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MONETARY POLICY STATEMENT (JUNE 4-6) 2025-26

Governor's Statement

*Governor's Statement**

Sanjay Malhotra

The 55th meeting of the Monetary Policy Committee (MPC) was held in the backdrop of an early and promising start of the monsoon season, which is of vital significance for the Indian economy. In contrast, the global backdrop remains fragile and highly fluid. The uncertainty around the global economic outlook has somewhat ebbed since the MPC met in April in the wake of temporary tariff reprieve and optimism around trade negotiations. However, it is still high to weaken sentiments and lower global growth prospects. Accordingly, global growth and trade projections have been revised downwards by multilateral agencies.[1] Moreover, the last mile of disinflation is turning out to be more protracted. As growth-inflation trade-off is becoming more challenging, monetary authorities are charting out a more cautious and carefully calibrated policy trajectory.

Looking beyond the near-term, growing economic and financial fragmentation is reshaping the global economy. Besides, complex interconnections within the financial system, elevated debt levels and growing influence of frontier technologies are raising financial stability concerns. Amidst heightened volatility in capital flows and exchange rates, coupled with constrained policy space, central banks of emerging market economies have a tougher task to stabilise their economies against global spillovers.

In this global milieu, the Indian economy presents a picture of strength, stability, and opportunity. First, strength comes from the strong balance sheets of the five major sectors - corporates, banks, households, government, and the external sector. Second, there is stability on all three fronts – price, financial, and political – providing policy and economic certainty in this dynamically evolving global economic order. Third, the Indian economy offers immense opportunities to investors through 3Ds – demography, digitalisation and domestic demand.[2] This 5x3x3 matrix of fundamentals provides the necessary core strength to cushion the Indian economy against global spillovers and propel it to grow at a faster pace.

Decisions of the Monetary Policy Committee (MPC)

The Monetary Policy Committee (MPC) met on the 4th, 5th and 6th of June to deliberate and decide on the policy repo rate. After a detailed assessment of the evolving macroeconomic and financial developments and the outlook, the MPC decided to reduce the policy repo rate under the liquidity adjustment facility (LAF) by 50 basis points to 5.50 per cent with immediate effect; consequently, the standing deposit facility (SDF) rate shall stand adjusted to 5.25 per cent and the marginal standing facility (MSF) rate and the Bank Rate to 5.75 per cent.

I shall now briefly set out the rationale for these decisions. Inflation has softened significantly over the last six months from above the tolerance band in October 2024 to well below the target with signs of a broad-based moderation. The near-term and medium-term outlook now gives us the confidence of not only a durable alignment of headline inflation with the target of 4 per cent, as exuded in the last meeting but also the belief that during the year, it is likely to undershoot the target at the margin. While food inflation outlook remains soft, core inflation is expected to remain benign with easing of international commodity prices

* Governor's Statement - June 6, 2025.

[1] The OECD, in its Economic Outlook released in June 2025, revised down the global growth forecast by 20 basis points to 2.9 per cent for 2025 while the IMF in its April World Economic Outlook lowered the global growth projection to 2.8 per cent for 2025 and 3.0 per cent for 2026—well below the historical average of 3.7 per cent recorded between 2000 and 2019. Furthermore, the WTO now projects world merchandise trade volume to contract by 0.2 per cent in 2025, marking a notable downgrade of nearly 3 percentage points from earlier forecasts.

[2] India: A partner in progress and prosperity: Keynote Address by Shri Sanjay Malhotra, Governor, RBI - at the US-India Economic Forum organised by the Confederation of Indian Industry (CII) and US India Strategic Partnership Forum (USISPF), Washington DC; April 25, 2025.

in line with the anticipated global growth slowdown. The inflation outlook for the year is being revised downwards from the earlier forecast of 4.0 per cent to 3.7 per cent. Growth, on the other hand, remains lower than our aspirations amidst challenging global environment and heightened uncertainty.

Thus, it is imperative to continue to stimulate domestic private consumption and investment through policy levers to step up the growth momentum. This changed growth-inflation dynamics calls for not only continuing with the policy easing but also frontloading the rate cuts to support growth. Accordingly, the MPC voted to reduce the policy repo rate by 50 basis points to 5.50 per cent.

After having reduced the policy repo rate by 100 bps in quick succession since February 2025, under the current circumstances, monetary policy is left with very limited space to support growth. Hence, the MPC also decided to change the stance from accommodative to neutral. From here onwards, the MPC will be carefully assessing the incoming data and the evolving outlook to chart out the future course of monetary policy in order to strike the right growth-inflation balance. The fast-changing global economic situation too necessitates continuous monitoring and assessment of the evolving macroeconomic outlook.

Assessment of Growth and Inflation

Growth

The provisional estimates released by the National Statistical Office (NSO) placed India's real GDP growth in 2024-25 at 6.5 per cent.[3] During 2025-26 so far, domestic economic activity has exhibited resilience. Agriculture sector remains strong. With a very good harvest in both the *kharif* as well as *rabi* cropping seasons, the supply of major food crops is comfortable.[4] The reservoir levels remain healthy.[5] The highest procurement of wheat[6] in the last four years provides a comforting stock position.[7] Industrial activity is gaining gradually, even though the pace of recovery is uneven.[8] Services sector is expected to maintain momentum.[9] PMI services stood strong at 58.8 in May 2025, indicating robust expansion in activity.[10]

On the demand side, private consumption, the mainstay of aggregate demand, remains healthy, with a gradual rise in discretionary spending.[11] Rural demand[12] remains steady, while urban demand[13] is improving. Investment activity is reviving as

[3] Real GDP expanded by 7.4 per cent in Q4:2024-25. Private consumption and gross fixed capital formation (GFCF) grew by 6.0 per cent and 9.4 per cent, respectively, in Q4:2024-25. For the full year 2024-25, private consumption and GFCF expanded by 7.2 per cent and 7.1 per cent, respectively. On the supply side, gross value added (GVA) expanded by 6.8 per cent in Q4:2024-25. Manufacturing rose by 4.8 per cent and services registered growth of 7.9 per cent in Q4. For 2024-25, GVA expanded by 6.4 per cent. Manufacturing and services sector grew by 4.5 per cent and 7.5 per cent, respectively in 2024-25.

