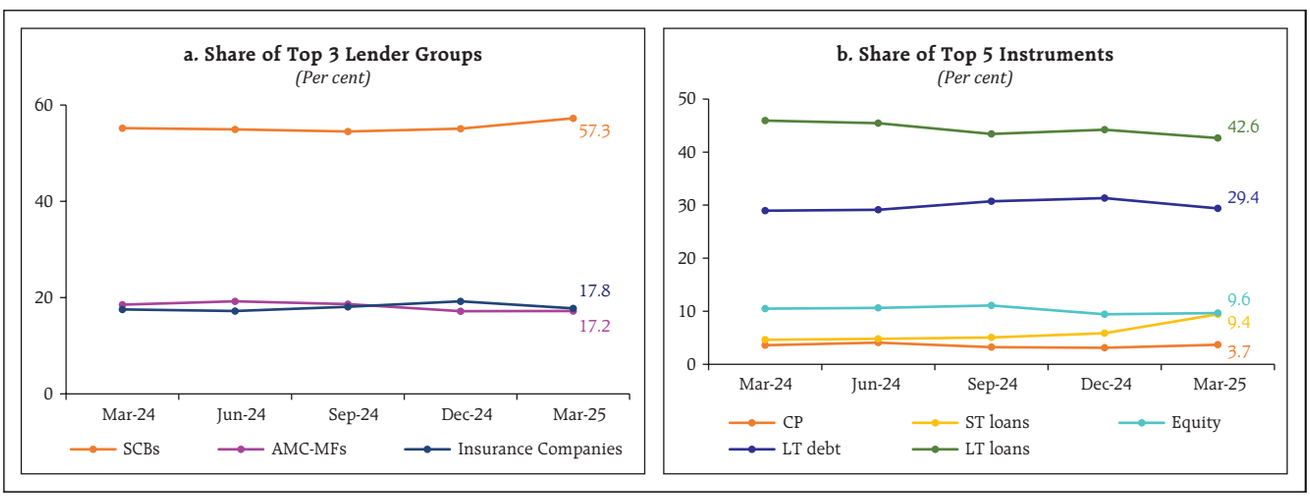
g. Exposure of AIFIs

2.82 With gross payables and receivables at ₹9.06 lakh crore and ₹8.14 lakh crore, respectively, AIFIs were both active borrower and lender in the financial system and had net payable position of less than ₹1 lakh crore in March 2025. While the AIFIs raised funds mainly from SCBs, AMC-MFs and insurance companies, they were observed to lend to SCBs predominantly (83 per cent in March 2025) (Chart 2.48 a and b).

II.7.2 Contagion Analysis

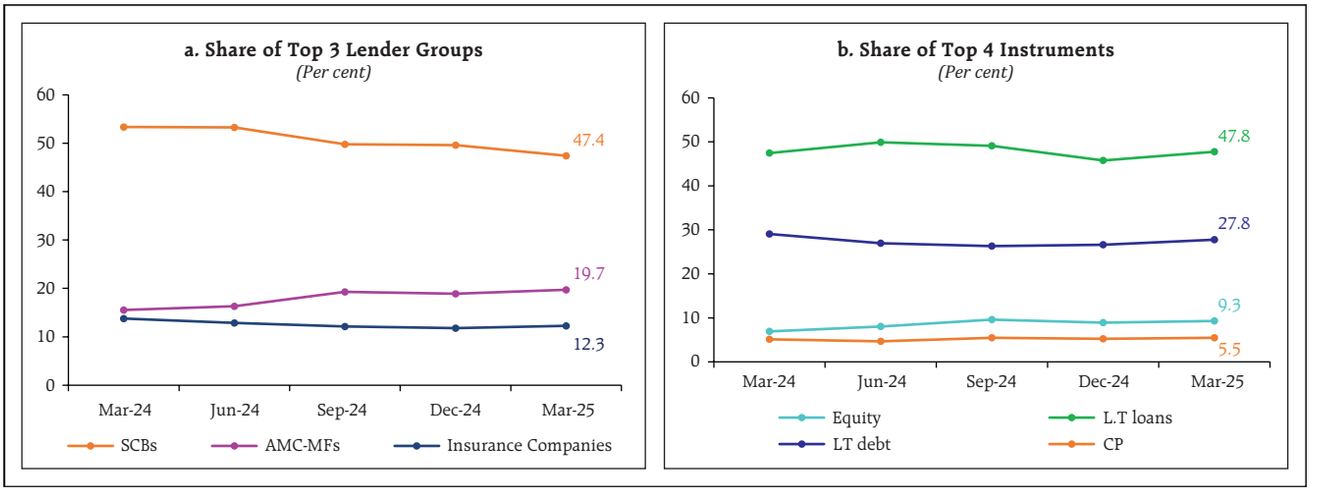
2.83 Contagion analysis uses network technology to estimate the systemic importance of different financial institutions. The failure of a bank due to solvency and / or liquidity losses could lead to

Chart 2.46: Gross Payables of NBFCs to the Financial System



Sources: Supervisory returns of various regulators and RBI staff calculations.

Chart 2.47: Gross Payables of HFCs to the Financial System



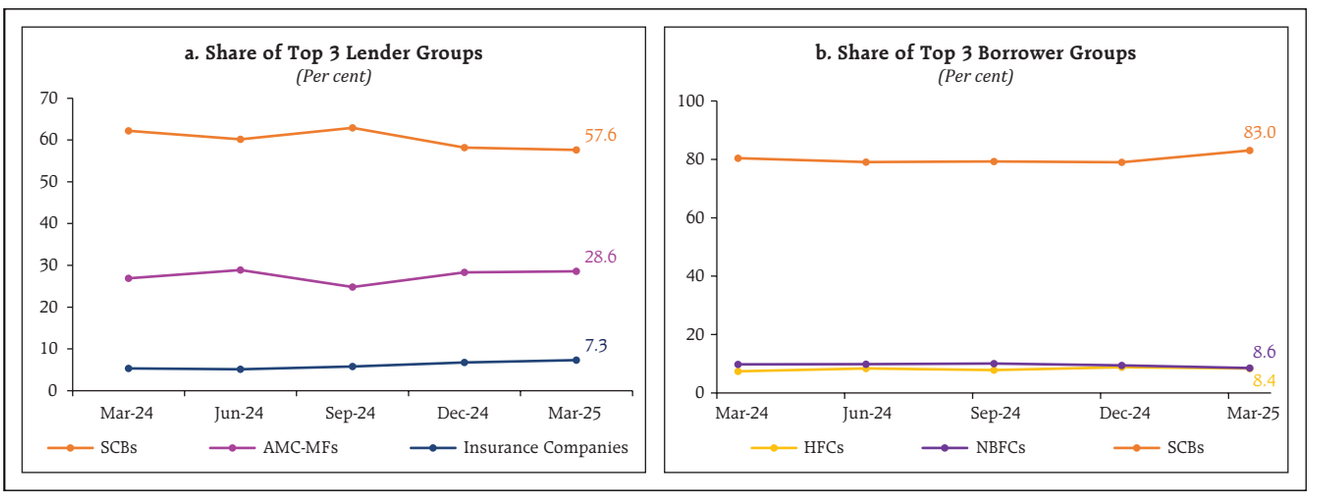
Sources: Supervisory returns of various regulators and RBI staff calculations.

contagion impact on the banking system along with the financial system depending upon the number, nature (whether it is a lender or a borrower) and magnitude of the interconnections that it has with the rest of the banking system.

a. Joint Solvency[58]- Liquidity[59] Contagion Impact on SCBs due to Bank Failure

2.84 A contagion analysis of the banking network as at the end-March 2025 position indicated that the hypothetical failure of the bank with the maximum

Chart 2.48: Gross Payables/Receivables of AIFIs to/from the Financial System



Sources: RBI supervisory returns and staff calculations.

[58] In solvency contagion analysis, gross loss to the banking system owing to a domino effect of hypothetical failure of one or more borrower banks is ascertained. Failure criterion for contagion analysis has been taken as Tier 1 capital falling below 7.5 per cent for SFBs, while 7 per cent for other banks.

[59] In liquidity contagion analysis, a bank is considered to have failed when its liquid assets are not enough to tide over a liquidity stress caused by the hypothetical failure of a large net lender. Liquid assets are measured as: 18 per cent of NDTL + excess SLR + excess CRR.

Table 2.13: Simulated Contagion Losses due to Hypothetical Bank Failure – March 2025

Name of Bank	Solvency Losses as per cent of Tier 1 Capital of the Banking System	Liquidity Losses as per cent of HQLA	Number of Banks Defaulting due to Solvency	Number of Banks Defaulting due to Liquidity
Bank 1	3.4	0.3	0	0
Bank 2	2.2	0.4	0	1
Bank 3	1.7	0.1	0	0
Bank 4	1.3	0.0	0	0
Bank 5	1.2	0.1	0	0

Note: Top five 'Trigger banks' have been selected on the basis of solvency losses caused to the banking system.
Sources: RBI supervisory returns and staff calculations.

capacity to cause contagion losses would cause a solvency loss of 3.4 per cent of total Tier 1 capital of SCBs and liquidity loss of 0.3 per cent of total HQLA of the banking system (Table 2.13).

b. Solvency Contagion Impact on SCBs due to NBFC/ HFC Failure

2.85 As NBFCs (non-HFCs) and HFCs are among the largest borrowers of funds from the financial system, with a substantial part of funding from the banks, failure of any NBFC or HFC will act as a solvency shock to their lenders which can spread through contagion.

2.86 By end-March 2025, hypothetical failure of the NBFC with the maximum capacity to cause solvency losses to the banking system would have knocked off 2.9 per cent of the latter's total Tier 1 capital but it would not lead to failure of any bank. Similarly, hypothetical failure of the HFC with the maximum capacity to cause solvency losses to the banking system would have knocked off 3.7 per cent of the latter's total Tier 1 capital but without failure of any bank (Tables 2.14 and 2.15).

Table 2.14: Simulated Contagion Losses due to Hypothetical NBFC Failure – March 2025

NBFC Name	Solvency Losses as per cent of Tier 1 Capital of the Banking System	Number of Banks Defaulting due to Solvency
NBFC 1	2.9	0
NBFC 2	2.6	0
NBFC 3	2.4	0
NBFC 4	1.9	0
NBFC 5	1.9	0

Note: Only Private NBFCs are considered. Top five 'Trigger NBFCs' have been selected on the basis of solvency losses caused to the banking system.
Sources: RBI supervisory returns and staff calculations.

Table 2.15: Simulated Contagion Losses due to Hypothetical HFC Failure – March 2025

HFC Name	Solvency Losses as per cent of Tier 1 Capital of the Banking System	Number of Banks Defaulting due to Solvency
HFC 1	3.7	0
HFC 2	1.3	0
HFC 3	1.0	0
HFC 4	0.8	0
HFC 5	0.5	0

Note: Top five 'Trigger HFCs' have been selected on the basis of solvency losses caused to the banking system.
Sources: RBI supervisory returns and staff calculations.

2.87 Further, in terms of the impact and vulnerability metrics developed for identification of impactful and vulnerable banks, two banks were common between the sets of top ten highly impactful banks and top ten highly vulnerable banks[60] in March 2025.

[60] The detailed methodology is given in Annex 2.

c. Solvency Contagion Impact after Macroeconomic Shocks to SCBs

2.88 Any contagion from failure of a bank is likely to get magnified if macroeconomic shocks result in distress to the banking system. In such a situation, similar shocks may cause some SCBs to fail the solvency criterion, which, then, acts as a trigger for further solvency losses. In the previous iteration, shock was applied to the entity that could cause the maximum solvency contagion losses. Here, we consider another iteration, where the initial impact on an individual bank's capital is taken from the macro stress test[61] results. The initial capital loss(+)/gain(-) stood at (-) 2.64 per cent, 13.83 per cent and 11.70 per cent of Tier I capital for baseline, adverse scenario 1 and adverse scenario 2, respectively. Further, all banks would be able to maintain Tier I capital ratio of 7 per cent under all three scenarios. It is observed that there would be no additional solvency losses to the banking system due to contagion (over and above the initial loss of capital due to the macro shocks).

[61] The contagion analysis used the results of the macro-stress tests and made the following assumptions:

(a) The projected losses under a macro scenario (calculated as reduction in projected Tier 1 CRAR, in percentage terms, in March 2027 with respect to the actual value in March 2025) were applied to the March 2025 capital position assuming proportionally similar balance sheet structures for both March 2025 and March 2027.

(b) Bilateral exposures between financial entities are assumed to be similar for March 2025 and March 2027.

Chapter III

Regulatory Initiatives in the Financial Sector

The global financial system faces mounting challenges from trade tensions, cyber threats, and climate-related risks. In response, global regulators are working to build systemic resilience through strengthened Basel standards, improved liquidity management, enhanced cybersecurity, and comprehensive climate risk frameworks. Domestically, regulators are aligned with these efforts, focusing on digital fraud prevention, secure digital lending, and mutual fund reforms. The Financial Stability and Development Council (FSDC) and its Sub-Committee continues to play a vital role in building a resilient and secure financial system.

Introduction

3.1 In response to growing economic uncertainty and structural shifts in the global financial landscape, regulators remain committed to enhance the resilience of the global financial system. Policymakers and global standard-setting bodies are advancing measures to strengthen the system's resilience to complex securitisation structures, rapid technological changes, rising cyber threats and escalating climate-related risks. Since the December 2024 issue of Financial Stability Report, several regulatory initiatives have been undertaken in key areas including cyber security, cross-border payments, and climate-related risks.

3.2 Against this backdrop, this chapter reviews the recent major regulatory initiatives, both global and domestic, aimed at enhancing the stability and resilience of the financial system.

III.1 Global Regulatory Developments

III.1.1 Banking

3.3 The Basel Committee on Banking Supervision (BCBS) regularly reviews the impact of the Basel III standards on banks and publishes the results reflecting different degrees of implementation of these standards such as risk-based capital ratio, leverage ratio framework and disclosure requirements, liquidity metrics such as LCR and NSFR. The latest Basel III monitoring exercise covered both large international active banks (Group 1) and other smaller banks (Group 2). The results[1] highlighted that for Group 1 banks, NSFR remained stable while the LCR decreased slightly. Group 2 banks[2] showed an increase in both LCR and NSFR.

3.4 The BCBS also revised its principles for management of credit risk[3] ('Credit Risk Principles') issued in 2000, to align them with the current Basel Framework and the latest guidelines issued by the Committee. The updated principles provide guidelines for banking supervisors to evaluate banks' credit risk management processes in four key areas: (i) establishing a suitable credit risk environment; (ii) operating under a sound credit-granting process; (iii) maintaining an appropriate credit administration, measurement, and monitoring process; and (iv) ensuring adequate controls over credit risk.

[1] BCBS (2025), "Basel III monitoring report", March.

[2] Group 1 banks are those that have Tier 1 capital of more than €3 billion and are internationally active. All other banks are considered Group 2 banks.

[3] BCBS (2025), "Principles for the management of credit risk", April.

III.1.2 Financial Markets

3.5 The complex structuring and multi-layered distribution chains in certain securitisation structures create misaligned incentives between originator of securitised products and their investors while encouraging rapid and largely undetected build-up of leverage and maturity mismatches. To address such vulnerabilities, a recent evaluation report[4] by the Financial Stability Board (FSB) assesses the extent to which G20 reforms on securitisation have achieved their financial stability objectives. The report reviews the implementation status of the International Organisation of Securities Commission (IOSCO) policy recommendations[5] across FSB jurisdictions and revised prudential standards for bank exposures to securitisation in the residential mortgage-backed securities (RMBS) and collateralised loan obligation (CLO) markets. The report observes that though the reforms have improved the overall resilience of securitisation markets while increasing market transparency, it is difficult to definitively assess their resilience as these markets have not yet been tested through a full credit cycle. This is particularly relevant for CLOs, which have expanded rapidly but have not yet faced a prolonged downturn. The report has identified a few issues for consideration of national and international authorities, including: (a) monitoring risks in securitisation markets given the developments in synthetic risk transfers and private credit activity in securitisation structures; (b) risk retention requirements in CLO market, given that a large portion of global CLO issuance remains outside the scope of these requirements and often involves third-party risk financing; and (c) divergences in reform implementation across jurisdictions and the implications for regulatory consistency and effectiveness.

3.6 The IOSCO has assessed[6] the implementation by market authorities[7] of its earlier recommendations to develop regulatory tools for addressing challenges arising due to technological adoption, particularly with respect to improving surveillance capabilities on a cross-market and cross-asset basis. Key recommendations of the latest report include regular review and updation of surveillance capabilities by market authorities in the context of their own markets and trading environment and collective efforts by market authorities on strengthening their cross-border surveillance capabilities.

3.7 The IOSCO published its final report on IOSCO Standards Implementation Monitoring (ISIM) for Principles (6-7) relating to the regulator in April 2025[8]. The IOSCO Assessment Committee, established in 2012, developed the ISIM review as a tool to monitor the implementation of the IOSCO Principles and Standards by member jurisdictions. The three IOSCO core objectives of securities regulation are protection of investors, ensuring that markets are fair, efficient, and transparent, and reduction of systemic risk. The ISIM review

[4] FSB (2025), "Evaluation of the Effects of the G20 Financial Regulatory Reforms on Securitisation", January.

[5] IOSCO's policy recommendations in 2012 prescribed minimum risk retention requirements and standardised disclosure templates. Risk retention, or 'skin in the game', was identified as one way to address the misaligned incentives that was embedded in the 'originate to distribute' model of some securitisation products.

[6] IOSCO (2025), "Thematic Review on Technological Challenges to Effective Market Surveillance Issues and Regulatory Tools", February.

[7] A statutory regulator, a self-regulatory organisation or the operator of a trading venue, responsible for conducting and/ or overseeing market surveillance efforts.

[8] IOSCO (2025), "IOSCO Standards Implementation Monitoring (ISIM)", April.

covered two IOSCO Principles (Principles 6 and 7) relating to the regulator:

a. Principle 6: The regulator should have or contribute to a process to identify, monitor, mitigate and manage systemic risk, appropriate to its mandate.

Principle 6 recognises that promoting financial stability is a shared responsibility amongst the financial sector regulatory community and the tools available to reduce systemic risk generally consist of strong investor protection standards and enforcement measures, disclosure and transparency requirements, business conduct regulation and resolution regimes, *etc.* The Principle explicitly recognises that securities regulators may not have the appropriate tools to address certain forms of systemic risk and, therefore, it is important that they cooperate with other regulators. Overall compliance with Principle 6 was generally high among the participating jurisdictions. In case of India, the report states, *"India SEBI has a comprehensive process for identification, monitoring of various risk indicators, and contribution to financial stability encompassing multiple groups/ forums under the umbrella of the Financial Stability Development Council*[9] *(FSDC) to analyse the various sources of risks, such as an Early Warning Group for detection of early warning signals, Forum for supervision of Financial Conglomerates, Technical Group for discussion of risks to systemic financial stability and inter-regulatory coordination, etc. India IFSCA is also a member of the FSDC and participates in the various groups such as FSDC Sub-Committee and Inter Regulatory Technical Group."*

b. Principle 7: The regulator should have or contribute to a process to review the perimeter of regulation regularly.

