

# Chapter I

## Macrofinancial Risks

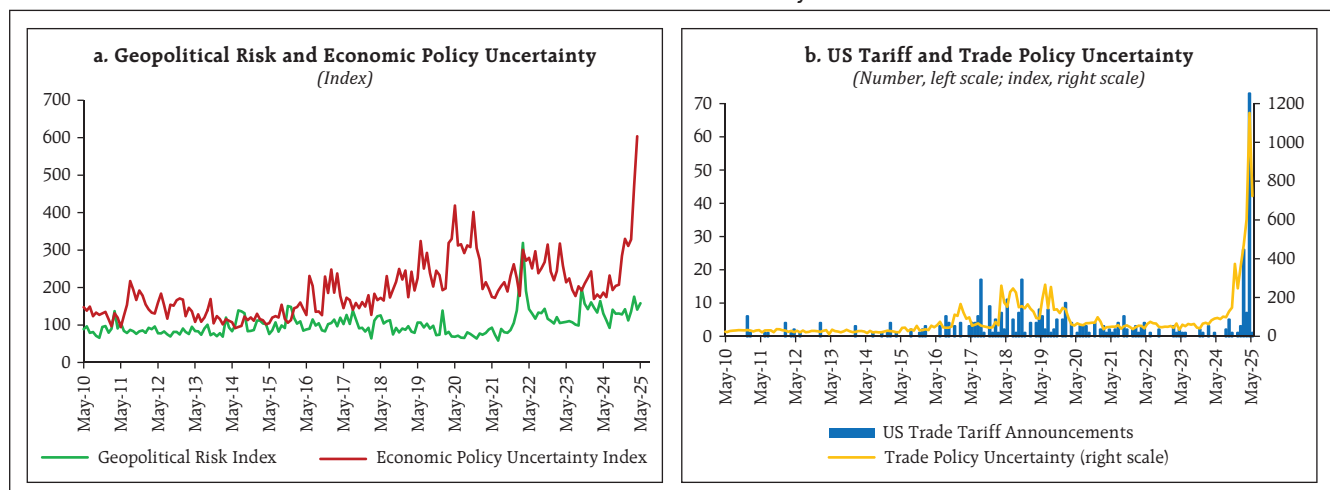
*An uncertain and volatile global macroeconomic environment is testing the resilience of the global financial system. Global financial stability risks have increased as heightened policy and trade uncertainties have the potential to interact with existing vulnerabilities, especially elevated public debt, 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, Molloy, Prestipino and Raffo (January 2020).

**Sources:** Global Trade Alert and Policyuncertainty.com.

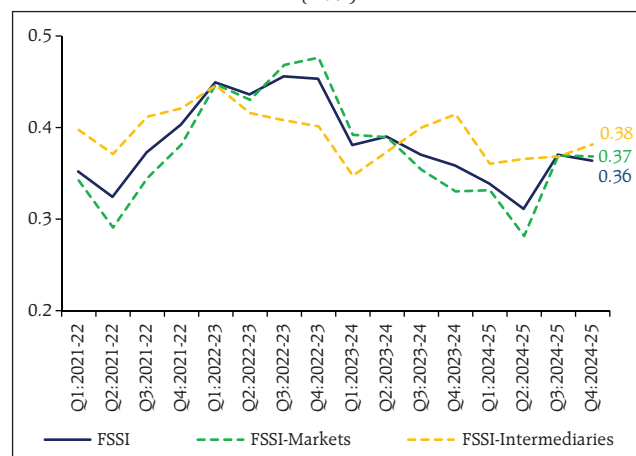
1.2 Amidst elevated global economic and trade policy uncertainties, the Indian economy continues to display resilience, underpinned by strong macroeconomic fundamentals and robust financial system. The economy is growing at a healthy pace, with the financial system meeting the financing needs of all 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

**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.

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).

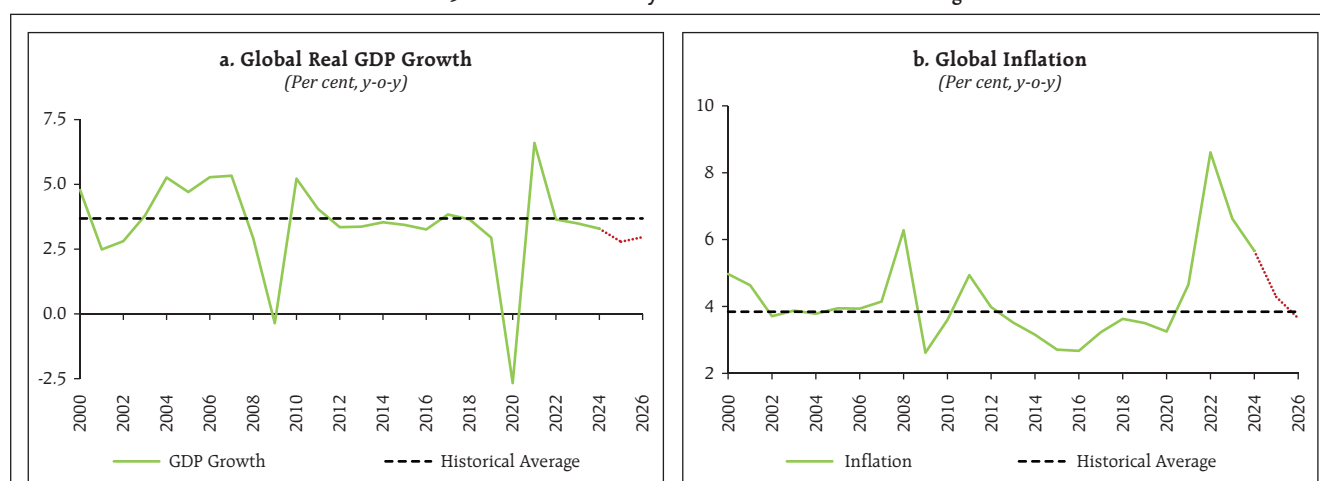
## I.1 Macroeconomic Outlook

### 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<sup>1</sup>. The impact of such tariff measures, however, may vary across countries as tariffs constitute an adverse supply shock for the

<sup>1</sup> 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).

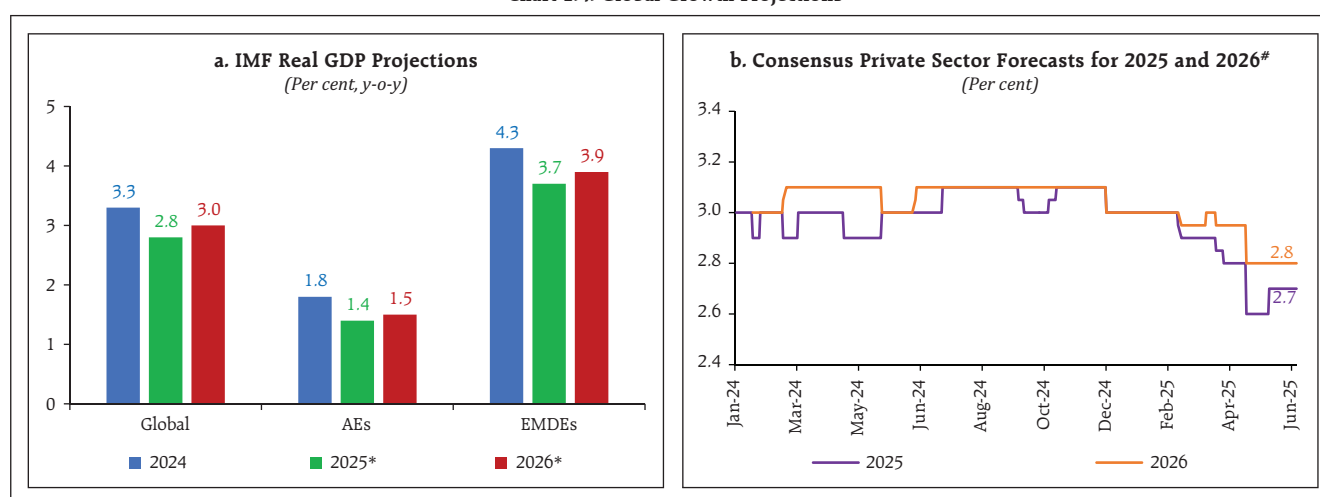
implementing countries and a negative demand shock for their trading partners<sup>2</sup>.

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<sup>3</sup> (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).

<sup>2</sup> Gourinchas, Pierre-Olivier (2025), "The Global Economy Enters a New Era", IMF Blog, April.

<sup>3</sup> International Monetary Fund (2025), "World Economic Outlook: A Critical Juncture amid Policy Shifts", April.

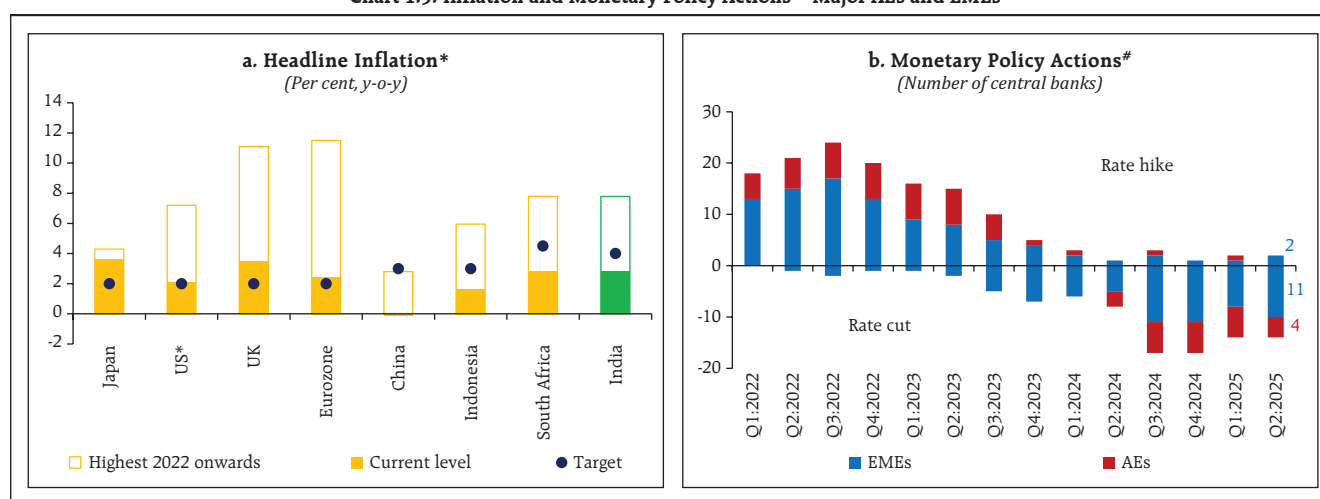
advanced economies (AEs) and emerging market and developing economies (EMDEs) is projected to decelerate. Consensus private sector forecasts, however, indicate a sharper deceleration in output growth (Chart 1.4 b). Furthermore, the IMF's Growth-at-Risk (GaR) model, an important metric to assess risks 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<sup>4</sup>.

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<sup>5</sup>, 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.

<sup>4</sup> International Monetary Fund (2025), "Global Financial Stability Report: Enhancing Resilience amid Uncertainty", April.

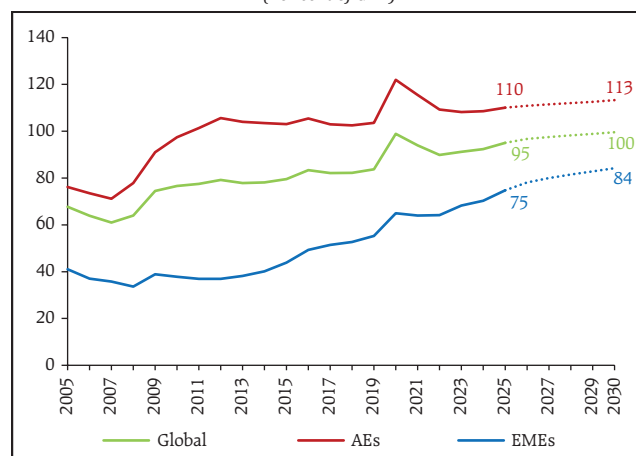
<sup>5</sup> As per the World Bank GEP report, global trade growth is projected to decelerate to 1.8 per cent in 2025, a downward revision of 1.3 percentage points from the previous January 2025 projection.

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<sup>6</sup>. 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<sup>7</sup>. 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

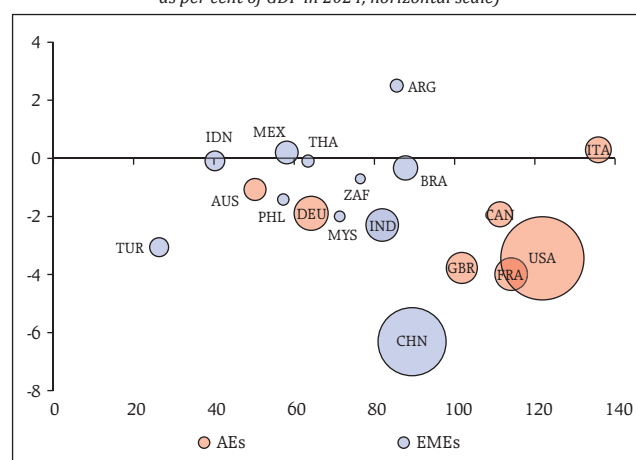
**Chart 1.6: Public Debt – Global, AEs and EMEs**  
(Per cent of GDP)



**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<sup>8</sup>**  
(Primary balance as per cent of GDP in 2024, vertical scale; gross public debt as per cent of GDP in 2024, horizontal scale)



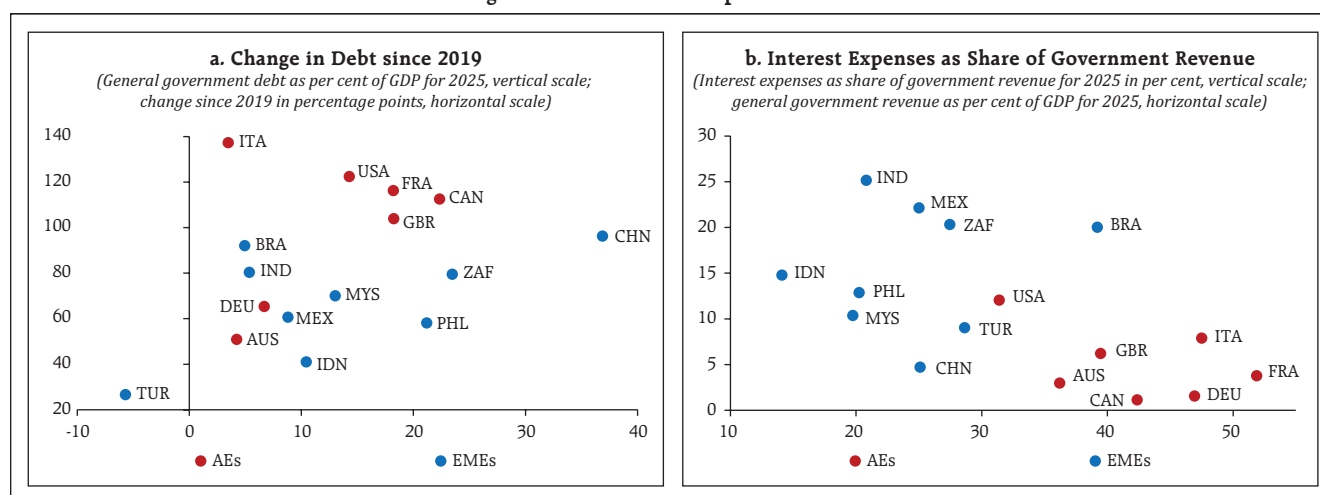
**Note:** Size of the bubble represents scaled GDP in US\$ trillion.

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

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

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

<sup>8</sup> 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<sup>9</sup>

Note: Projected values for 2025 are considered.

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

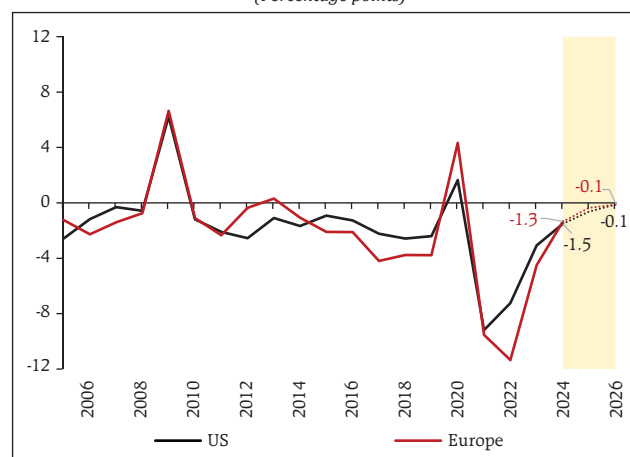
(Chart 1.9). The rating agency Moody's decision to downgrade the sovereign rating of the US citing sharp increase in debt, widening fiscal deficit and rising interest payments reflects this growing risk.

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<sup>10</sup>. Thus, in times of stress, the resilience of market functioning will be tested (See paragraphs 1.23 to 1.25 for details).

### 1.1.2 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

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).

<sup>9</sup> 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.

<sup>10</sup> Adrian, Tobias, Nikolaou, Kleopatra, Wu, Jason (2025), "Fostering Core Government Bond Market Resilience, IMF Blog, May.

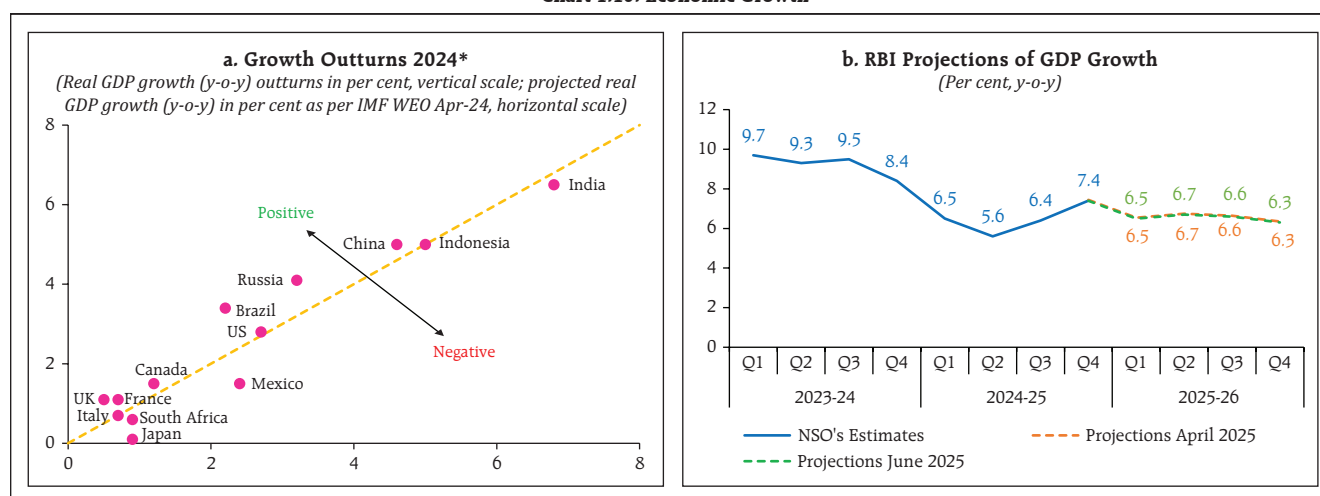
external shocks remained limited. In terms of growth outturns<sup>11</sup> for 2024, India's actual growth rate did not deviate significantly from projections even amidst deteriorating global outlook (Chart 1.10 a). The RBI has projected the real GDP to grow at 6.5 per cent in 2025-26<sup>12</sup>, same 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<sup>13</sup>.

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.

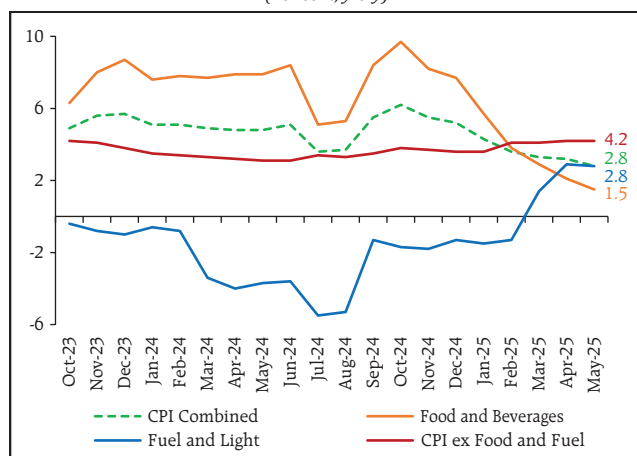
**Sources:** IMF World Economic Outlook (April 2024 and April 2025). National Statistical Office (NSO) and RBI staff calculations.

<sup>11</sup> Growth outturn refers to the actual economic growth compared to what was originally forecast.

<sup>12</sup> Reserve Bank of India (2025), "Monetary Policy Statement", June.

<sup>13</sup> Reserve Bank of India (2025), "Monetary Policy Report", April.

**Chart 1.11: Inflation - India**  
(Per cent, y-o-y)



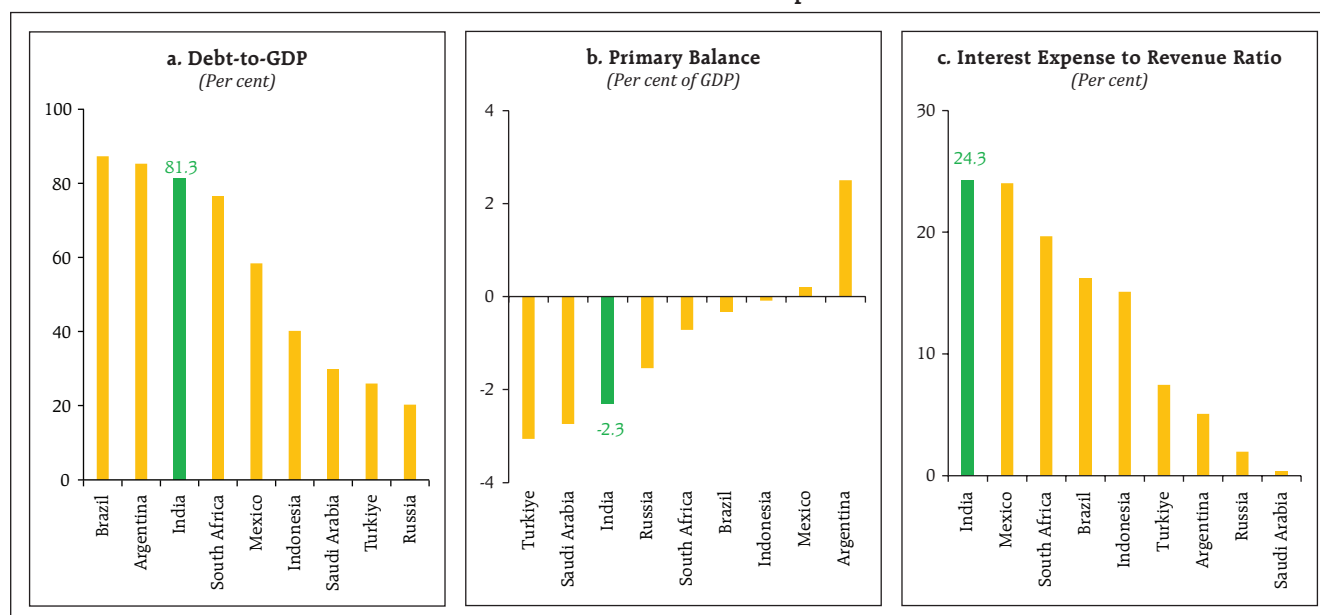
Sources: NSO and RBI staff calculations.