[4] As per the third advance estimates, the combined *kharif* and *rabi* food-grains production at 354.0 million tonnes in 2024-25 is 6.5 per cent higher than a year ago.

[5] As of June 5, 2025, reservoir levels were at 31.1 per cent of the full capacity, above last year's level of 22.5 per cent and higher than the decadal average of 24.2 per cent.

[6] Procurement of wheat as on June 1, 2025 at 298.8 lakh tonnes is 13.3 per cent higher over the last year.

[7] As on May 16, 2025, the stocks held by the Food Corporation of India for wheat stands at 5.1 times the buffer norms (highest in 4 years) and rice at 4.4 times the buffer norms.

[8] IIP during April 2025 expanded at tepid rate of 2.7 per cent despite a lower base of 4.0 per cent growth in 2024-25. While mining contracted by 0.2 per cent in April, electricity and manufacturing recorded growth of 1.1 per cent and 3.4 per cent, respectively. Manufacturing PMI for May 2025 moderated to 57.6 but remains well above the long-run average.

[9] E-way bills increased strongly by 23.4 per cent in April 2025, while toll collections increased by 16.4 per cent in May 2025. Gross GST collections rose by a healthy 16.4 per cent in May 2025. Domestic air cargo posted a growth of 16.6 per cent in April. Domestic air passenger traffic grew by 9.7 per cent in April, however moderated to 3.7 per cent in May. Port cargo witnessed a growth of 5.6 per cent in April-May 2025.

[10] PMI services for May 2025 edged up to 58.8 from 58.7 in April, maintaining a level that reflects the sector's recent stable and robust performance.

[11] IIP consumer durables expanded by 6.4 per cent in April 2025.

[12] As per the NielsenIQ's Retail Audit Service, FMCG sales volume growth in rural areas improved to 8.7 per cent in April 2025 from 8.1 per cent in March.

[13] Wholesale passenger vehicle sales and FMCG products sales (urban) recorded a growth of 5.5 per cent and 4.5 per cent, respectively, during April 2025.

reflected by high-frequency indicators.[14] Merchandise exports recorded a strong growth in April 2025 after a lacklustre performance in the recent past.[15] Non-oil, non-gold imports posted a double-digit growth, reflecting buoyant domestic demand conditions.[16] Services exports continue on a strong growth trajectory.[17]

Going forward, the outlook for agriculture sector and rural demand is expected to receive further impetus by the expected above normal southwest monsoon rainfall.[18] On the other hand, sustained buoyancy in services activity should nurture revival in urban consumption. The healthy balance sheets of banks and corporates; government's continued thrust on capex;[19] elevated capacity utilisation;[20] improving business optimism[21] and easing of financial conditions should help further revive investment activity. Trade policy uncertainty however continues to weigh on merchandise exports prospects, while conclusion of free trade agreement (FTA) with the United Kingdom[22] and progress with other countries should provide a fillip to trade in goods and services. Spillovers emanating from protracted geopolitical tensions, and global trade and weather-related uncertainties pose downside risks to growth. Taking all these factors into consideration, real GDP growth for 2025-26 is projected at 6.5 per cent with Q1 at 6.5, Q2 at 6.7, Q3 at 6.6 and Q4 at 6.3 per cent. The risks are evenly balanced.

Inflation

CPI headline inflation continued its declining trajectory in March-April, with headline CPI inflation moderating to a nearly six-year low of 3.2 per cent (y-o-y) in April 2025. This was led mainly by food inflation, which recorded the sixth consecutive monthly decline. Fuel group witnessed a reversal of deflationary conditions and recorded positive inflation prints during March and April, partly reflecting the hike in LPG prices. Core[23] inflation remained largely steady and contained during March-April, despite increase in gold prices exerting upward pressure.[24]

The outlook for inflation points towards benign prices across major constituents. The record wheat production and higher production of key pulses in the *Rabi* crop season should ensure adequate supply of key food items. Going forward, the likely above normal monsoon along with its early onset augurs well for *Kharif* crop prospects. Reflecting this, inflation expectations are showing a moderating trend, more

[14] Production and Imports of capital goods rose sharply by 20.3 per cent and 21.5 per cent, respectively, in April 2025. Steel consumption and cement production recorded double-digit growth in Q4:2024-25 before moderating to 6.0 per cent and 6.7 per cent, respectively in the month of April.

[15] Merchandise exports recorded a growth of 9.2 per cent in April 2025 with non-oil exports growing at a healthy 10.3 per cent.

[16] Non-oil non-gold imports witnessed a strong growth of 17.3 per cent, with overall imports growing at 19.1 per cent.

[17] Services exports increased by 18.6 per cent during March 2025, on the back of robust software and business exports. However, it moderated to 8.8 per cent in April 2025.

[18] Monsoon landed on coast of Kerala on May 24, 2025, eight days in advance. As per the IMD's updated long-range forecast, monsoon season rainfall is likely to be 106 per cent of the long period average (LPA) with a model error of ±4 per cent.

[19] As per the Union Budget 2025-26, the central government's effective capital expenditure (including grants-in-aid for creation of capital assets) is budgeted to grow by 17.4 per cent.

[20] As per the early results of quarterly order books, inventories, and capacity utilisation (OBICUS) survey of RBI, seasonally adjusted capacity utilisation (CU) of manufacturing sector at 75.5 per cent in Q4:2024-25 is above the long-period average of 73.9 per cent.

[21] PMI manufacturing Future Output Index is at a healthy 63.1in May 2025. Future Output Index has hovered above 60.0 since April 2023. Future Activity Index of PMI services rebounded in May after declining in April.

[22] As per the Ministry of Commerce and Industry, 99 per cent of Indian exports to the UK will benefit from this Free Trade Agreement.

[23] CPI headline excluding food and fuel.