Principle 7 seeks to ascertain whether securities regulator performs a regular review of the perimeter of regulation, thereby promoting a regulatory framework that supports investor protection, fair, efficient and transparent markets, and the reduction of systemic risk. Overall, a high level of implementation by participating jurisdictions has been observed for Principle 7. India is among the participating jurisdictions that have affirmative answers to all the key questions relating to Principle 7, as summed up in the Report: *"The regulatory review process in India is structured within the group of regulators around the working of its FSDC. Both India SEBI and India IFSCA are members of the FSDC. India SEBI, upon identification of any potential risks, also constitutes an expert committee/ working group. It also coordinates within formal frameworks of State Level Coordination Committees and Regional Economic Intelligence Committee with other financial/ non-financial authorities for information sharing."*

[9] The Financial Stability and Development Council (FSDC) was set up by the Government as the apex level forum in December 2010 and is chaired by the Hon'ble Finance Minister. Members are Minister of State (Finance), Reserve Bank of India (RBI), Chief Economic Adviser to the Ministry of Finance, Securities and Exchange Board of India (SEBI), Insurance Regulatory and Development Authority of India (IRDAI), Pension Fund Regulatory and Development Authority (PFRDA), Insolvency and Bankruptcy Board of India (IBBI), International Financial Services Centre Authority (IFSCA), Secretaries of the Departments of (i) Economic Affairs, (ii) Financial Services, (iii) Revenue, (iv) Expenditure, (v) Ministry of Corporate Affairs and (v) Ministry of Electronics and Information Technology.

3.8 As part of the comprehensive efforts jointly taken by the BCBS, IOSCO and the FSB to improve transparency in derivatives, increasing the predictability of margin requirements and improving the liquidity preparedness of non-bank market participants for margin calls, policy prescriptions[10] were issued on the initial margin in centrally cleared markets. The recommendations on initial margin, *inter alia*, include (a) availability of margin simulation tools to all clearing members; (b) disclosure of anti pro-cyclicality tools; and (c) identification of an internal analytical and governance framework appropriate to their business lines and risk profile, *etc.*

3.9 A joint report[11] was also published on margins in non-centrally cleared markets. The report suggested industry practices to improve effectiveness of variation margin, especially during stress periods. These include resolving margin and collateral exchange issues, allowing flexibility in accepting non-cash collateral, adopting standardised and automated margin processes, and evaluating third-party services. To enhance initial margin responsiveness, the report suggests improvements in ISDA Standard Initial Margin Model (SIMM) including regular back testing, operational readiness for shortfalls and preparation for recalibrations. Besides, firms should also ensure sufficient liquidity to meet unexpected margin changes.

III.1.3 Cyber Resilience

3.10 Cyberattacks and technology failures have become a significant threat to financial stability, especially in a world marked by rising digitalisation, evolving technologies and interconnectedness. Supervisory authorities need timely incident reporting to monitor such disruptions and coordinate effective responses and recovery efforts. Recognising the challenges posed by fragmented reporting frameworks across jurisdictions, the FSB has finalised a common framework[12] to promote common information elements for incident reporting while allowing for flexible implementation practices. The Format for Incident Reporting Exchange (FIRE) encompasses a broad spectrum of operational incidents, including cyber incidents, and is designed to be applicable to third-party service providers and entities outside the financial sector. To support global implementation, the FSB has also issued a taxonomy package that uses the Data Point Model approach. Data Point Model is a data-centric method for organising objects hierarchically and can model various reporting scenarios derived from the underlying legal requirements in a business-friendly and non-technical manner.

III.1.4 Climate Finance

3.11 Climate-related shocks have the potential to disrupt business operations through the materialisation of physical hazards, such as floods, droughts or windstorms (physical risks) and/ or due to changes in regulatory policies, technological innovation and/ or consumer preferences (transition risks). Climate shocks can interact with existing vulnerabilities in the financial system and threaten financial stability through various transmission channels and amplification mechanisms. In order to trace how physical and transition climate risks can be transmitted to the

[10] BCBS-CPMI-IOSCO (2025), "Transparency and responsiveness of initial margin in centrally cleared markets – review and policy proposals", January.

[11] BCBS-IOSCO (2025), "Streamlining VM processes and IM responsiveness of margin models in non-centrally cleared markets", January.

[12] FSB (2025), "Format for Incident Reporting Exchange (FIRE): Final report", April.

global financial system, the FSB has introduced an analytical framework[13] for assessing climate-related vulnerabilities. The analytical toolkit sets out three high-level categories of metrics: a) proxies; b) exposure metrics; and c) risk metrics. Monitoring these metrics can provide early signals on potential drivers of transition and physical risks that can impact the financial system and quantify the scale of financial impacts. The report also compiles a set of forward-looking metrics currently used by the FSB jurisdictions to monitor climate-related vulnerabilities. Notable risk metrics for quantifying physical and transitions risks include carbon earnings at risk[14] (used by the IMF and the Hong Kong Monetary Authority), climate beta[15] and CRISK[16] (used by the ECB).

3.12 The FSB also released a report[17] on the transition plans, examining how firms' climate transition strategies and their associated transition plans can support financial stability. Transition plans offer forward-looking insights into how financial and non-financial firms intend to align their operations with their climate goals. These plans can serve multiple functions: they inform firms' strategic responses to climate risks, help investors make better-informed decisions by closing information gaps, and provide authorities with valuable data to monitor systemic risk and assess the alignment of financial flows with broader climate objectives. The FSB notes that the use of transition plans for financial stability assessment and macro-prudential analysis remains in its early stages and is currently limited to a small set of firms and shows wide variation in scope, methodology, and quality of key metrics. Enhanced comparability and consistency, supported by international standard-setting bodies, could significantly improve the usability of these plans for supervisory purposes, thereby reinforcing the financial system's ability to manage climate-related risks over the long term.

3.13 The International Association of Insurance Supervisors (IAIS), an international standard-setting body, published an application paper[18] highlighting the significance of climate risks for the insurance sector given their impact on the insurability of the assets under consideration as well as insurers' own operations and investments. Also, on the other hand, opportunities exist for the insurance sector as it plays a critical role in the management of climate-related risks in its capacity as an assessor, manager and carrier of risk, and as an investor. The paper makes several recommendations in areas such as corporate governance, internal controls, scenario analysis, market conduct and public disclosures.

3.14 In January 2025, the International Auditing and Assurance Standards Board issued a new global sustainability assurance standard, the '*International Standard on Sustainability Assurance (ISSA 5000)*', designed to strengthen the global sustainability disclosure ecosystem. The standard is designed to be used along with the International Ethics Standards for Sustainability Assurance (IESSA) issued by the International

[13] FSB (2025), "Assessment of Climate-related Vulnerabilities: Analytical framework and toolkit", January.

[14] Shows the modelled increase in carbon costs relative to company earnings under different climate scenarios.

[15] Reflects the sensitivity of financial or non-financial stock prices to climate transition or physical risks.

[16] Expected capital shortfall of a financial institution in a climate stress generated via climate-related market and credit risk channels.

[17] FSB (2025), "The Relevance of Transition Plans for Financial Stability", January.

[18] International Association of Insurance Supervisors (2025), "Application Paper on the supervision of climate-related risks in the insurance sector", April.

Ethics Standards Board for Accountants. ISSA 5000 contains principle-based requirements that support limited or reasonable assurance engagements of sustainability information reported by entities. The standards are profession agnostic and framework neutral, *i.e.*, they can be applied in relation to sustainability information prepared under any suitable sustainability reporting framework.

III.2 Initiatives from Domestic Regulators/ Authorities

3.15 During the period under review, financial regulators undertook several initiatives to improve the resilience of the Indian financial system (major measures are listed in Annex 3).

III.2.1 Use of Indian Rupee for Cross Border Settlements

3.16 The Reserve Bank has progressively implemented a suite of measures to increase the use of Indian Rupee (INR) in cross-border settlements. In July 2022, in order to give a fillip to trade in INR, the Reserve Bank introduced the Special Rupee Vostro Account (SRVA) framework, an additional arrangement for effecting payment and settlement of exports/ imports in INR, by enabling foreign banks to open and maintain SRVAs with Indian banks, and with the additional provision of utilizing the INR balances therein for permissible capital and current account transactions. Use of INR for cross-border settlements was further bolstered by (i) notification of the Foreign Exchange Management (Manner of Receipt and Payment) Regulations in December 2023, which enables settlement of cross border transactions (other than those involving Nepal/ Bhutan and the ACU Mechanism) in any foreign currency (including local currencies of trading partner countries) alongside INR; and (ii) Memoranda of Understanding (MOU) with the central banks of the United Arab Emirates, Indonesia, Maldives and Mauritius to promote local currency settlement.

3.17 In continuation of the above initiatives, the Reserve Bank, in consultation with the Government of India, has further liberalised the FEMA framework as follows: (i) overseas branches of Authorised Dealer banks may open INR accounts for non-residents to conduct all permissible current and capital account transactions with Indian residents and for any transaction with a non-resident; and (ii) non-resident entities may utilise balances in their repatriable INR accounts (including SRVAs) to settle *bona fide* transactions with other non-residents and to invest in non-debt instruments, including foreign direct investment; and (iii) Indian exporters are now permitted to maintain foreign currency accounts abroad for receipt of export proceeds and use them for payment of imports.

III.2.2 Prevention of Financial and Digital Payments Fraud

3.18 The rapid growth of digital transactions, though instrumental in enhancing convenience and efficiency, has been accompanied by a significant rise in financial frauds. The Reserve Bank, in conjunction with other regulatory agencies, has taken two major measures to combat financial and payments related frauds: (i) introduction of '.bank.in' exclusive internet domain for Indian banks which helps customers identify legitimate bank websites and reduces the risk of phishing and other cyberattacks; (ii) steps to mitigate the misuse of mobile numbers of customers by fraudsters by directing the regulated entities to undertake transaction/ service calls and promotional voice calls only using '1600xx' numbering series and '140xx' numbering series, respectively. Additionally, SEBI

has also advised its regulated/ registered entities to use only the '1600' phone number series exclusively for service and transactional voice calls to their existing customers.

3.19 In further efforts to combat financial fraud using voice calls and SMS, RBI, as requested by Telecom Regulatory and Authority of India (TRAI), *vide* Circular 'Prevention of financial frauds perpetrated through voice calls and SMS – Regulatory prescriptions and Institutional Safeguards', advised the Regulated Entities to (a) make use of Mobile Number Revocation List[19] (MNRL) published by Department of Telecommunication (DoT) to monitor and clean their customer databases and develop standard operating procedures for enhanced monitoring of accounts linked to revoked mobile numbers for preventing the linked accounts from being operated as Money Mules and/ or being involved in cyber frauds *etc.*; (b) provide their customer care number details to DoT for publishing in Digital Intelligence Platform (DIP) of DoT; (c) make marketing and transaction alert calls only from specific number series (as mentioned above) allotted to them by Telecom Service Providers (TSPs); and (d) undertake necessary awareness initiatives.

III.2.3 Reserve Bank of India (Project Finance) Directions, 2025

3.20 To provide a harmonised framework for financing of projects in infrastructure and non-infrastructure (including commercial real estate & commercial real estate - residential housing) sectors by regulated entities (REs), the project finance directions were issued. The Directions lay down prudential framework for financing of projects, including treatment of RE exposures upon change in the date of commencement of commercial operations of such projects.

III.2.4 Amendments to Liquidity Coverage Ratio (LCR) Framework

3.21 The banking turmoil[20] in March 2023 highlighted, *inter alia*, the role of social media and digitalisation of financing in hastening the speed and impact of liquidity stress. Advances in digitalisation of finance have reduced friction, resulting in the actual scale and speed of the deposit outflows far exceeding the run-off rate assumptions under LCR framework. To address this concomitant increase in liquidity risk due to usage of technology, the Reserve Bank has undertaken calibrated amendments to the LCR framework by introducing additional run-off rate[21] factors for internet and mobile banking enabled retail deposits (recognising their higher propensity for withdrawal). Haircuts on market value of Level 1 High-Quality Liquid Assets (HQLA) have also been calibrated to capture their liquidity generating capacity during periods of stress. These amendments are intended to improve the liquidity risk resilience of banks in India.

III.2.5 Reserve Bank of India (Digital Lending Directions), 2025

3.22 As part of innovation in financial system, products, and credit-delivery methods, digital lending has emerged as a prominent way to design, deliver and service credit. However, unchecked third-party involvement, mis-selling, data-privacy

[19] MNRL comprises numbers that have been disconnected due to various reasons.

[20] The March 2023 banking turmoil in the U.S. was characterised by the swift collapse of few U.S. banks, driven by rising interest rates and erosion of their bond portfolios, exacerbated by a heavy reliance on digital bank deposits which accelerated depositor withdrawals.

[21] The runoff rate factor represents the estimated percentage of deposits a bank expects to be withdrawn or transferred during a period of stress.

breaches, unfair practices, exorbitant interest rates, and unethical recovery methods threaten public confidence in the digital-lending ecosystem. In this context, the Reserve Bank has issued Reserve Bank of India (Digital Lending) Directions, 2025 consolidating the previous instructions on Digital Lending and introduced two new measures for arrangements involving Lending Service Providers (LSPs) partnering with multiple regulated entities and for creation of a directory of digital lending apps (DLAs). The first measure aims to promote transparency and fairness in digital lending by enabling borrowers to compare loan offers objectively. It also aims to prevent biased or deceptive presentation of loan options by LSPs. The second measure aims to aid the borrowers in verifying the claim of a DLA's association with a RE.

III.2.6 Reserve Bank of India (Forward Contracts in Government Securities) Directions, 2025

3.23 Over the past few years, the Reserve Bank has been expanding the suite of interest rate derivative products available to market participants to manage their interest rate risks. In addition to Interest Rate Swaps, products such as Interest Rate Options, Interest Rate Futures, Interest Rate Swaptions, Forward Rate Agreements, *etc.* are available to market participants. To further develop the market for interest rate derivatives, forward contracts in government securities have now been permitted. Such forward contracts will enable long-term investors such as insurance funds to manage their interest rate risk across interest rate cycles. They will also enable efficient pricing of derivatives that use bonds as underlying instruments.

III.2.7 Introduction of Mutual Funds Lite (MF Lite) Framework

3.24 A light-touch regulation regime for passively managed mutual fund schemes, 'MF Lite Framework' was introduced by SEBI with an intent to promote ease of entry, encourage new players, reduce compliance requirements, increase penetration, facilitate investment diversification, increase market liquidity and foster innovation. The framework is applicable to passive funds (with specific asset under management requirements) with underlying as domestic equity and debt indices and select commodity-based exchange traded funds (ETFs) such as gold and silver as well as fund of funds (FoFs) based on such ETFs.

III.2.8 Introduction of Specialised Investment Funds

3.25 SEBI introduced a comprehensive regulatory framework for Specialised Investment Funds (SIF) aimed at bridging the gap between mutual funds and portfolio management services. SIFs are required to operate under a distinct brand name, logo and website, clearly differentiated from the mutual fund business. SIFs may offer investment strategies across equity, debt and hybrid categories. Comprehensive disclosure requirements include alternate month portfolio disclosures and scenario analysis for derivatives and risk depiction. This regulatory initiative is a significant step towards diversifying India's pooled investment landscape. The introduction of SIFs is expected to encourage innovation in investment strategies while ensuring appropriate safeguards for investor protection and market integrity.

III.2.9 Safer Participation of Retail Investors in Algorithmic Trading

3.26 SEBI issued a regulatory framework to facilitate safer participation of retail investors in algorithmic trading through brokers, which has outlined the rights and responsibilities of the main stakeholders of the trading ecosystem, *viz.*, investors, stockbrokers, model providers/ vendors

and market infrastructure institutions so as to enable use of algorithmic models by retail investors with appropriate safeguards. The said measure aims to enhance investor protection and promote market integrity.

III.2.10 Identifying Unclaimed Assets

3.27 SEBI has put in place a framework in collaboration with National e-Governance Division (NeGD), Ministry of Electronics and Information Technology (MeitY) for '*Harnessing DigiLocker as a Digital Public Infrastructure for reducing unclaimed assets in the Indian Securities Market*'. Investors/ users can now download their mutual fund and demat holding statements as well as consolidated account statements through DigiLocker, the digital document wallet of the Government of India. By facilitating seamless access to financial records, this mechanism is expected to ensure the identification and reduction of unclaimed assets. By building on the centralised mechanism for reporting the demise of an investor through KYC Registration Agencies and the reforms to the nomination facilities in the Indian securities market, the current framework has been assisting the families and survivors of investors/ consumers after their demise. The SEBI has also developed a platform named 'Mutual Fund Investment Tracing and Retrieval Assistant (MITRA)' to provide investors with a searchable database of inactive and unclaimed mutual fund investor folios at an industry level, empowering the investors to identify the overlooked investments or any investments made by any other person for which he/ she may be the rightful legal claimant. The platform is aimed at reduction in the unclaimed mutual fund investor folios and incorporating mitigants against fraud risk.

III.2.11 System Audit of Stock Brokers (SBs) through Technology-based Measures

3.28 The framework aims to strengthen and enhance the quality of system audit of stock brokers through online monitoring. Stock exchanges are required to develop a web portal to supervise system audit of stock brokers, wherein brokers and auditors will be mandated to provide details, such as date of appointment of auditor, audit official conducting the inspection, *etc.* during various stages of audit. The web portal shall capture geo-location of the auditor to ensure that the auditor visits the premises of the stock brokers physically for audit. Additionally, stock exchanges are also empowered to conduct surprise visits to verify the audit being actually carried out by the authorised auditor or authorised person of the audit firm.

III.2.12 Access to Negotiated Dealing System – Order Matching (NDS-OM)

3.29 In order to further the objective of the Government of India to facilitate retail participation in purchase and trading of government securities, the SEBI has facilitated registered stock broker to access G-Secs market through NDS-OM under a Separate Business Unit (SBU). The securities market related activities of stock brokers would be segregated and ring-fenced from NDS-OM related activities of the SBU by way of maintenance of separate accounts and net worth. The framework ensures ease of doing investment for retail investors while ensuring ease of doing business for brokers.

III.2.13 Intraday Monitoring of Position Limits for Index Derivatives

3.30 Position limits for various participants/ product types are specified by SEBI and these positions are monitored by the market infrastructure institutions (MIIs) at the end of day. In this situation, there is a possibility of

undetected intraday positions (particularly on the day of expiry) beyond permissible limits, as end of day open positions will be negligible. Therefore, it was decided that in addition to the end of day monitoring mechanism, the position limits for equity index derivatives contracts will be monitored on an intraday basis from April 2025 onwards. The number of snapshots may be decided by the respective stock exchanges, subject to a minimum of four snapshots in a day. The snapshots will be randomly taken during pre-defined time windows. However, there shall be no penalty for breach of existing position limits intraday and such intraday breaches are not considered as violations.