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<sup>14</sup> and around 97 per cent are issued at fixed rate<sup>15</sup>. 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**

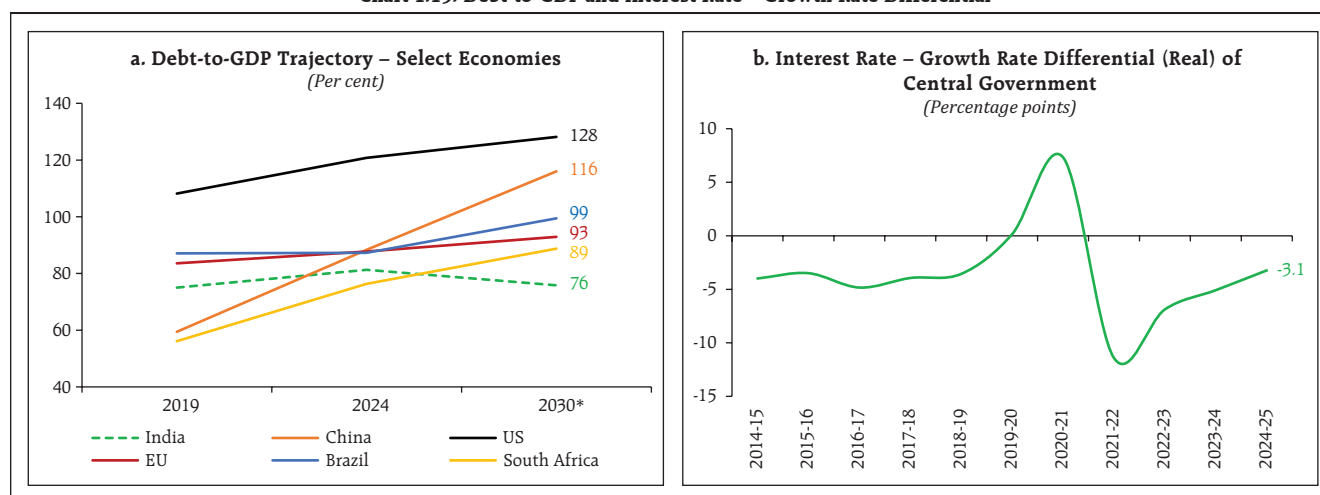


Sources: IMF Fiscal Monitor (April 2025) and RBI staff calculations.

<sup>14</sup> Reserve Bank of India (2025), "Annual Report", May.

<sup>15</sup> As on June 18, 2025.

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



Note: \* IMF April 2025 Projections.

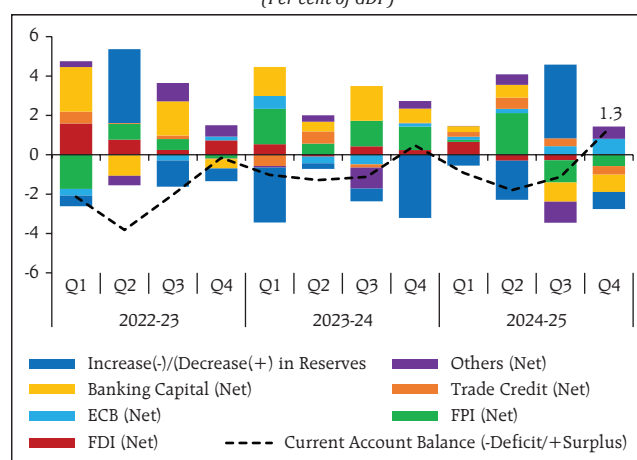
Sources: IMF World Economic Outlook (April 2025) and RBI staff calculations.

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<sup>16</sup>, 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.

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

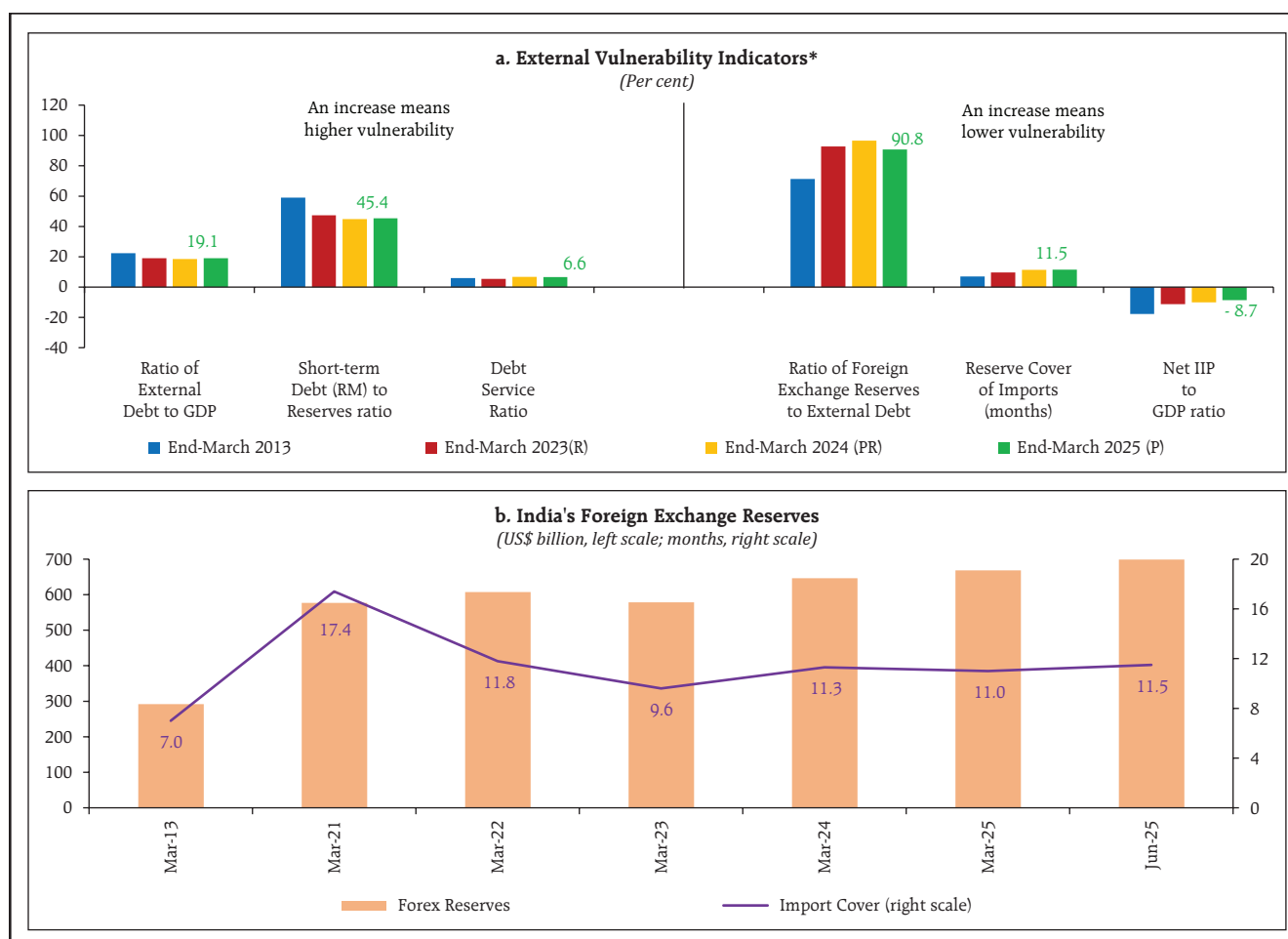
1.20 Notwithstanding the uncertainty surrounding the trade outlook, India's external vulnerability indicators remain robust and continue to show improvement. Foreign exchange reserves at US\$ 697.9 billion, as on June 20, 2025, are sufficient to cover more than 11 months of merchandise imports on BoP 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).

## 1.2 Financial Markets

### 1.2.1 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.

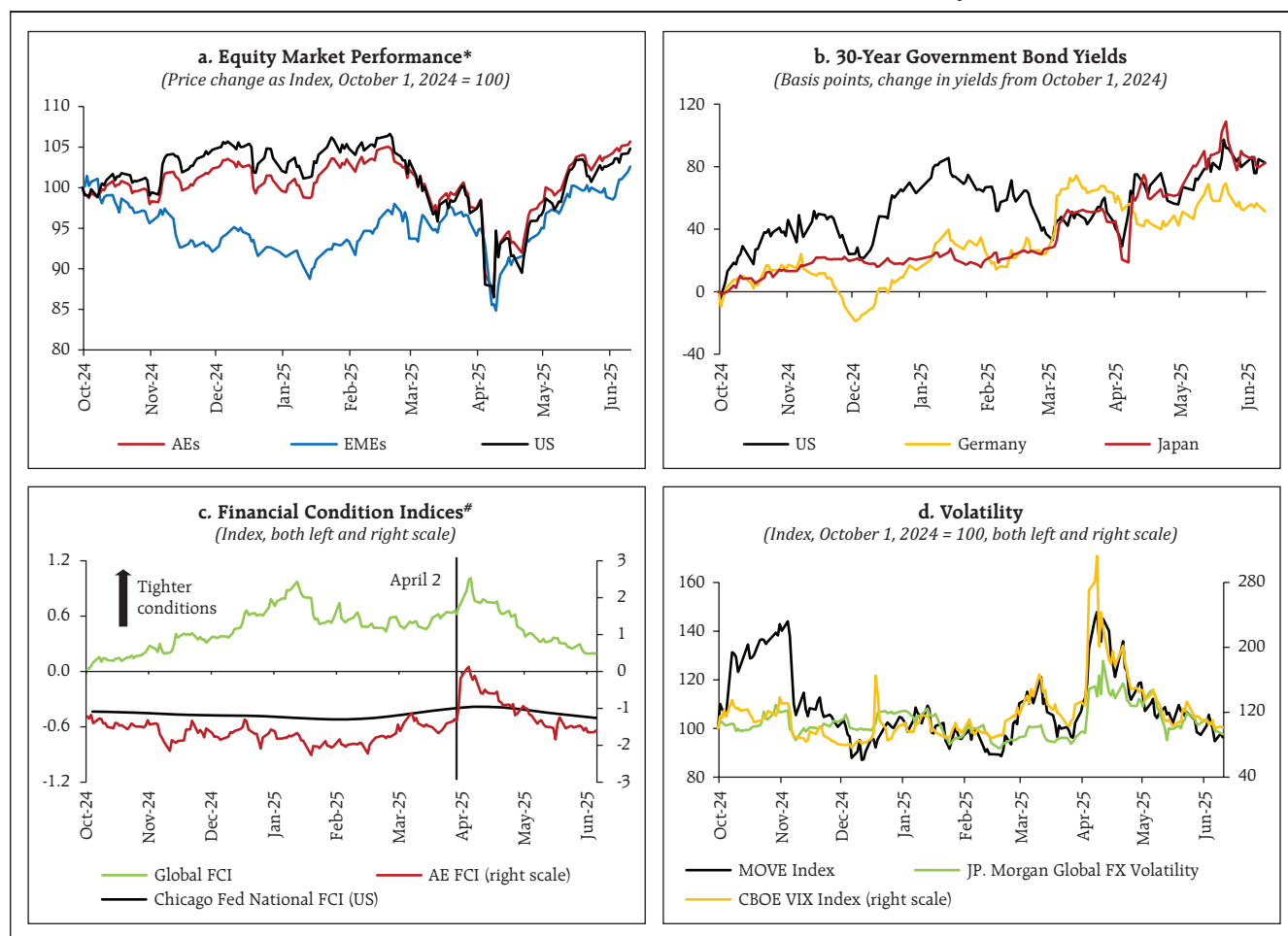
Sources: RBI and Ministry of Finance.

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<sup>17</sup>, 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



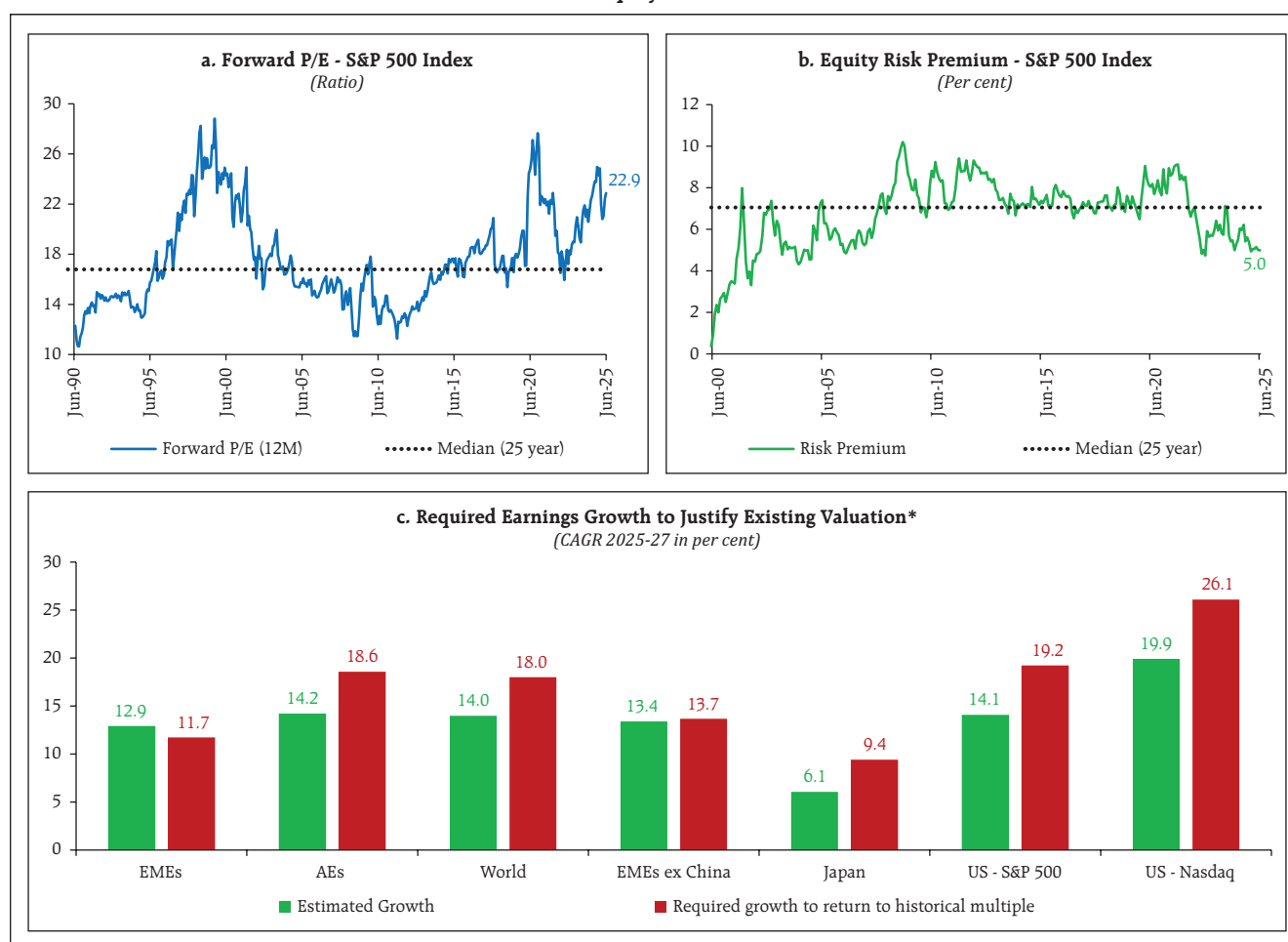
Notes: (1) \* S&P 500 Index for the United States and MSCI indices for all other series.

(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.

<sup>17</sup> 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.

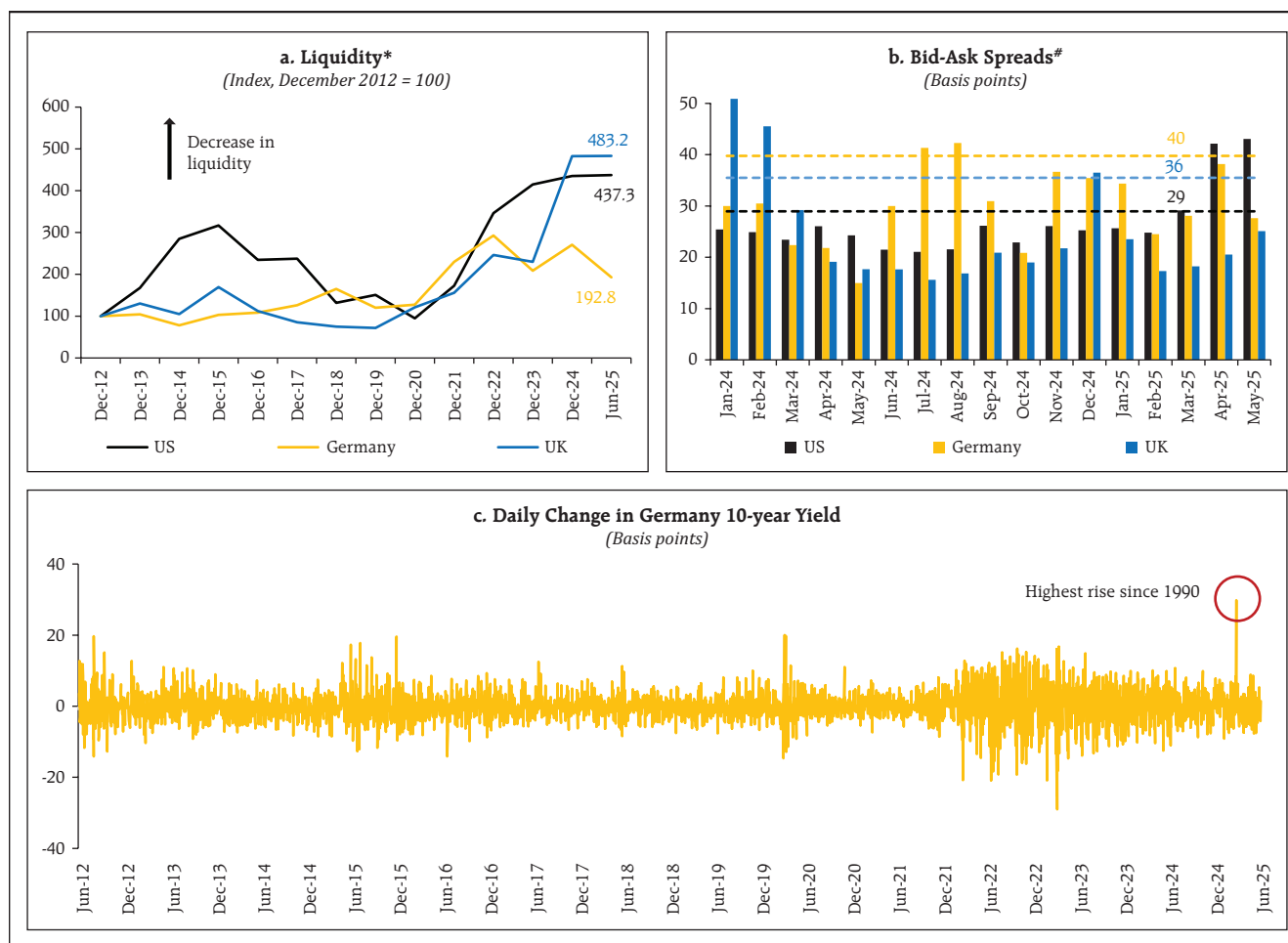
measure of additional return investors require to buy stocks relative to risk-free bonds – has declined to decadal low levels (Chart 1.17 b). Moreover, to justify current valuations, corporate earnings must grow at a robust pace, which may be difficult in an uncertain economic environment (Chart 1.17 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<sup>18</sup>. 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-

<sup>18</sup> 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<sup>19</sup>.

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<sup>20</sup>.

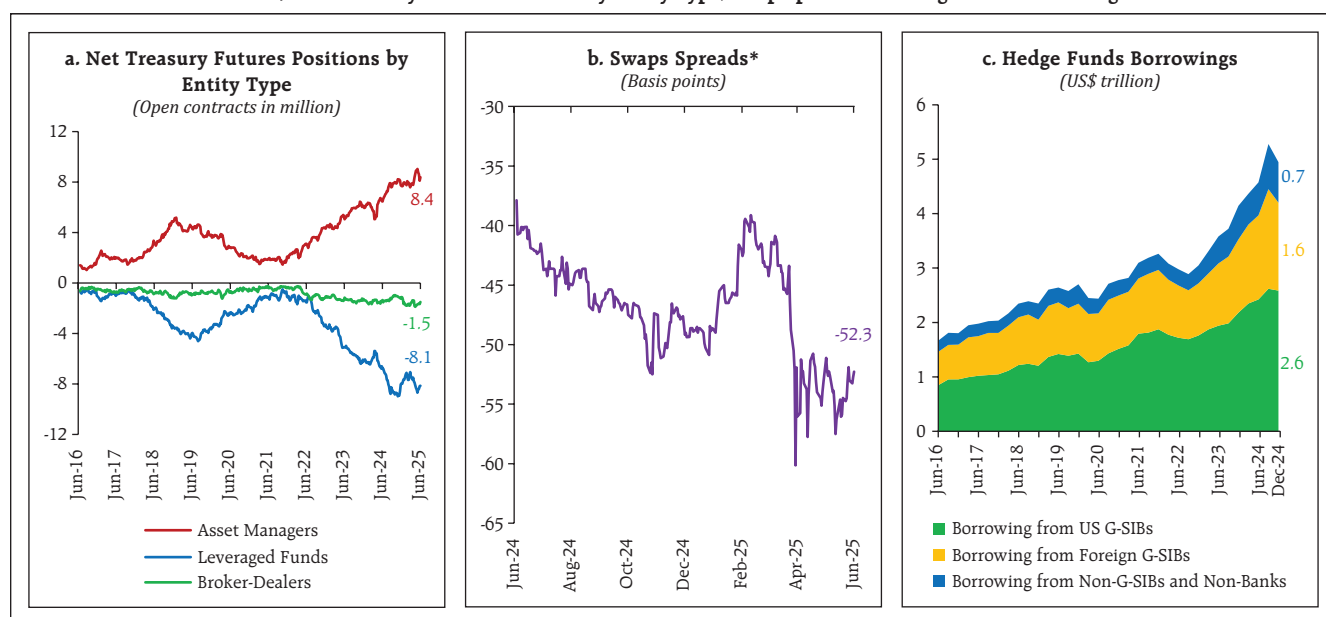
<sup>19</sup> Financial Stability Board (2022), "Liquidity in Core Government Bond Markets", October.

<sup>20</sup> 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<sup>21</sup>. 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<sup>22</sup>. 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<sup>23</sup> (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.