[24] CPI headline inflation declined by a cumulative 45 basis points during March-April 2025, from 3.6 per cent in February 2025 to a low of 3.2 per cent in April 2025 – the lowest reading since July 2019. As vegetable prices continued to record a strong seasonal correction, food inflation dropped to a 42-month low of 2.1 per cent in April from 3.8 per cent in February 2025. Fuel group, however, exited the deflationary zone, recording an year-on-year inflation of 1.4 per cent in March 2025 and rose further to 2.9 per cent in April 2025. CPI excluding food and fuel inflation also edged up to 4.2 per cent, year-on-year, in April 2025 after remaining steady at 4.1 per cent in March 2025. Gold, which has a share of 2.3 per cent within CPI excluding food and fuel, contributed 21.4 per cent to the core inflation in April 2025.

so for the rural households.[25] Most projections point towards continued moderation in the prices of key commodities, including crude oil. Notwithstanding these favourable prognoses, we need to remain watchful of weather-related uncertainties and still evolving tariff related concerns with their attendant impact on global commodity prices. Taking all these factors into consideration, and assuming a normal monsoon, CPI inflation for the financial year 2025-26 is now projected at 3.7 per cent, with Q1 at 2.9 per cent; Q2 at 3.4 per cent; Q3 at 3.9 per cent; and Q4 at 4.4 per cent. The risks are evenly balanced.

External Sector

With the moderation in trade deficit in Q4:2024-25, alongside strong services exports[26] and remittance receipts, the current account deficit (CAD) for 2024-25 is expected to remain low.[27] Furthermore, despite rising geopolitical uncertainties and trade tensions, India's merchandise trade remained robust in April 2025. As imports grew faster than exports, trade deficit however widened during the month.[28] Going forward, net services and remittance receipts are likely to remain in surplus, counterbalancing the rise in trade deficit. The CAD for 2025-26 is expected to remain well within the sustainable level.

On the financing side in 2024-25, foreign portfolio investment (FPI) to India dropped sharply to 1.7 billion US$, as foreign portfolio investors booked profits in equities.[29] Net foreign direct investment (FDI)[30] too moderated. It is germane to point out that this moderation is on account of a rise in repatriation and net outward FDI while gross FDI actually increased by 14 per cent. Rise in repatriation is a sign of a mature market where foreign investors can enter and exit smoothly, while high gross FDI indicates that India continues to remain an attractive investment destination. External commercial borrowings (ECBs) and non-resident deposits, on the other hand, witnessed higher net inflows compared to the previous year.[31] As on May 30, 2025, India's foreign exchange reserves stood at US$ 691.5 billion. These are sufficient to fund more than 11 months of goods imports[32] and about 96 per cent of external debt outstanding.[33] Overall, India's external sector remains resilient as key external sector vulnerability indicators continue to improve.[34] We remain confident of meeting our external financing requirements.

[25] Urban households' perception of the current median inflation declined by 10 basis points (bps) and reached 7.7 per cent, while their inflation expectations for the next three months remained unchanged at 8.9 per cent. Moreover, their expectation for year ahead reduced by 20 bps to 9.5 per cent. For rural households, the current perception of inflation reduced by 30 basis points (bps) to 6.3 per cent in May 2025 as compared with the previous round. Moreover, their year ahead inflation expectation also declined by 40 bps to 8.9 per cent in the latest survey.

[26] As per provisional figures, India's services exports grew by 13.6 per cent to US$ 387.5 billion during 2024-25, whereas services imports registered a growth of 11.4 per cent (US$ 198.7 billion). Net services receipts reached an all-time high of US$ 188.8 during 2024-25. In April 2025, services exports grew by 8.8 per cent to US$32.8 billion on a y-o-y basis, while services imports rose moderately by 0.9 per cent (US$16.9 billion). Net services receipts at US$15.9 billion recorded a y-o-y expansion of 18.8 per cent.

[27] India's current account balance recorded a deficit of 1.1 per cent of GDP in Q3:2024-25 lower than 1.8 per cent of GDP in Q2:2024-25.

[28] India's merchandise exports expanded for the second consecutive month, growing by 9.0 per cent (y-o-y) to US$ 38.5 billion in April 2025. Merchandise imports at US$ 64.9 billion expanded by 19.1 per cent (y-o-y) in April 2025. India's merchandise trade deficit increased to US$ 26.4 billion in April 2025 from US$ 19.2 billion a year ago.

[29] During 2025-26 so far (up to June 4), foreign portfolio investment (FPI) to India registered net outflows of US$ 2.1 billion.

[30] Gross foreign direct investment (FDI) inflows remained strong, rising by around 14 per cent to US$ 81.0 billion in 2024-25 from US$ 71.3 billion a year ago. However, net FDI inflows moderated to US$ 0.4 billion in 2024-25 from US$ 10.1 billion a year ago.

[31] Net inflows under external commercial borrowings (ECBs) to India increased to US$ 18.7 billion during 2024-25 as compared with US$ 3.6 billion a year ago. In April 2025, net ECB to India rose to US$2.8 billion from US$0.5 billion a year ago. Non-resident deposits recorded a higher net inflow of US$ 16.2 billion in 2024-25 than US$ 14.7 billion a year ago.

[32] Based on actual merchandise imports (on a BoP basis) during the four quarters (Q4:2023-24 to Q3:2024-25).

[33] Based on external debt outstanding, as at end-December 2024.

[34] India's CAD stood at 0.7 per cent of GDP in 2023-24 and 1.1 per cent during Q3:2024-25 (0.9 per cent in Q1:2024-25 and 1.8 per cent in Q2:2024-25). India's external debt to GDP ratio stood at 19.1 per cent at end-December 2024 from 18.5 per cent at end-March 2024.

Liquidity and Financial Market Conditions

A total amount of ₹9.5 lakh crore of durable liquidity was injected into the banking system since January.[35] As a result, after remaining in deficit since mid-December, liquidity conditions transitioned to surplus at the end of March. This is also evident from the tepid response to daily VRR auctions[36] and high SDF balances – the average daily balance during April-May amounted to ₹2.0 lakh crore.