III.2.14 Operational Resilience of Financial Market Intermediaries

3.31 To streamline the reporting process of technical glitches across MIIs and facilitate the creation of a centralised repository of technical glitches, SEBI has developed a web-based portal, *i.e.*, Integrated SEBI Portal for Technical Glitches (ISPOT), for submission of preliminary and final root cause analysis reports of technical glitches by the MIIs. This would help to improve the data quality, traceability of historical submissions related to technical glitches at the end of SEBI and MIIs, and preparation of system generated reports for monitoring of various compliance requirements in a more focused manner. SEBI has also stipulated a framework for business continuity for interoperable segments of stock exchanges. The said framework, *inter alia*, covers availability of identical or correlated trading products on another trading venue, creation of reserve contracts for scrips and single stock derivatives not traded on one stock exchange for invocation at the time of outage on the other stock exchange.

III.2.15 Changes to Disclosure Requirements

3.32 SEBI introduced the 'Additional Disclosures Framework' for Offshore Derivative Instruments (ODIs) and FPIs with segregated portfolios, to address concerns of regulatory arbitrage. The concentration criteria and size criteria of the framework shall now be applicable directly to ODI subscribers. For FPIs with segregated portfolios, the concentration criteria shall be applied to each segregated portfolio independently. Further, issuance of ODIs (other than those with government securities as underlying) by FPIs shall be permitted only through a separate dedicated FPI registration, with no proprietary investments under such registration. ODI issuing FPIs shall neither issue ODIs with derivatives as reference/ underlying nor hedge their ODIs with derivative positions on stock exchanges. SEBI also enhanced the disclosure requirements for mutual fund schemes, mandating equity oriented mutual fund schemes to disclose Risk Adjusted Return (RAR) which shall be calculated as a ratio of portfolio rate of return less benchmark rate of return (*i.e.*, excess return) to the standard deviation of this excess return. The move is aimed at making a holistic assessment of the portfolio manager's level of skill and ability to generate excess returns.

III.3 Other Developments

III.3.1 Customer Protection

3.33 The number of complaints received by the Offices of the Reserve Bank of India Ombudsman (ORBIOs) for the previous two quarters indicates that majority of the complaints pertained to loans/ advances and credit cards constituting approximately 30 per cent and 18 per cent, respectively, of the complaints during Q3 and Q4 of 2024-25 (Table 3.1).

3.34 Complaints under the category 'Loans and Advances' and 'Credit card' emanated mainly

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

Sr. No.	Grounds of Complaint	Oct-Dec 2024		Jan-Mar 2025	
		Number	Share *(per cent)*	Number	Share *(per cent)*
1	Loans and Advances	21,847	30.04	21,701	29.76
2	Credit Card	13,218	18.17	13,609	18.66
3	Opening/ Operation of Deposit accounts	12,133	16.68	12,375	16.97
4	Mobile/ Electronic Banking	11,951	16.43	11,472	15.73
5	Other products and services*	6,875	9.45	7,335	10.06
6	ATM/ CDM/ Debit card	4,204	5.78	4,142	5.68
7	Remittance and Collection of instruments	943	1.30	883	1.21
8	Para-Banking	809	1.11	750	1.03
9	Pension related	659	0.91	563	0.77
10	Notes and Coins	97	0.13	99	0.14
Total		**72,736**	**100.00**	**72,929**	**100.00**

Note: * includes bank guarantee/ letter of credit, customer confidentiality, premises and staff, grievance redressal, etc.
Source: RBI.

due to, *inter alia*, revision in EMI without proper communication, excessive charges for delayed payments, inappropriate recovery practices, wrong/ delayed reporting of credit information and unsolicited credit cards.

3.35 With respect to the Indian securities market, the number of complaints received during Jan-Mar 2025 declined by 14.2 per cent over the previous quarter. Complaints related to stock brokers and listed companies accounted for 54.6 per cent of the total number of complaints received during the quarter (Table 3.2).

3.36 Under the SEBI Circular on Online Resolution of Disputes in the Indian securities market, MIIs are required to establish and operate a common Online Dispute Resolution Portal to harness online conciliation and online arbitration for resolution of disputes arising in the Indian securities market, the status of which is given in Table 3.3.

Table 3.2: Type/ Category of Complaints

Sr. No.	Category	Oct-Dec 2024	Jan-Mar 2025
1	Stock Broker	6,174	4,898
2	Listed Company- Equity Issue (Dividend/ Transfer/ Transmission/ Duplicate Shares/ Bonus Shares *etc.*)	3,261	3,156
3	Registrar and Share Transfer Agent	2,373	2,161
4	Mutual Fund	942	749
5	Listed Company-IPO/ Prelisting/ Offer document (shares)	925	619
6	Research Analyst	511	618
7	Stock Exchange	649	549
8	Depository Participant	603	500
9	Listed Company-IPO/ Prelisting/ Offer Document (Debentures and Bonds)	359	304
10	Banker to the issue	426	260
11	Investment Advisor	248	230
12	Depository	242	196
13	Listed Company-Delisting of securities	73	139
14	Portfolio Manager	37	67
15	KYC Registration Agency	77	55
16	Listed Company- Debt Issue (Interest/ Redemption/ Transfer/ Transmission *etc.*)	69	53
17	Debenture Trustee	40	42
18	Mutual Fund trading on Exchange Platform	37	36
19	Clearing Corporation	60	28
20	Listed Company- Buy Back of Securities	26	24
21	Merchant Bankers	31	20
22	Category 2 Alternative Investment Fund	2	18
23	Category 1 Alternative Investment Fund	3	11
24	Vault Manager	1	7
25	Category 3 Alternative Investment Fund	7	4
26	Credit Rating Agency	4	3
27	Infrastructure Investment Trust (InvIT)	0	3
28	Venture Capital Fund	8	2
29	Securitised Debt Instrument (SDI)	0	1
30	Small and Medium Real Estate Investment Trust (SM REIT)	0	1
31	Real Estate Investment Trust (REIT)	4	1
32	Collective Investment Scheme	1	0
Total		**17,193**	**14,755**

Source: SEBI.

Table 3.3: Status of Disputes on SmartODR.in (Value in ₹crore)

Period (FY)	Opening Balance of Disputes		Disputes Received		Disputes Resolved		Outstanding Balance as at end of FY	
	No.	Value	No.	Value	No.	Value	No.	Value
2023-24	-	-	2,034	143.8	1,414	47.7	620	96.1
2024-25	620	96.1	5,114	490.9	4,426	402.1	1,308	184.8

Notes: 1. The data includes disputes of Listed Companies also.
2. SEBI introduced SMART ODR vide Circular dated July 31, 2023. Hence, the opening balance of disputes for 2023-24 is Nil.

Source: SEBI.

III.3.2 Enforcement

3.37 During December 2024 – May 2025, the Reserve Bank undertook enforcement action against 177 REs (10 PSBs; 12 PVBs; three SFBs; one PB, three foreign banks, three RRBs; 118 co-operative banks; 22 NBFCs, one ARC, three HFCs and one CIC) and imposed an aggregate penalty of ₹29.15 crore for non-compliance with/ contravention of statutory provisions and/ or directions issued by the Reserve Bank.

3.38 During November 2024 - April 2025, prohibitive directions under Section 11 of the SEBI Act, 1992 were issued against 296 entities, while cancellation, suspension and warnings under SEBI (Intermediaries) Regulations, 2008 were taken against 23, six and one intermediaries, respectively. A total of 19 prosecution cases were filed during November 2024 - April 2025. Penalties under adjudication proceedings were imposed against 277 entities amounting to ₹38.5 crore during November 2024 to April 2025.

III.3.3 Deposit Insurance

3.39 The Deposit Insurance and Credit Guarantee Corporation (DICGC) extends insurance cover to depositors of all the banks operating in India. As on March 31, 2025, the number of banks registered with the DICGC was 1,982, comprising 139 commercial banks (including 11 small finance banks, six payment banks, 43 regional rural banks, two local area banks) and 1,843 co-operative banks.

3.40 With the present deposit insurance limit of ₹5 lakh, 97.6 per cent of the total number of deposit accounts (293.7 crore) were fully insured and 41.5 per cent of the total value of all assessable deposits (₹241 lakh crore) were insured as on March 31, 2025 (Table 3.4).

3.41 The insured deposits ratio (*i.e.*, the ratio of insured deposits to assessable deposits) was higher for co-operative banks (61.9 per cent) followed by commercial banks (40.4 per cent) (Table 3.5). Within commercial banks, PSBs had higher insured deposit ratio *vis-à-vis* PVBs.

3.42 Deposit insurance premium received by the DICGC grew by 12.1 per cent (y-o-y) to ₹26,764 crore during 2024-25 (Table 3.6), of which, commercial banks had a share of 94.7 per cent.

Table 3.4: Coverage of Deposits
(Amount in ₹crore and No. of Accounts in crore)

Sr. No.	Item	Mar 31, 2024	Sep 30, 2024	Mar 31, 2025*	Percentage Variation (y-o-y)	
					Mar 31, 2024	Mar 31, 2025
(A)	Number of Registered Banks	1,997	1,989	1,982		
(B)	Total Number of Accounts	289.7	293.7	293.7	4.9	1.4
(C)	Number of Fully Protected Accounts	283.3	286.9	286.5	4.7	1.1
(D)	**Percentage (C)/ (B)**	**97.8**	**97.7**	**97.6**		
(E)	Total Assessable Deposits	2,18,52,160	2,27,26,914	2,40,95,727	12.3	10.3
(F)	Insured Deposits	94,12,705	96,74,623	1,00,04,919	9.1	6.3
(G)	**Percentage (F)/ (E)**	**43.1**	**42.6**	**41.5**		

Note: *Provisional.
Source: DICGC

Table 3.5: Bank Group-wise Deposit Protection Coverage
(as on March 31, 2025)

Bank Groups	As on September 30, 2024				As on March 31, 2025*			
	Insured Banks *(number)*	Insured Deposits *(₹crore)*	Assessable Deposits *(₹crore)*	IDR *(ID/ AD, per cent)*	Insured Banks *(number)*	Insured Deposits *(₹crore)*	Assessable Deposits *(₹crore)*	IDR *(ID/ AD, per cent)*
I. Commercial Banks	**139**	**89,34,151**	**2,15,53,399**	**41.5**	**139**	**92,32,113**	**2,28,46,848**	**40.4**
i) PSBs	12	57,93,657	1,19,84,450	48.3	12	59,53,830	1,26,11,152	47.2
ii) PVBs	21	24,76,339	75,95,372	32.6	21	25,70,617	81,89,779	31.4
iii) FBs	44	49,158	10,86,877	4.5	44	52,084	10,91,743	4.8
iv) SFBs	11	98,498	2,41,745	40.7	11	1,07,719	2,70,601	39.8
v) PBs	6	18,375	18,470	99.5	6	26,142	26,294	99.4
vi) RRBs	43	4,97,161	6,25,151	79.5	43	5,20,703	6,55,870	79.4
vii) LABs	2	962	1,334	72.1	2	1,018	1,409	72.3
II. Co-operative Banks	**1,850**	**7,40,473**	**11,73,515**	**63.1**	**1,843**	**7,72,806**	**12,48,879**	**61.9**
i) UCBs	1,465	3,73,715	5,56,862	67.1	1,457	3,80,261	5,84,539	65.1
ii) StCBs	33	63,262	1,47,586	42.9	34	66,285	1,57,076	42.2
iii) DCCBs	352	3,03,496	4,69,067	64.7	352	3,26,260	5,07,264	64.3
Total (I+II)	**1,989**	**96,74,623**	**2,27,26,914**	**42.6**	**1,982**	**1,00,04,919**	**2,40,95,727**	**41.5**

Note: 1 IDR: Insured Deposit Ratio is calculated as Insured Deposit by Assessable Deposit.
2. The insured deposits to assessable deposits ratio may not tally due to rounding off.
3. *Provisional.
Source: DICGC

3.43 The Deposit Insurance Fund (DIF) with the DICGC is primarily built out of the premium paid by insured banks, investment income and recoveries from settled claims, net of income tax. DIF recorded a 15.2 per cent y-o-y increase to reach ₹2.29 lakh crore as on March 31, 2025. The reserve ratio (*i.e.*, ratio of DIF to insured deposits) increased to 2.29 per cent from 2.11 per cent a year ago (Table 3.7).

Table 3.6: Deposit Insurance Premium
(₹crore)

Period	Commercial Banks	Co-operative Banks	Total
2023-24			
H1	10,962	666	11,628
H2	11,581	670	12,251
Total	**22,543**	**1,336**	**23,879**
2024-25			
H1	12,419	707	13,127
H2	12,932	704	13,637
Total	**25,352**	**1,412**	**26,764**

Note: Constituent items may not add up to the total due to rounding off.
Source: DICGC

III.3.4 Corporate Insolvency Resolution Process (CIRP)

3.44 Since the provisions relating to the corporate insolvency resolution process (CIRP) came into force in December 2016, a total of 8,308 CIRPs have been initiated till March 31, 2025 (Table 3.8), out of which 6,382 (76.8 per cent of total) have been closed. Out of the closed CIRPs, around 20 per cent have been closed on appeal or review or settled, 18 per cent have been withdrawn, around 43.2 per cent have ended in orders for liquidation and 18.7

Table 3.7: Deposit Insurance Fund and Reserve Ratio
(₹crore)

As on	Deposit Insurance Fund (DIF)	Insured Deposits (ID)	Reserve Ratio (DIF/ ID) (Per cent)
Mar 31, 2024	1,98,753	94,12,705	2.11
Sep 30, 2024	2,13,513	96,74,623	2.21
Mar 31, 2025	2,28,933	1,00,04,919*	2.29*

Note: *Provisional.
Source: DICGC

Table 3.8: Status of Corporate Insolvency Resolution Process
(as on March 31, 2025)

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 RP	Commencement of Liquidation	
2016 - 17	0	37	1	0	0	0	36
2017 - 18	36	707	95	0	18	91	539
2018 - 19	539	1157	158	97	75	305	1061
2019 - 20	1061	1991	350	220	132	537	1813
2020 - 21	1813	536	92	168	119	349	1621
2021 - 22	1621	891	129	200	142	340	1701
2022 - 23	1701	1262	192	230	186	406	1949
2023 - 24	1949	1003	160	168	263	444	1917
Apr - Jun, 2024	1917	241	39	24	71	79	1945
July – Sept, 2024	1945	211	31	23	58	86	1958
Oct - Dec, 2024	1958	145	10	15	60	84	1934
Jan - Mar, 2025	1934	127	19	9	70	37	1926
Total	**NA**	**8308**	**1276**	**1154**	**1194**	**2758**	**1926**

Note: 1. The numbers are subject to change due to constant data updates and reconciliation.
2. These CIRPs are in respect of 7919 Corporate Debtors. This excludes 1 corporate debtors which has moved directly from Board for Industrial and Financial Reconstruction (BIFR) to resolution.

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

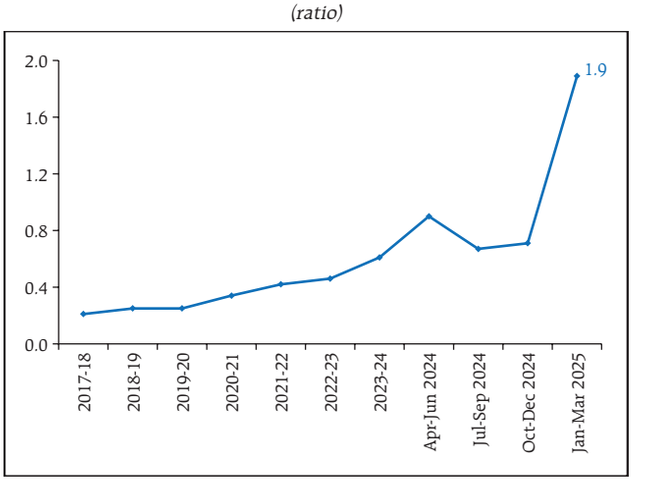
per cent have ended in approval of resolution plans (RPs). A total of 1,926 CIRPs (23.2 per cent of total) are ongoing. The sectoral distribution of corporate debtors under CIRP is presented in Table 3.9.

3.45 The outcome of CIRPs as on March 31, 2025 shows that out of the operational creditor initiated CIRPs that were closed, 63.6 per cent were closed on appeal, review or withdrawal (Table 3.10).

3.46 The primary objective of the Insolvency and Bankruptcy Code (hereinafter referred as "Code") is rescuing corporate debtors in distress. The Code has rescued 3,624 corporate debtors (1,194 through resolution plans, 1,276 through appeal or review or settlement and 1,154 through withdrawal) till March 2025. It has referred 2,758 corporate debtors for liquidation. Several initiatives are being taken to improve the outcomes of the Code which have steadily increased the number of cases ending with resolution *vis-à-vis* cases in which liquidation is ordered (Chart 3.1).

3.47 Cumulatively till March 31, 2025, creditors have realised ₹3.89 lakh crore under the resolution plans, which is around 170.1 per cent of liquidation value and 93.41 per cent of fair value (based on 1082 cases, where fair value has been estimated). In terms of percentage of admitted claims, the creditors have realised 33 per cent. Furthermore,

Chart 3.1: Summary of Outcomes - Resolution to Liquidation Ratio
(ratio)



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

Table 3.9: Sectoral Distribution of CIRPs
(as on March 31, 2025)

Sector	No. of CIRPs						
	Admitted	Closed					Ongoing
		Appeal/ Review/ Settled	Withdrawal under Section 12 A	Approval of RP	Commencement of Liquidation	Total	
Manufacturing	**3068**	**431**	**442**	**545**	**1112**	**2530**	**538**
Food, Beverages & Tobacco Products	395	47	58	66	148	319	76
Chemicals & Chemical Products	335	57	66	56	104	283	52
Electrical Machinery & Apparatus	217	27	23	29	99	178	39
Fabricated Metal Products	163	25	28	27	52	132	31
Machinery & Equipment	335	62	58	39	112	271	64
Textiles, Leather & Apparel Products	521	61	78	74	221	434	87
Wood, Rubber, Plastic & Paper Products	358	48	51	71	123	293	65
Basic Metals	509	62	46	136	185	429	80
Others	235	42	34	47	68	191	44
Real Estate, Renting & Business Activities	**1823**	**334**	**280**	**190**	**509**	**1313**	**510**
Real Estate Activities	527	106	78	58	81	323	204
Computer and related activities	241	30	41	20	90	181	60
Research and Development	11	2	3	1	2	8	3
Other Business Activities	1044	196	158	111	336	801	243
Construction	**995**	**192**	**159**	**146**	**210**	**707**	**288**
Wholesale & Retail Trade	**834**	**112**	**79**	**79**	**368**	**638**	**196**
Hotels & Restaurants	**169**	**34**	**27**	**31**	**43**	**135**	**34**
Electricity & Others	**228**	**29**	**21**	**51**	**89**	**190**	**38**
Transport, Storage & Communications	**226**	**26**	**25**	**23**	**96**	**170**	**56**
Others	**965**	**118**	**121**	**129**	**331**	**699**	**266**
Total	**8308**	**1276**	**1154**	**1194**	**2758**	**6382**	**1926**

Note: The distribution is based on the CIN of corporate debtors and as per National Industrial Classification (NIC 2004).
Source: Insolvency and Bankruptcy Board of India (IBBI).