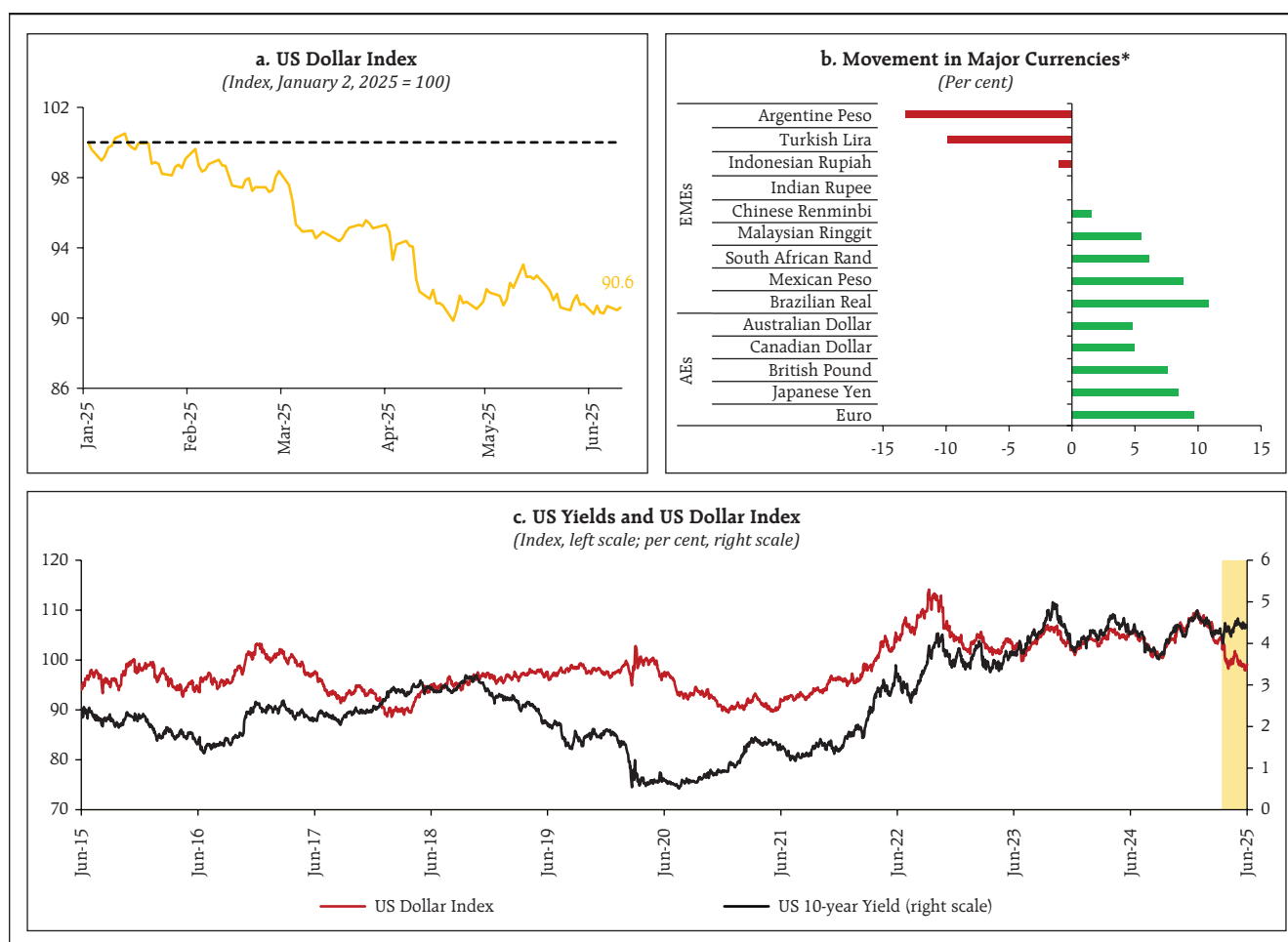
**Sources:** Bloomberg and US Office of Financial Research.

<sup>21</sup> 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.

<sup>22</sup> 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.

<sup>23</sup> 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.

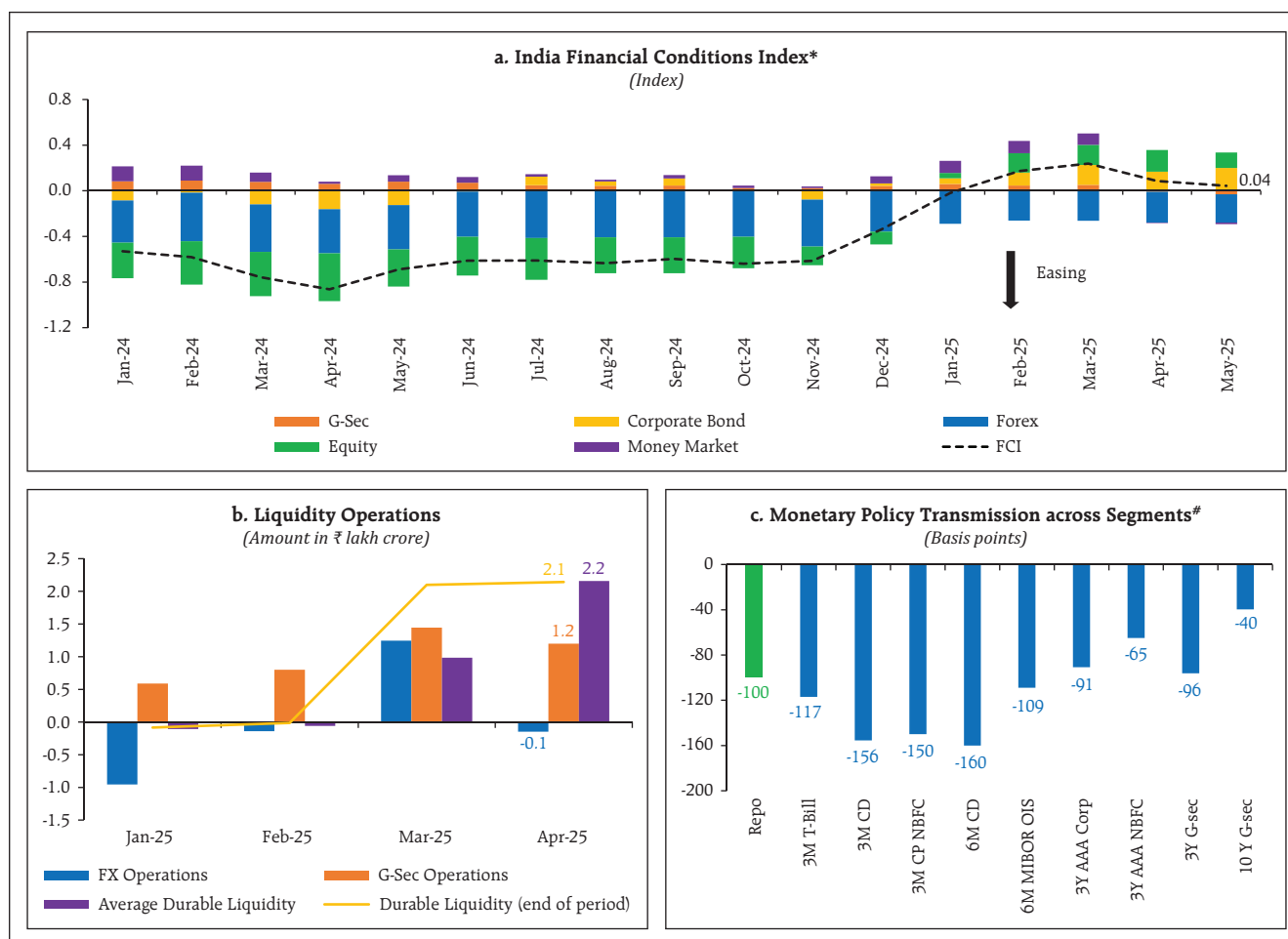
Importantly, the correlation between the USD and the US treasury bond yields has diverged since the tariff announcements in April (Chart 1.20 c). In parallel, investors are increasingly hedging their holdings in dollar-denominated assets<sup>24</sup>, which could put further pressure on the USD. Moreover, 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.

## 1.2.2 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)

<sup>24</sup> 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.

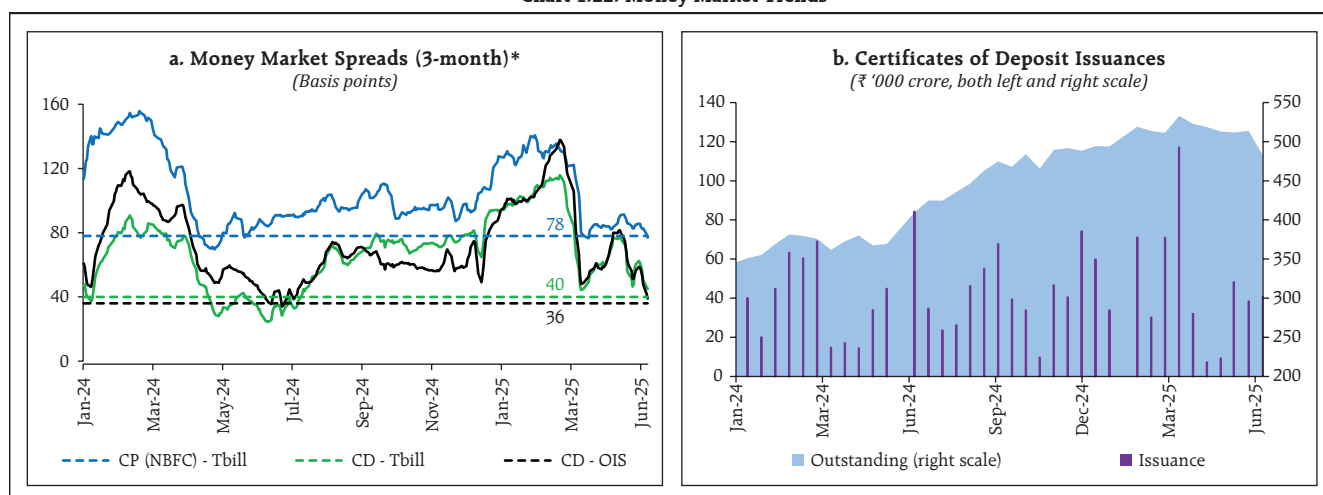
**Sources:** Bloomberg and RBI staff calculations.

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.

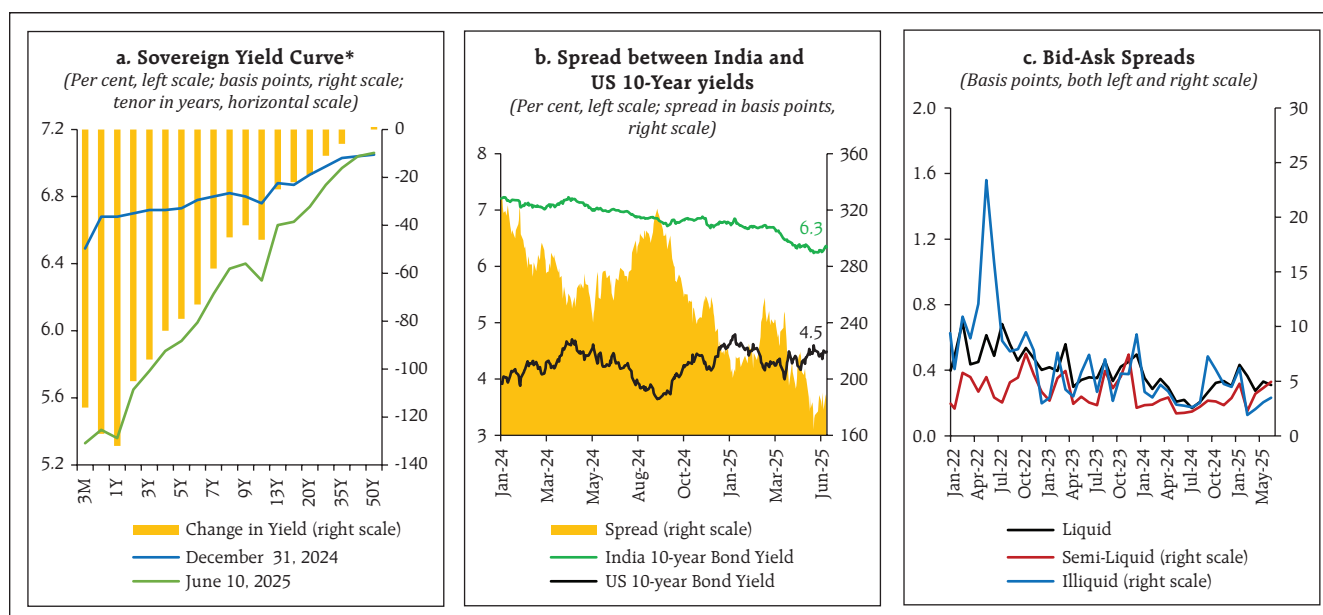
**Sources:** Bloomberg, FBIL and LSEG Workspace.

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

1.29 The sovereign yield curve has bull steepened<sup>25</sup>, 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.

<sup>25</sup> 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<sup>26</sup>, signaling improved trading conditions in the sovereign bond market (Chart 1.23 c).

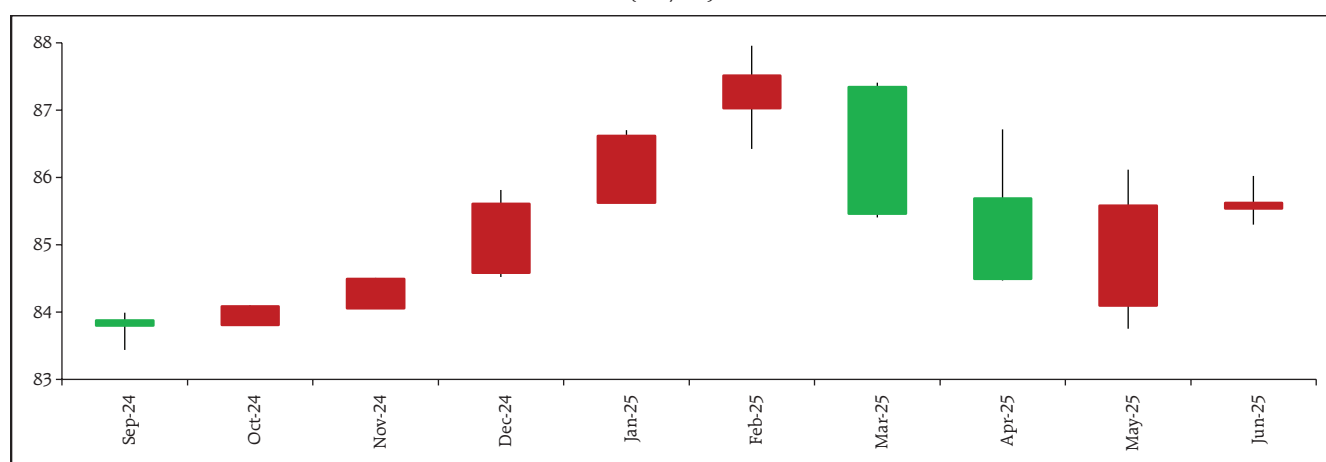
1.30 The foreign exchange market witnessed bouts of volatility even as the USD/INR exchange rate recorded sharp two-way movements during January-May 2025. The pace of rupee depreciation accelerated in late 2024 and continued till February 2025. In March and April, however, it appreciated supported by 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<sup>27</sup>, 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.

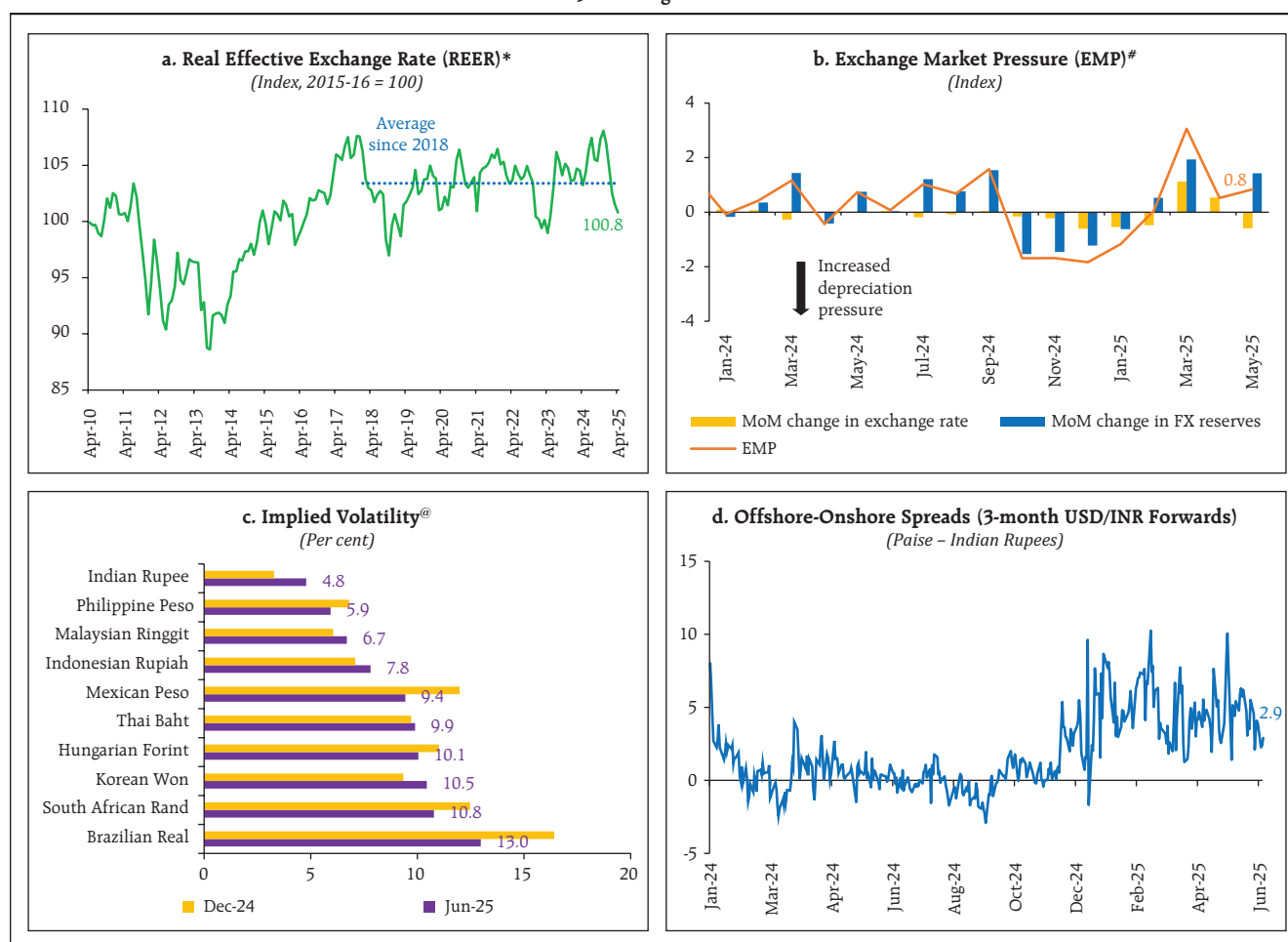
<sup>26</sup> Semi-liquid securities have average of 1-10 trades (of face value >= ₹5 crore) per day during previous calendar month. Illiquid securities have average of less than 1 trade (of face value >= ₹5 crore) per day during previous calendar month.

<sup>27</sup> 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  $\Delta e_t$  is the y-o-y percentage change in exchange rate relative to the US dollar at time  $t$ , and  $\Delta r_t$  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)

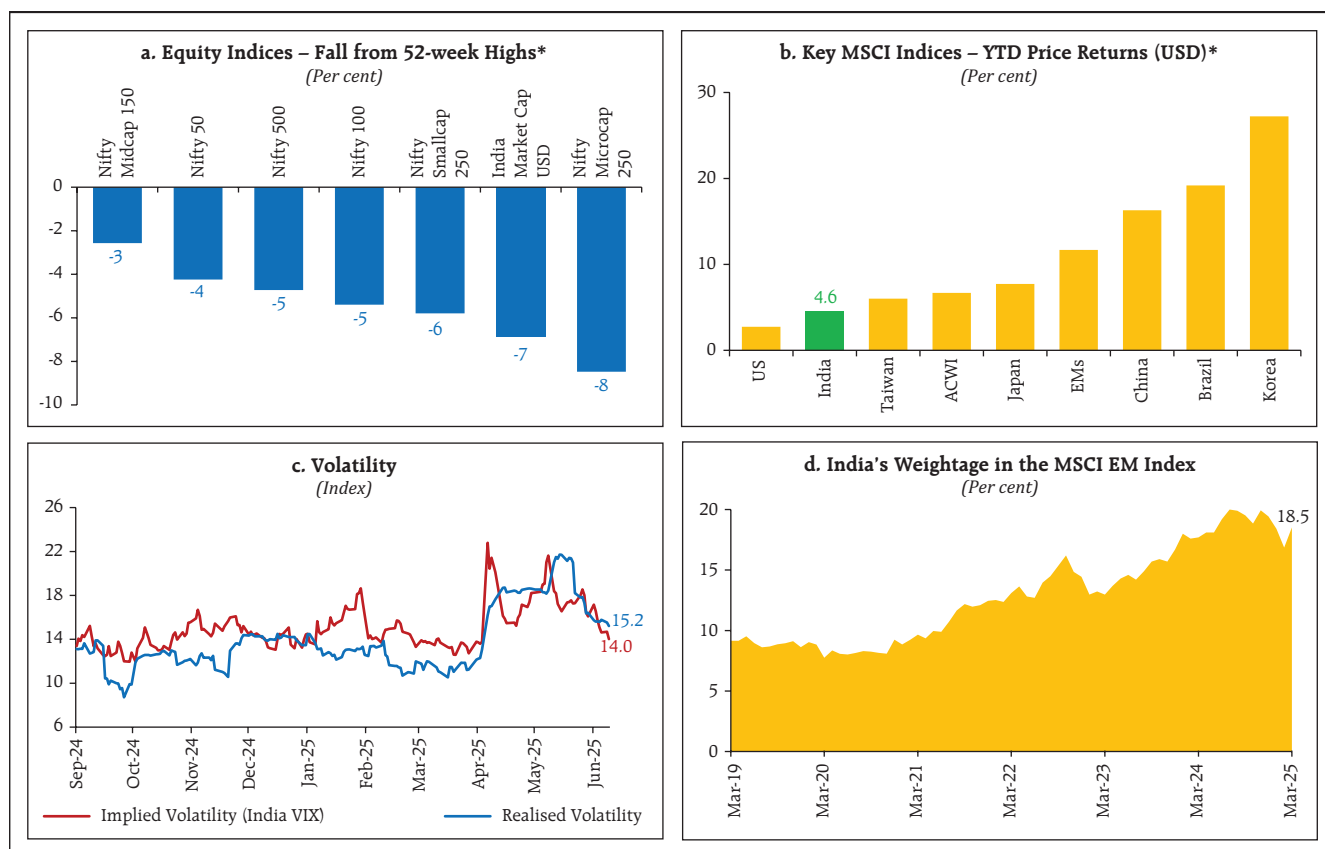
Category	2023-24	2024-25
Equity-Public	0.8	2.1
Equity-Private	1.1	2.2
Debt-Public	0.2	0.1
Debt-Private (listed)	8.4	9.9
REITs	0.06	0.05
InvITs	0.3	0.3
AIFs	0.9	1.1
<b>Total Resource Mobilisation</b>	<b>11.8</b>	<b>15.7</b>

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



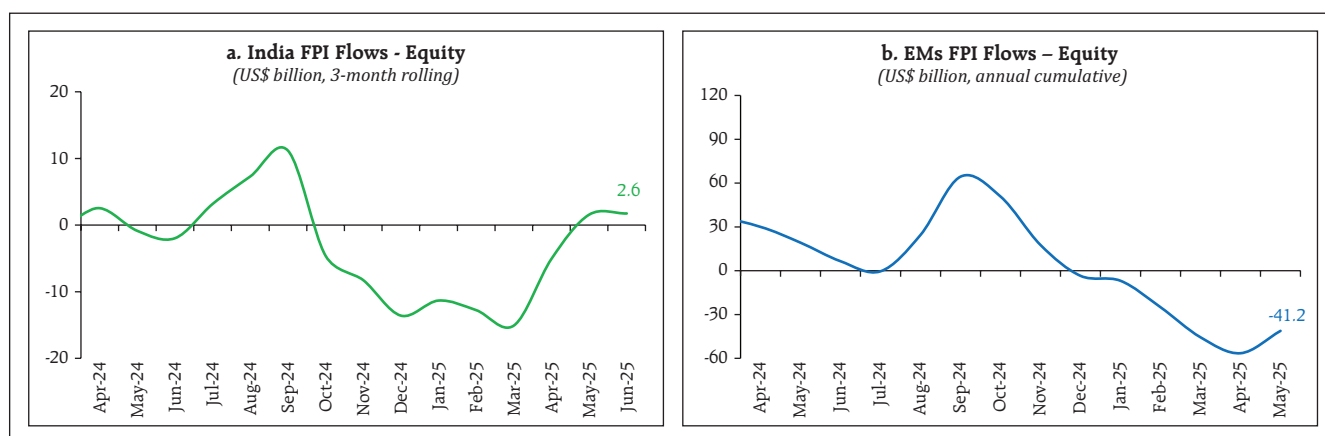
Note: \* As of June 10, 2025.