Reflecting the improvement in liquidity conditions, the weighted average call rate (WACR) – the operating target of monetary policy – traded at the lower end of the LAF corridor since the last policy.[37] The comfortable liquidity surplus in the banking system has further reinforced transmission of policy repo rate cuts to short term rates.[38] However, we are yet to see a perceptible transmission in the credit market segment, though we must keep in mind that it happens with some lag.[39]

The Reserve Bank remains committed to provide sufficient liquidity to the banking system. To further provide durable liquidity, it has been decided to reduce the cash reserve ratio (CRR) by 100 basis points (bps) to 3.0 per cent of net demand and time liabilities (NDTL) in a staggered manner during the course of the year. This reduction will be carried out in four equal tranches of 25 bps each with effect from the fortnights beginning September 6, October 4, November 1 and November 29, 2025. The cut in CRR would release primary liquidity of about ₹2.5 lakh crore to the banking system by December 2025. Besides providing durable liquidity, it will reduce the cost of funding of the banks, thereby helping in monetary policy transmission to the credit market. I would like to reiterate that we will continue to monitor the evolving liquidity and financial market conditions and proactively take further measures, as warranted.

Financial Stability

The system-level financial parameters of Scheduled Commercial Banks (SCBs) continue to be robust.[40] The asset quality parameters, liquidity buffers and profitability parameters have shown further improvement. Credit Deposit ratio for the banking system at the end of December 2024 was at 81.84 per cent, broadly similar to a year ago. Similarly, the system-level parameters of NBFCs too are sound

[35] Open market purchases (including through NDS-OM) injected durable liquidity amounting to ₹5.2 lakh crore since January. Additionally, term VRR auctions and USD/INR buy-sell swaps injected liquidity amounting to ₹2.1 lakh crore and ₹2.2 lakh crore, respectively, during the same period.

[36] The average bid cover ratio of daily VRRs was 0.26 during April-June (up to June 4).

[37] The WACR, on an average, traded 16 bps below the policy repo rate during April-June (up to June 4) as compared to 6 bps above the repo rate during February-March.

[38] In response to the policy repo rate cut of 50 bps in the current easing cycle (up to June 4), the WACR moderated by 70 bps, 3-month T-bill rate by 88 bps, 3-month CP issued by NBFCs by 143 bps and 3-month CD rate by 138 bps. The compression in CP and CD spreads over T-bill suggests easier financing conditions for banks and corporates. The average CP and CD spread over T-bill moderated from 134 bps and 108 bps, respectively in March to 82 bps and 65 bps, respectively in May.

[39] The weighted average lending rate (WALR) on fresh rupee loans and outstanding rupee loans declined by 6 bps and 17 bps, respectively, during February-April 2025, reflecting policy rate transmission to lending rates. The weighted average domestic term deposit rates (WADTDR) on fresh deposits declined by 27 bps, while WADTDR on outstanding deposits declined by 1 bp during February-April 2025.

[40] Scheduled Commercial Banks (SCBs) Parameters: The outstanding credit and deposit on a y-o-y basis increased by 11.03 per cent and 10.18 per cent, respectively, between March-24 and March-25. The system-level Capital to Risk Weighted Assets Ratio (CRAR) of 16.43 per cent in December 2024 was well above the regulatory minimum level. Ratio of non-performing loans improved further (GNPA ratio at 2.42 per cent in December 2024 vis-à-vis 2.96 per cent in December 2023, NNPA Ratio at 0.55 per cent in December 2024 vis-à-vis 0.69 per cent in December 2023). SMA-2 ratio, the proportion of loans that are overdue by 61–90 days as a share of total advances -- a lead indicator of the build-up of fresh stress in the banking book – remained stable on a y-o-y basis at 0.96 per cent in December 2024 (0.90 per cent in December 2023). Liquidity buffers were robust, with an LCR of 130.21 per cent as of December end 2024. The annualised return on assets (RoA) and return on equity (RoE) stood at 1.37 per cent and 14.14 per cent, respectively, in December 2024. Net Interest Margin was 3.49 per cent for December 2024. (3.64 per cent in December 2023).

with comfortable capital position and improved GNPA ratios.[41]

The stress witnessed earlier in retail segments like unsecured personal loans and credit card receivables portfolio has abated, while the stress in micro-finance segment is persisting. Banks and NBFCs active in these segments are already recalibrating their business models, strengthening their credit underwriting practices and stepping up their collection efforts to avoid any excessive build-up of risks on this front in future.

Concluding Remarks

On both inflation and growth fronts, the Indian economy is progressing well and broadly on expected lines. Strong macroeconomic fundamentals and benign inflation outlook provide space to monetary policy to support growth, while remaining consistent with the goal of price stability. As global environment remains uncertain, it has become even more important to focus on domestic growth amidst sustained price stability. Accordingly, today's monetary policy actions should be seen as a step towards propelling growth to a higher aspirational trajectory.

Here, I would like to highlight that there is no tussle between price stability and growth in the medium and long term. Price stability preserves purchasing power, imparts certainty to households and businesses in their savings and investment decisions and ensures congenial interest rate and financial conditions, all of which foster consumption, investment and overall activity. Moreover, it is crucial for equitable growth and shared prosperity because its absence is disproportionately burdensome on the poor.

I must also add that while price stability is a necessary condition, it is not sufficient to ensure growth. A supportive policy environment is vital. This is even more important during periods of high uncertainties such as the current times. At the Reserve Bank, therefore, while price stability remains the focus of monetary policy, we are not oblivious to putting in place complementary monetary and credit policies and regulations that support growth and prosperity.

Thank you. Namaskar and Jai Hind.

[41] Non-Bank Financial Companies (NBFCs) Parameters: Total CRAR of NBFCs was 26.22 per cent and Tier I capital of 24.13 per cent in December 2024, well above the minimum regulatory requirements. RoA for the sector, decreased from 3.11 per cent in December 2023 to 2.86 per cent in December 2024. GNPA ratio has improved from 2.70 per cent in December 2023 to 2.53 per cent in December 2024, while NNPA ratio remained almost same at 1.10 per cent in December 2024 as compared to 1.11 per cent in December 2023.