Table 3.10: Outcome of CIRPs, Initiated Stakeholder-wise
(as on March 31, 2025)

Outcome	Description	CIRPs initiated by				
		Financial Creditor	Operational Creditor	Corporate Debtor	FiSPs	Total
Status of CIRPs	Closure by Appeal/ Review/ Settled	402	863	11	0	1276
	Closure by Withdrawal u/s 12A	343	803	8	0	1154
	Closure by Approval of RP	725	383	82	4	1194
	Closure by Commencement of Liquidation	1290	1172	296	0	2758
	Ongoing	1133	678	114	1	1926
	Total	**3893**	**3899**	**511**	**5**	**8308**
CIRPs yielding RPs	Realisation by FCs as per cent of Liquidation Value	187.0	128.0	144.9	134.9	170.1
	Realisation by FCs as per cent of their Claims	33.2	25.2	18.1	41.4	32.8
	Average time taken for Closure of CIRP (days)	723	724	577	677	713
CIRPs yielding Liquidations	Liquidation Value as per cent of Claims	5.3	8.2	8.1	-	6.0
	Average time taken for Closure of CIRP (days)	518	511	455	-	508

Note: FiSPs = Financial service providers. A "Financial service provider" means a person engaged in the business of providing financial services (other than banks) in terms of authorisation issued or registration granted by a financial sector regulator.
Source: Insolvency and Bankruptcy Board of India (IBBI).

realisable value through RPs does not include (a) possible realisation through corporate and personal guarantors and recovery against avoidance transactions; (b) the CIRP cost; and (c) other probable future realisations, such as increase in value of diluted equity and funds infused into the corporate debtor, including capital expenditure by the resolution applicants. About 40 per cent of the CIRPs that yielded resolution plans were defunct companies. In these cases, the claimants have realised 152 per cent of the liquidation value and 19 per cent of their admitted claims.

3.48 Till March 2025, the total number of CIRPs ending in liquidation was 2,758, of which final reports have been submitted for 1,374 corporate debtors. These corporate debtors together had outstanding claims of ₹4.27 lakh crore, but the assets were valued at only ₹0.16 lakh crore. The liquidation of these companies resulted in realisation of 90 per cent of the liquidation value. The 1,194 CIRPs which have yielded resolution plans till March 2025 took an average of 597 days for conclusion of process, while incurring an average cost of 1.2 per cent of liquidation value and 0.8 per cent of resolution value. Similarly, the 2,758 CIRPs, which ended up in orders for liquidation, took an average 508 days for conclusion.

III.3.5 Developments in International Financial Services Centre (IFSC)

3.49 To establish a world-class regulatory framework for firms operating in GIFT-IFSC, the International Financial Services Centres Authority (IFSCA) has issued 35 new regulations and 16 frameworks since 2021 which are aligned with international best practices. As of end-March 2025, the total number of registrations/ authorisations given by IFSCA has reached 865.

3.50 Nearly 161 Fund Management Entities (FMEs) registered in IFSC have launched 229 Funds (AIFs) with a total targeted corpus of US$ 50 billion. In terms of exchanges at IFSCA, the monthly turnover on GIFT IFSC Exchanges was US$ 95.30 billion in March 2025, whereas the average daily turnover of NIFTY derivative contracts on NSE International Exchange (NSE IX) was US$ 4.53 billion in the same period. A total of US$ 63.68 billion debt securities has been listed on the IFSC exchanges including US$ 15.43 billion of green bonds, social bonds, sustainable bonds and sustainability-linked bonds till March 2025.

3.51 The banking ecosystem at GIFT-IFSC comprises 29 banks (IFSC banking units), including 13 foreign banks, 16 domestic banks and one multilateral bank offering a wide spectrum of financial services. In addition to the banking units, two Global Administrative Offices (GAOs) are already operational in IFSC. The total banking asset size has grown from US$ 14 billion in September 2020 to US$ 88.7 billion in March 2025. The cumulative banking transactions have grown from US$ 53 billion in September 2020 to US$ 1.24 trillion till March 2025.

3.52 The India International Bullion Exchange (IIBX), a vibrant gold trading hub, has seen transactions and imports amounting to 101 Tonnes of Gold (equivalent to US$ 8.46 billion) and 1,147.98 Tonnes of Silver (equivalent to US$ 927 million). The registered aircraft leasing entities in GIFT-IFSC have grown to 33, while the total registered ship leasing/ ship financing entities have grown to 24 till March 2025.

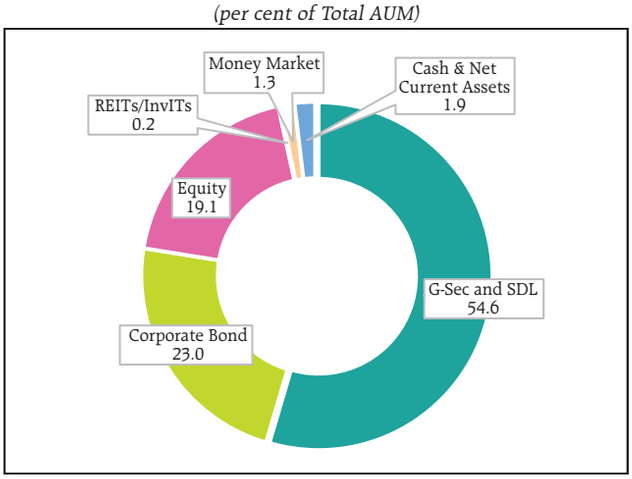
III.3.6 Pension Funds

3.53 The National Pension System (NPS) and Atal Pension Yojana (APY) have steadily grown, with

increases in both subscriber count and assets under management. As of March 31, 2025, in terms of number of subscribers, NPS and Atal Pension Yojana (APY) have shown a growth of 14.2 per cent since March 2024, whereas the asset under management (AUM) has recorded a growth of 23.1 per cent in the same period. The combined subscriber base under NPS and APY has reached 8.4 crore in March 2025, with an AUM of ₹14.4 lakh crore (Chart 3.2), which is primarily invested in fixed income instruments (Chart 3.3).

Chart 3.3: NPS and APY AUM: Asset Class-wise Bifurcation

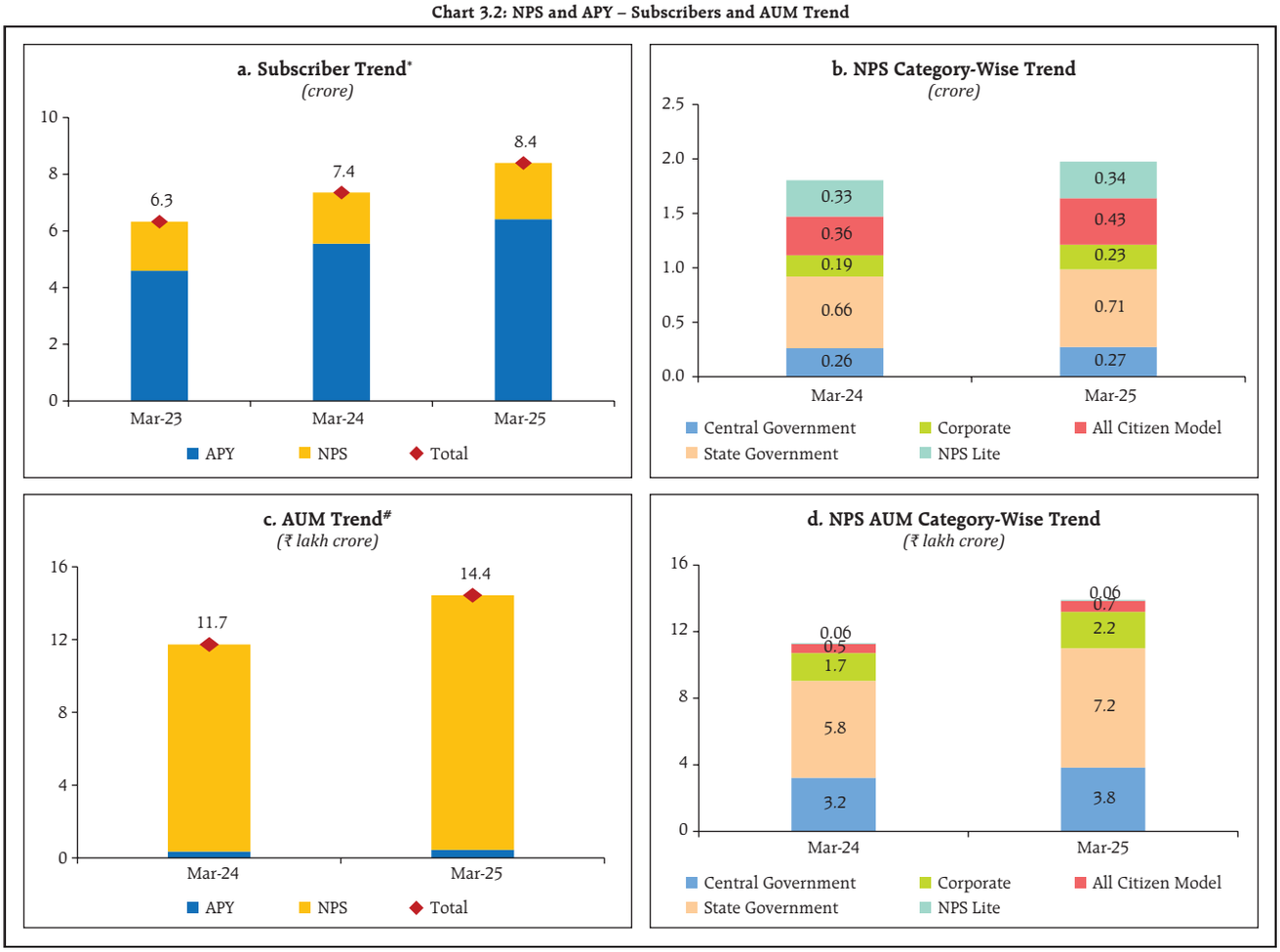
(per cent of Total AUM)



Source: PFRDA.

3.54 The Unified Pension Scheme (UPS) as an option under NPS, was issued by the Department of Financial Services *vide* Notification dated January 24, 2025. In terms of Para 15 of the said notification, the PFRDA *vide* Gazette notification dated 19th

Chart 3.2: NPS and APY – Subscribers and AUM Trend



Note: 1. * The total includes subscribers under NPS Vatsalya.

2. # The total also includes AUM from Tier II, TTS and NPS Vatsalya.

Source: PFRDA.

March 2025 has issued PFRDA (Operationalisation of the Unified Pension Scheme under NPS) Regulations, 2025 and Central Recordkeeping Agencies has rolled out the processes for subscribers who are desirous of exercising choice of UPS.

III.3.7 Insurance

3.55 The life insurance sector has witnessed steady growth in premium income over the years, driven by factors such as increasing disposable incomes, regulatory reforms, improved ease of doing business and greater public awareness about the importance of insurance. The total insurance premium collected by life insurers increased to ₹8.7 lakh crore in 2024-25 from ₹8.3 lakh crore in 2023-24, registering a growth rate of 5.2 per cent. Similarly, new business premium of life insurance industry rose by 5 per cent, reaching ₹4.0 lakh crore in 2024-25 from ₹3.8 lakh crore in 2023-24. The total premium underwritten by general and health insurers reached ₹3.1 lakh crore in 2024-25 exhibiting a 6.2 per cent growth. Among various lines of business, the health insurance segment (which includes Overseas Medical Insurance) has experienced significant growth of 9 per cent.

3.56 The IRDAI (Maintenance of Information by the Regulated Entities and Sharing of Information by the Authority) Regulations, 2025 consolidate and replace the following three regulations: a) IRDA (Sharing of Confidential Information concerning Domestic or Foreign Entity) Regulations, 2012; (b) IRDAI (Maintenance of Insurance Records) Regulations, 2015; and (c) IRDAI (Minimum Information Required for Investigation and Inspection) Regulations, 2020. These consolidated regulations mandate electronic record-keeping with robust security and privacy measures, require regulated entities to adopt data governance framework and implement Board approved policies for record maintenance.

3.57 IRDAI has issued comprehensive guidelines allowing insurers to use equity derivatives to hedge their equity investment portfolios, thus safeguarding the market value of insurers' equity holdings by mitigating the impact of market volatility. Further, IRDAI has introduced a new facility called "Bima Applications Supported by Blocked Amount" (Bima-ASBA). Under this mechanism, funds are blocked in the prospect's bank account via a one-time UPI mandate and are transferred to the insurer only upon policy issuance. If the proposal is not accepted, the blocked amount is released, ensuring greater transparency and trust in the policy purchase process.

Annex 1

Systemic Risk Survey

In the latest round of the Systemic Risk Survey, all the major risk groups were perceived to be in the medium-risk category. Risk perception of global and institutional risks increased marginally, while macroeconomic and financial market risks have moderated due to benign inflation and monetary easing. Overall, the survey respondents viewed geopolitical conflicts, capital outflows and reciprocal tariff/ trade slowdown as major near-term potential risks to financial stability.

The 28th round of the Reserve Bank's Systemic Risk Survey (SRS) was conducted in May 2025 to gauge the perceptions of experts, including economists and market participants, on the major vulnerabilities of the Indian financial system. Considering prevailing macroeconomic and financial conditions, the current round of the survey, in addition to regular questions, also captures the respondents' views on (i) impact of trade tension and protectionist policies on overall financial stability, (ii) effect of trade slowdown on banking sector and (iii) the major sectors affected by global trade disruptions.

A summary of feedback from 50 respondents is presented below.

- All the major risk groups were perceived to be in the medium-risk category. Risk perception of global and institutional risks increased marginally, primarily on account of global growth concerns, geopolitical conflicts, profitability risk and cyber risk. On the other hand, macroeconomic and financial market risks have moderated due to benign inflation and monetary easing (Figure 1).

Figure 1: Systemic Risk Survey: Major Risk Groups

Major Risk Groups	Nov-24	May-25	Change in Risk Perception[1]
A. Global risks	5.6	5.9	Increase
B. Macroeconomic risks	5.4	5.2	Decrease
C. Financial market risks	5.7	5.4	Decrease
D. Institutional risks	5.4	5.5	Increase

Source: Systemic Risk Survey (November 2024 and May 2025).

Risk Category

8.1 - 10	6.1 - 8	4.1 - 6	2.1 - 4	0 - 2
Very high	High	Medium	Low	Very low

- In the global risks, geopolitical conflicts/ geo-economic fragmentation scored the highest (*that is,* worst risk assessment) compared with other risk sub-categories. Global growth risk moved from the medium to the high-risk category in the latest survey, signalling increasing growth pessimism among the panellists. The funding risk (impact on external borrowings) increased marginally within the medium-risk category.

[1] The risk perception, as it emanates from the systemic risk survey conducted at different time periods (on a half-yearly basis in May and November), may shift from one risk category to the other, reflected by the change in colour. However, within the same risk category (boxes with the same colour), the risk perception may also increase/decrease or remain the same, the shift being indicated accordingly through average numeric values.

- In terms of macroeconomic risks, the risk of investment growth and climate-related risk have increased, whereas inflation risk has decreased significantly and moved from medium to low-risk categories. Other risks such as domestic growth, current account deficits, and household savings remained unchanged.
- Among the financial market risks, the risk perception of all individual risk categories declined. Equity price volatility continued to remain in the high-risk category.
- In the case of institutional risks, cyber risk continued to remain a high-risk category, with its risk perception rising further in the latest survey. Operational risk and profitability risk also inched up marginally (Figure 2).

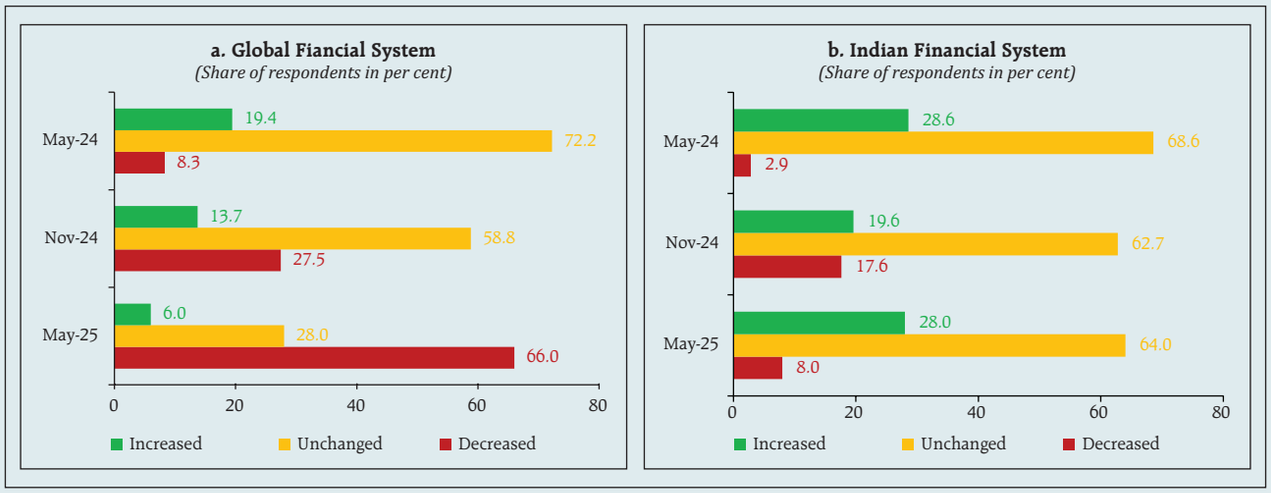
Figure 2: Systemic Risk Survey: Risks Identified

Risk items	Sub-Category	Nov-24	May-25	Change in Risk perception
A. Global Risks	Global growth	5.9	7.1	Increase
	Funding risk (External borrowings)	5.2	5.5	Increase
	Commodity price risk (including crude oil prices)	5.7	4.7	Decrease
	Monetary tightening in advanced economies	4.5	4.5	Unchanged
	Geo-political conflict/ Geo-economic fragmentation	6.8	7.5	Increase
B. Macroeconomic Risks	Domestic growth	5.7	5.7	Unchanged
	Domestic inflation	5.7	4.0	Decrease
	Current account deficit	4.4	4.4	Unchanged
	Capital inflows/ outflows (Reversal of FIIs, Slowdown in FDI)	6.1	6.0	Decrease
	Fiscal deficit	4.6	4.4	Decrease
	Corporate sector risk	4.5	4.6	Increase
	Real estate prices	4.9	4.7	Decrease
	Consumption Demand	5.9	5.2	Decrease
	Investment Growth	5.5	5.9	Increase
	Household savings	5.6	5.6	Unchanged
	Climate risk	6.7	6.9	Increase
C. Financial Market Risks	Foreign exchange rate risk	5.9	5.8	Decrease
	Equity price volatility	6.5	6.2	Decrease
	Interest rate risk	5.4	5.2	Decrease
	Liquidity Risk	5.0	4.4	Decrease
D. Institutional Risks	Asset quality deterioration	5.1	4.9	Decrease
	Banks' exposure to interest rate risk	5.1	5.0	Decrease
	Cyber risk	6.4	6.8	Increase
	Operational risk	5.3	5.6	Increase
	Profitability	5.2	5.4	Increase

Risk Category

8.1 - 10	6.1 - 8	4.1 - 6	2.1 - 4	0 - 2
Very high	High	Medium	Low	Very low

Chart 1: Confidence in the Stability of the Financial System



The latest survey shows that 66 per cent of respondents have expressed worsening confidence in the stability of the global financial system, much higher than the 28 per cent in the previous survey. The assessment of the Indian financial system was upbeat, as 92 per cent of them showed a higher or similar level of confidence in the Indian financial system (Chart 1 a and b).