Sources: SEBI, NSE, BSE, Bloomberg and RBI staff calculations.

1.33 Amidst a global rebalancing of funds from EMEs' equities<sup>28</sup> to fixed income and developed markets<sup>29</sup>, 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

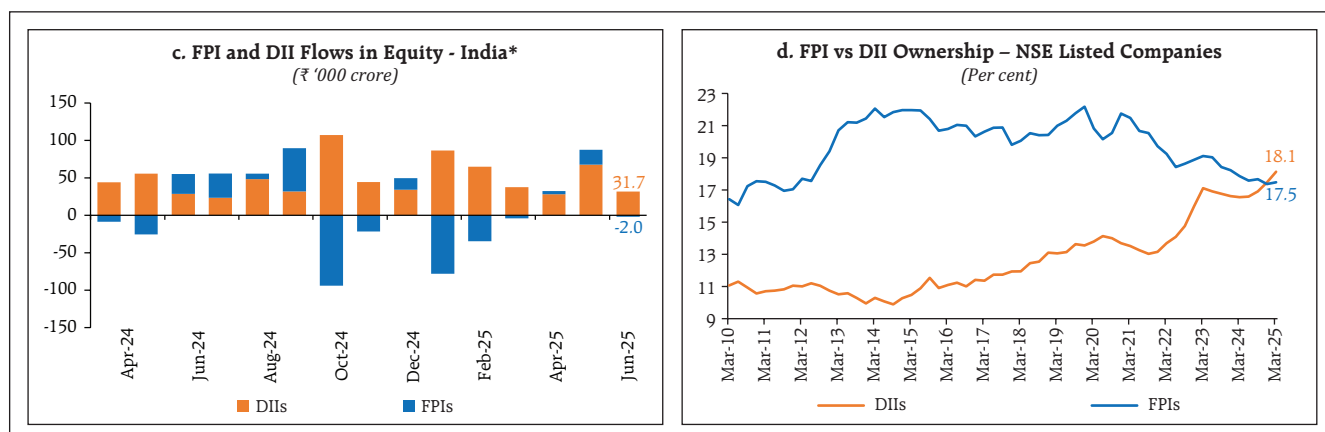
Chart 1.27: Fund Flows and NSE Listed Companies Ownership Pattern (Contd.)



<sup>28</sup> 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).

<sup>29</sup> Institute of International Finance (2025), "Capital Flows Tracker", February.

Chart 1.27: Fund Flows and NSE Listed Companies Ownership Pattern (Concl'd.)



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.

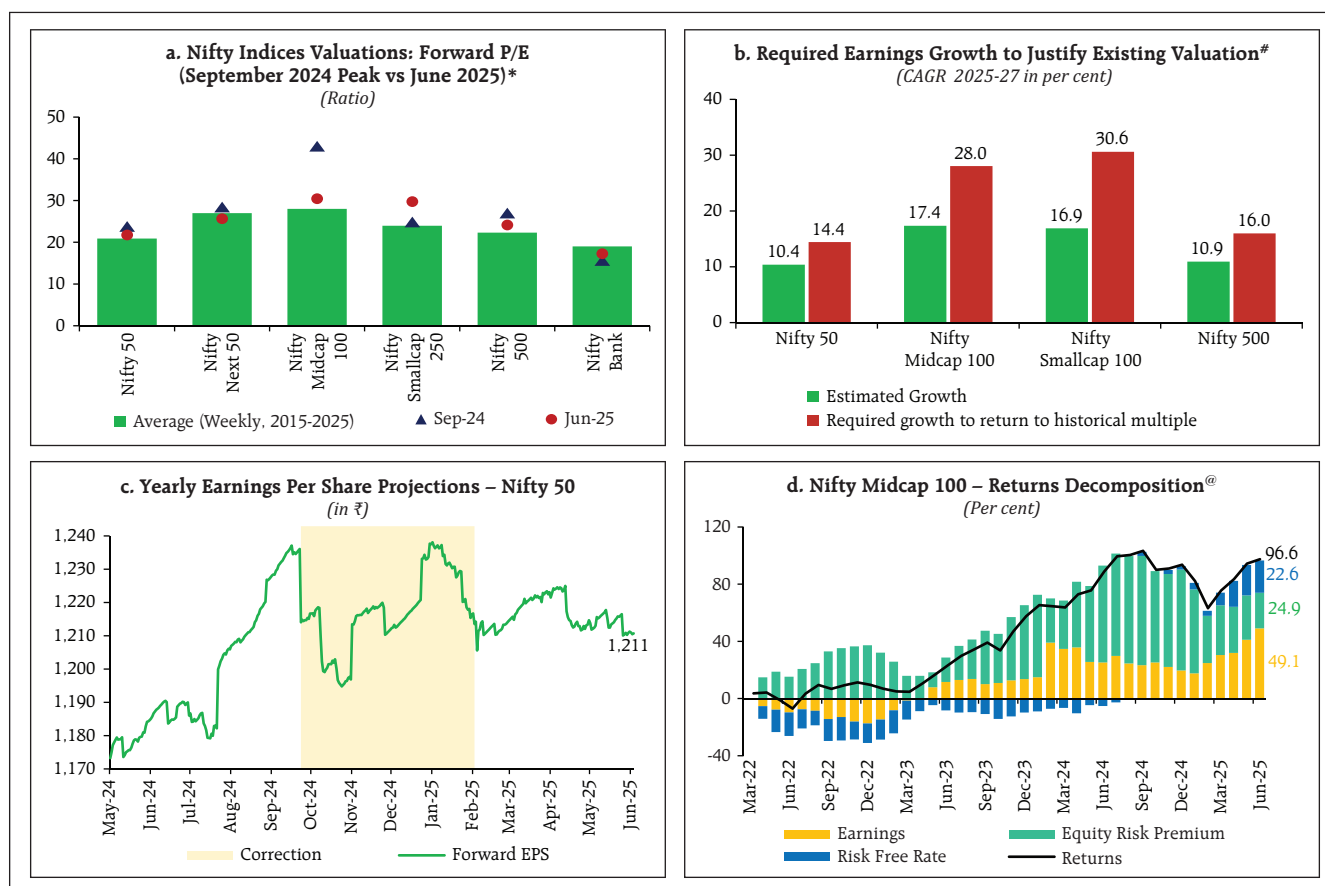
1.35 Equity valuations have moderated from their lofty levels, though they remain at the high end of historical range, especially for the midcap and smallcap stocks (Chart 1.28 a). Consequently, the gap between estimated earnings growth and required earnings growth for returning to historical valuation 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

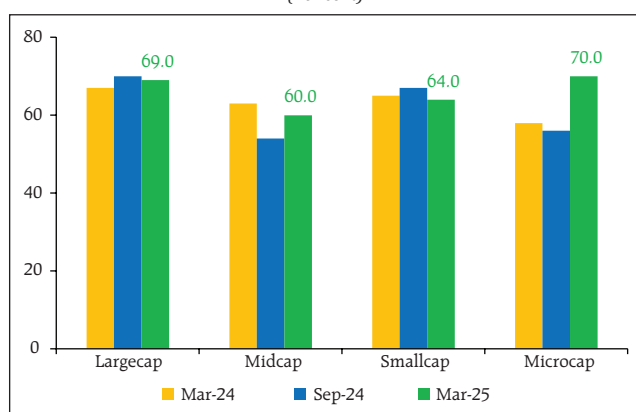


Notes: (1) \* Latest value as on June 10, 2025.

(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.

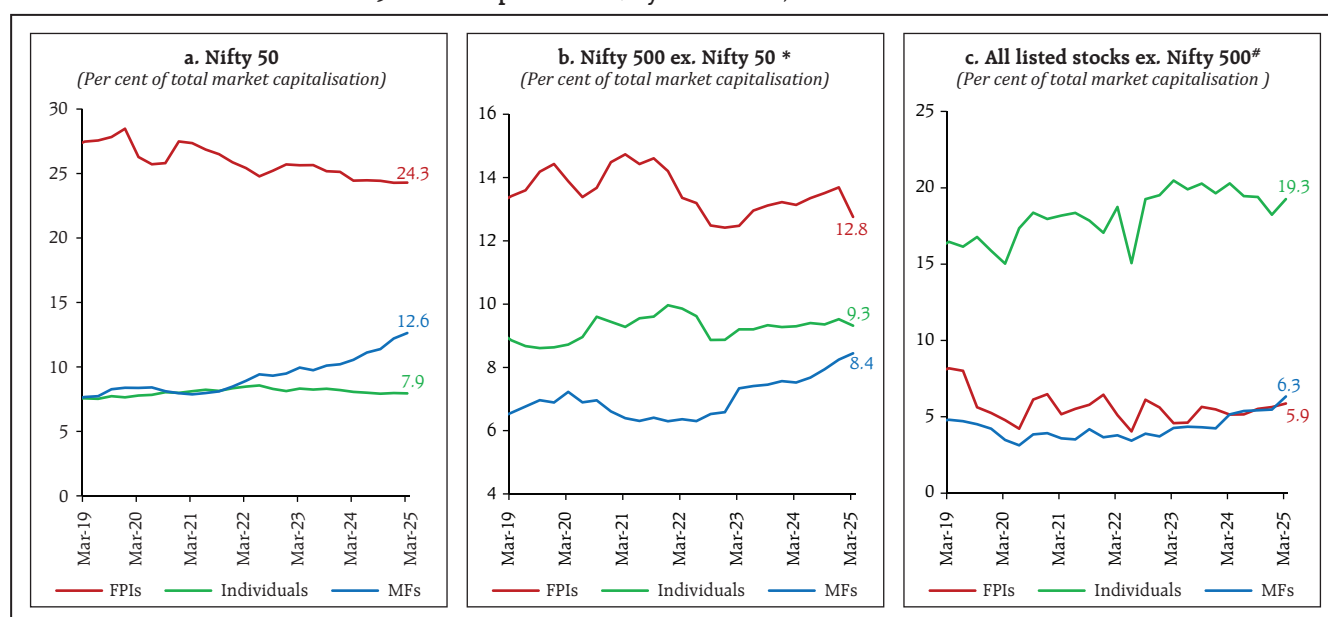
(2) Categorisation of stocks is based on AMFI classification of stocks as of December 2024. Only NSE listed stocks have been considered. P/E ratio is calculated by taking into consideration earnings reported by each company in trailing 4 quarters (consolidated financials). Where consolidated financials 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.

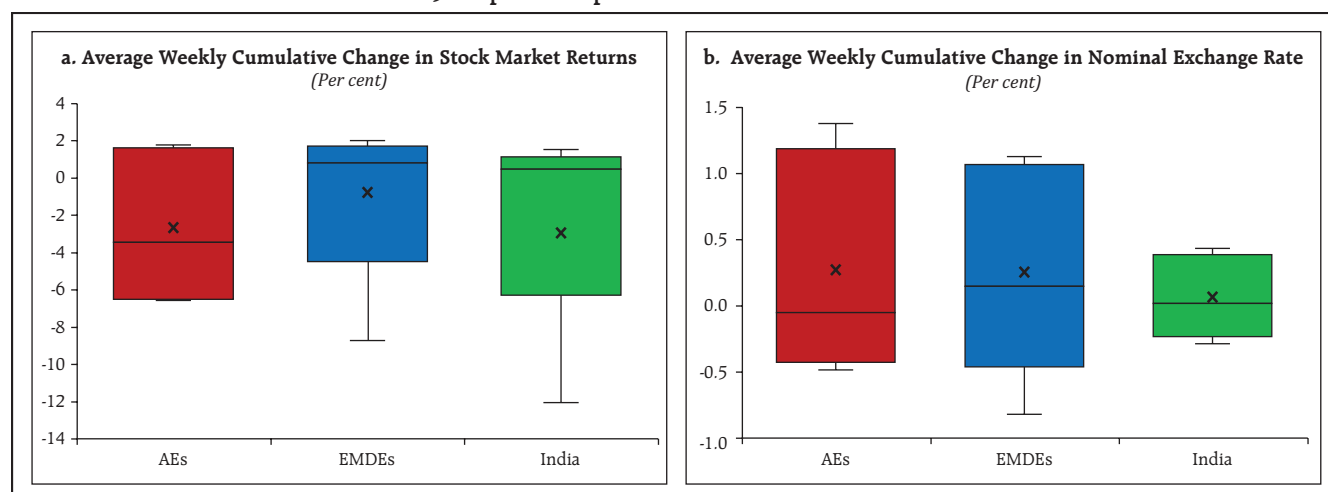
(2) # All listed stocks ex. Nifty 500 represents microcap stocks.

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

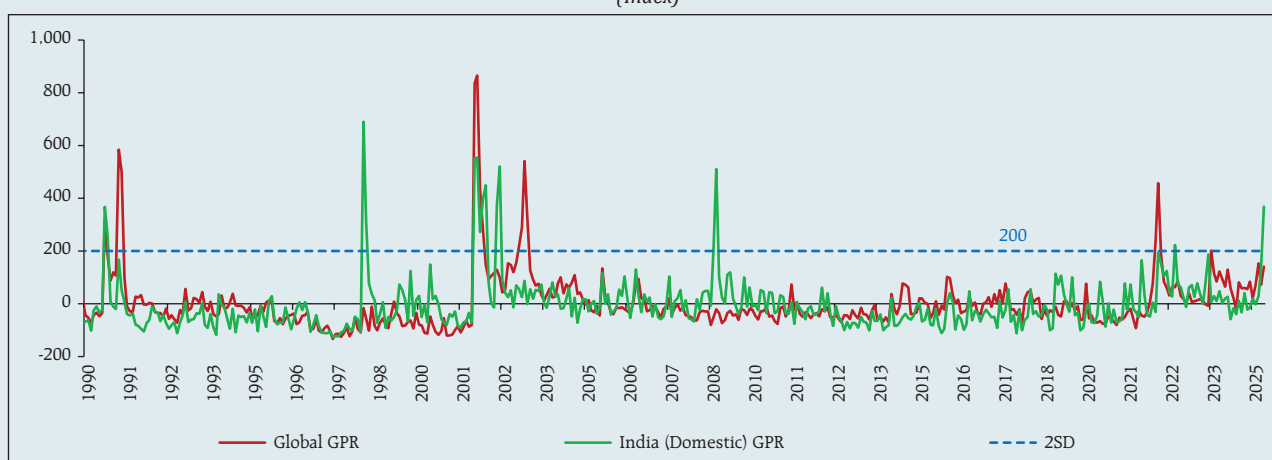
### Box 1.1: Tracing Market Reactions to Geopolitical Events: An Event Study Framework

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)<sup>30</sup>. 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.)

<sup>30</sup> 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<sup>31</sup>. 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.)

<sup>31</sup>  $\ln(R_t) = \alpha + \sum_{s=-4}^{s=5} \beta_s D_{s,t} + \varepsilon_t$ , 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,  $\beta_s$  captures the average return impact  $s$  days from the event,  $\varepsilon_t$  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.

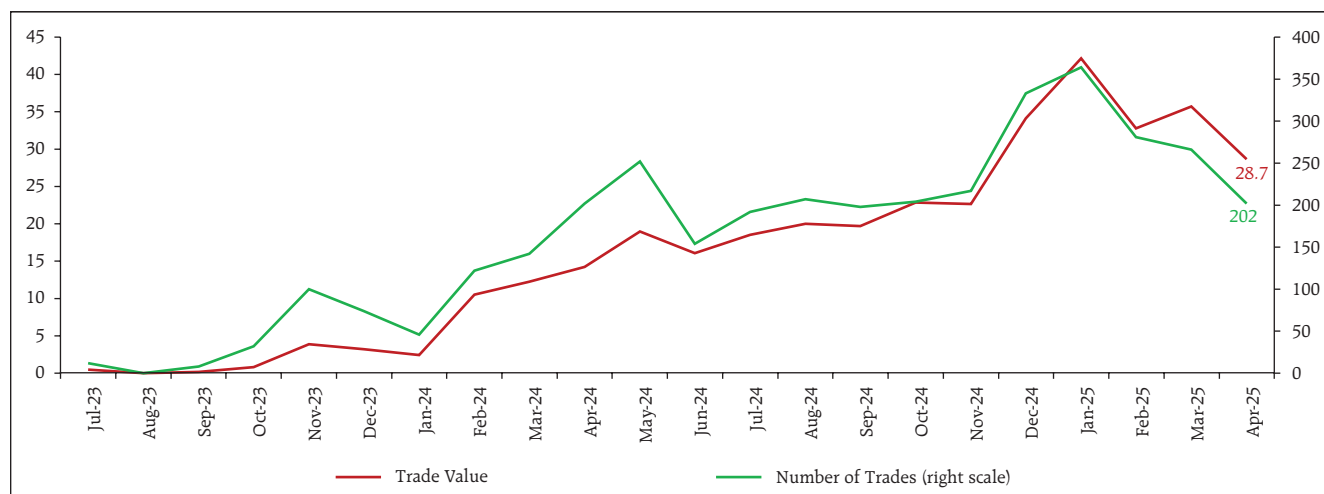
Sources: SEBI, Prime Database, NSDL, CDSL.

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.

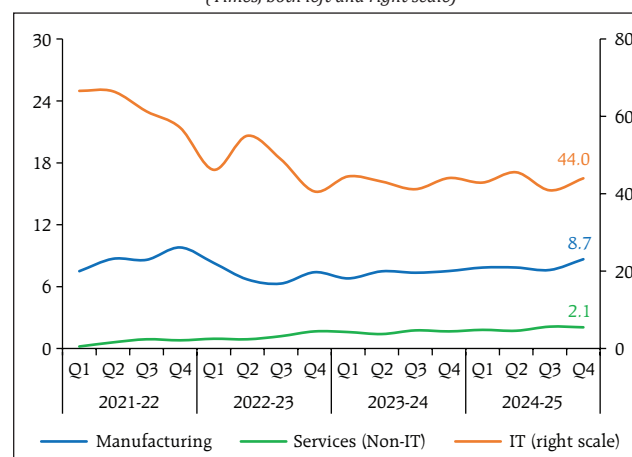
## I.3 Corporate and Household Sector

### 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).

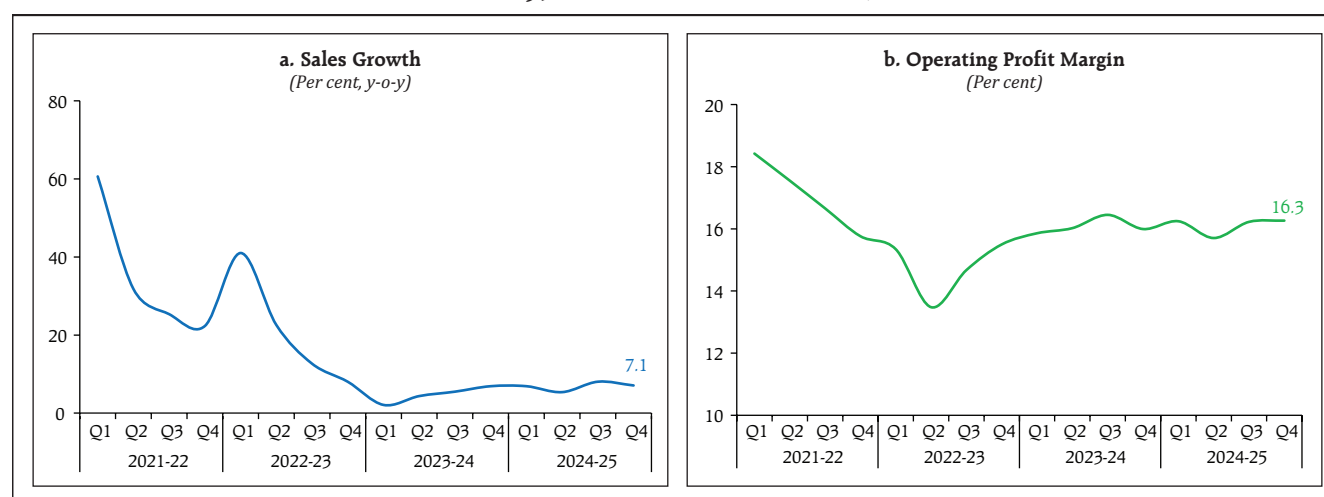
1.45 Listed private NFCs' debt serviceability improved as reflected in the healthy interest-coverage ratio<sup>32</sup> (ICR) of firms across the manufacturing, services and information technology sectors (Chart 1.35). Furthermore, NFCs' debt-service ratio<sup>33</sup> remained one percentage point below 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<sup>34</sup> 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**



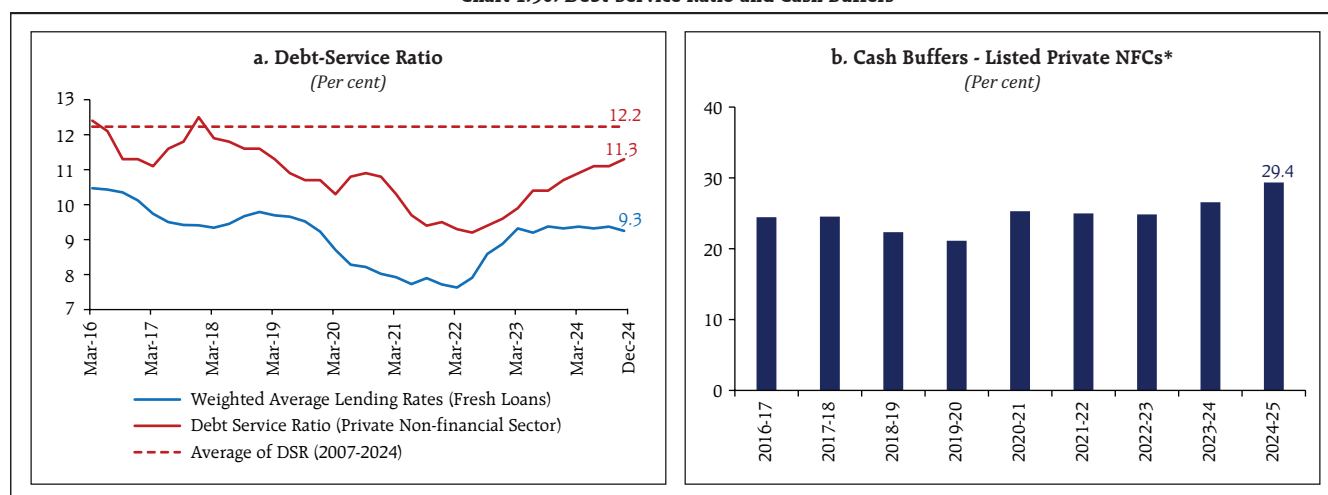
Sources: Capitaline and RBI staff calculations.