MONETARY POLICY STATEMENT (JUNE 4-6) 2025-26

Resolution of the Monetary Policy Committee (MPC)
June 4-6, 2025

Monetary Policy Statement, 2025-26 Resolution of the Monetary Policy Committee (MPC) *

Monetary Policy Decisions

The Monetary Policy Committee (MPC) held its 55th meeting from June 4 to 6, 2025 under the chairmanship of Shri Sanjay Malhotra, Governor, Reserve Bank of India. The MPC members Dr. Nagesh Kumar, Shri Saugata Bhattacharya, Prof. Ram Singh, Dr. Poonam Gupta and Dr. Rajiv Ranjan attended the meeting.

After assessing the current and evolving macroeconomic situation, the MPC voted to reduce the policy repo rate by 50 basis points (bps) to 5.50 per cent with immediate effect. Consequently, the standing deposit facility (SDF) rate under the liquidity adjustment facility (LAF) shall stand adjusted to 5.25 per cent and the marginal standing facility (MSF) rate and the Bank Rate to 5.75 per cent. This decision is in consonance with the objective of achieving the medium-term target for consumer price index (CPI) inflation of 4 per cent within a band of +/- 2 per cent, while supporting growth.

Growth and Inflation Outlook

The uncertainty around the global economic outlook has ebbed somewhat since the MPC met in April in the wake of temporary tariff reprieve and optimism around trade negotiations. However, it continues to remain elevated to weaken sentiments and lower global growth prospects. Accordingly, global growth and trade projections have been revised downwards by multilateral agencies. Market volatility has eased in the recent period with equity markets staging a recovery, dollar index and crude oil softening though gold prices remain high.

According to the provisional estimates released by the National Statistical Office (NSO) on May 30, 2025, real GDP growth in Q4:2024-25 stood at 7.4 per cent as against 6.4 per cent in Q3. On the supply side, real gross value added (GVA) rose by 6.8 per cent in Q4:2024-25. For 2024-25, real GDP growth was placed at 6.5 per cent, while real GVA recorded a growth of 6.4 per cent.

Going forward, economic activity continues to maintain the momentum in 2025-26, supported by private consumption and traction in fixed capital formation. The sustained rural economic activity bodes well for rural demand, while continued expansion in services sector is expected to support the revival in urban demand. Investment activity is expected to improve in light of higher capacity utilization, improving balance sheets of financial and non-financial corporates, and government's capital expenditure push. Trade policy uncertainty continues to weigh on merchandise exports prospects, while the conclusion of free trade agreement (FTA) with the United Kingdom and progress with other countries is supportive of trade activity. On the supply side, agriculture prospects remain bright on the back of an above normal south-west monsoon forecast and resilient allied activities. Services sector is expected to maintain its momentum. However, spillovers emanating from protracted geopolitical tensions, and global trade and weather-related uncertainties pose downside risks to growth. Taking all these factors into account, real GDP growth for 2025-26 is projected at 6.5 per cent, with Q1 at 6.5 per cent, Q2 at 6.7 per cent, Q3 at 6.6 per cent, and Q4 at 6.3 per cent (Chart 1). The risks are evenly balanced.

CPI headline inflation continued its declining trajectory in March and April, with headline CPI inflation moderating to a nearly six-year low of 3.2 per cent (year-on-year) in April 2025. This was led mainly by food inflation which recorded the sixth consecutive monthly decline. Fuel group witnessed

* Released on June 6, 2025.

Chart 1: Quarterly Projection of Real GDP Growth (y-o-y)

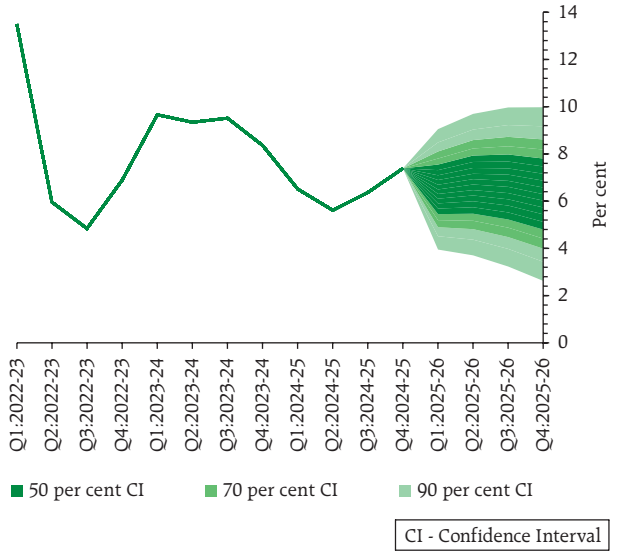
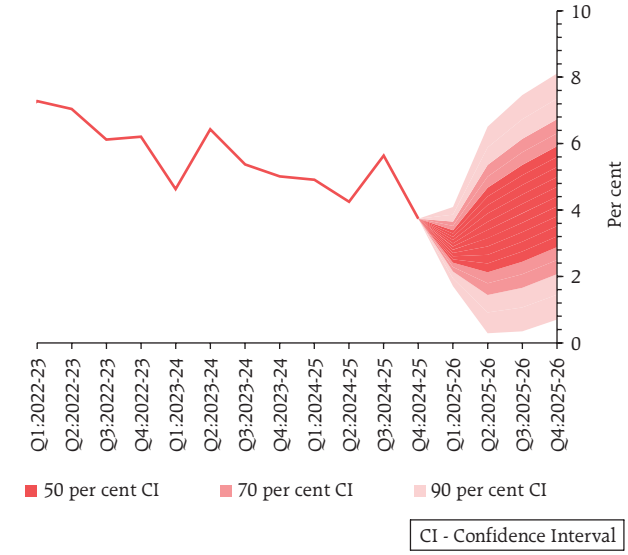


Chart 2: Quarterly Projection of CPI Inflation (y-o-y)



a reversal of deflationary conditions and recorded positive inflation prints during March and April, partly reflecting the hike in LPG prices. Core inflation remained largely steady and contained during March-April, despite increase in gold prices exerting upward pressure.