- Around 80 per cent of panellists expected better or similar prospects for Indian banking sector over the following year, marking an improvement from the previous survey round (Chart 2).
- About 60 per cent of panellists expected the asset quality of banking sector to remain unchanged or improve marginally over the next six months, supported by an improved growth outlook, easy liquidity conditions, lower interest rates, and stable prospects for corporate lending. However, 40 per cent of respondents identified factors such as heightened global uncertainty, risks in the export sector, and stress in unsecured lending as potential downside risks to asset quality, thereby expecting a marginal deterioration (Chart 3 a).

Chart 2: Prospects of Indian Banking Sector in the Next Year

(Share of respondents in per cent)

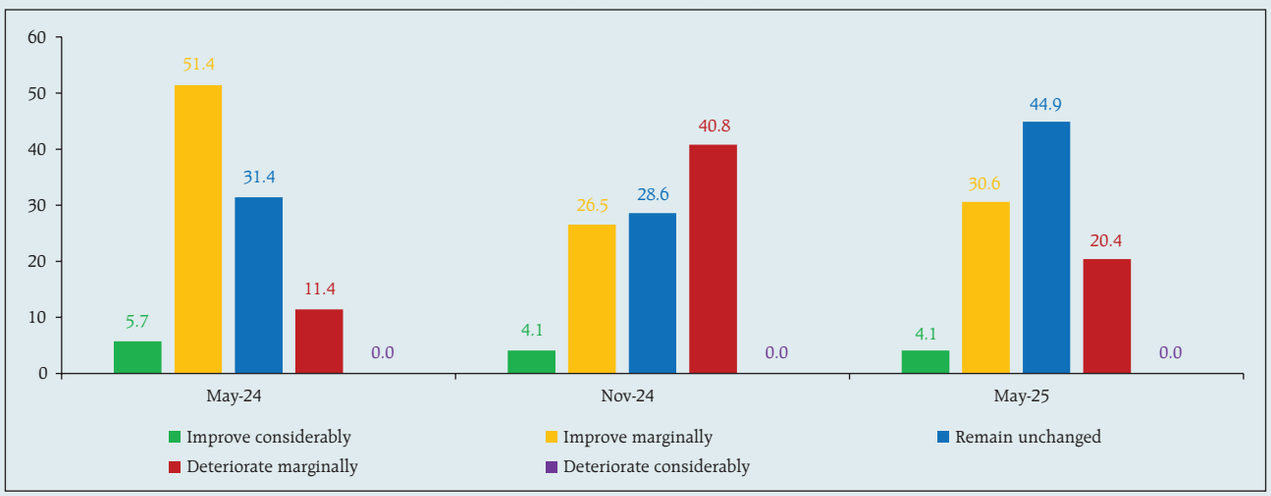
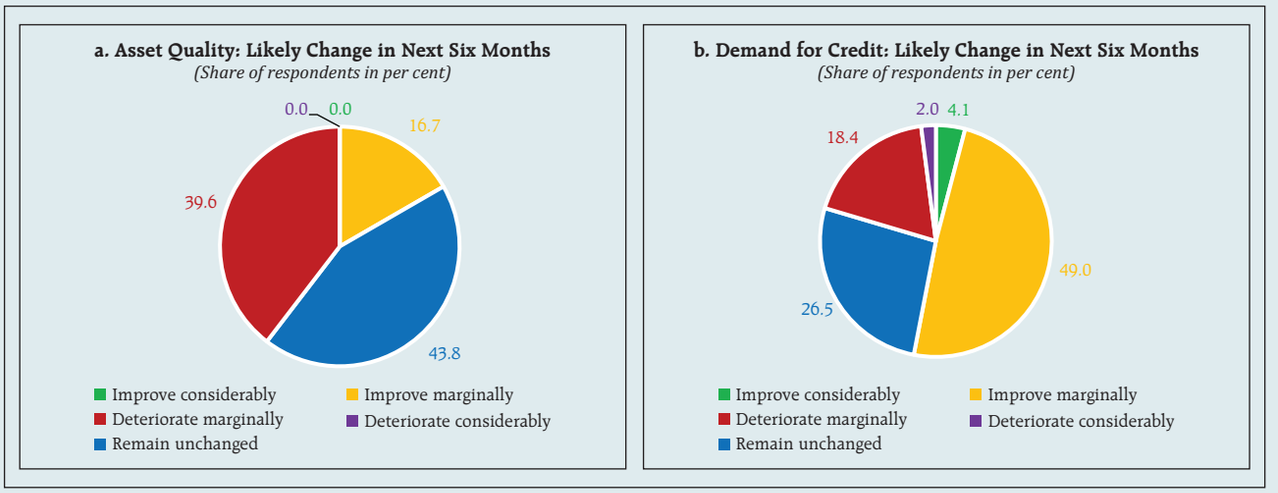


Chart 3: Indian Banking Sector – Outlook



- Around 53 per cent of the respondents assessed the demand for credit to improve in the near-term owing to uptick in rural demand, better business sentiments and improved health of banks. Another quarter of the respondents reported credit demand to remain unchanged (Chart 3 b).
- Regarding the impact of trade tensions and protectionist policies, three-fourths of the respondents assessed moderate impact of such disruptions on overall financial stability. However, around 88 per cent of participants expected trade slowdown to have a limited to moderate impact on banking sector asset quality (Chart 4 and 5).
- Most of the respondents (around 80 per cent) perceived export-dependent manufacturing sectors (*e.g.* textiles, readymade garments, electronics) and MSMEs in export clusters to face the highest risk due to global trade disruptions. Nearly 40 per cent of respondents assessed the shipping and logistics industry to be the most vulnerable to trade slowdown (Chart 6).

Chart 4: Impact of Trade Tensions and Protectionist Policies on Overall Financial Stability

(Share of respondents in per cent)

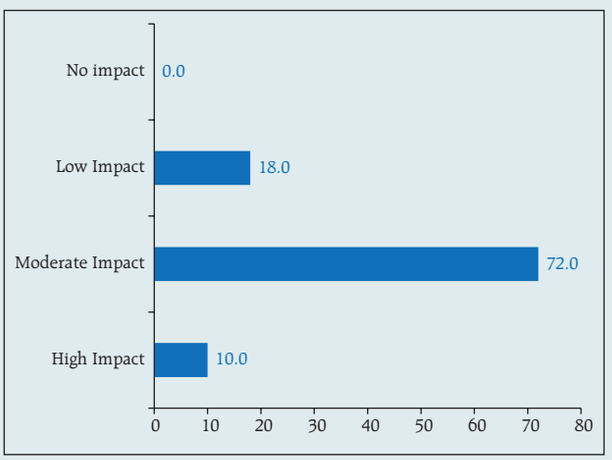


Chart 5: Effect of Trade Slowdown on Banking Sector Asset Quality

(Share of respondents in per cent)

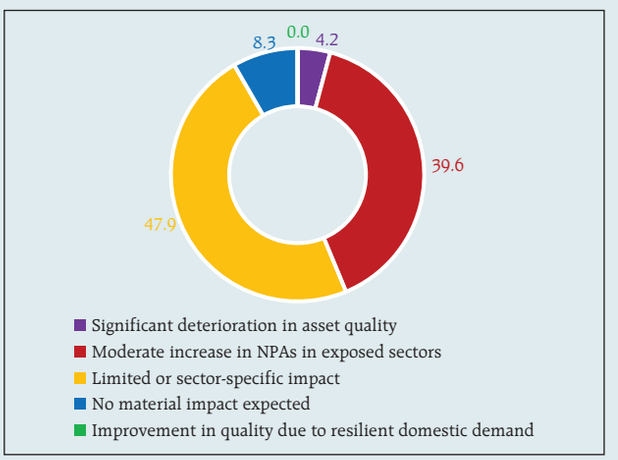
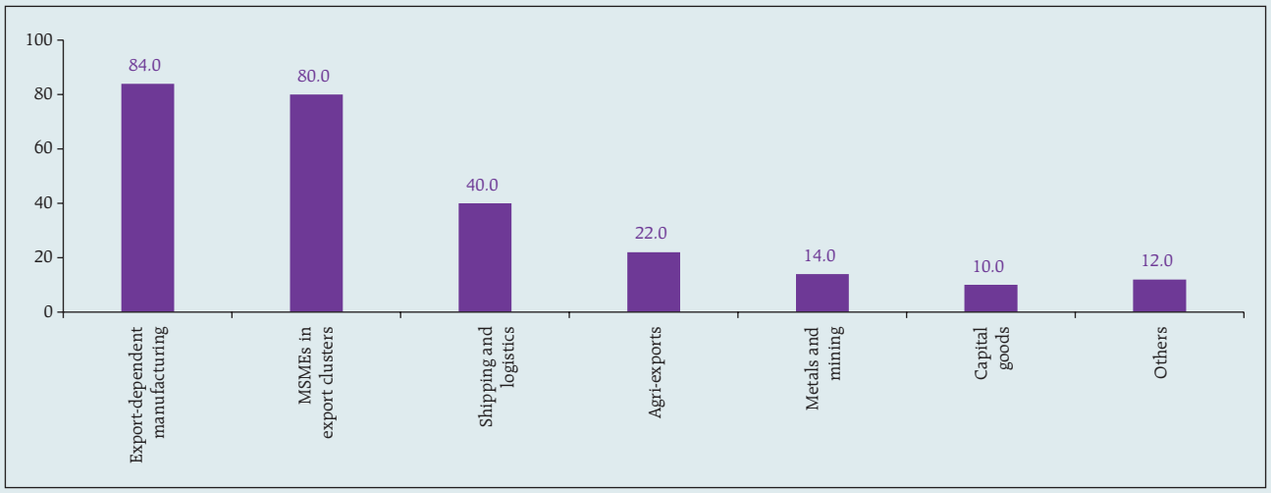


Chart 6: Sectors Vulnerable to Global Trade Disruptions

(Share of respondents in per cent)



Risks to Financial Stability

Going forward, the respondents identified the following risks to financial stability:

- Geopolitical conflicts
- Capital outflows and impact on Indian rupee
- Increase in trade tariffs and impact on global trade
- Global growth concerns
- Climate risk
- Cybersecurity issues
- Slowdown in domestic growth
- Rise in US treasury bond yield

Annex 2

Methodologies

2.1 Scheduled Commercial Banks

(a) Banking stability indicator (BSI) and map

The banking stability map and indicator present an overall assessment of changes in underlying conditions and risk factors that have a bearing on the stability of the banking sector during a period. The six composite indices represent risk in six dimensions - soundness, asset quality, profitability, liquidity, efficiency and sensitivity to market risk. Each composite index is a relative measure of risk during the sample period used for its construction, where a higher value would mean higher risk in that dimension.

The financial ratios used for constructing each composite index are given in Table 1. Each financial ratio is first normalised for the sample period using the following formula:

$$Y_t = \frac{X_t - min(X_t)}{max(X_t) - min(X_t)}$$

where X_t is the value of the ratio at time t. If a variable is negatively related to risk, then normalisation is done using 1-Y_t. Composite index of each dimension is then calculated as a simple average of the normalised ratios in that dimension. Finally, the banking stability indicator is constructed as a simple average of these six composite indices. Thus, each composite index and the overall banking stability indicator takes values between zero and one.

Table 1: Ratios used for constructing the Banking Stability Indicator and Map

Dimension	Ratios			
Soundness	CRAR #	Net NPAs to Capital	Tier 1 Capital to Assets #	
Asset Quality	Gross NPAs to Total Advances	Provisioning Coverage Ratio #	SMA-1 and SMA-2 Loans to Total Advances	Restructured Standard Advances to Standard Advances
Profitability	Return on Assets #	Net Interest Margin #	Growth in Earnings Before Provisions and Taxes #	Interest Margin to Gross Income #
Liquidity	Liquid Assets to Total Assets #	Liquidity Coverage Ratio #	Non-Bank Advances to Customer-Deposits	
Efficiency	Cost to Income	Business (Credit + Deposits) to Staff Expenses #	Staff Expenses to Operating Expenses	
Sensitivity to market risk	RWA (market risk) to Capital	PV01 of HFT and AFS Investments to Total Capital	Total Net Open Position in Forex to Total Capital	

Note: # Negatively related to risk.

(b) Macro stress test

Macro stress test evaluates the resilience of banks against adverse macroeconomic shocks. It attempts to assess the impact on capital ratios of banks[1] over a one-and-half to two-year horizon, under a baseline and two adverse scenarios. The test encompasses credit risk, market risk and interest rate risk in the banking book. The salient features are as below:

[1] The macro stress test is carried out on select 46 scheduled commercial banks (SCBs).

I. Macro-scenario design: The test envisages three scenarios - a baseline and two hypothetical adverse macro scenarios. While the baseline scenario is derived from the forecasted path of select macroeconomic variables, the two adverse scenarios are derived based on hypothetical stringent stress scenario narratives and by performing simulations using the following Vector Autoregression with Exogenous Variables (VARX) model,

$$Y_t = \sum_{p=1}^{P} A_p Y_{t-p} + \sum_{s=0}^{S} B_s X_{t-s} + u_t \quad \ldots\ldots\ldots (1)$$

with GDP growth, CPI inflation, repo rate and lending spread as the endogenous variables and US GDP growth and US-VIX as exogeneous variables.

II. Projection of key financial variables: Slippage ratio, interest income and interest expense are projected at bank-level using panel regression models for each bank group. GNPA ratio and provision are projected using structural models. Non-interest income [comprising of (a) fee income and (b) other operating income excluding fee income] and non-interest expense are projected based on assumed growth rate of these variables under each scenario.

(i) Projection of slippage ratio: The quarterly slippage ratios at bank level are projected using the following panel regression model;

$$Z_{i,t} = \beta_Z * Z_{i,t-1} + \beta'_X * X_{t-s} + \mu'_i + \lambda'_{it} + \varepsilon'_{i,t} \quad \ldots\ldots\ldots (2)$$
$$\text{for } t = 1,\ldots, T \text{ and } i = 1,\ldots,N$$

$Z_{i,t}$ is the quarterly slippage ratio of bank i during quarter t, X_t is a vector of macroeconomic variables including lending spread and GDP growth, μ'_i represents bank-specific fixed effects, λ'_{it} represents adjustments for specific quarters and $\varepsilon'_{i,t}$ is an i.i.d. error term. Subsequently, quarterly slippage ratios, $\hat{Z}_{i,t}'s$ are computed based on first differences of the regression equation (2) as,

$$\hat{Z}_{i,t} = \hat{Z}_{i,t-1} + \Delta\hat{Z}_{i,t} = \hat{Z}_{i,t-1} + \{\beta_Z \times \Delta\hat{Z}_{i,t-1} + \beta'_X \times \Delta\hat{X}_{i,t-1}\} \quad \ldots\ldots\ldots (3)$$

(ii) Projection of gross loans and advances: Bank level gross loans and advances are projected by applying growth rate equivalent to nominal GDP growth as,

$$L_{i,t} = L_{i,t-1}(1 + g_t) \quad \ldots\ldots\ldots (4)$$

where $L_{i,t}$ represents the gross loans and advances of bank i at the end of quarter t, and g_t represents the nominal GDP growth rate during quarter (t-1, t).

(iii) Projection of non-performing loans (NPL) or GNPAs: Bank-level GNPAs are projected using the equation,

$$NPL_{i,t} = NPL_{i,t-1}(1 - WRO_{i,t} - CURER_{i,t} - RECR_{i,t}) + PD_{i,t}.PL_{i,t-1} \quad \ldots\ldots\ldots (5)$$

where $NPL_{i,t}$ represents the stock of GNPA of bank i at the end of quarter t, $WRO_{i,t}$, $CURER_{i,t}$ and $RECR_{i,t}$ are write-off, upgradation and recovery rates of bank i during the quarter t respectively, $PD_{i,t}$ is the probability of default (slippage ratio) projected in (3) and $PL_{i,t-1}$ is the stock of performing loans at the end of quarter t-1.

(iv) Projection of performing loans (PL): The stock of performing loans for bank i at the end of quarter t, $PL_{i,t}$ is projected as,

$$PL_{i,t} = L_{i,t} - NPL_{i,t} \quad \ldots\ldots\ldots (6)$$

(v) Projection of provisions: Provisions of bank i for quarter t are projected as follows,

$$Provisions_{i,t} = PD_{i,t}.LGD_t.PL_{i,t-1}.PCR \quad \ldots\ldots\ldots (7)$$

where provisioning coverage ratio (PCR) is assumed at 75 per cent. The loss given default (LGD) during quarter t is derived based on the model of Frye and Jacobs (2012), as below

$$LGD_{i,t0+h} = \frac{\Phi\left(\Phi^{-1}\left(PD_{i,t0+h}\right)-k\right)}{PD_{i,t0+h}} \quad \ldots\ldots\ldots (8)$$

and the parameter k is derived as,

$$k = \frac{\Phi^{-1}\left(PD^{*}_{i,t0}\right)-\Phi^{-1}\left(PD^{*}_{i,t0}\times LGD^{*}_{i,t0}\right)}{\sqrt{1-\rho}} \quad \ldots\ldots\ldots (9)$$

PD* and LGD* are long-term average PDs and LGDs and Φ represents the cumulative normal distribution function.

(vi) Projection of interest income and expenses: Interest income (as share of interest-earning assets) and interest expenses (as share of interest-bearing liabilities) are modelled as functions of macroeconomic variables (GDP growth and call rate) and bank fixed effects with structure similar to equation (2). Bank-wise projections of these ratios are applied to derive shocks to yield on assets and cost of funds for each bank.

(vii) Projection of market risk: Market risk is estimated by applying MTM revaluation of bond exposures (AFS and HFT portfolio) of banks using three inputs, (i) bond exposure, (ii) Macaulay duration, and (iii) interest rate shock, using the bond revaluation formula:

$$\Delta V_{t+1} = -V_t \frac{D}{(1+r_t+s_t)}\left(\Delta r_{t+1} + \Delta s_{t+1}\right) \quad \ldots\ldots\ldots (10)$$

where D is the Macaulay duration, r is the risk-free rate, s is credit spread component, t is the time steps until maturity T, V is the market value, Δr_{t+1} represents the risk-free rate shift and Δs_{t+1} the credit spread shift. Further, equity and foreign exchange risk are also factored into market risk.