<sup>32</sup> The interest coverage ratio is the ratio of earnings before interest and taxes (EBIT) to interest expenses.

<sup>33</sup> 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.

<sup>34</sup> 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.

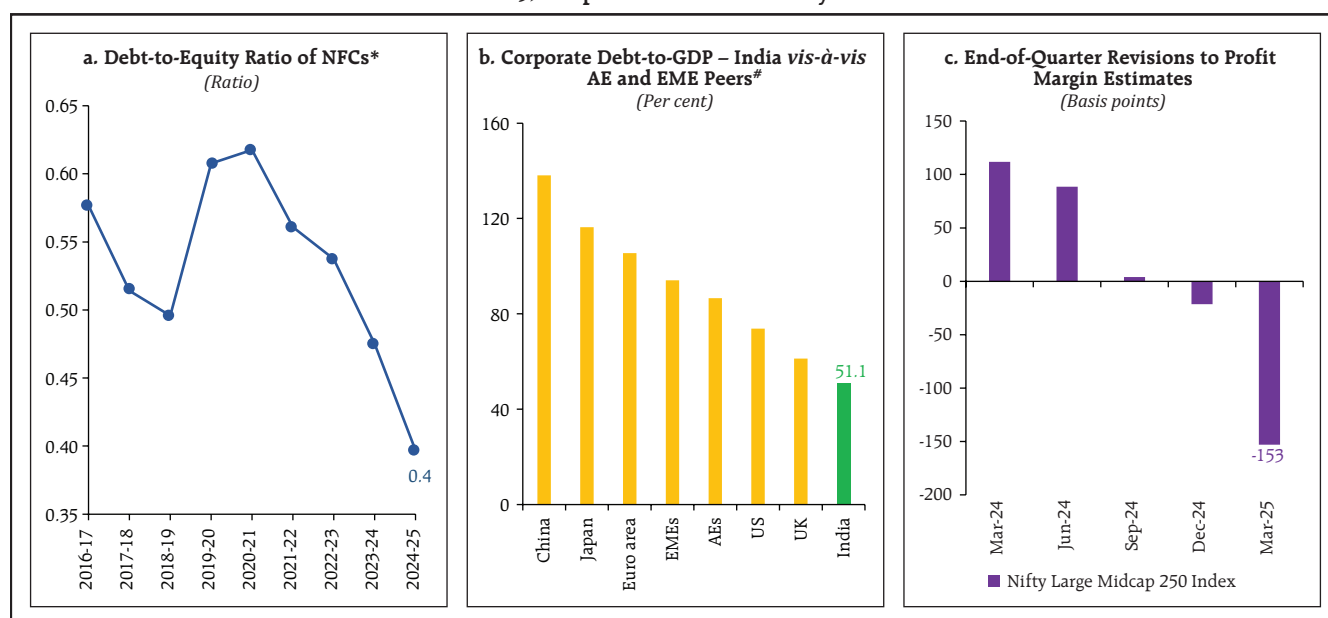
(2) # Cash Buffer is defined as Cash/Total Liabilities\*100, wherein Cash = 'cash and cash equivalents', 'short term loans and advances' and 'current investments'; and Total liabilities = Sum of 'total long-term borrowings' and 'total current liabilities' less 'short-term provisions'.

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<sup>35</sup>. 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.

<sup>35</sup> After adjusting for natural hedge.

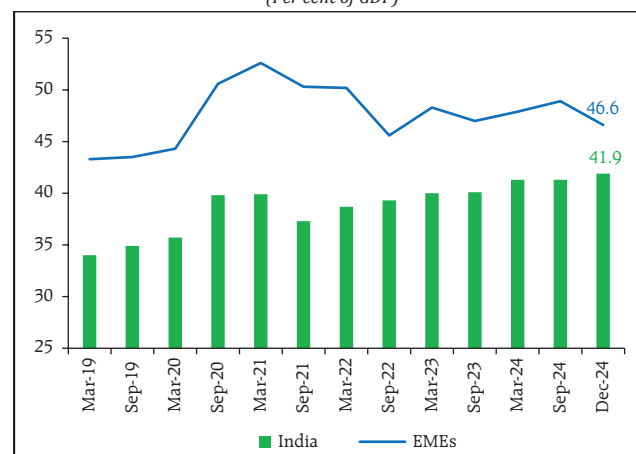
however, is likely to impact earnings estimates, which have already been moderating in the recent past. The higher effective tariff rates are likely to put pressure on corporate margins going forward (Chart 1.37 c).

### 1.3.2 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<sup>36</sup>, formed 54.9 per cent of total household debt<sup>37</sup> 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)

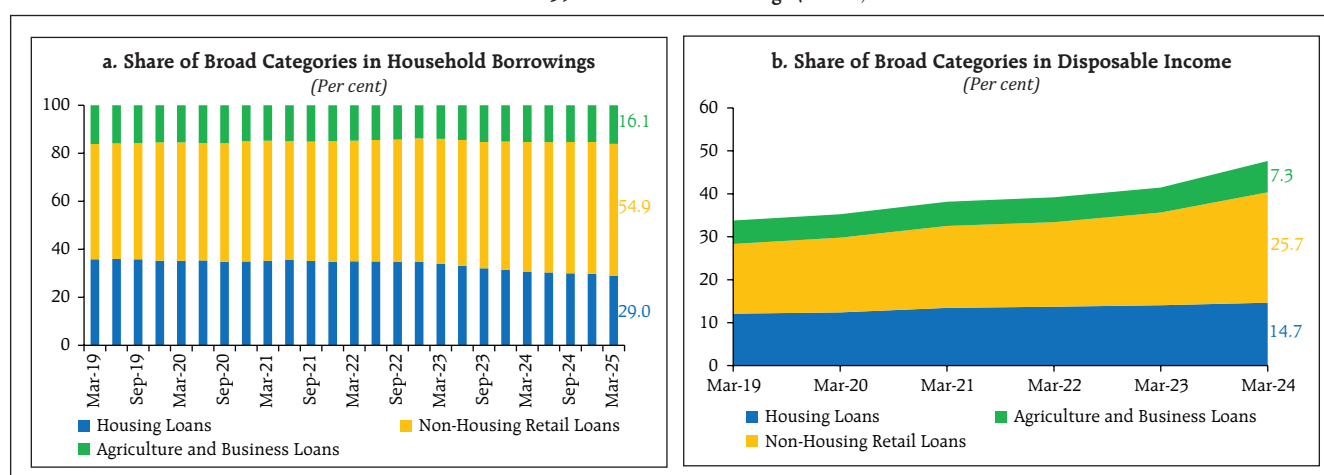


**Note:** The BIS database on 'Credit to the non-financial sector' provides data of credit to the households (including non-profit institutions serving households) from domestic banks, other domestic financial corporations, non-financial corporations and non-residents.

**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-

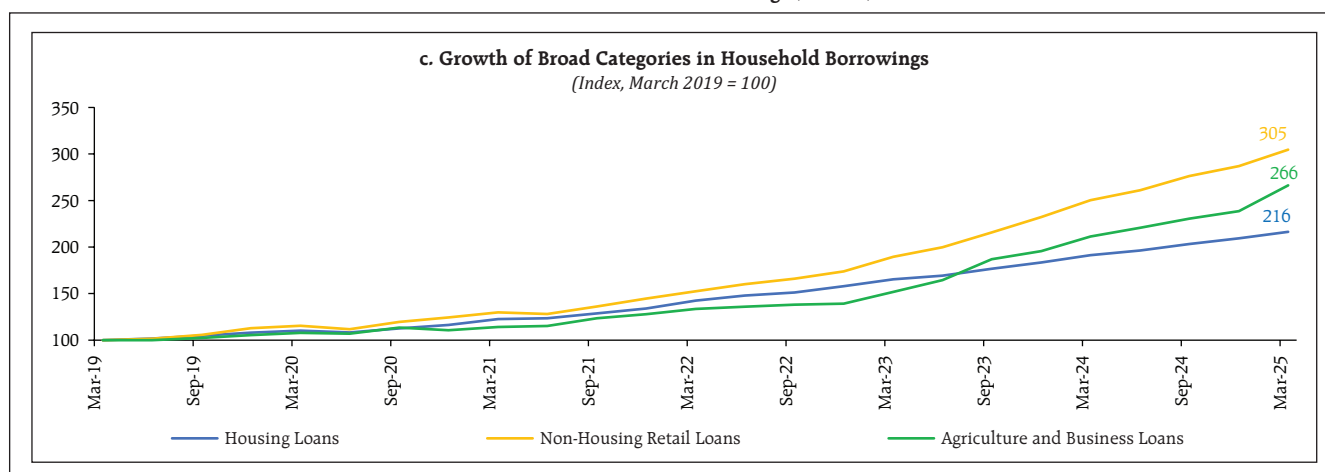
**Chart 1.39: Household Borrowings (Contd.)**



<sup>36</sup> Includes personal loans, credit cards, consumer durable loans and other personal loans.

<sup>37</sup> 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 (Concl'd.)

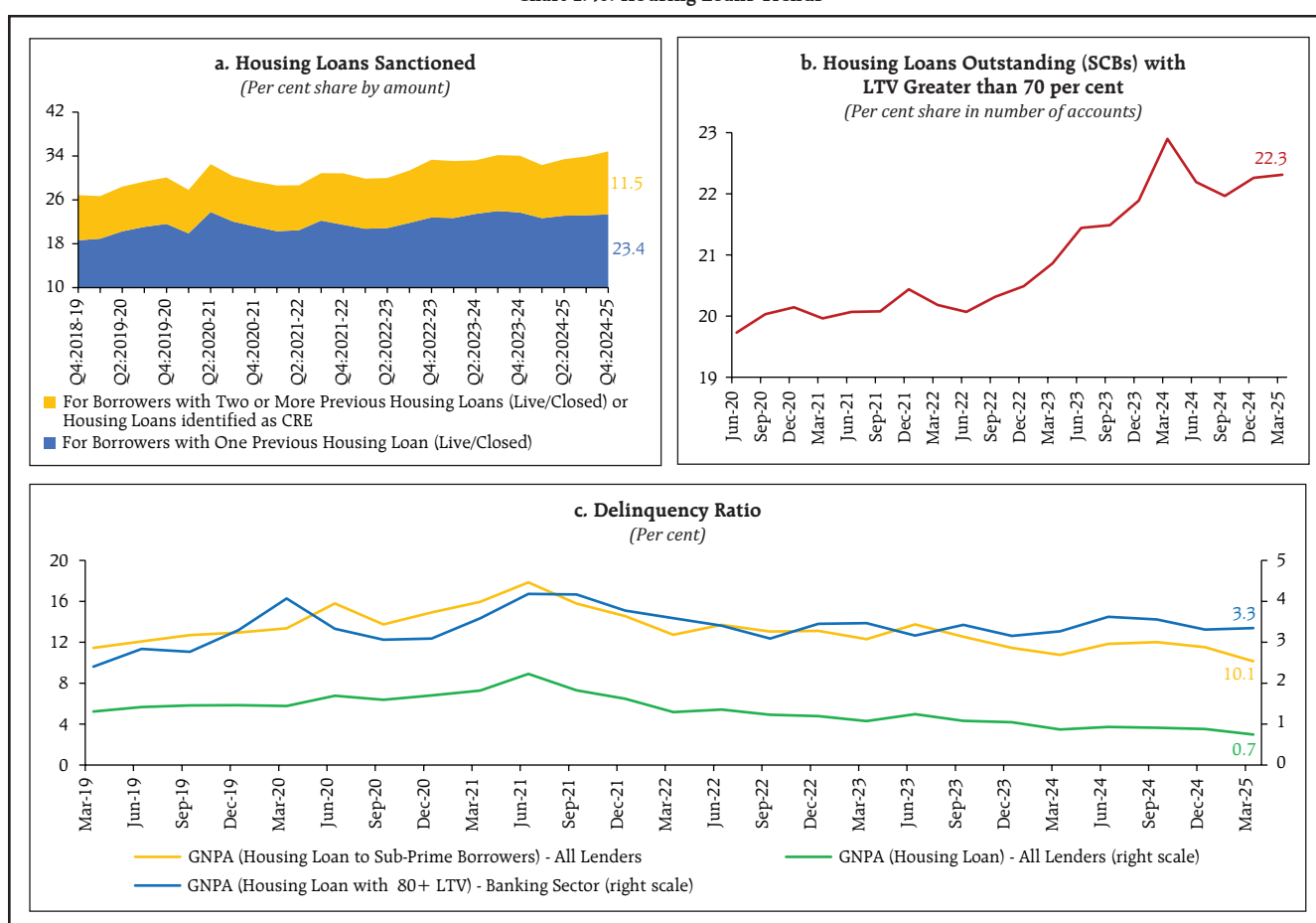


Sources: TransUnion CIBIL and MoSPI.

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

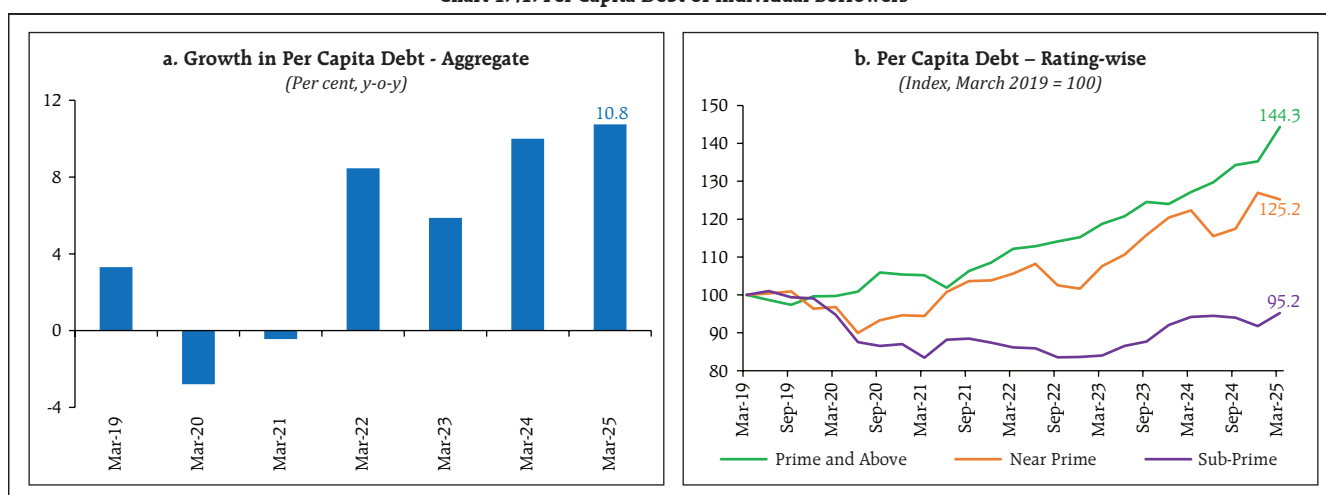
borrowers. However, these have declined considerably from their levels during COVID-19 (Chart 1.40 c).

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.

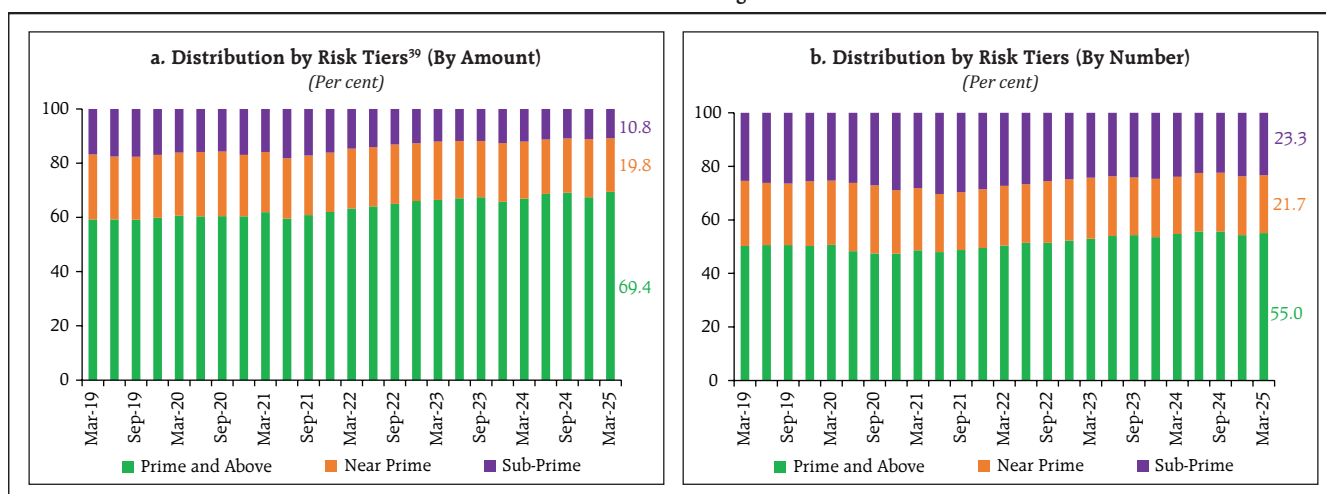
1.50 At an aggregate level, the per capita debt of individual borrowers<sup>38</sup> has grown from ₹3.9 lakh in March 2023 to ₹4.8 lakh in March 2025 (Chart 1.41 a). The rise in per capita debt has been mainly led by the higher-rated borrowers (Chart 1.41 b).

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<sup>40</sup> 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.

<sup>38</sup> Debt outstanding divided by number of live unique borrowers at the end of each period.

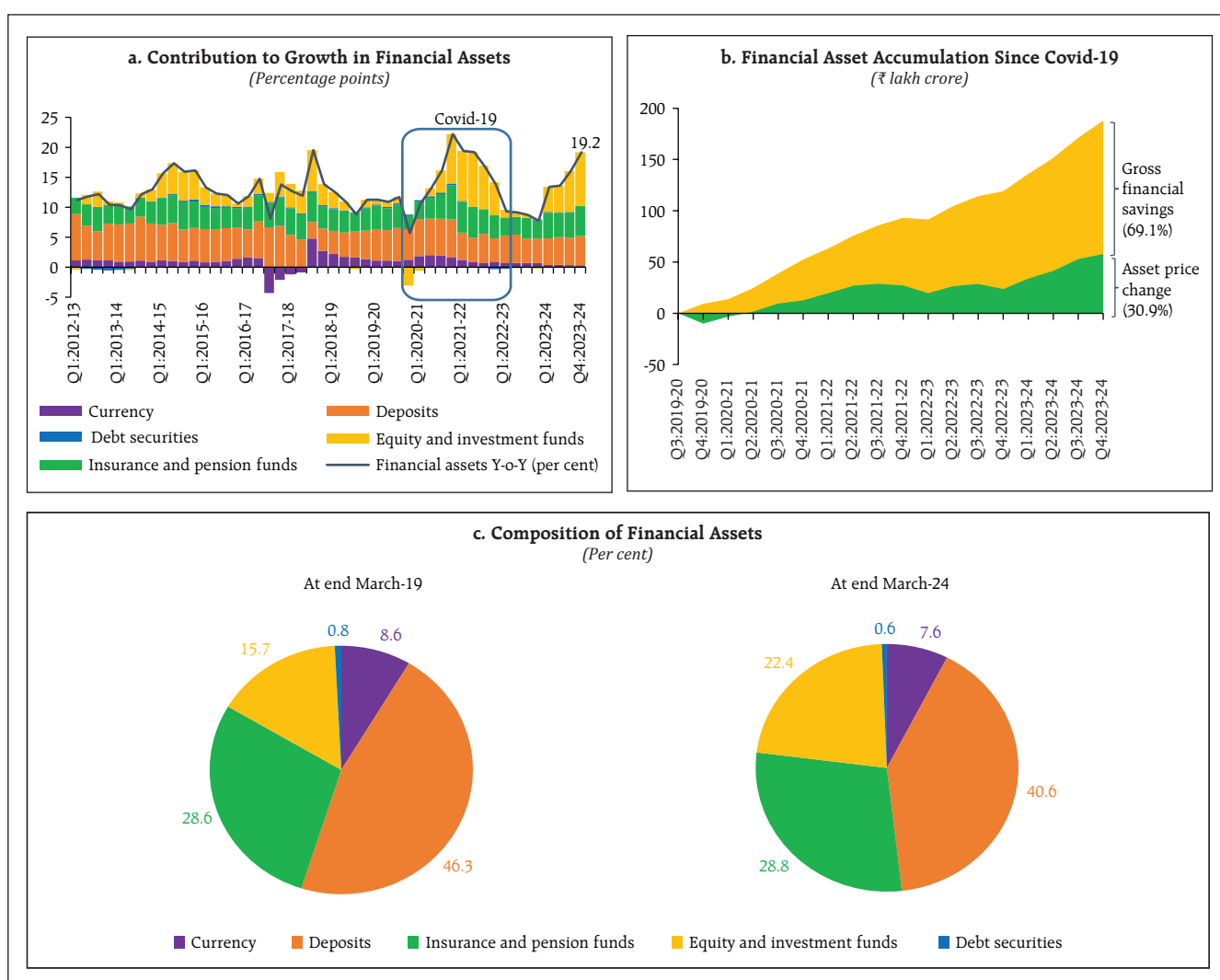
<sup>39</sup> The segregation of risk tiers based on CIBIL scores is as follows - Super-Prime:791-900; Prime Plus: 771-790, Prime: 731-770; Near Prime: 681-730; and Sub-Prime: 300-680.