The outlook for inflation points towards benign prices across major constituents. The record wheat production and higher production of key pulses in the *Rabi* crop season should ensure adequate supply of key food items. Going forward, the likely above normal monsoon along with its early onset augurs well for *Kharif* crop prospects. Reflecting this, inflation expectations are showing a moderating trend, more so for the rural households. Most projections point towards continued moderation in the prices of key commodities, including crude oil. Notwithstanding these favourable prognoses, we need to remain watchful of weather-related uncertainties and still evolving tariff related concerns with their attendant impact on global commodity prices. Taking all these factors into consideration, and assuming a normal monsoon, CPI inflation for the financial year 2025-26 is now projected at 3.7 per cent, with Q1 at 2.9 per cent; Q2 at 3.4 per cent; Q3 at 3.9 per cent; and Q4 at 4.4 per cent (Chart 2). The risks are evenly balanced.

Rationale for Monetary Policy Decisions

Inflation has softened significantly over the last six months from above the tolerance band in October 2024 to well below the target with signs of a broad-based moderation. The near-term and medium-term outlook now gives us the confidence of not only a durable alignment of headline inflation with the target of 4 per cent, as exuded in the last meeting but also the belief that during the year, it is likely to undershoot the target at the margin. While food inflation outlook remains soft, core inflation is expected to remain benign with easing of international commodity prices in line with the anticipated global growth slowdown. The inflation outlook for the year is being revised downwards from the earlier forecast of 4.0 per cent to 3.7 per cent. Growth, on the other hand, remains lower than our aspirations amidst challenging global environment and heightened uncertainty.

Thus, it is imperative to continue to stimulate domestic private consumption and investment through policy levers to step up the growth

momentum. This changed growth-inflation dynamics calls for not only continuing with the policy easing but also frontloading the rate cuts to support growth. Accordingly, the MPC voted to reduce the policy repo rate by 50 bps to 5.50 per cent. Dr. Nagesh Kumar, Prof. Ram Singh, Dr. Rajiv Ranjan, Dr. Poonam Gupta and Shri Sanjay Malhotra, voted to decrease the policy repo rate by 50 bps. Shri Saugata Bhattacharya voted for a 25 bps cut in repo rate.

After having reduced the policy repo rate by 100 bps in quick succession since February 2025, under the current circumstances, monetary policy is left with very limited space to support growth. Hence, the MPC also decided to change the stance from accommodative to neutral. From here onwards, the MPC will be carefully assessing the incoming data and the evolving outlook to chart out the future course of monetary policy in order to strike the right growth-inflation balance. The fast-changing global economic situation too necessitates continuous monitoring and assessment of the evolving macroeconomic outlook.

The minutes of the MPC's meeting will be published on June 20, 2025.

The next meeting of the MPC is scheduled from August 4 to 6, 2025.

SPEECHES

Convocation Address at the 58th Convocation, Indian Institute of Technology, Kanpur
Shri Sanjay Malhotra

Moving the Boundaries of Financial Inclusion- A Regulatory Perspective
Shri M. Rajeshwar Rao

*Convocation Address at the 58th Convocation, Indian Institute of Technology, Kanpur**

Shri Sanjay Malhotra

Chairman of the Board of Governors, Director of the Institute, Prof and Padma Shree Manindra Agrawal, winner of numerous awards, who was my senior here and who I hold in very high esteem, faculty members, staff, proud parents, family and friends of the graduating students, distinguished guests, and my dear graduating students.

Today marks the culmination of an exciting chapter for the graduating students, where you have not only learnt new things – academic and extra-curricular – but have also had an enjoyable and memorable experience. I extend a very warm congratulations to all the graduating students. Please give yourselves a huge round of applause.

To the parents and guardians, this moment belongs as much to you as it does to your children and wards. Your innumerable sacrifices, continuous support, unconditional love and unwavering encouragement have laid the foundation upon which these young achievers now stand. I know this is an emotional and proud moment for you. I have myself experienced these emotions when my sons graduated – one from IIT Bombay and the other from IIT Guwahati. My warmest congratulations to you as your ward steps into a new chapter in life.

Dear graduates, it is a special day for you as you enter a new and exciting phase of life. It is an equally special day for me and doubly so. First, this institute has had a transformational impact on me, my life and my thoughts. I remember with nostalgia my years at IIT. I still vividly remember my first day at IIT when my mother came to drop me with another batchmate. I recollect my days at Hall III and then Hall I, the healthy rivalry between Hall II and Hall III, *phatta* cricket, *bulla*, the various celebrations at Red Rose Restaurant on the campus and Chung Fa restaurant in the city, movies at L7, DEC 10 of which we were so proud, the iconic library, Culfest and the many friends that I made and treasure till date. The steel trunk which carried my belongings to IIT and which my loving wife has preserved till date is still with me. I still have my Wilson tennis racket, with which I religiously played every evening at the clay courts on campus. IITK has a special place in my heart. This convocation ceremony is even more special as I did not attend our convocation ceremony; in fact, we did not have a proper convocation ceremony, perhaps the only batch not to have it. So, it's an honour to be back here after thirty-six long years in a new and privileged role and be a part of the convocation ceremony today. Thank you, IIT, for this honour.

Times have changed a lot since I graduated. But there are certainly lessons which endure time. As a fellow-alumnus, roll number 85213, who has experienced life after campus, I will speak about four learnings from my journey.

Learning for Life

Many of you would have got your dream jobs. Others, who plan to pursue further studies, would get them soon. With a degree from a prestigious institute and a good job in hand, please don't think that you have arrived. The moment you think you have arrived, you will stagnate. The moment you believe you know everything, you will stop growing.

This is just the beginning, only the first step. The degree has only laid a solid foundation and will take you thus far. You will need to build from here. You will need to learn when you change sectors, move across organisations within a sector, take up different

* Convocation Address by Shri Sanjay Malhotra, Governor, Reserve Bank of India at the 58th Convocation, Indian Institute of Technology, Kanpur, June 23, 2025.

roles within an organization and even within the same role in an organisation. Technology is advancing at a lightning speed. What you learnt yesterday would be outdated tomorrow as new ideas and tools emerge daily.