(viii) Projection of net profit: Net profit is projected as,

$$\begin{aligned} Net\ Profit = {} & (Interest\ Income - Interest\ Expenses) + (Non\text{-}interest\ income \\ & - Non\text{-}interest\ expenses) + Trading\ income - Loss\ Provisions \\ & - Provisions\ for\ Income\ Tax \end{aligned}$$

(ix) Projection of capital: Capital is projected as,

$$\begin{aligned} Capital_{t+1} = {} & Capital_t + Net\ Profit_{(t,t+1)} + Other\ Comprehensive\ Income\ _{(t,t+1)} \\ & - Dividend_{(t,t+1)} \end{aligned}$$

(x) Projection of risk weighted assets (RWA): RWA for Credit risk is projected as,

$$RWA_{t+1} = (RWA_t - Reduction\ in\ RWA_{(t,t+1)}\ due\ to\ new\ provisions).(1 + g_t) + Additional\ RWA\ due\ to\ new\ slippages_{(t,t+1)}$$

where g_t represents the nominal GDP growth rate during the period $(t, t+1)$.

RWA for market risk and RWA for operational risk are also projected to grow at nominal GDP growth rate.

III. Major assumptions: Provisions for income tax are assumed at 30 per cent, 30 per cent and 35 per cent of profit before tax for public sector banks (PSBs), private sector banks (PVBs) and foreign banks (FBs), respectively. Dividend payout ratio is assumed at 35 per cent of net profit. Balance sheet is projected to grow at the rate of nominal GDP growth.

(c) Single factor sensitivity analysis – Stress testing

As part of quarterly surveillance, stress tests are conducted covering credit risk, interest rate risk, liquidity risk, equity price risk, and the resilience of scheduled commercial banks (SCBs) in response to these shocks is studied. The analysis is done on individual SCBs as well as on the system level.

I. Credit risk (includes concentration risk)

To ascertain the resilience of banks, the credit portfolio was given a shock by increasing GNPA ratio for the entire portfolio. For testing the credit concentration risk, default of the top individual borrower(s) and the largest group borrower(s), in terms of credit outstanding, was assumed. The analysis was carried out both at the aggregate level as well as at the individual bank level. In case of credit risk, the assumed increase in GNPAs was distributed across sub-standard, doubtful and loss categories in the same proportion as prevailing in the existing stock of GNPAs at system level. However, for credit concentration risk (exposure based), the additional GNPAs under the assumed shocks were considered to fall into sub-standard category only and for credit concentration risk (stressed advances based), stressed advances were considered to fall into loss category. The provisioning requirements were taken as 25 per cent, 75 per cent and 100 per cent for sub-standard, doubtful and loss advances, respectively. These norms were applied on additional GNPAs calculated under a stress scenario. As a result of the assumed increase in GNPAs, loss of income on the additional GNPAs for one quarter was also included in total losses, in addition to the incremental provisioning requirements. The estimated provisioning requirements so derived were deducted from banks' capital and the capital adequacy ratios under stress scenarios were computed.

II. Sectoral credit risk

To ascertain the sectoral credit risk of individual banks, the credit portfolios of a particular sector was given a shock by increasing GNPA ratio for the sector, based on standard deviation (SD) of GNPA ratios of the sector. The additional GNPAs under the assumed shocks were considered to fall into sub-standard category only. Calculation of the impact on capital is similar to that of stress test for credit risk described above.

III. Interest rate risk

Under assumed shocks of shift in the INR yield curve, there could be losses on account of the fall in value of the portfolio or decline in income.

For interest rate risk in the investment portfolio: AFS, FVTPL (including HFT book) and HTM categories, a duration analysis approach was considered for computing the valuation impact (portfolio losses). The portfolio losses on these investments were calculated for each time bucket of AFS, FVTPL (including HFT book) and HTM categories based on the applied shocks. These estimated losses were reduced from banks' capital and market risk weighted losses from RWA to arrive at capital ratios under stress scenarios.

Interest rate risk of banks refers to the risk to a bank's capital and earnings arising from adverse movements in interest rates that affect bank's books. The impact on earnings is measured using the traditional gap analysis (TGA) and the capital impact is measured by duration gap analysis (DGA). The focus of TGA is to measure the level of a bank's exposure to interest rate risk in terms of the sensitivity of its net interest income (NII) to interest rate movements over one-year horizon. It involves bucketing of all rate-sensitive assets (RSA), rate-sensitive liabilities (RSL), and off-balance sheet items as per residual maturity / re-pricing date, in various time bands and computing earnings-at-risk (EAR) i.e., loss of income under different interest rate scenarios over a time horizon of one year. Advances, investments, swaps / forex swaps and reverse repos are the major contributors to RSA whereas deposits, swaps / forex swaps and repos are the main elements under RSL. The DGA involves bucketing of all RSA and RSL as per residual maturity / re-pricing dates in various time bands and computing the modified duration gap (MDG) to estimate the impact on the market value of equity. MDG is calculated with the following formula: MDG = [MDA - MDL * (RSL / RSA)], where MDA and MDL are the weighted averages of the modified duration (MD) of items of RSA and RSL, respectively. Thereafter, change in market value of equity (MVE) is computed as $\Delta E/ E = -[MDG]*RSA* \Delta i/ E$, where Δi is the change in interest rate and E is equity (i.e. net worth).

IV. Equity price risk

Under the equity price risk, the impact of the shock of a fall in the equity price index, by certain percentage points, on bank capital was examined. The loss due to the fall in the value of the portfolio on account of change in equity prices is deducted from the bank's capital to arrive at the capital under stress scenarios.

V. Liquidity risk

Liquidity stress test assesses the ability of a bank to withstand unexpected liquidity drain without taking recourse to any outside liquidity support. The stress test is based on the Liquidity Coverage Ratio (LCR) framework. The baseline scenario for the stress test depicts the extant LCR computation guidelines and accordingly applies weights used for LCR computation, to each component of cash

outflows, inflows and liquid assets. The adverse stress scenarios are designed by applying higher run-off rates relative to the baseline scenario to certain cash outflows (Table 2). LCR for each bank is computed under each of these scenarios.

Table 2: Run-off Factors applied on Cash Outflow Components

(in per cent)

Scenarios	Baseline	Stress Scenario 1	Stress Scenario 2
Retail Deposits			
Stable deposits	5	6	7
Less stable retail deposits	10	11	12
Unsecured Wholesale Funding			
Demand and term deposits, residual maturity < 30 days, small business			
Stable deposits	5	6	7
Less stable deposits	10	11	12
Nonfinancial corporates, sovereigns, central banks, multilateral development banks, PSEs	40	42.5	45
Currently undrawn but committed Credit and Liquidity Facilities			
Retail and small business	5	10	12
Nonfinancial corporates, sovereigns, central banks, multilateral development banks, PSEs			
Credit facilities	10	12	15
Liquidity facilities	30	40	50

(d) Bottom-up stress testing: Credit, market and liquidity risks

Bottom-up sensitivity analyses for credit, market and liquidity risks were performed by 37 select scheduled commercial banks. A set of common stress scenarios and shocks were provided to the select banks. The tests were conducted by the banks using relevant data at end-March 2025 and their own methodologies for calculating losses in each case.

(e) Bottom-up stress testing: Derivatives portfolios of select banks

Stress tests on derivatives portfolio (in terms of notional value) were carried out by a sample of 36 banks, constituting the major active authorised dealers and interest rate swap counterparties. Each bank in the sample was asked to assess the impact of stress conditions on their respective derivatives portfolio.

In case of domestic banks, the derivatives portfolio of both domestic and overseas operations was included. In case of foreign banks, only the domestic (Indian) position was considered for the exercise. Derivatives trades where hedge effectiveness was established were exempted from the stress tests, while all other trades were included.

The stress scenarios incorporated four shocks consisting of the spot USD-INR rate and domestic interest rates as parameters (Table 3).

Table 3: Shocks for sensitivity analysis

	Domestic interest rates	
Shock 1	Overnight	**+2.5 percentage points**
	Up to 1-year	**+1.5 percentage points**
	Above 1-year	**+1.0 percentage points**
	Domestic interest rates	
Shock 2	Overnight	**-2.5 percentage points**
	Up to 1-year	**-1.5 percentage points**
	Above 1-year	**-1.0 percentage points**
	Exchange rates	
Shock 3	USD-INR	**+20 per cent**
	Exchange rates	
Shock 4	USD-INR	**-20 per cent**

2.2 Primary (Urban) Co-operative Banks

Single factor sensitivity analysis – Stress testing

Stress testing of UCBs was conducted with reference to the reported position as of March 2025. The banks were subjected to baseline, medium and severe stress scenarios in the areas of credit risk, market risk and liquidity risk as follows:

I. Credit default risk

- Under credit default risk, the model aims to assess the impact of stressed credit portfolio of a bank on its CRAR.
- The arithmetic mean of annual growth rate of GNPAs was calculated separately for each NPA class (sub-standard, doubtful 1 (D1), doubtful 2 (D2), doubtful 3 (D3) and loss assets) based on reported data between 2009 and 2024 for the UCB sector as a whole. This arithmetic mean of annual growth rate formed the baseline stress scenario, which was further stressed by applying shocks of 1.5 standard deviation (SD) and 2.5 SD to generate medium and severe stress scenarios for each category separately. These were further adjusted based on NPA divergence level.
- Based on the above methodology, the annual NPA growth rate matrix arrived at under the three scenarios are as below.

(per cent)

	Increase in Substandard Assets	**Increase in D1 assets**	**Increase in D2 assets**	**Increase in D3 assets**	**Increase in Loss assets**
Baseline	21.71	17.10	15.93	14.38	29.83
Medium Stress	62.37	46.09	39.56	49.27	169.57
Severe Stress	89.47	65.42	55.32	72.53	262.72

II. Credit concentration risk

- The impact of CRAR, under assumed scenarios of top 1, 2, 3 single borrower exposures moving to 'loss advances' category, requiring 100 per cent provisioning, was assessed. These exposures may not necessarily be 'standard advances' but are identified based on their potential to require higher provisioning, thereby reflecting more impactful stress scenario.

III. Interest rate risk in trading book

- Duration analysis approach was adopted for analysing the impact of upward movement of interest rates on the AFS and HFT portfolio of UCBs.
- Upward movement of interest rates by 50 bps, 100 bps and 150 bps were assumed under the three stress scenarios and consequent provisioning impact on CRAR was assessed.

IV. Interest rate risk in banking book

- The banking book of UCBs was subjected to interest rate shocks of 50 bps, 100 bps and 150 bps under three stress scenarios and its impact on net interest income was assessed.

V. Liquidity risk

- The stress test was conducted based on cumulative cash flows in the 1-28 days' time bucket. The cash inflows and outflows were stressed under baseline, medium, and severe scenarios.
- While the inflows are stressed uniformly at 5 per cent under all the stress scenarios, outflows are stressed based on worst negative deposit growth recorded across quarters for the periods ranging across past ten years (2014 - 2024). Since UCBs are primarily dependent on deposits as major source of funds, negative growth in deposits is considered as representative of stressed outflows. Further, three months period is considered as representative of 1-28 days' bucket as this is the closest short-term period for which deposits data is available for all the banks (given that all the banks submit quarterly returns). The average of worst negative deposit growth rate for ten years is considered as baseline scenario, which is further stressed by 1.5 SD and 2.5 SD to generate medium and severe stress scenarios for outflows.
- The banks with negative cumulative mismatch (cash inflow less cash outflow) exceeding 20 per cent of the outflows were considered to be under stress on the basis of the circular RBI/2008-09/174 UBD. PCB. Cir. No12/12.05.001/2008-09 dated September 17, 2008, which stipulates that the mismatches (negative gap between cash inflows and outflows) during 1-14 days and 15-28 days' time bands in the normal course should not exceed 20 per cent of the cash outflows in each time band.

2.3 Non-Banking Financial Companies (NBFCs)

(a) Non-banking stability indicator (NBSI) and map

The non-banking financial company (NBFC) stability indicator (NBSI) presents an overall assessment of changes in underlying conditions and risk factors that have a bearing on the stability of the NBFC sector during a period. In line with the scale-based regulatory structure, NBFCs falling in the upper and middle

layers (excluding the Core Investment Companies (CICs), Primary Dealers (PDs) and Housing Finance Companies (HFCs)) have been considered for construction of the indicator and a related stability map.

The NBSI constitutes five composite indices representing risks in five dimensions – soundness, asset-quality, profitability, liquidity and efficiency. Each composite index is a relative measure of risk and is constructed using multiple financial ratios in respective risk dimension (Table 4). A higher value of a composite index would mean higher risk in that dimension.

Each financial ratio is first normalized for the sample period using the following formula:

$$Y_t = \frac{X_t - min(X_t)}{max(X_t) - min(X_t)}$$

where X_t is the value of the financial ratio at time *t*. If a variable is negatively related to risk, then it is normalized using 1-Y_t. Composite index of each dimension is then calculated as a simple average of the normalized ratios in that dimension. Finally, the NBSI is constructed as a simple average of these five composite indices. Each composite index and the overall NBSI take values between zero and one.

Table 4: Ratios used for constructing the Non-Banking Stability Indicator and Map

	Dimension		
Soundness	CRAR #	Net NPAs to Capital	Tier 1 Capital to Assets #
Asset Quality	Gross NPAs to Total Advances	Provisioning Coverage Ratio #	Sub-Standard Advances to Gross NPAs#
Profitability	Return on Assets #	Net Interest Margin #	Return on Net Owned Funds #
Liquidity	Short-term Liability to Total Assets	Long-term Assets to Total Assets	Dynamic Liquidity#
Efficiency	Cost to Income	Staff Expense to Total Expense	Business to Staff Expense#

Note: # Negatively related to risk.

(b) Single factor sensitivity analysis - Stress testing

Credit and liquidity risk stress tests for NBFCs have been performed under baseline, medium and high risk scenarios.

I. Credit risk

Major items of the balance sheet of NBFCs over one year horizon were projected by applying moving average and smoothing techniques. Assets, advances to total assets ratio, earnings before profit and tax (EBPT) to total assets ratio, risk-weight density and slippage ratio were projected over the next one year; and thereafter, based on these projections – new slippages, provisions, EBPT, risk-weighted assets and capital were calculated for the baseline scenario. For the medium and high-risk scenarios, GNPA ratios under baseline scenario were increased by 1 SD and 2 SD and accordingly revised capital and CRAR were calculated.

II. Liquidity risk

Cash flows under stress scenario and mismatch in liquidity position were calculated by assigning assumed percentage of stress to the overall cash inflows and outflows in different time buckets over the next one year. Projected outflows and inflows over the next one year were considered for

calculating the liquidity mismatch under the baseline scenario. Outflows and inflows of the sample NBFCs were applied a shock of 5 per cent and 10 per cent for time buckets over the next one year for the medium and high-risk scenarios, respectively. Cumulative liquidity mismatch due to such shocks were calculated as per cent of cumulative outflows and, NBFCs with negative cumulative mismatch were identified.

2.4 Stress Testing Methodology of Mutual Funds

The SEBI has mandated all open-ended debt schemes (except overnight schemes) to conduct stress testing. Accordingly, Association of Mutual Funds in India (AMFI) prescribed the "Best Practice Guidelines on Stress Testing by Debt Schemes of Mutual Funds". The stress testing is carried out internally by all Asset Management Companies (AMCs) on a monthly basis and also when the market conditions require so. A uniform methodology is being followed across the industry for stress testing with a common outcome, i.e., impact on NAV as a result of the stress testing.

Stress testing parameters

The stress testing is conducted on the three risk parameters, *viz.*, interest rate risk, credit risk and liquidity risk.

(a) Interest rate risk parameter

For interest rate risk parameter, AMCs subject the schemes at portfolio level to the following scenarios of interest rate movements and assess the impact on NAV.

1) The highest increase in G-Sec yield in the last 120 months (1-year G-Secs or 10-year G-Secs whichever is higher on month-on-month basis comparing maximum yield of a month to minimum yield of previous month).
2) Two-third of the highest increase in G-Sec yield in the last 120 months.
3) One-third of the highest increase in G-Sec yield in the last 120 months

(b) Credit risk parameter

For credit risk parameter, AMCs may subject the securities held by the scheme to the following:

1) Calculate the probability of downgrade of each security. In this regard, to incorporate all possible downgrade scenarios (notches) for each security, probability tables published by rating agencies are being used.
2) Further, each potential notched down rating will correspond to a change in valuation yield for the security corresponding to that change in rating. The change in valuation yields for the respective rating changes is derived from the valuation matrix used by the valuation agencies.
3) The sum product of probability of downgrade within investment grade and change in yield on that downgrade of a security, is then multiplied by the duration of that security and the weightage of that security in the portfolio. Separately, the sum product of probability of downgrade below investment grade with haircut applicable on that downgrade of any security, is multiplied with the weightage of that security in the portfolio. These two sum products are added to get the aggregate potential impact at a security level.

4) The summation of all these security level outputs is considered as the portfolio level credit impact.

(c) Liquidity risk parameter

For liquidity risk parameter, the following analysis is being undertaken:

1) Data for past periods of stress (viz. stress scenarios during the years 2008, 2013, 2018, 2020) along with rise in yields for a given credit rating, type of security, etc. in respective matrices for the relevant duration bucket is considered.

2) The change in median yield differential over G-Sec during stress period compared to the preceding normal period (normal period is a period starting 6 months prior to the start of the stress period and ending at the start of the stress period) is considered as rise in spread for the purpose of stress testing.

3) AMCs take yield spike as higher than the AMFI-specified values for stress testing based on market scenarios.

4) These calculations are again reiterated for individual securities based on respective ratings, matrix-based sector as provided in the matrix files and duration bucket and aggregated at the portfolio level to get the portfolio level output.

AMCs additionally consider extreme stress scenarios of time bound liquidation (viz 5 days, 3 days and 1 day) of full portfolios and its impact on NAV by applying suitable haircuts.

2.5 Methodology for Stress Testing Analysis at Clearing Corporations

The SEBI has specified the granular norms related to core settlement guarantee fund (SGF); stress testing and default procedures to create a core fund (called core SGF) within the SGF against which no exposure is given and which is readily and unconditionally available to meet settlement obligations of clearing corporation in case of clearing member(s) failing to honour settlement obligation; align stress testing practices of clearing corporations with Principles for Financial Market Infrastructures (norms for stress testing for credit risk, stress testing for liquidity risk and reverse stress testing including frequency and scenarios); capture the risk due to possible default in institutional trades in stress testing; harmonise default waterfalls across clearing corporations; limit the liability of non-defaulting members in view of the Basel capital adequacy requirements for exposure towards central counterparties (CCPs); ring-fence each segment of clearing corporation from defaults in other segments; and bring in uniformity in the stress testing and the risk management practices of different clearing corporations especially with regard to the default of members.