<sup>40</sup> 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



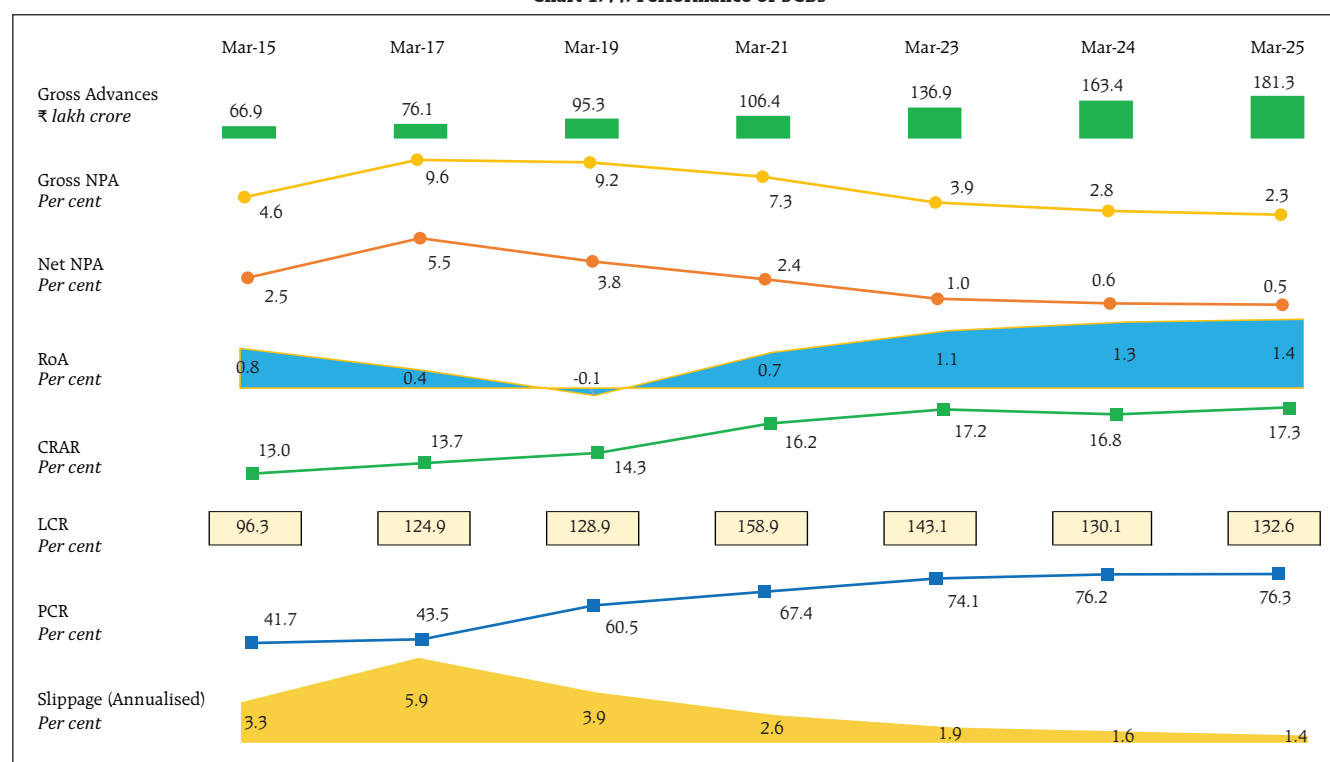
Sources: RBI and staff calculations.

## 1.4 Banking System<sup>41</sup>

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



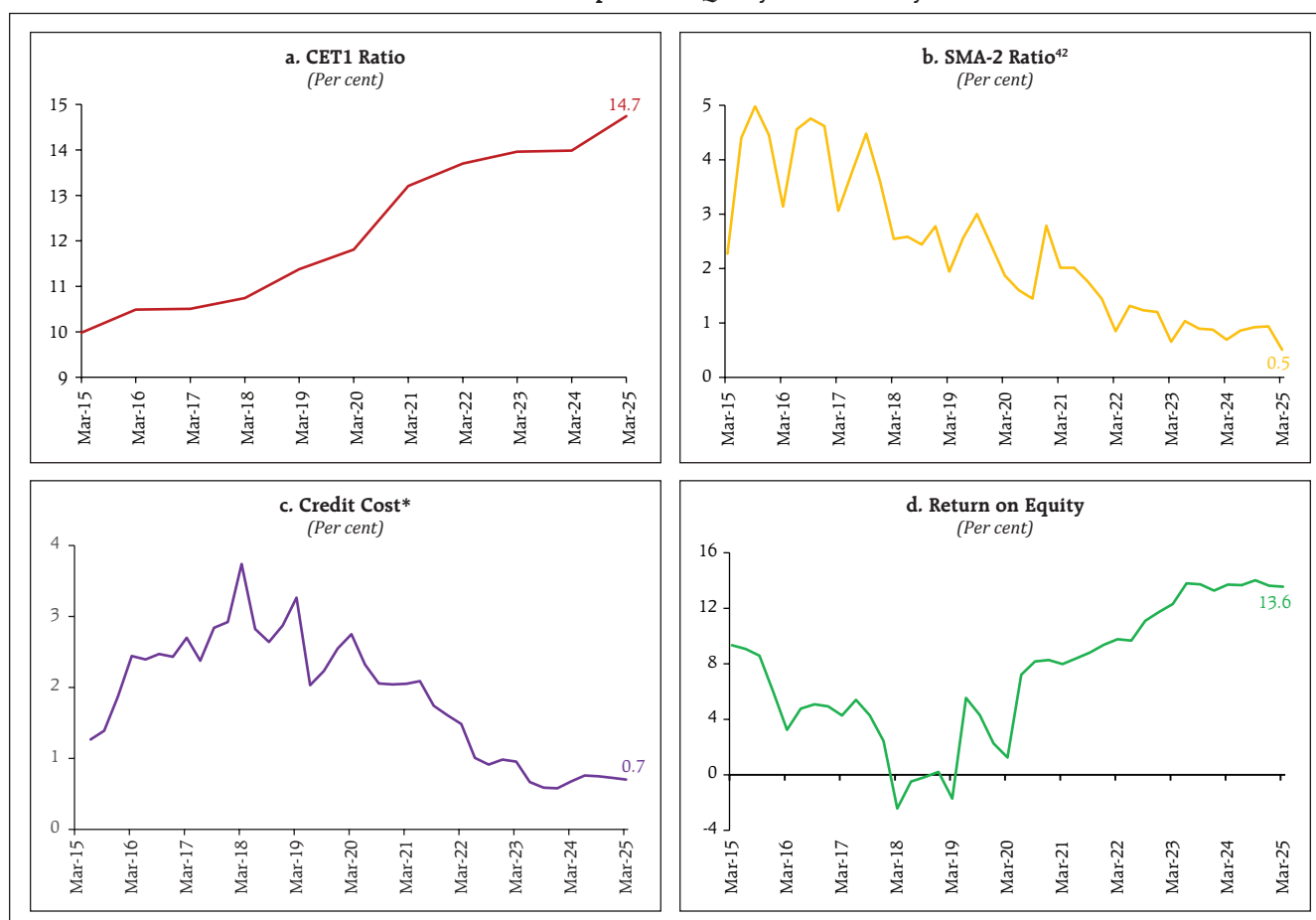
Notes: (1) Data as on June 10, 2025.

(2) Data pertains to domestic operations of SCBs, including SFBs (except for CRAR).

Source: RBI supervisory returns.

<sup>41</sup> 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<sup>43</sup> 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).

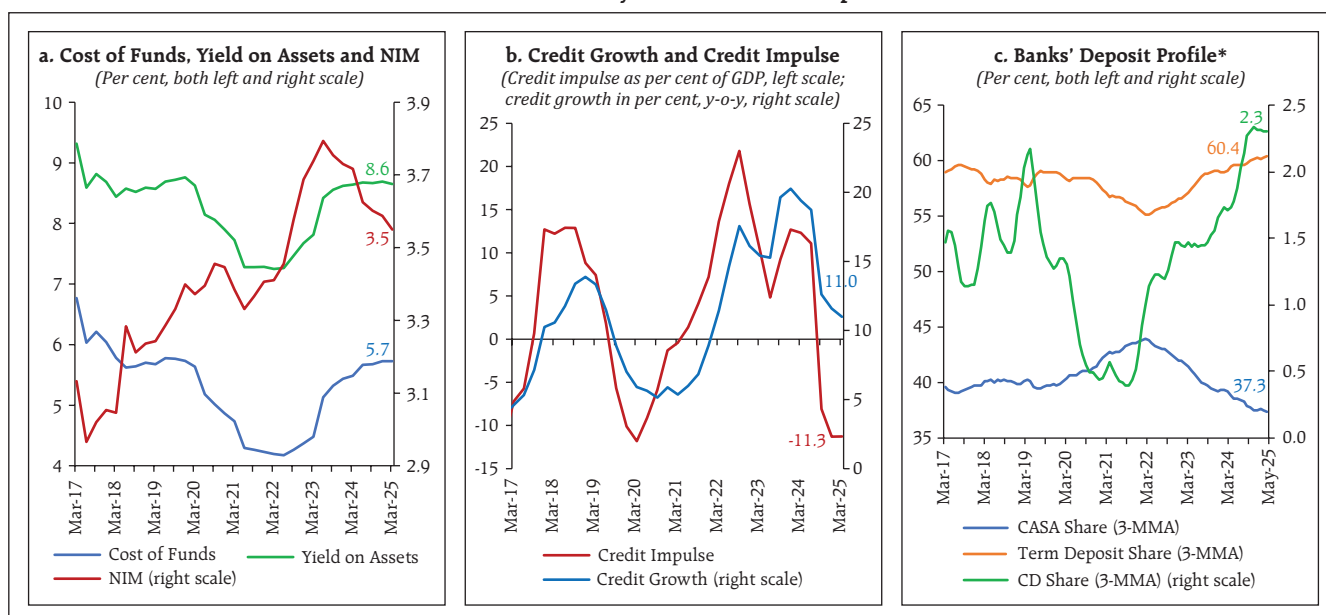
1.56 Post-pandemic, bank loan growth was largely driven by lending to the retail and services sector, particularly through unsecured retail loans and lending to the NBFCs. Pursuant to the RBI's decision to increase risk weights on certain segments of consumer credit and bank lending to the NBFCs, loan 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

<sup>42</sup> Special mention account (SMA) is defined as:

- 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.
- 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.

<sup>43</sup> 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.

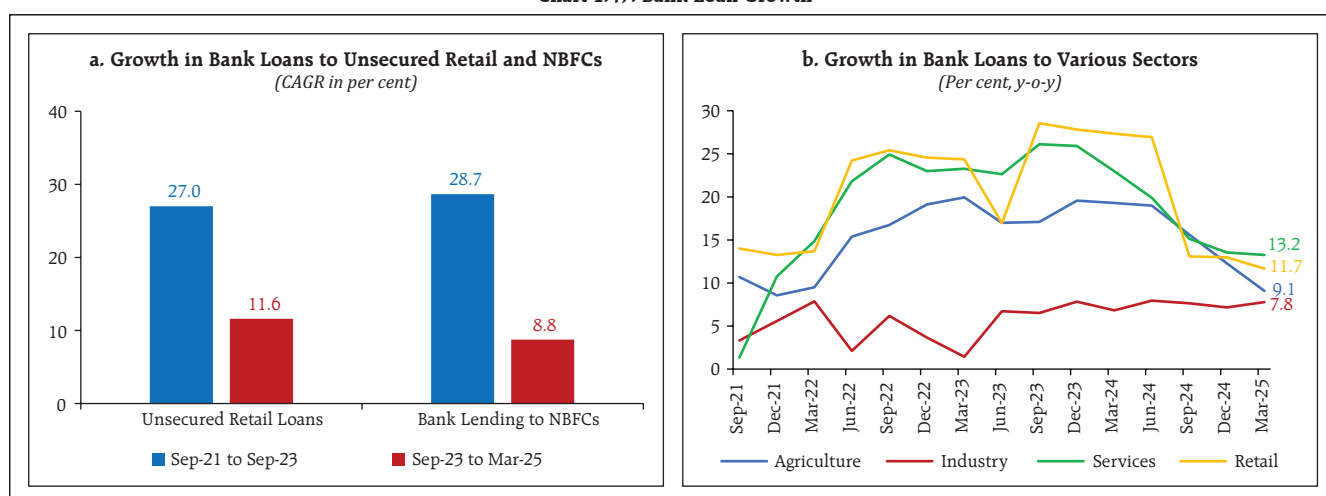
Source: RBI supervisory returns.

in lending standards, and the restoration of risk weights on bank lending to NBFCs<sup>44</sup> 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).

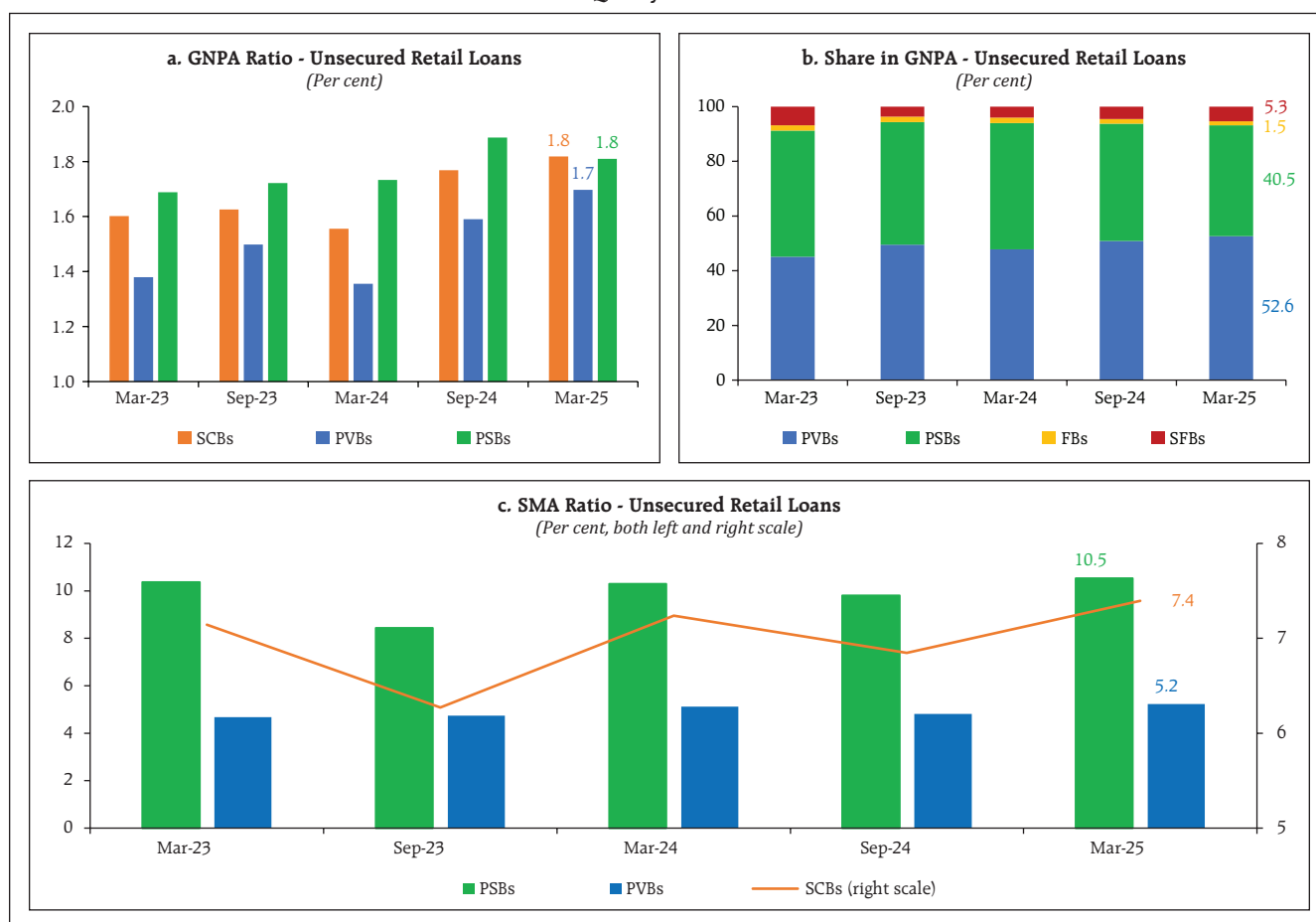
Chart 1.47: Bank Loan Growth



Source: RBI supervisory returns.

<sup>44</sup> 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

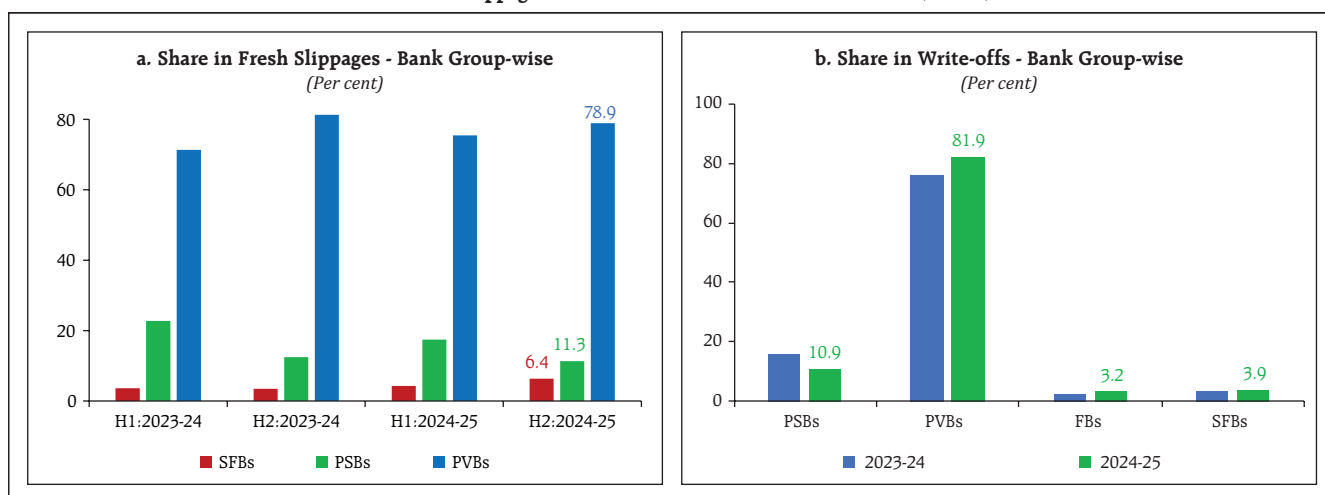


Sources: RBI supervisory returns and staff calculations.

1.58 Slippages in unsecured retail loans remain elevated for PVBs. Fresh slippage in unsecured retail loans continues to dominate the overall slippage

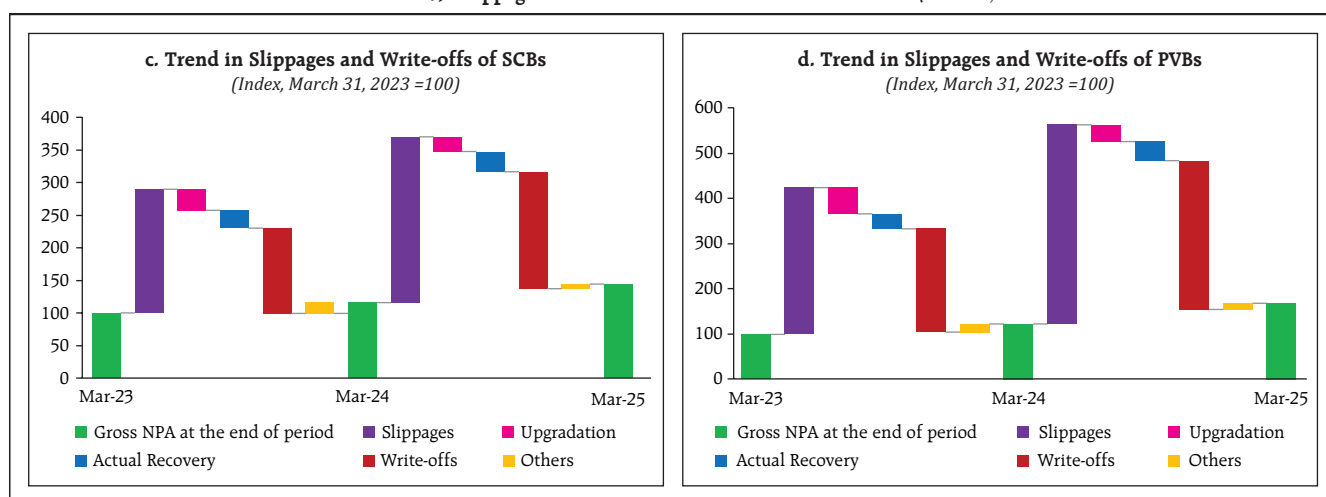
in retail loan segment with PVBs' contribution significantly higher among bank groups (Chart 1.49 a). Alongside, write-offs continue to remain

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 (Concl'd.)



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
<b>Housing Loans</b>					
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
<b>Vehicle/Auto Loans</b>					
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
<b>Credit Card Receivables</b>					
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
<b>Education Loans</b>					
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
<b>Other Retail Loans</b>					
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
<b>Total Retail Loans</b>					
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).

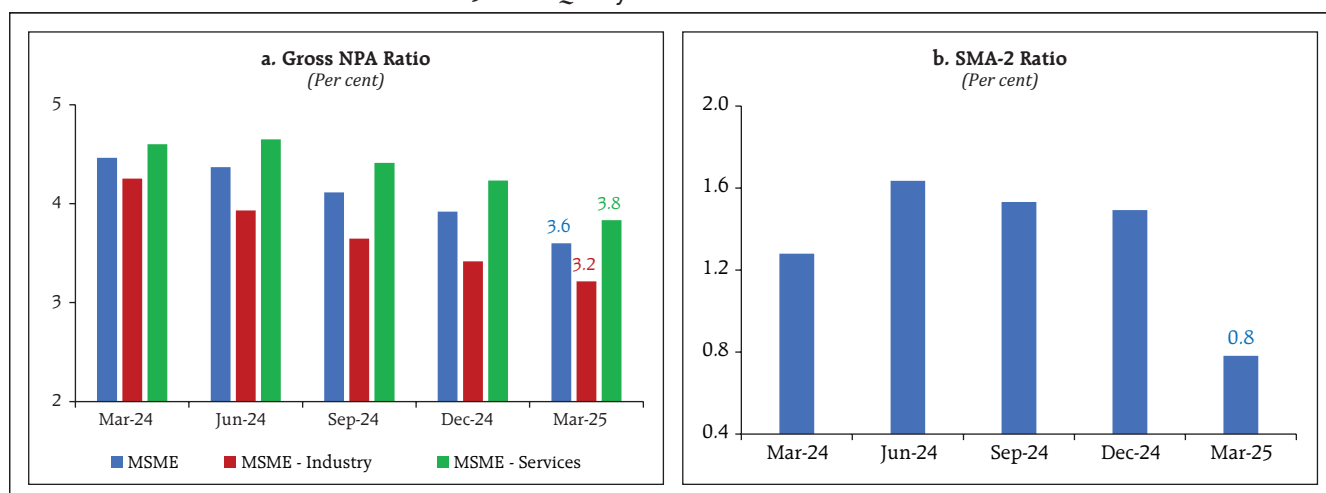
1.62 In terms of amount outstanding, the share of sub-prime borrowers in the MSME portfolio of the SCBs has decreased from 33.5 per cent in June 2022 to 23.3 per cent in March 2025. PSBs, however,

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.