I can assure you that the institute has prepared you well for your life ahead. It has not only imparted you with knowledge which will be of immense use but, more importantly, equipped you with the most important tool – the tool of self-learning.

Like other IAS officers, I worked in diverse fields like urban management, land resources, industries, power, health, taxation, banking, finance, *etc.* Many of them were general management but many were highly technical and specialized, which had a steep learning curve. The IITK emphasis on basic sciences and core engineering subjects, its importance to the fundamentals of a subject, its priority to deriving the formulae rather than merely memorizing and applying them, its attention to problem-solving from first principles, and various other methods of problem solving have held me in good stead. IIT gave me the necessary tools for self-learning. I am sure it has given you too the same tools.

So, continue your quest for knowledge. Remember that learning is for life. The moment one is not learning, it is a signal that one is not growing; one is not advancing. It is knowledge which will keep you ahead of others. Its importance cannot be over-emphasized. I urge you all, as Stephen Covey said, to continuously sharpen your saw and cut the grass under your feet.

Question the *status quo*

My second learning pertains to the period between 2003 and 2006, when I was working in the United Nations. I was managing a project to improve productivity in the hand tools clusters in India. We hired a Total Quality Management expert for some of our interventions. He had long and diverse experience across organisations.

He challenged the forging units there to reduce the time taken in changing a die from about eight hours to less than an hour. All of them including the most advanced, productive and efficient forging units vehemently denied the possibility of reducing the time. When he failed after many days of trying to convince them to improve, he suggested some changes including installation of a video camera. This was tried in a unit. These small changes reduced the time to five hours. When asked, the supervisor, apart from other things, explained that the work started on time, as scheduled; no one was late; no one took an unscheduled tea break; all required equipment were pre-arranged and kept ready for use; there was no wastage of time. The small changes and videography did the trick as everyone was being watched. What followed was a series of improvements or what are called *kaizens*, not only in the exchange of dies, but also various other processes – forging, grinding, electroplating, packaging, *etc*, as every process was questioned. We ended up reducing costs by about 10%.

I learnt to question the *status quo.* I learnt that there is always scope for improvement. This helped me improve efficiency in various organisations and departments that I worked in. It helped in reducing processing time of files. I reduced turnaround times for applications. It helped me make changes in laws, rules and procedures for the benefit of citizens and government alike, as I questioned the *status quo.*

As Albert Einstein famously said, "The important thing is not to stop questioning." When you question the *status quo* and ask questions, you open the door to new ideas and fresh perspectives. It is fuel for innovation; it drives you to explore, experiment, and create something better. So, no matter where you are in life or your career, never stop questioning the *status quo* and improving.

Pursue virtuous Karma

The third learning pertains to my tenure as Secretary, Department of Personnel in the Government of Rajasthan in 2007-08. Promotions from the state civil service to the IAS were plagued with disputes and court cases. For almost about 20 years, no one was promoted to the IAS. My predecessors did not take up this issue as they thought it would be an exercise in futility as some aggrieved officer will approach the doors of the judiciary. When I was given responsibility for this department, I took up the gauntlet. I studied all the disputes and judicial pronouncements meticulously; decided on claims of seniority and promotion, without fear or favour; finalized and published the seniority lists; and after spending months on this mammoth exercise, sent the proposals to UPSC for promotion. Just when we were about to convene the meeting for promotion, one officer again approached the court and got a stay. Months of my hard work was brought to nought. Even though many officers commended me for the hard work and getting the matter so close to finalization, I was disappointed.

I had to leave for Princeton for my masters within a few days and could not pursue the case in the courts. After I returned, I was put in a different department. In a few years, the court lifted the stay. I was asked if I would be interested in giving finishing touches to the work I had initiated. Once bitten, twice shy, I did not take up the challenge this time. The work was completed by another officer. In recognition of his efforts, he was conferred with the state award for civil service.

I realized I did not follow my *karma* as I feared failure. I realized I needed to follow my karma boldly and decisively without bothering about the results.

Without going in to details of my journey thereafter, today, as I look back, I can confidently say that it is *karma* that largely determines outcomes and results. It is the path that one chooses that broadly determines the destination. Today, I appreciate how true Steve Jobs was when he said, "You can't connect the dots looking forward; you can only connect them looking backward." Right now, you may not fully grasp how your *karma* - each late-night lab session, each frustrating bug, and each decision that you take - will impact your journey. You may not appreciate, how delayed gratification, the hallmark of all great leaders, will deliver bigger success over the longer term for the instant rewards foregone. But trust me, over time, the dots will connect and it will be in large measure due to your *karma.*

Trust

My last learning is from the student days in IIT, when we were always short of money and under debt. Food at the mess was as good as it can be. We relied heavily on the hostel canteen. A samosa at that time costed 35 paise and a bottle of Thums Up 2 rupees and 25 paise. The canteen was managed by a person called Lala. Lala was loved by everyone. He would serve us till late in night and very generously gave us credit. Even outside hostel, we got credit from the juice vendor, the shops in Shopping Centre, *etc.* This may not be surprising. Lala knew us, recognizing us as hostelers. Other vendors too recognized us as students from the campus. What was surprising though was that we got credit even from some shopkeepers in Kanpur, who did not know us at all. Why did these shopkeepers give credit to us? It is because of their trust in the IIT students.

It is because people do business with people they trust. Trust is the foundation on which any relationship is built, whether it is marriage, friendship, or at workplace - between the CEO and the employees, or between a company and its consumers.

It is trust in a person that makes him a leader; it is trust which makes people follow a leader. Integrity and ethics are paramount to develop trust. It is not

easy to gain trust. To earn trust, a leader must have the courage to take difficult decisions. He must act in the interest of the employees and other stakeholders. He must be willing to accept responsibility. He must lead by example. He must possess the humility to learn from his mistakes. He must be just, transparent and respectful. Trust takes time to build. But it is easy to lose trust. To be a successful person, a successful leader, graduating students, try to gain trust and having gained it, preserve trust.