Stress testing is carried out at clearing corporations (CCs) to determine the minimum required corpus (MRC), which needs to be contributed by clearing members (CMs) to the core SGF. The MRC is determined separately for each segment (viz. cash market, equity derivatives, currency derivatives, commodity derivatives, debt and tri-party repo segment) every month based on stress testing subject to the following:

(a) The MRC is fixed for a month.

(b) By 15th of every month, CCs review and determine the MRC for next month based on the results of daily stress tests of the preceding month.

(c) For every day of the preceding month, uncovered loss numbers for each segment are estimated based on stress test and highest of such numbers is taken as worst-case loss number for the day.

(d) Average of all the daily worst case loss numbers determined in (iii) above is calculated.

(e) The MRC for next month is at least the higher of the average arrived in at step (iv) above and the segment MRC as per previous review.

For determining the MRC for cash, equity derivatives and currency derivatives segment, CCs calculate the credit exposure arising out of a presumed simultaneous default of top two CMs. The credit exposure for each CM is determined by assessing the close-out loss arising out of closing open positions (under stress testing scenarios) and the net pay-in/ pay-out requirement of the CM against the required margins and other mandatory deposits of the CM. The MRC or average stress test loss of the month is determined as the average of all daily worst case loss scenarios of the month. The actual MRC for any given month is determined as at least the higher of the average stress test loss of the month or the MRC arrived at any time in the past. For the debt segment, the trading volume is minimal, and hence the MRC for the core SGF is calculated as higher of ₹4 crore or aggregate losses of top two CMs, assuming close out of obligations at a loss of four per cent less required margins. The tri-party repo segment and commodity derivatives segment also follow the same stress testing guiding principles as prescribed for equity cash, equity derivatives and currency derivatives segments. For commodity derivatives segment, however, MRC is computed as the maximum of either credit exposure on account of the default of top two CMs or 50 per cent of credit exposure due to simultaneous default of all CMs. Further, the minimum threshold value of MRC for commodity derivatives segment of any stock exchange is ₹10 crore.

CCs carry out daily stress testing for credit risk using at least the standardized stress testing methodology prescribed by SEBI for each segment. Apart from the stress scenarios prescribed for cash market and derivatives market segments, CCs also develop their own scenarios for a variety of 'extreme but plausible market conditions' (in terms of both defaulters' positions and possible price changes in liquidation periods, including the risk that liquidating such positions could have an impact on the market) and carry out stress testing using self-developed scenarios. Such scenarios include relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons and a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions. Also, for products for which specific stress testing methodology has not been prescribed, CCs develop extreme but plausible market scenarios (both hypothetical and historical) and carry out stress tests based on such scenarios and enhance the corpus of SGF, as required by the results of such stress tests.

2.6 Interconnectedness – Network Analysis

Matrix algebra is at the core of the network analysis, which uses the bilateral exposures between entities in the financial sector. Each institution's lending to and borrowings from all other institutions in the system are plotted in a square matrix and are then mapped in a network graph. The network model uses

various statistical measures to gauge the level of interconnectedness in the system. Some of the important measures are given below:

i) *Connectivity Ratio*: This statistic measures the extent of links between the nodes relative to all possible links in a complete graph. For a directed graph, denoting total number of out-degrees as $K = \sum_{i=1}^{N} k_i$ and the total number of nodes as N, connectivity ratio is given as $\frac{K}{N(N-1)}$.

ii) *Cluster coefficient:* Clustering in networks measures how interconnected each node is. Specifically, there should be an increased probability that two of a node's neighbours (banks' counterparties in case of a financial network) are neighbours to each other also. A high clustering coefficient for the network corresponds with high local interconnectedness prevailing in the system. For each bank with k_i neighbours the total number of all possible directed links between them is given by $k_i(k_i\text{-}1)$. Let E_i denote the actual number of links between bank i's k_i neighbours. The clustering coefficient C_i for bank i is given by the identity:

$$C_i = \frac{E_i}{k_i(k_i - 1)}$$

The clustering coefficient (C) of the network as a whole is the average of all C_i's:

$$C = \frac{\sum_{i=1}^{N} C_i}{N}$$

iii) *Tiered network structures:* Typically, financial networks tend to exhibit a tiered structure. A tiered structure is one where different institutions have different degrees or levels of connectivity with others in the network. In the present analysis, the most connected banks are in the innermost core. Banks are then placed in the mid-core, outer core and the periphery (the respective concentric circles around the centre in the diagram), based on their level of relative connectivity. The range of connectivity of the banks is defined as a ratio of each bank's in-degree and out-degree divided by that of the most connected bank. Banks that are ranked in the top 10 percentile of this ratio constitute the inner core. This is followed by a mid-core of banks ranked between 90 and 70 percentile and a 3rd tier of banks ranked between the 40 and 70 percentile. Banks with a connectivity ratio of less than 40 per cent are categorised in the periphery.

iv) *Colour code of the network chart*: The blue balls and the red balls represent net lender and net borrower banks respectively in the network chart. The colour coding of the links in the tiered network diagram represents the borrowing from different tiers in the network (for example, the green links represent borrowings from the banks in the inner core).

(a) Solvency contagion analysis

The contagion analysis is in the nature of a stress test where the gross loss to the banking system owing to a domino effect of one or more banks failing is ascertained. We follow the round by round or sequential algorithm for simulating contagion that is now well known from Furfine (2003). Starting with a trigger bank i that fails at time 0, we denote the set of banks that go into distress at each round or iteration by Dq, q = 1,2, …For this analysis, a bank is considered to be in distress when its Tier I capital ratio goes below 7 per cent. The net receivables have been considered as loss for the receiving bank.

(b) Liquidity contagion analysis

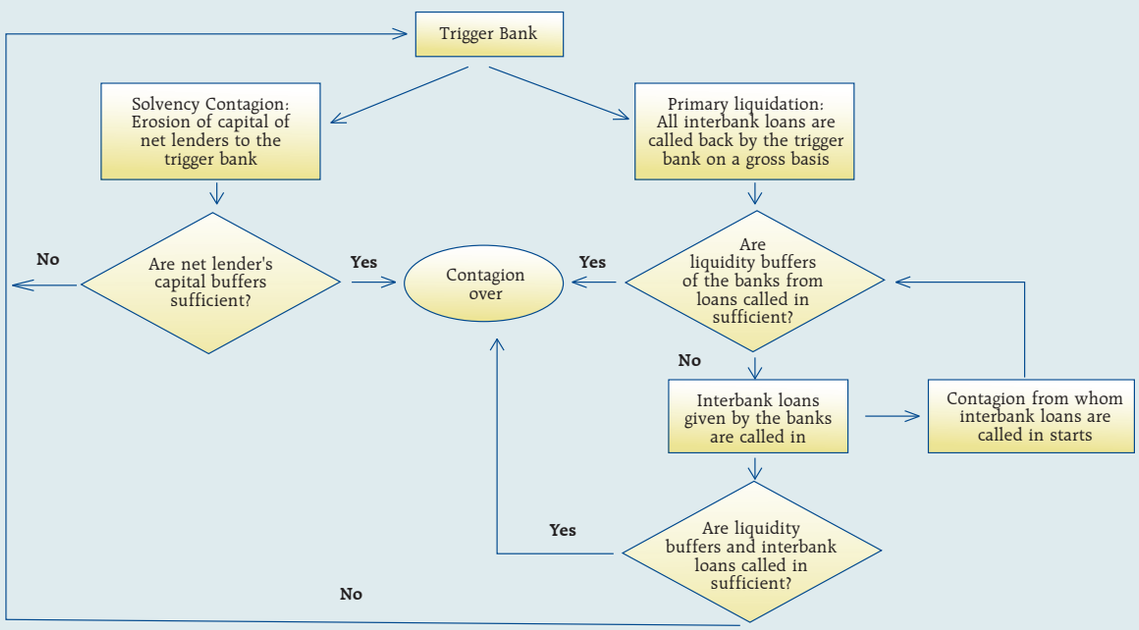
While the solvency contagion analysis assesses potential loss to the system owing to failure of a net borrower, liquidity contagion estimates potential loss to the system due to the failure of a net lender. The analysis is conducted on gross exposures between banks comprising both fund based ones and derivatives. The basic assumption for the analysis is that a bank will initially dip into its liquidity reserves or buffers to tide over a liquidity stress caused by the failure of a large net lender. The items considered under liquidity reserves are: (a) excess CRR balance; (b) excess SLR balance; and (c) 18 per cent of NDTL. If a bank is able to meet the stress with liquidity buffers alone, then there is no further contagion.

However, if the liquidity buffers alone are not sufficient, then a bank will call in all loans that are 'callable', resulting in a contagion. For the analysis only short-term assets like money lent in the call market and other very short-term loans are taken as callable. Following this, a bank may survive or may be liquidated. In this case there might be instances where a bank may survive by calling in loans, but in turn might propagate a further contagion causing other banks to come under duress. The second assumption used is that when a bank is liquidated, the funds lent by the bank are called in on a gross basis (referred to as primary liquidation), whereas when a bank calls in a short-term loan without being liquidated, the loan is called in on a net basis (on the assumption that the counterparty is likely to first reduce its short-term lending against the same counterparty. This is referred to as secondary liquidation).

(c) Joint solvency-liquidity contagion analysis

A bank typically has both positive net lending positions against some banks while against some other banks it might have a negative net lending position. In the event of failure of such a bank, both solvency and liquidity contagion will happen concurrently. This mechanism is explained by the following flowchart:

Flowchart of Joint Liquidity-Solvency contagion due to a bank coming under distress



The trigger bank is assumed to have failed for some endogenous reason, *i.e.*, it becomes insolvent and thus impacts all its creditor banks. At the same time it starts to liquidate its assets to meet as much of its obligations as possible. This process of liquidation generates a liquidity contagion as the trigger bank starts to call back its loans.

Since equity and long-term loans may not crystallise in the form of liquidity outflows for the counterparties of failed entities, they are not considered as callable in case of primary liquidation. Also, as the RBI guideline dated March 30, 2021 permits the bilateral netting of the MTM values in case of derivatives at counterparty level, exposures pertaining to derivative markets are considered to be callable on net basis in case of primary liquidation.

The lender / creditor banks that are well capitalised will survive the shock and will generate no further contagion. On the other hand, those lender banks whose capital falls below the threshold will trigger a fresh contagion. Similarly, the borrowers whose liquidity buffers are sufficient will be able to tide over the stress without causing further contagion. But some banks may be able to address the liquidity stress only by calling in short term assets. This process of calling in short term assets will again propagate a contagion.

The contagion from both the solvency and liquidity side will stop / stabilise when the loss / shocks are fully absorbed by the system with no further failures.

(d) Identification of impactful and vulnerable banks

Data on bilateral exposures among entities of the financial system are leveraged to compute impact and vulnerability metrics to identify entities that are impactful (causing sizeable capital loss to others in the system upon their default) as well as vulnerable (their own capital loss susceptibility conditional on other entities' failures), using the following metrics and methodology (IMF, 2017):

(i) Index of contagion (impact) of a bank represents the average loss experienced by other banks (expressed as a percentage of their Tier 1 capital) due to failure of that bank. It is calculated, for bank *i*, as

$$100 * \left(\sum_{j \neq i} L_{ji} / K_j \right) / (N - 1)$$

where K_j is bank *j's* capital, L_{ji} is the loss to bank *j* due to the default of bank *i* and N is the total number of banks;

(ii) Index of vulnerability of a bank represents the average loss experienced by the bank (expressed as a percentage of its Tier 1 capital) across individually triggered failures of all other banks. It is calculated, for bank *i*, as

$$100 * \left(\sum_{j \neq i} L_{ij} / K_i \right) / (N - 1)$$

where K_i is bank *i's* capital, L_{ij} is the loss to bank *i* due to the default of bank *j* and N is the total number of banks;

(iii) To analyse the effects of a credit shock, the exercise simulates default of each bank with 100 per cent loss-given-default, where the counterparties' capitals absorb the losses. A bank is said to fail if its Tier 1 capital ratio falls below 7 per cent. In the subsequent rounds, if there are further failures, the losses are aggregated.

The results of indexes calculated can be analysed to identify entities that are common between the set of top highly impactful banks and the set of top highly vulnerable banks.

2.7 Financial System Stress Indicator (FSSI)

FSSI is compiled using risk factors spread across five financial market segments (equity, forex, money, government debt and corporate debt), three financial intermediary segments (banks, NBFCs and AMC-MFs) and the real sector (Table 5). FSSI lies between zero and unity, with higher value indicating more stress. For its construction, the risk factors pertaining to each component segment are first normalised using min-max method and thereafter aggregated based on simple average into a sub-indicator 'y_i' representing the i^{th} market / sector. Finally, the composite FSSI is obtained as,

$$FSSI_t = \sum_{i=1}^{9} w_i y_{it}$$

where the weight 'w_i' of each sub-indicator 'y_i' is determined from its sample standard deviation 's_i', as,

$$w_i = \frac{1/s_i}{\sum_{i=1}^{9}(1/s_i)}$$

Table 5: Risk factors constituting each component of FSSI

Equity Market	1. Difference between NIFTY 50 monthly returns and its maximum over a two-year rolling window 2. NIFTY 50 Market capitalisation-to-GDP ratio 3. NSE-VIX Index 4. Net Equity FPI flows	
Government Debt Market	5. Realised volatility in 10-year G-sec yield 6. Term Spread: Spread between 10-year G-sec yield and 3-month T-Bill rate 7. Increase in the 10-year G-sec yield compared to the minimum over a two-year rolling window 8. Net Debt FPI flows	
Forex Market	9. Difference between rupee dollar exchange rate and its maximum over a two-year rolling window. 10. m-o-m appreciation/depreciation of rupee dollar exchange rate 11. GARCH (1,1) volatility of rupee dollar exchange rate 12. Difference between 3-month forward premia and its historical maximum.	
Money/Short Term Market	13. Spread between weighted average call rate and weighted average market repo rate 14. Spread between 3-month CD rate and 3-month T-Bill rate 15. Spread between 3-month non-NBFC CP rate and 3-month T-Bill rate 16. Realised volatility of 3-month CP rate 17. Spread between 3-month OIS rate and 3-month T-Bill rate	
Corporate Bond Market	18. Yield spread between 3-year AAA corporate bonds and 3-year G-sec 19. Difference between 3-year BBB and 3-year AAA corporate bond yield 20. Difference between 3-year BBB corporate bond yield and its maximum	
Banking Sector	SCBs	21. CRAR (SCBs) 22. RoA (SCBs) 23. LCR (SCBs) 24. Cost-to-Income (SCBs) 25. Stressed Assets Ratio (SCBs) 26. Banking Beta: cov(r,m)/var(m), over 2-year moving window. r= Bank NIFTY y-o-y, m= NIFTY 50 y-o-y
	UCBs	27. GNPA ratio (UCBs) 28. CRAR (UCBs) 29. RoA (UCBs)
NBFC Sector	30. GNPA ratio 31. CRAR 32. RoA 33. Spread between 3-month NBFC CP rate and 3-month T-Bill rate	
AMC-MF Sector	34. Mutual fund redemptions: y-o-y 35. Mutual fund net inflows	
Real Sector	36. GDP growth 37. CPI inflation 38. Current account balance as a share of GDP 39. Gross fiscal deficit as a share of GDP	

Annex 3

Important Domestic Regulatory Measures

1. Reserve Bank of India (RBI)

Date	Regulation	Rationale
December 31, 2024	**Government Debt Relief Schemes (DRS):** The implementation of various forms of State Government DRS provides for waiver of debt obligations of targeted segment of borrowers against fiscal support. However, frequent announcement of such schemes may affect the credit discipline and impair future credit flow to such borrowers. The guidelines on Government Debt Relief Schemes address these concerns by laying down the prudential treatment of such exposures by REs and by also providing a model operating procedure which may be adopted while designing such relief measures so that the expectations of all stakeholders involved are aligned.	To maintain credit discipline and mitigate moral hazard and prudential concerns.
February 07, 2025	**Access of SEBI-registered non-bank brokers to NDS-OM:** A new facility, *viz.*, 'stock broker connect' was introduced in the NDS-OM platform - an electronic trading for secondary market transactions in Government securities. Under this facility, SEBI registered stock brokers have been permitted to directly access NDS-OM on behalf of their individual constituents/ clients.	To facilitate retail participation in Government securities.
February 17, 2025	**Government securities transactions between a Primary Member (PM) of NDS-OM and its own Gilt Account Holder (GAH) or between two GAHs of the same PM:** Matching of PM-GAH and GAH-GAH trades of the same PM on NDS-OM was permitted, along with guaranteed settlement of such trades. An option to settle reported PM-GAH and GAH-GAH trades of same PM through CCIL was also enabled.	To bring uniformity in the trading and settlement norms for all transactions in G-secs.

Date	Regulation	Rationale
February 24, 2025	**Review and rationalization of prudential norms – UCBs:** The Reserve Bank has reviewed the prudential norms for UCBs on credit concentration risk, exposures to sensitive sectors and provisioning for relatively riskier exposures. Key measures include revision in definition of small value loans, rationalisation of aggregate exposure limits for housing loans to individuals and a stricter limit for aggregate exposure to other real estate sector, enhanced monetary ceiling on individual housing loans for Tier-3 and Tier-4 UCBs and extension of the five year glide-path allowed to UCBs to provide for the valuation differential on the Security Receipts held against the assets transferred by them to Asset Reconstruction Companies by additional two years.	To allow greater operational flexibility to UCBs without diluting the regulatory objectives.
March 24, 2025	**Master Directions – Reserve Bank of India (Priority Sector Lending – Targets and Classification) Directions, 2025:** The revised guidelines on Priority Sector Lending (PSL) were issued by the Reserve Bank after a comprehensive review along with feedback from stakeholders. They include the following major changes: (i) enhancement of several loan limits, including housing loans for enhanced PSL coverage; (ii) broadening of the purposes based on which loans may be classified under 'Renewable Energy'; (iii) revision of overall PSL targets for UCBs to 60 per cent of Adjusted Net Bank Credit or Credit Equivalent of Off-Balance Sheet Exposures, whichever is higher; (iv) expansion of the list of eligible borrowers under the category of 'Weaker Sections', along with removal of the existing cap on loans by UCBs to individual women beneficiaries.	To facilitate better targeting of bank credit to the priority sectors of the economy.