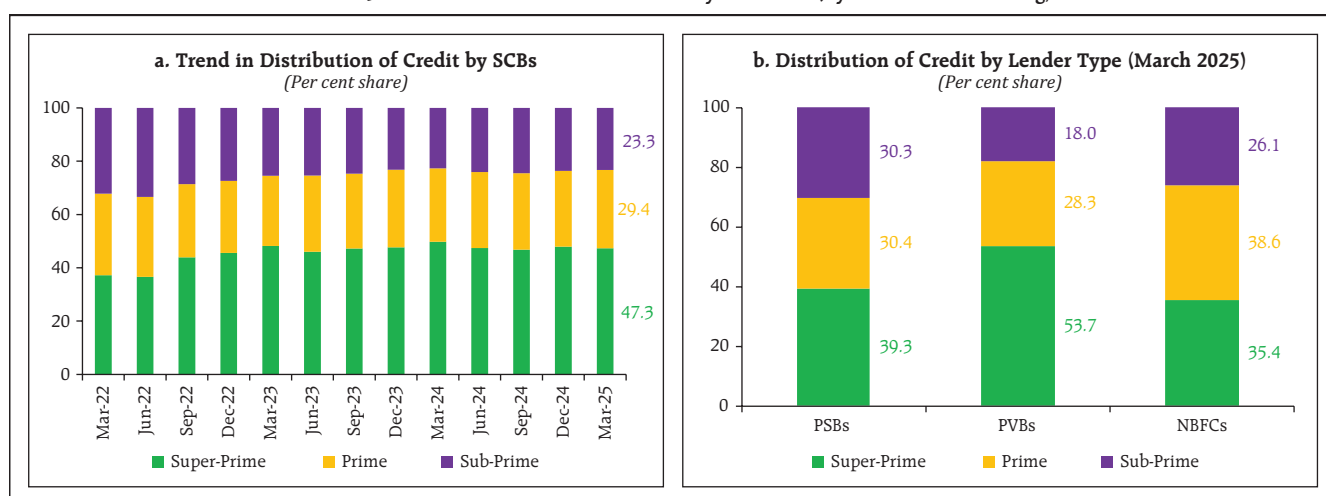
had a higher share of sub-prime borrowers in their MSME portfolio compared to PVBs and NBFCs (Chart 1.52 a and b).

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).

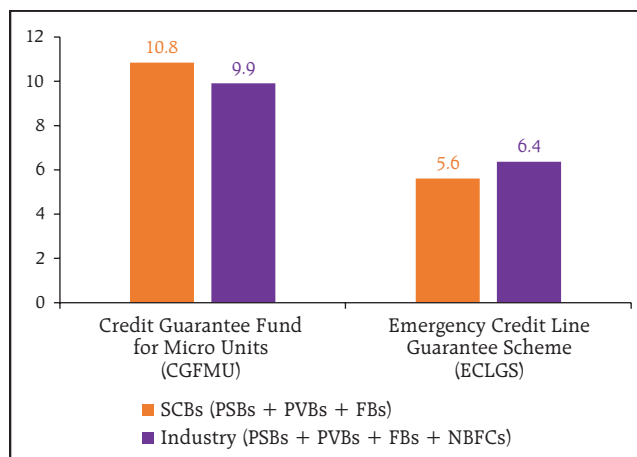
1.64 Consumer segment loans grew at a CAGR of 20.4 per cent between March 2021 and March

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.

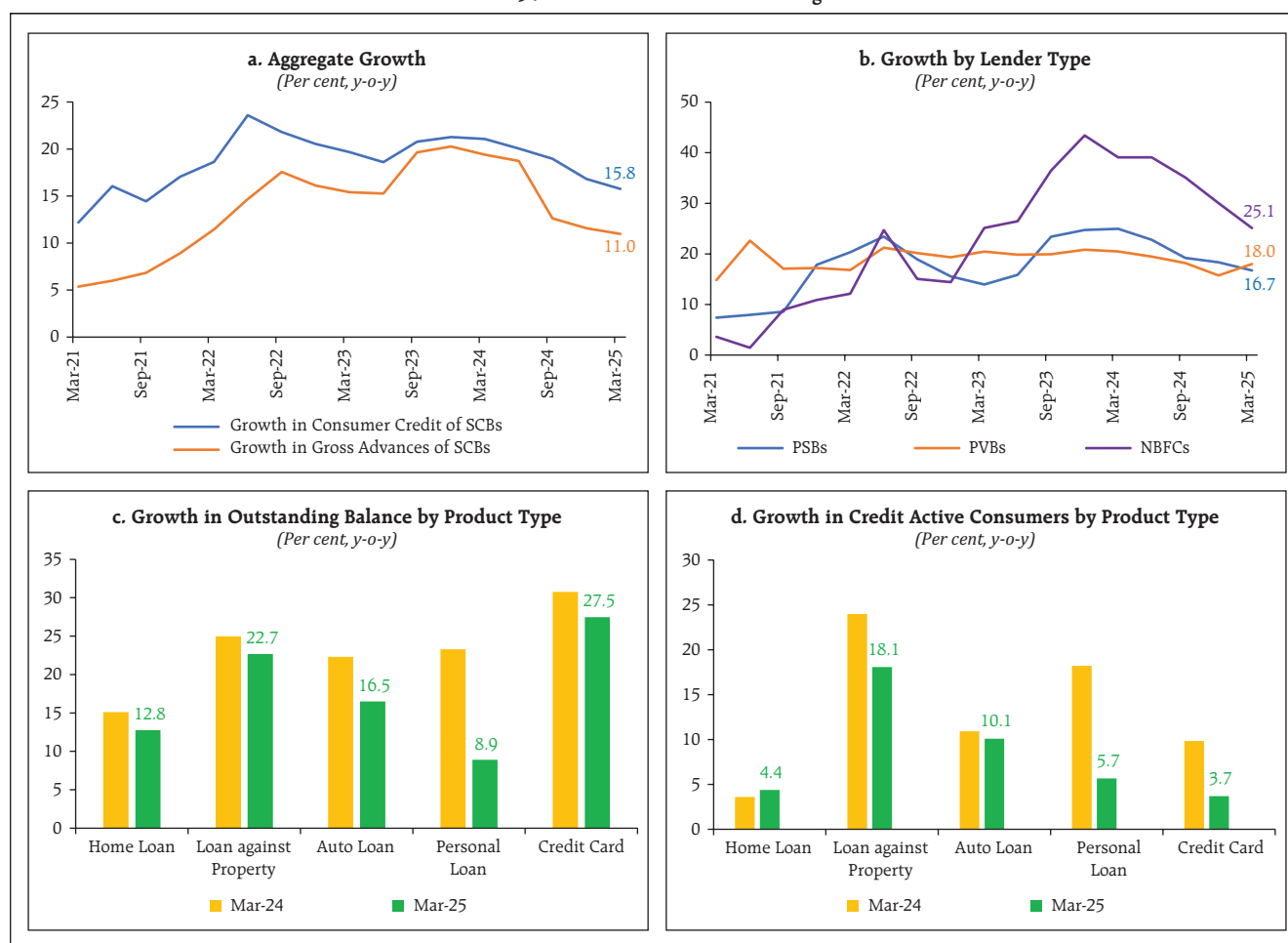
Source: National Credit Guarantee Trustee Company Limited.

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).

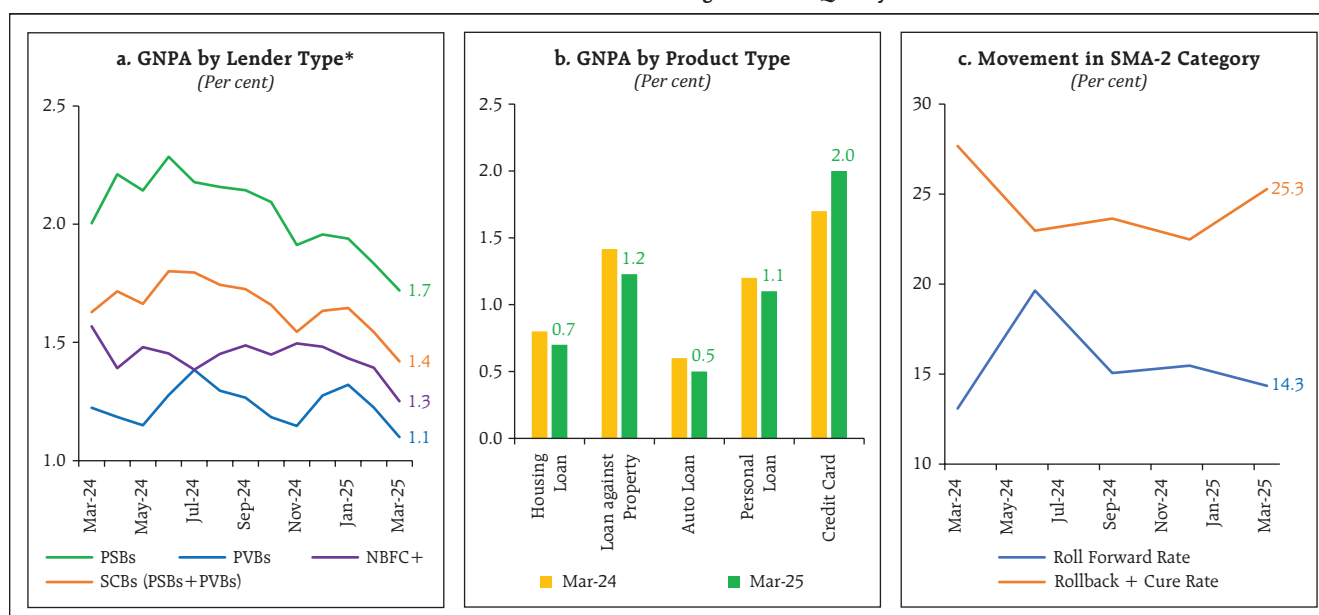
1.65 Even as loan growth to consumer segment slowed down, the quality of the portfolio has improved. Delinquency levels, except credit cards, have decreased, upgradations from SMA-2 accounts have risen, and slippages from SMA-2 accounts have fallen (Chart 1.55 a, b and c). The GNPA ratio of the SCBs' 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).

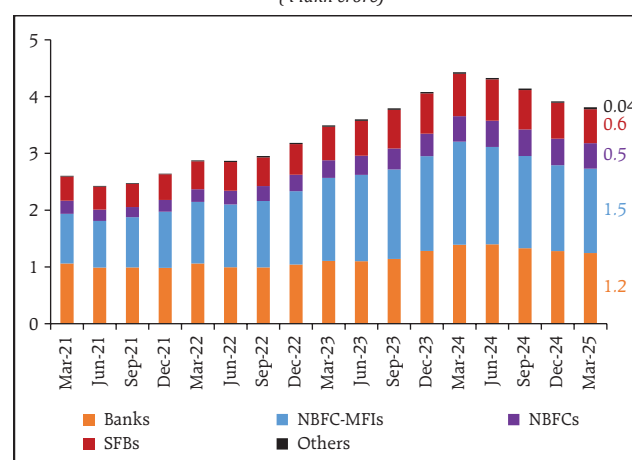
(3) Rollback + Cure rate is the percentage change (in amount) in SMA-2 category in the current month, which rolled back to SMA-1/ SMA-0/ 0 dpd in the next month (aggregated quarterly).

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

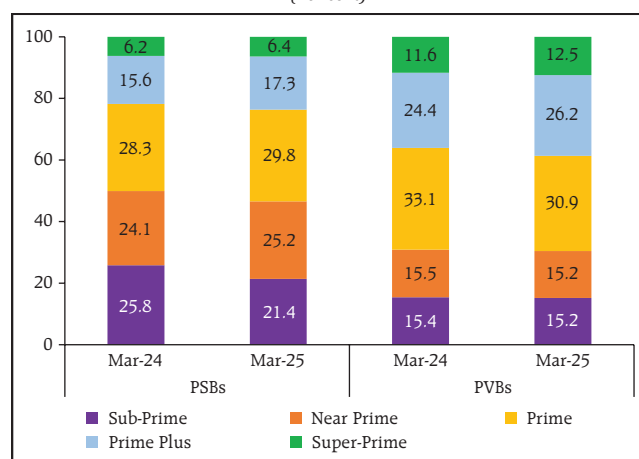
Chart 1.57: Credit to the Microfinance Sector  
(₹ lakh crore)

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.

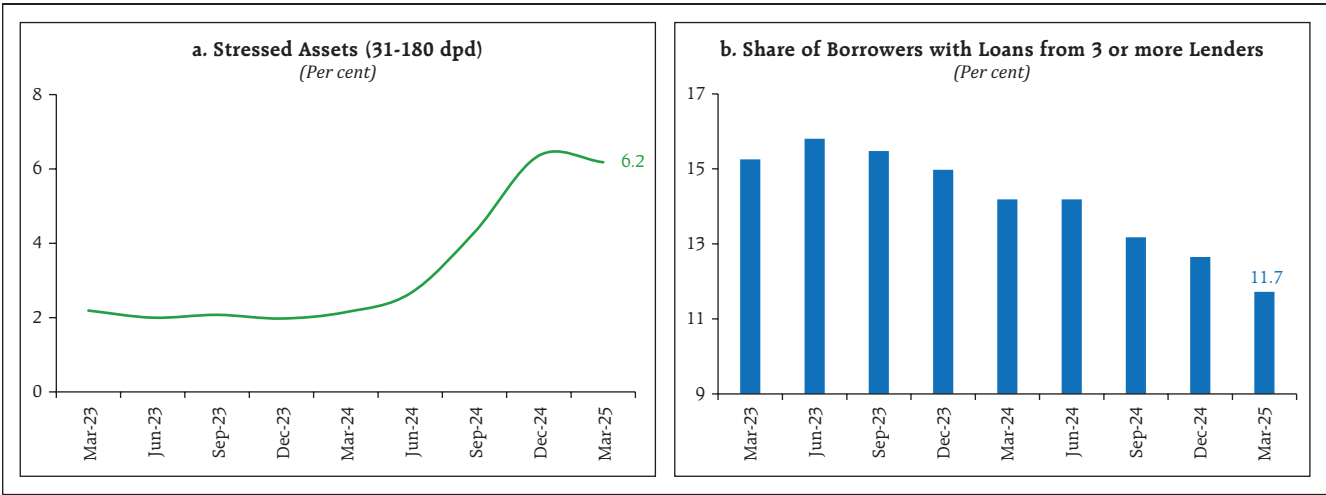
(3) Updated as on May 16, 2025.

Source: CRIF High Mark.

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

Source: TransUnion CIBIL.

Chart 1.58: Stressed Assets and Indebtedness in the Microfinance Sector



Source: CRIF High Mark.

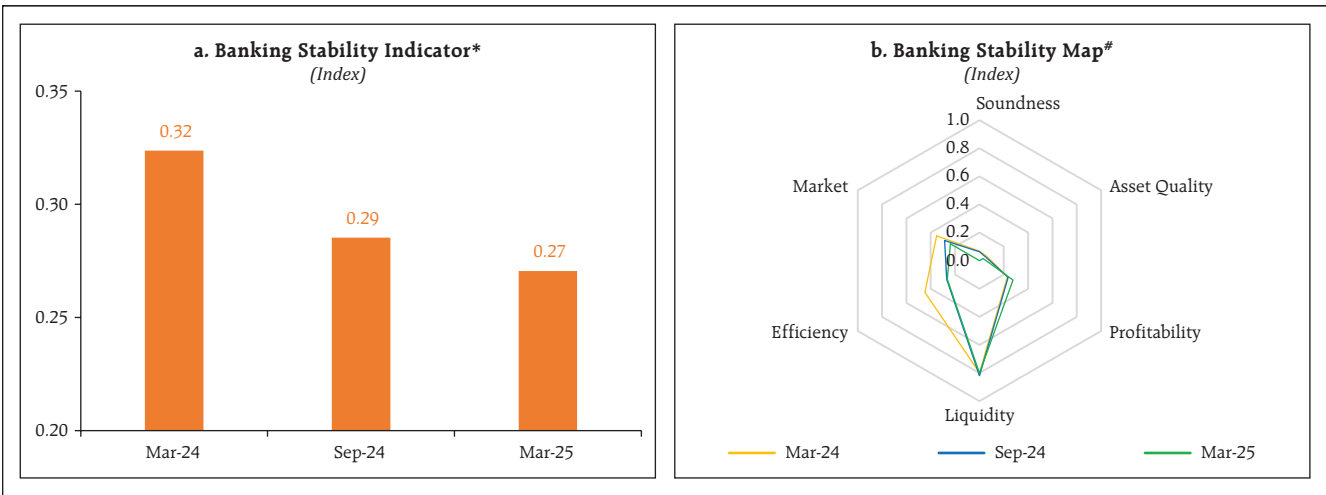
active borrowers by 40 lakhs. Bank credit<sup>45</sup> to the sector, which forms 48.3 per cent of total credit outstanding to the sector, contracted by 13.8 per cent in 2024-25.

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.

<sup>45</sup> Including small finance banks (SFBs).

## 1.5 Non-Bank Financial Intermediaries (NBFIs)

### 1.5.1 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<sup>46</sup>.

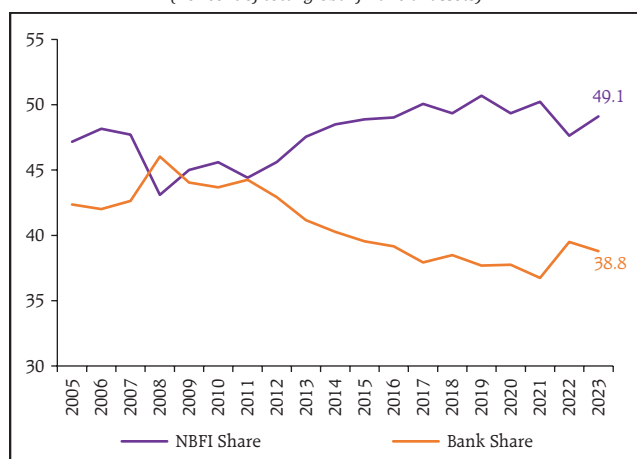
1.70 The rapid growth in the non-bank financial sector, however, has been accompanied by excessive use of leverage. Global hedge funds have significantly increased their use of synthetic leverage through derivatives over the past decade, which stands above 20 for multiple strategies (Chart 1.61). Similarly, 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<sup>47</sup>.

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<sup>48</sup>. Banks extend credit to or invest in NBFIs even as NBFIs rely on banks for their liquidity needs. Moreover, as banks and NBFIs

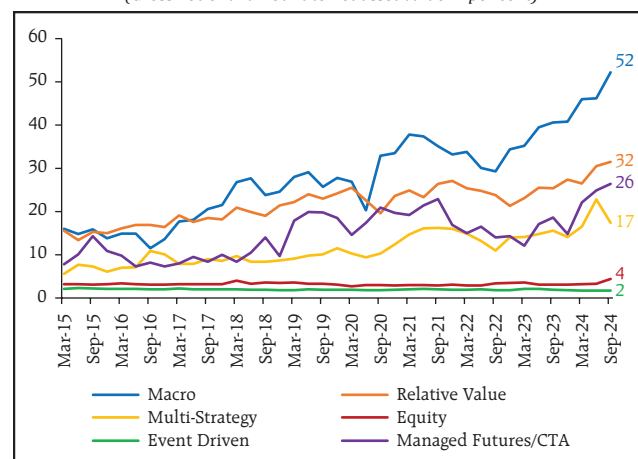
**Chart 1.60: Global NBFI Share**  
(Per cent of total global financial assets)



**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)



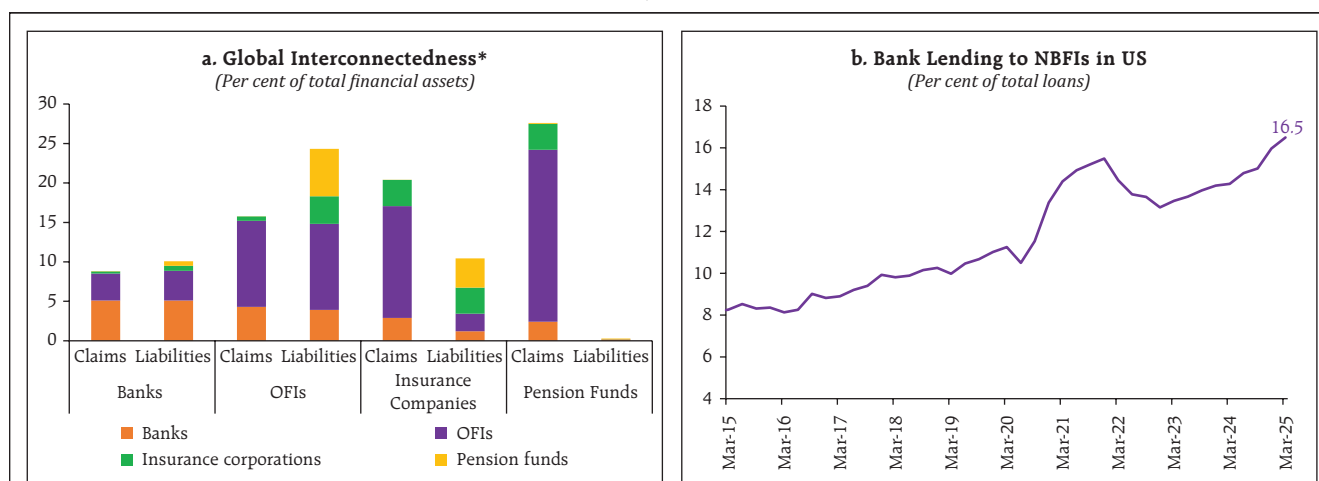
**Source:** US Securities and Exchange Commission.

<sup>46</sup> FSB (2024), "Global Monitoring Report on Non-Bank Financial Intermediation 2024", December.

<sup>47</sup> International Monetary Fund (2025), "Global Financial Stability Report: Enhancing Resilience amid Uncertainty", April.

<sup>48</sup> 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.

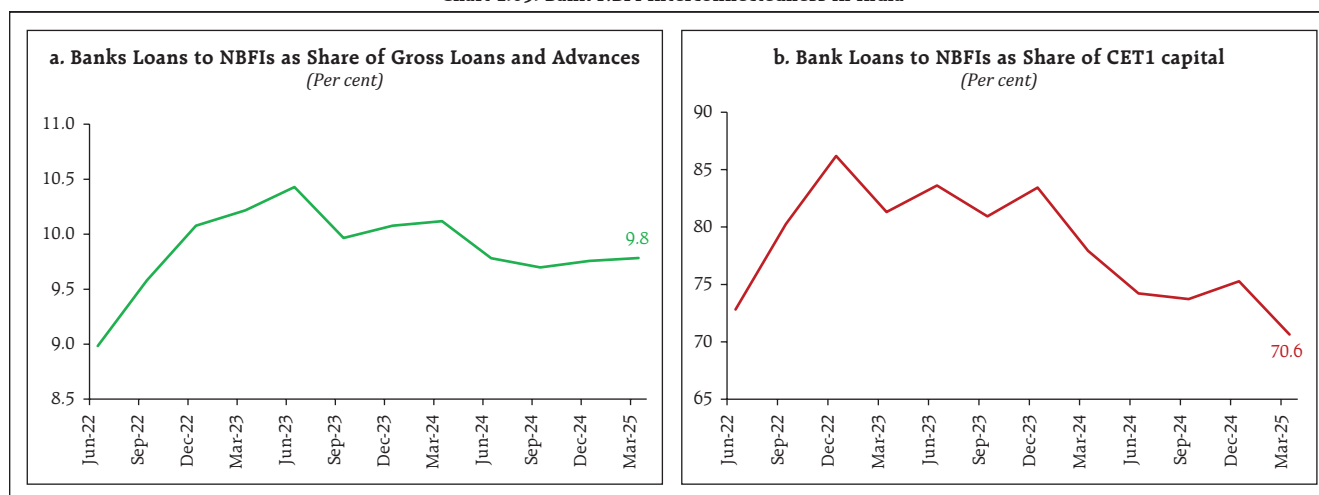
**Sources:** FSB Global Monitoring Report on Non-Bank Financial Intermediation (December 2024) and S&P Capital IQ.

adopt similar business models, the commonality of exposures of banks and NBFIs could amplify market stress<sup>49</sup>, 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.