Date	Regulation	Rationale
May 07, 2025	**Policy Statement - Framework for Formulation of Regulations:** The framework for formulation of regulations establishes a standardised, transparent process for the Reserve Bank to draft, amend, and review its regulations[1]. Key steps before issuance of regulations and any significant amendments include public consultation and impact analysis (to the extent feasible). The framework also includes periodic review of the regulations keeping in view the stated objectives, experience gained through surveillance and supervision, relevant orders passed by courts, global best practices or standards prescribed by international standard setting bodies, relevance in a changed environment and the scope for reducing redundancies.	To ensure a transparent, consultative and standardised approach in the formulation of regulations.
May 08, 2025	**Investments by FPIs in Corporate Debt Securities through the General Route – Relaxations:** The requirement for investments by FPIs in corporate debt securities to comply with the short-term investment limit and the concentration limit was withdrawn.	To provide greater ease of investment to FPIs.
June 06, 2025	**Reserve Bank of India (Lending Against Gold and Silver Collateral) Directions, 2025:** As a part of moving towards a more principle-based and harmonised regulatory framework and addressing possible prudential and conduct related gaps across the REs, revised instructions on the subject were issued.	To put in place a harmonised regulatory framework for loans against gold and silver collateral applicable across REs, to provide necessary clarity on applicable guidelines and strengthen the conduct-related aspects.

[1] For the purpose of this Framework, "Regulations" include all regulations, directions, guidelines, notifications, orders, policies, specifications, and standards as issued by the Bank in exercise of the powers conferred on it by or under the provisions of the Acts and Rules as given in its Annex.

Date	Regulation	Rationale
June 16, 2025	**Master Direction – Reserve Bank of India (Electronic Trading Platforms) Directions, 2025:** The regulatory framework for Electronic Trading Platforms (ETPs) issued by the Reserve Bank in 2018 were reviewed. Regulatory treatment for single dealer platforms operated by banks and standalone primary dealers were notified. Eligibility criteria to seek authorisation to operate ETPs and stipulations relating to operating framework for authorised ETPs were fine tuned.	To calibrate the regulatory framework for ETPs based on changes in the market ecosystem.

2. Securities and Exchange Board of India (SEBI)

Date	Regulation	Rationale
October 01, 2024	**Review of Stress Testing Framework for Equity Derivatives Segment for determining the Corpus of Core Settlement Guarantee Fund (Core SGF):** The SEBI has specified the stress testing methodologies to be adopted for determining the credit risk of a Clearing Corporations (CCs) towards its participants.	To have a more comprehensive understanding of the prevalent tail risk in the equity derivatives segment considering the changing market dynamics of the equity derivatives segment.
October 10, 2024	**Change in timing for securities payout in the activity schedule for T+1 rolling settlement.**	To enable payout of securities to be credited to the clients' demat account on the same settlement day instead of one working day from the receipt of pay-out from the Clearing Corporation.
November 05, 2024	**Disclosure of expenses, half yearly returns, yield and 'risk-o-meter' of schemes of Mutual Funds:** Mutual Funds were advised to disclose expenses, returns during the half year and yield of direct and regular plans of mutual fund schemes separately. Further, a standardised format and colour scheme of risk-o-meter applicable for all digital and polychrome printed promotion materials/ disclosures for the schemes have been specified.	To increase transparency for all regulatory disclosures.

Date	Regulation	Rationale
November 18, 2024	**Modification of Para 15 of Master Circular for Credit Rating Agencies (CRAs):** Specific policy guidance on the treatment of specified scenarios of non-payment of debt (principal and/ or interest) was provided.	To make application of default recognition policy uniform across CRAs.
December 11, 2024	**Amendment to SEBI (Issue and Listing of Non-Convertible Securities) Regulations, 2021 (SEBI NCS Regulations) regarding expanding the scope of Sustainable Finance Framework in the Indian Securities Market:** The issuer will be able to raise funds through issuance of social bonds, sustainable bonds and sustainability-linked bonds which together with green debt securities will be termed as Environmental, Social and Governance (ESG) Debt Securities.	To expand the scope of sustainable finance in the Indian securities market,
January 07, 2025	**Measures for Ease of Doing Business for CRAs – Timelines.**	To facilitate ease of doing business and bring uniformity in timelines related to rating reviews and publication of Press Release by CRAs.
January 17, 2025	**Disclosure of Risk Adjusted Return - Information Ratio (IR)[2] for Mutual Fund Schemes:** Disclosure of Information Ratio by equity schemes of Mutual Funds has been mandated, which will represent a more holistic measure of a scheme's performance.	To bring more transparency in disclosures made by AMCs and aid better decision making by investors.
January 17, 2025	**Timeline for review of ESG rating pursuant to occurrence of 'Material Events'.**	To enable ESG Rating Providers (ERPs) to effectively assess the impact of Business Responsibility and Sustainability Reporting (BRSR) on the ESG ratings of the rated companies.

[2] IR is an established financial ratio to measure the Risk Adjusted Return (RAR) of any scheme portfolio. It is often used as a measure of a portfolio manager's level of skill and ability to generate excess returns, relative to a benchmark and attempts to identify the consistency of the performance by incorporating standard deviation/ risk factor into the calculation.

Date	Regulation	Rationale
February 27, 2025	**Timelines for deployment of funds collected by Asset Management Companies (AMCs) in New Fund Offer (NFO) as per asset allocation of the scheme.**	To encourage AMCs to collect only as much funds in NFOs as can be deployed in a reasonable period of time and to discourage any mis-selling of NFOs of the mutual fund schemes.
March 21, 2025	**Alignment of interest of the Designated Employees of the Asset Management Company (AMC) with the interest of the unitholders:** Amendments to SEBI (Mutual Funds) Regulations, 1996 were carried out to relax the regulatory framework with respect to the "skin in the game requirements" applicable to AMCs and their employees.	To facilitate ease of doing business for Mutual Funds.
March 28, 2025	**Amendment to Master Circular for Real Estate Investment Trusts (REITs):** Amendments include review of lock-in provisions for preferential issue of units for REITs and guidelines for follow-on offer by publicly offered REITs.	To align the quantum of units required to be locked-in under the guidelines for preferential issue of units for REITs and Infrastructure Investment Trusts (InvITs) applicable at the time of initial offer and to provide a regulatory framework for undertaking follow-on offer by a publicly offered REIT/ InvIT.

Date	Regulation	Rationale
March 28, 2025	**Amendments to SEBI (Listing Obligations and Disclosure Requirements (LODR)) Regulations, 2015 regarding corporate norms for High Value Debt Listed Entities (HVDLEs):** The revised framework for HVDLEs provides for the following – (a) increase in threshold for identification of HVDLE from ₹500 crore to ₹1000 crore; (b) introduction of a separate chapter and a sunset clause for HVDLEs; (c) increased flexibility on the constitution of the Nomination and Remuneration Committee (NRC), Risk Management Committee (RMC) and Stakeholder Relationship Committee (SRC) by HVDLEs; (d) inclusion of HVDLEs in computation of listed entities while counting the ceiling on the number of directorships, memberships or chairpersonships; (e) for debt listed entities where the shareholding is wholly/ substantially held by one or a few related party shareholders, material Related Party Transactions (RPTs) shall require No-Objection Certificate (NOC) from the Debenture Trustee (who, in turn, shall obtain debenture holders' approval); (f) introduction of Business Responsibility and Sustainability Report (BRSR) for HVDLEs on a voluntary basis; and (g) relaxation to entities set up under the Public-Private Partnership mode from provisions relating to composition of directors under the SEBI LODR Regulations akin to PSUs or statutory entities.	To review the corporate governance norms in the SEBI's LODR regulations to make it relevant for debt listed entities.
April 04, 2025	**Recognition and Operationalisation of Past Risk and Return Verification Agency (PaRRVA).**	To facilitate persons regulated by SEBI to market their risk-return performance to investors and to ensure protection of interests of investors by ensuring access of investors to verified risk-return claims.

Date	Regulation	Rationale
April 22, 2025	**Measures towards Ease of Doing Business (EoDB) and Investor Protection for Infrastructure Investment Trusts and Real Estate Investment Trusts:** The SEBI, in consultation with various stakeholders, reviewed the extant regulatory provisions for various matters and based on the recommendations of the working group for Ease of Doing Business and Hybrid Securities Advisory Committee (HySAC), measures towards EoDB for InvITs and REITs were provided.	To promote ease of doing business for activities related to REITs and InvITs.
April 22, 2025	**Securities and Exchange Board of India (Real Estate Investment Trusts) (Amendment) Regulations, 2025:** The amendments include the following: (a) standardising the disclosures in scheme offer document; (b) public issue process for scheme of Small and Medium Real Estate Investment Trusts (SM REITs); and (c) alignment of provisions for SM REITs vis-à-vis REITs.	To promote ease of doing business for activities related to SM REITs.
April 22, 2025	**Measures towards Ease of Doing Business for ESG Rating Providers (ERPs).**	To promote ease of doing business for ERPs following a subscriber-pays business model and to address the industry need for ESG rating of products/ issuers under the purview of other financial sector regulators/ authorities by specifying Activity Based Regulation for ERPs.
April 22, 2025	**Change in cut-off timings to determine applicable Net Asset Value (NAV) with respect to repurchase/ redemption of units in overnight schemes of Mutual Funds.**	To operationalise the upstreaming of clients' funds in the form of pledge of units of Mutual Fund Overnight Schemes, revised cut-off timings to determine applicable NAV with respect to repurchase of units in the overnight schemes have been prescribed.

3. Insurance Regulatory and Development Authority of India (IRDAI)

Date	Regulation	Rationale
November 26, 2024	**A pan India Quiz organized by IRDAI to promote Insurance Awareness:** In line with the vision of achieving 'Insurance for All by 2047' and to create more awareness on insurance products, the Insurance Regulatory and Development Authority of India (IRDAI) organised a Pan-India insurance awareness quiz – 'BimaGyaan', on MyGov platform.	To raise awareness about the role of insurance in financial security and inclusion.
January 10, 2025	**IRDAI (Regulatory Sandbox) Regulations, 2025.**	To promote innovation, adaptability and operational efficiency in the insurance sector, the Regulatory Sandbox framework has been further strengthened.
January 10, 2025	**IRDAI (Maintenance of Information by the Regulated Entities and Sharing of Information by the Authority), Regulations 2025.**	The regulation mandates electronic record-keeping with robust security and privacy measures, requires regulated entities to adopt data governance framework and implement Board approved policies for record maintenance.
January 10, 2025	**IRDAI (Insurance Advisory Committee) (Amendment) Regulations, 2025;** **IRDAI (Re-insurance Advisory Committee) (Amendment) Regulations, 2025; and** **IRDAI (Meetings) (Amendment) Regulations, 2025.**	To enhance operational flexibility, governance and efficiency of conducting meetings.
January 30, 2025	**Review of revision in premium rates under health insurance policies for senior citizens.**	To direct all general and health insurers to not to revise the premium for senior citizens by more than 10% per annum without prior consultation with the appropriate authority.

Date	Regulation	Rationale
March 10, 2025	**Exposure to Forward Contracts in Government Securities (Bond Forwards).**	To permit the insurers to undertake transactions in bond forwards as users for hedging purpose subject to certain conditions
March 13, 2025	**Identification of Domestic Systemically Important Insurers (D-SIIs):** The following insurers are identified as Domestic Systemically Important Insurers (D-SIIs) for FY 2024-25: (1) Life Insurance Corporation of India; (2) The New India Assurance Company Ltd.; and (3) General Insurance Corporation of India. These insurers have to raise the level of Corporate Governance, identify all relevant risks and promote a sound risk management framework and culture. Furthermore, D-SIIs are being subjected to enhanced regulatory supervision.	To ensure continued functioning of D-SIIs which are critical for the uninterrupted availability of insurance services to the national economy.

4. Pension Fund Regulatory and Development Authority (PFRDA)

Date	Regulation	Rationale
February 24, 2025	**Regarding Timely and Quality Resolution of Grievances received under Centralised Public Grievance Redress and Monitoring System (CPGRAMS) Portal.**	To advise intermediaries under NPS to take utmost care of grievances received at the end of intermediaries/ entities/ Government Nodal offices and ensure that they are resolved within defined turn-around time with quality resolution.
March 28, 2025	**Master Circular on Investment Guidelines for UPS/NPS/ APY Schemes- Central/ State Government (default), Corporate CG, NPS Lite, Atal Pension Yojana and APY Fund Scheme:** The Master Circular, among other things, increases the maximum permissible limit under equity to 25 per cent from 15 per cent and permits pension funds to invest up to 2 per cent of their Scheme AUM in equity, in stocks beyond the Top 200 and up to Top 250 of the list prepared by NPS Trust.	To stipulate the guidelines for investment by Pension Funds in UPS/ NPS/ APY Schemes.

Date	Regulation	Rationale
March 28, 2025	**Master Circular on Investment Guidelines for NPS Tier-I & Tier-II {Other than UPS/ Central/ State Government (default), Corporate CG, NPS Lite, APY}:** Pension Funds have been permitted to invest up to 2 per cent of their Equity Scheme AUM, in stocks beyond the Top 200 and up to Top 250 of the list prepared by NPS Trust.	To stipulate the guidelines for investment by Pension Funds in NPS Tier-I & Tier-II.

5. Insolvency and Bankruptcy Board of India (IBBI)

Date	Regulation	Rationale
January 9, 2025	**Circular regarding extension of time for filing Forms to monitor Liquidation and Voluntary Liquidation Processes.**	To ease compliance and uphold transparency in reporting requirements under the Code.
January 28, 2025	**Amendment to Insolvency Professional Agencies Regulations:** The amendment extends the timeline for submitting applications for the renewal of Authorisation for Assignment (AFA) from 45 days to 90 days before the expiry of the previous AFA. It also extends the timeline for the IPA to approve or reject AFA applications from 15 days to 90 days from the date of receipt.	To improve operational efficiency in AFA compliance and processing.`
January 28, 2025	**Amendment to Liquidation Process Regulations:** The amendments, *inter alia*, provide for the following: (a) introduce changes to Schedule I of the liquidation regulations regarding the procedure for conduct of auction of assets, such as declaration of eligibility under Section 29A, verification of eligibility of highest bidder *etc.*; and (b) require the liquidator to file the final report along with Form H when a scheme under Section 230 of the Companies Act, 2013, is approved by the Adjudicating Authority (AA).	To enhance the efficiency of auction process and information disclosure to the Board.
January 28, 2025	**Amendment to Voluntary Liquidation Process Regulations:** The amendment allows the voluntary liquidation process to be completed even in the presence of uncalled capital.	To facilitate smooth closure of voluntary liquidation process.

Date	Regulation	Rationale
January 28, 2025	**Amendment to Grievance and Complaint Handling Procedure Regulations:** The amendment extends the timeline for filing grievances or complaints to 30 days from the closure of the insolvency, liquidation, or bankruptcy process by the AA, Appellate Authority, or a Court.	To allow stakeholders sufficient time to raise concerns while preventing undue delays and minimizing post-closure burdens on the Insolvency Professional.
January 29, 2025	**Amendment to Inspection and Investigation Regulations:** The amendment introduces an explanation to the definition of "Disciplinary Committee," clarifying that "associated" refers to involvement in the conduct of investigation or inspection, consideration of the report, or issuance of a show cause notice.	To clarify the scope of involvement of whole-time members of the Board in the Disciplinary Committee in the context of matters being adjudicated by them *vis-à-vis* the investigations and inspections conducted by the Board.
January 29, 2025	**Amendment to the Guidelines for Technical Standards for Information Utilities (IUs):** The amendments, *inter alia*, provide for the following: (a) verification of user identity using PAN card or any other Officially Valid Document (OVD); (b) filing of information of default with the IU before filing an application under Sections 7 or 9 of the Code and issue of Record of Default thereon; and (c) expansion of terminology used for various authentication statuses for debt information within the IU along with a color-coded scheme for each term.	To enhance the accuracy and reliability of default records by strengthening user identity verification, streamlining supporting document submissions and standardizing authentication status tracking within the IU.

Date	Regulation	Rationale
February 3, 2025	**Amendment to CIRP Regulations:** The amendments, *inter alia*, provide for the following - (a) disclosure of corporate debtor's MSME registration status at the Expression of Interest (EOI) stage; (b) empowering the Committee of Creditors (CoC) to invite real estate land authorities to CoC meetings, in cases involving real estate companies, without voting rights; (c) submission of a report to the CoC and AA on development rights and required permissions for real estate projects within 60 days of the insolvency commencement; (d) enabling CoC to relax certain eligibility and procedural requirements for associations or groups of allottees to submit EOI in real estate insolvency cases; (e) permitting handing over possession and facilitate registration of real estate units to allottees who have performed their obligations upon approval of 66 per cent CoC votes; (f) appointment of facilitators for a sub-class within the creditors in a class and outlining their roles and responsibilities; and (g) providing for the constitution of a monitoring committee to oversee implementation of the resolution plan, and submission of quarterly reports to the AA on the status of the same.	To improve stakeholder participation, streamline real estate resolution procedures and strengthen post-approval resolution plan monitoring mechanisms.
February 11, 2025	**Circular regarding intimation to the Board on the appointment of IPs under various Processes:** The IBBI issued a circular requiring IPs to notify the Board of all their appointments as Interim Resolution Professional, Resolution Professional, Bankruptcy Trustee or Administrator across various processes under the Code - CIRP, liquidation, voluntary liquidation, personal guarantor to corporate debtor's proceedings and Financial Service Providers proceedings.	To streamline record-keeping and formalise the requirement for IPs to notify the IBBI of their appointments across various processes.

Date	Regulation	Rationale
March 17, 2025	**Circular regarding disclosure of Carry Forward Losses in the Information Memorandum (IM):** IBBI issued a circular directing IPs to include a dedicated section in the IM that provides detailed information regarding the carry forward losses of the corporate debtor under the Income Tax Act, 1961.	To provide potential RAs with a more comprehensive overview of the corporate debtor's financial position, enabling them to develop informed and viable resolution plans while considering the benefits of carry forward losses.
March 28, 2025	**Circular regarding Mandatory use of BAANKNET (formerly knowns as eBKray) Auction Platform for Liquidation Process.**	To standardise asset sales, enhance bidder participation, and improve realisation for creditors.

6. International Financial Services Centres Authority (IFSCA)

Date	Regulation	Rationale
February 19, 2025	**IFSCA (Fund Management) Regulations, 2025:** The Fund Management Regulations 2025 replace the IFSCA (Fund Management) Regulations, 2020 and key reforms include (a) lower investment thresholds; (b) extended PPM validity; (c) increased Fund Management Entity (FME) contributions; (d) simplified retail FME entry; (e) optional listing for retail schemes; and (f) global expansion simplified.	To strengthen the regulatory framework for fund management within the IFSC while simplifying processes, reducing compliance costs and introducing adequate safeguards for investor protection.
February 20, 2025	**Appointment and Change of Key Managerial Personnel (KMPs) by a Fund Entity:** The Authority specified the manner and procedure to be followed by a FME for effecting the appointment of or change to the KMPs after the grant of registration by the Authority to the FME.	To outline a clear and standardised process for the appointment and change of KMPs of the FMEs.

Date	Regulation	Rationale
April 03, 2025	**Circular for Revision in Reporting Formats for Fund Management Entities in IFSC.**	To seek salient details of retail schemes, capture granular information in certain areas for supervisory purpose, provide greater clarity to the FMEs by restructuring some of the tables, include guidance notes wherever deemed necessary and to align the formats with the recently notified IFSCA (Fund Management) Regulations, 2025.