## 1.5.2 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.

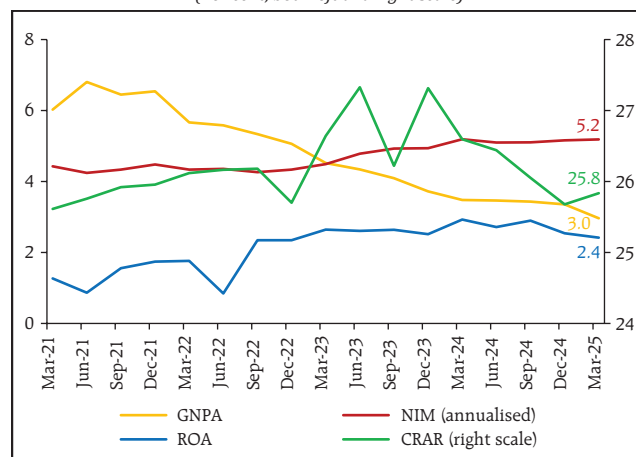
**Sources:** RBI supervisory returns and staff calculations.

<sup>49</sup> 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<sup>50</sup> 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<sup>51</sup> 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).

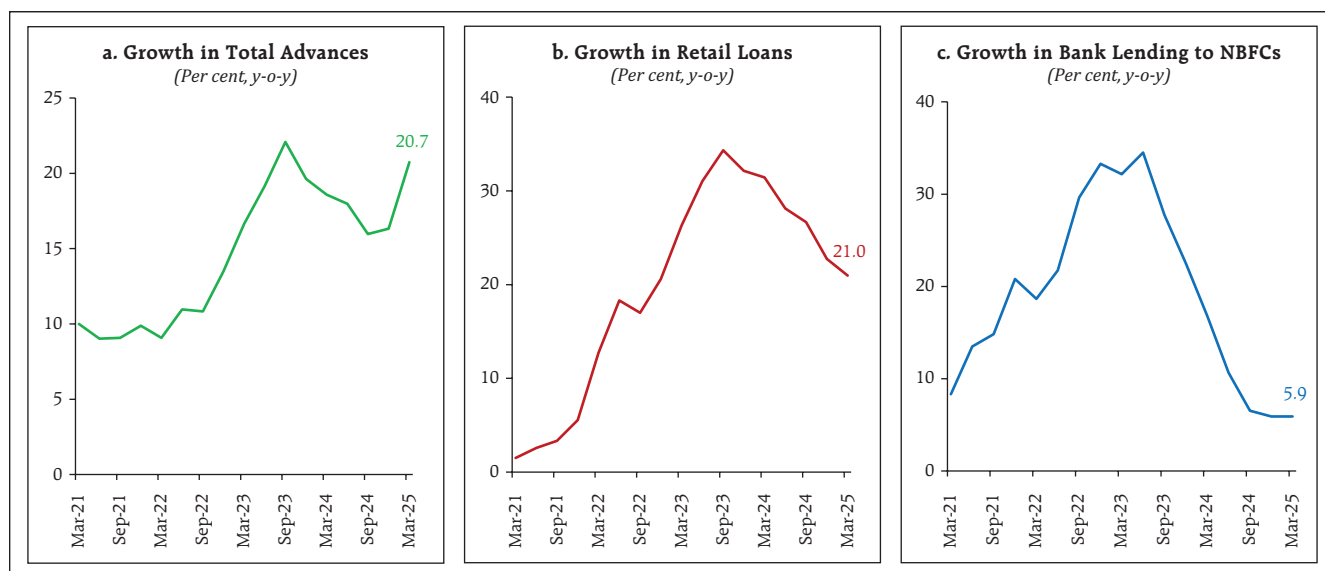
**Chart 1.64: NBFC Sector – Key Financial Parameters**  
(Per cent, both left and right scale)



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**

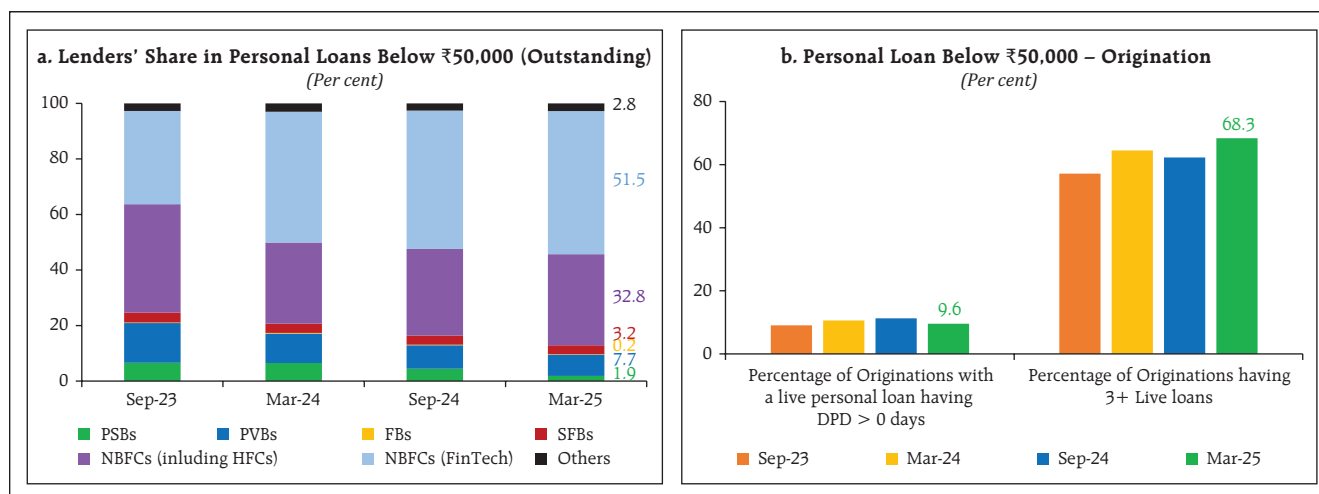


Sources: RBI supervisory returns and staff calculations.

<sup>50</sup> 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.

<sup>51</sup> 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

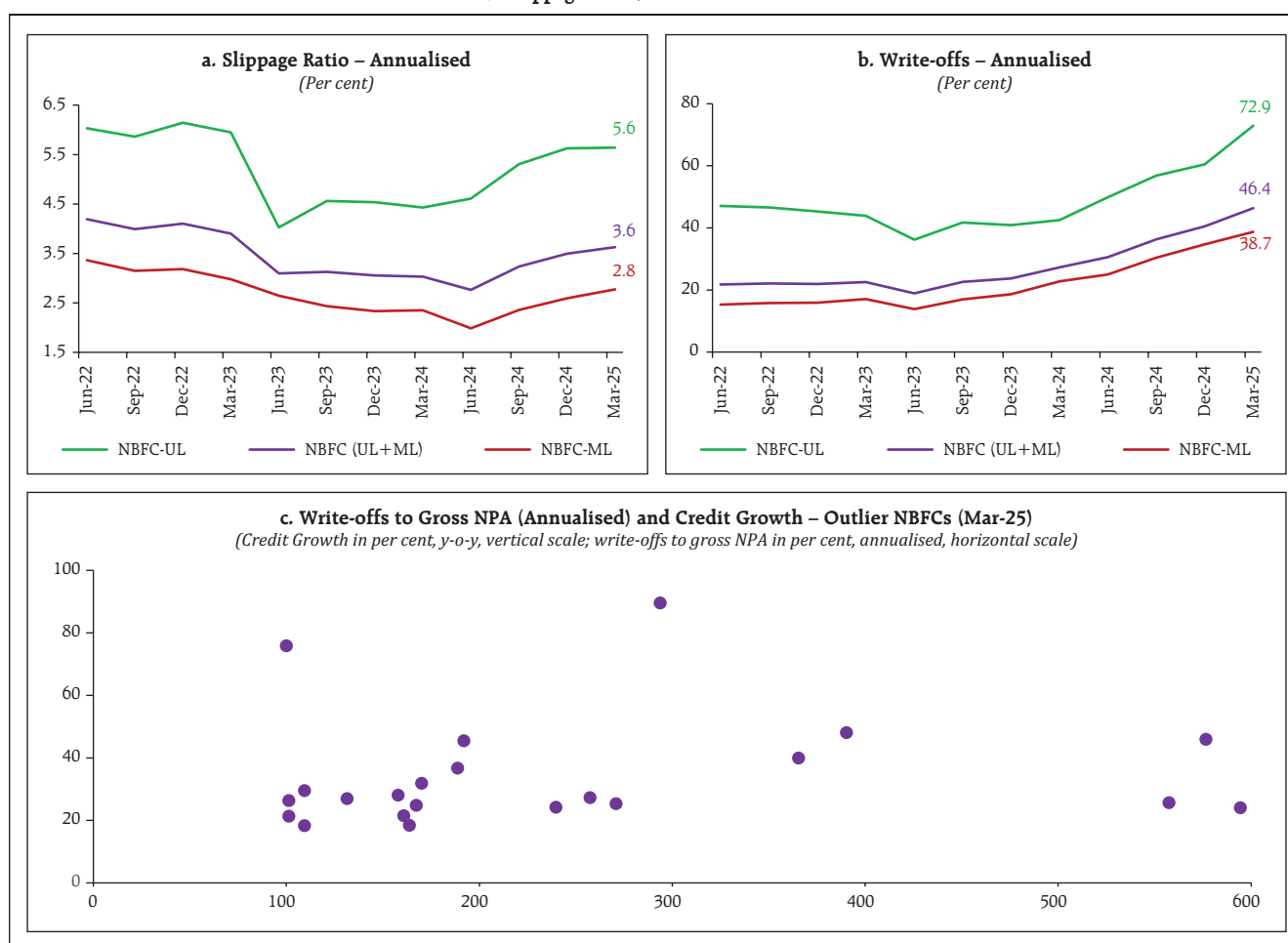


Source: Transunion CIBIL.

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.

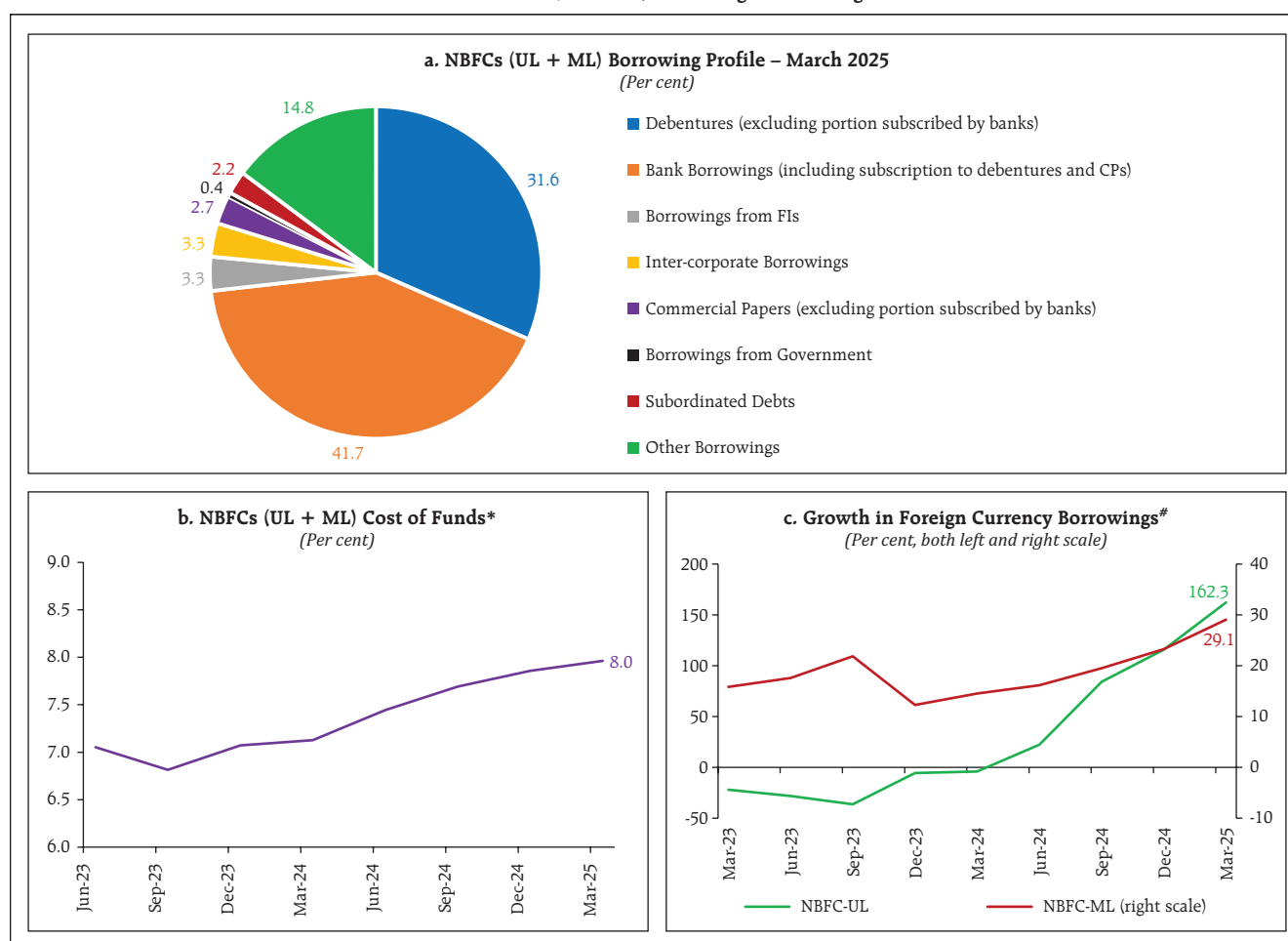
1.78 Despite decrease in bank lending to NBFCs, bank finance remains the dominant source of funding for NBFCs (Chart 1.68 a). The decline in borrowings from banks increased overall cost of funds (Chart 1.68 b). Many NBFCs have increased their foreign currency borrowings to diversify funding sources and 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)<sup>52</sup> 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



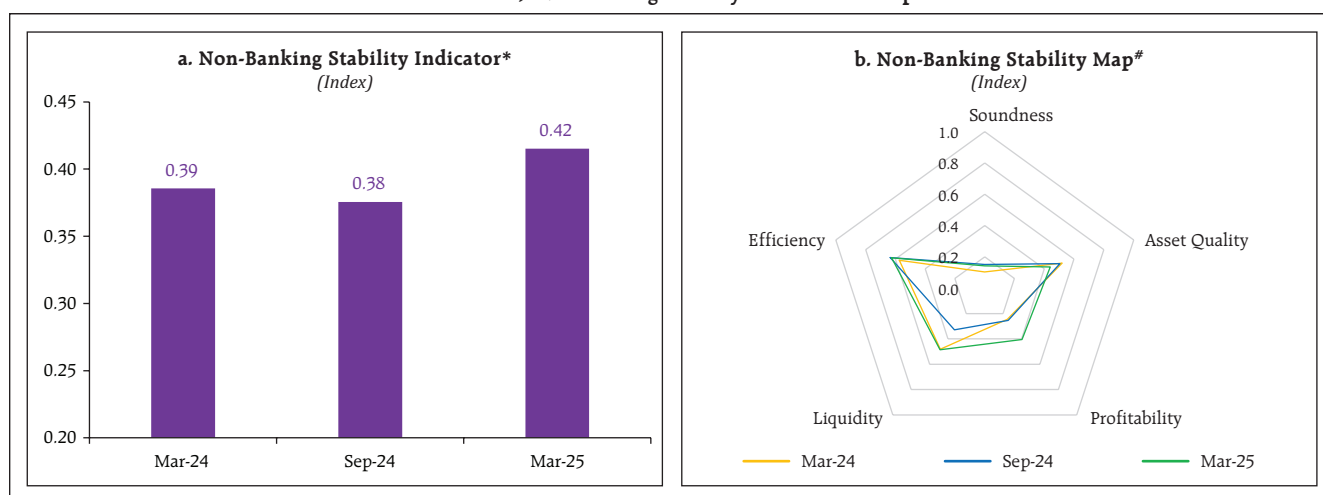
Notes: (1) \* Cost of funds = Annualised Interest Expense and Other Financing Cost/ (Average Total Borrowings + Average Public Deposits).

(2) # Includes borrowings through bonds and debentures.

Sources: RBI supervisory returns and staff calculations.

<sup>52</sup> 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.

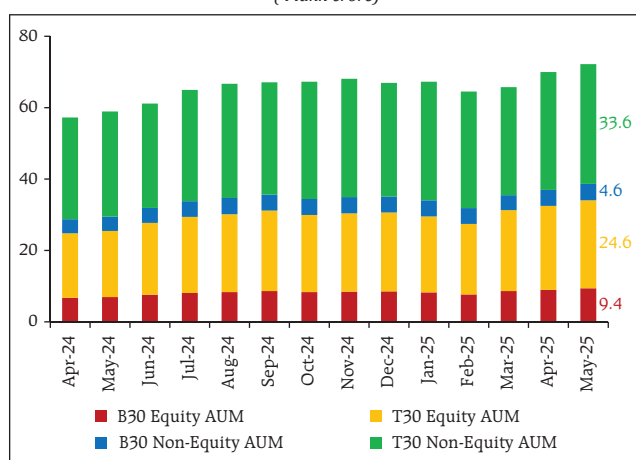
## Mutual Funds

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<sup>53</sup> as closed/cancelled from the month of January 2025.

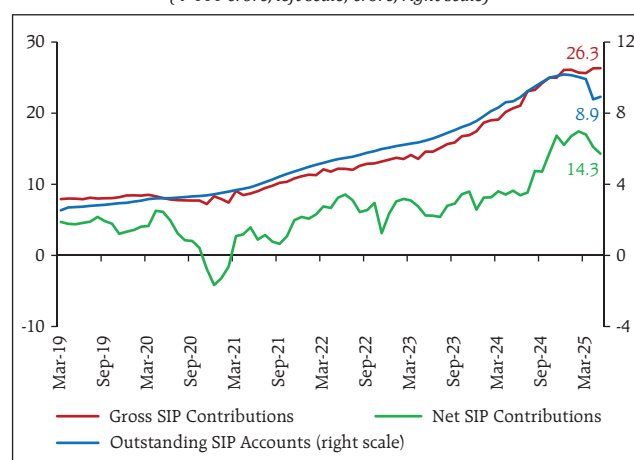
1.82 Among different equity-oriented schemes, sectoral/thematic funds have attracted largest inflows over the last year and half, except in the last three months (Chart 1.72 a and b). In debt-

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.

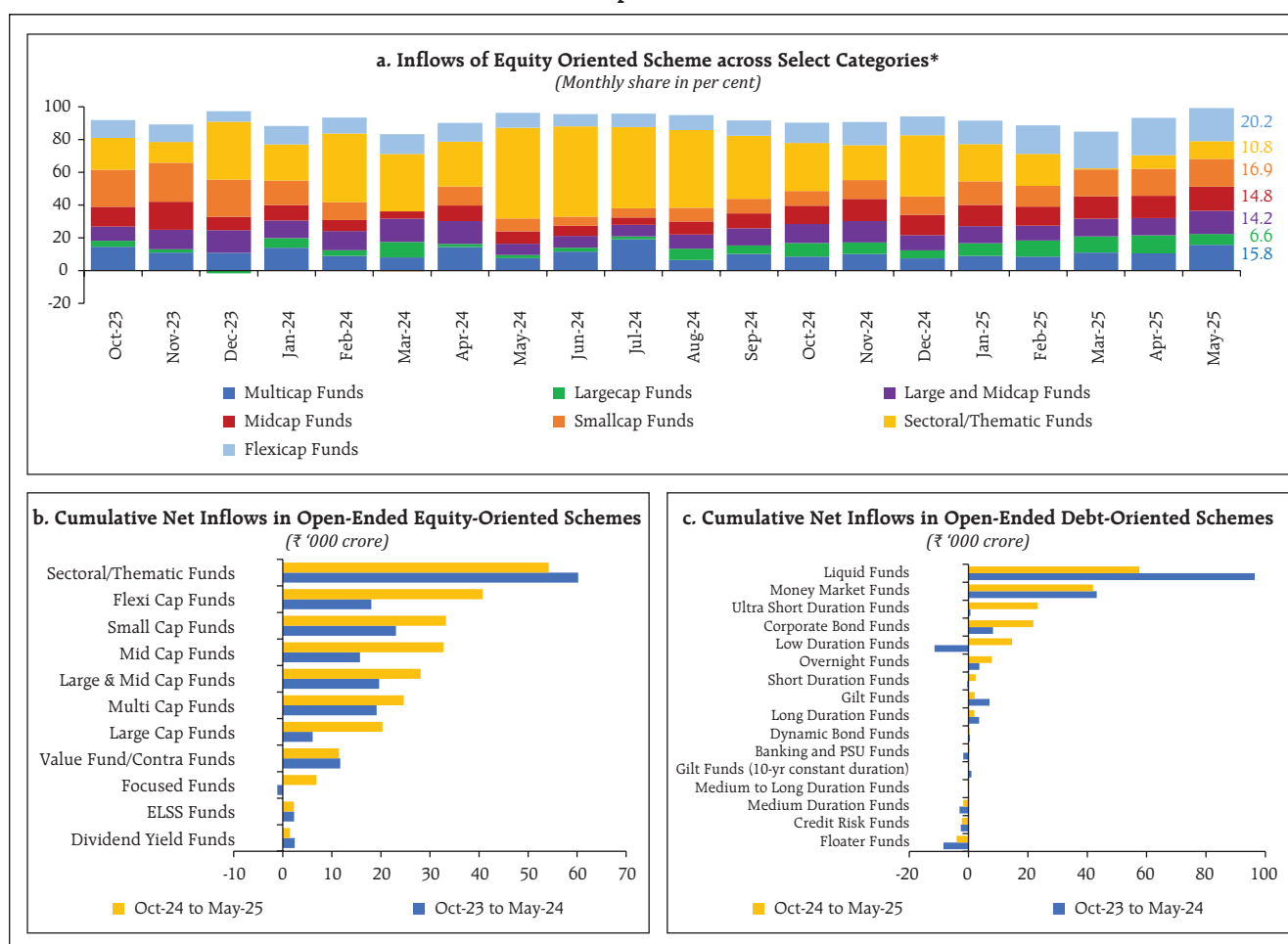
Chart 1.71: Trends in Monthly SIP Contributions and Outstanding SIP Accounts  
 (₹ '000 crore, left scale; crore, right scale)



**Source:** SEBI.

<sup>53</sup> 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).

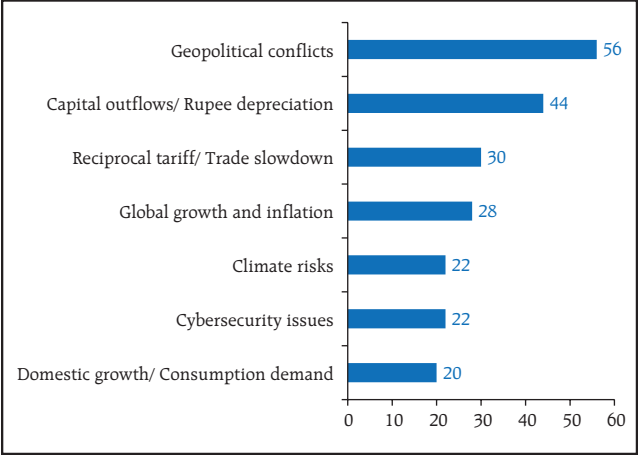
### 1.6 Systemic Risk Survey (SRS)

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.