Your time to shine

To conclude, dear graduating students, as you leave this campus today, have confidence in yourself. Dream big, but more importantly, act on those dreams. Make IIT Kanpur proud. Make your parents proud. Make India proud. But most importantly, make yourselves proud - proud by living lives of character, ethics and humility; lives filled with purpose, service and impact. As you step into tomorrow, carry with you the spirit of this institution, carry with you the love of your families, and carry with you the dreams of a billion Indians who believe in your potential.

Your journey of transformation began here at IIT Kanpur. Now, transform the world as leaders who are trustworthy; who continue learning for life; who question the status quo and who pursue virtuous karma.

May God bless you with all the very best in your journey ahead.

Thank you.

Jai Hind.

*Moving the Boundaries of Financial Inclusion- A Regulatory Perspective**

Shri M. Rajeshwar Rao

Distinguished guests, participants, ladies and gentlemen, Good evening.

At the outset, let me thank the organisers for inviting me to share some of my thoughts on the theme of financial inclusion. Before that, let me take a moment to acknowledge that today *i.e.*, June 05, 2025, is the World Environment Day, an UN-recognized day that brings together people across the globe in a shared mission to safeguard and restore our planet. This year's theme of ending plastic pollution is a call to all of us to make a behavioural shift in our daily life choices. In the spirit of preserving the purity of our environment and safeguarding our well-being, let us commit toward making more sustainable choices.

Coming back to our theme for the day, let me begin by stating the obvious that financial inclusion is not just a policy objective but a collective obligation and responsibility for all stakeholders in the financial ecosystem. The importance of the theme can be underscored by the fact that at least seven out of the seventeen United Nations Sustainable Development Goals of 2030 view financial inclusion as a key enabler for achieving sustainable development worldwide by improving the quality of lives of poor and marginalized sections of the society. It is seen as a way to bridge the gap between the privileged and the under-privileged and a way to bring people out of poverty. An inclusive financial system has the potential to reduce income inequality and poverty, promote social cohesion and enable shared economic development. It also can dissuade the disadvantaged and low-income segments of society from seeking out informal options that renders them vulnerable to financial distress, debt, and poverty.

History of Financial Inclusion in India

Given the theme for today's discourse, it would be worthwhile to set the historical context regarding financial inclusion in India. While the financial inclusion initiatives in our country can in many ways be traced back to the 1950s, with significant developments ensuing in the subsequent decade, it was the National Credit Council meeting of July 1968 that paved the way for framing of Priority Sector Lending (PSL) guidelines, nationalisation of select private banks in July 1969 and launch of the Lead Bank Scheme in December 1969 that were the precursors of this journey. The branch expansion policy adopted by RBI during the 1970s, which required a specific number of branches to be opened in rural areas for every branch opened in urban areas, became the foundation for expanding the reach of banking services that we see today. Besides, the experiments with group-based lending towards the turn of the last century and proliferation of microfinance institutions have also helped link the unserved section of the population with the formal banking system.

Interestingly, the above initiatives were taken during a period when the term 'financial inclusion' was not prevalent in the country. The first reference to the term was made in RBI's Annual Policy Statement for the Year 2005-06 by Dr Y.V. Reddy[1], the then Governor of the Reserve Bank of India, who highlighted 'financial exclusion' that resulted due to certain banking practices. Banks were then urged to review their existing practices to align them with the objective of financial inclusion, leading to the genesis

* Address delivered by Shri M Rajeshwar Rao, Deputy Governor, Reserve Bank of India on June 05, 2025, at HSBC's event for Financial Inclusion in Mumbai. Inputs provided by Jyoti Prakash Sharma, Jignasa Morthania and Yash Goel are gratefully acknowledged.

[1] Annual Policy Statement for the Year 2005-06 by Dr. Y. Venugopal Reddy, Governor, Reserve Bank of India.

of 'no frills' account, which are now known as Basic Savings Bank Deposit Accounts.

Financial Inclusion in Indian Context

The first step in promoting financial inclusion is understanding its nuances, which are as dynamic and diverse as the Indian economy itself, and thereafter outline its ambit in the Indian context. Given its multi-faceted nature, various organisations and jurisdictions have defined financial inclusion in different ways. In India, the formal definition of financial inclusion[2] was given in January 2008 by the Committee on Financial Inclusion chaired by Dr C Rangarajan as "the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost". Reflecting the priorities of that time, the definition focused largely on the access to financial services. Currently we have a scenario, where more than 95% households have access to a bank account[3], which reflects remarkable progress on one out of three parameters of Financial Inclusion Index developed by the Reserve Bank to measure the extent of financial inclusion in the country.

While there has been a significant progress in expanding the banking reach, it is also important to ensure that inherent barriers to a gamut of financial products and services are eliminated and usage of these services expands to various segments of yet underserved and un-served population in the country. Efforts towards making financial services accessible become futile if they are not used by the intended population or are used without appropriate awareness of its risks and benefits. Thus, the other two parameters of RBI's financial inclusion index, *viz.*, usage and quality of the financial services cannot be overlooked while defining or measuring financial inclusion. Over the last few years this index has shown reasonable improvement, but there is a scope for improvement in some aspects.

Current Scenario

To get a perspective on the current scenario, it would be worthwhile to dwell a bit on some of the recent developments in the journey of financial inclusion in the country. Several policy measures towards furthering financial inclusion have been undertaken from time to time, but it was the launch of Pradhan Mantri Jan Dhan Yojana (PMJDY) that became the watershed moment in this journey. The Jan Dhan Yojana – Aadhar – Mobile *i.e.*, JAM trinity provided a quantum leap in our endeavour to ensure access to banking services for all adults, making it the world's largest financial inclusion program. As of May 21, 2025[4], 55.44 crore Jan Dhan accounts, 56% of which belong to women, have over ₹2.5 lakh crore worth of deposits, which speaks volumes about the impact of the scheme. The provision of universal access to bank accounts has not only increased the potential reach of other financial services but has also enabled frictionless delivery of welfare programs to the targeted segment through adoption of Direct Benefit Transfer (DBT).

Digital Payments

Access to a bank account is a prerequisite for availing other financial services, and a robust payments and settlements system is an indispensable enabler for proliferation of formal financial services. Over the past decade, the fundamentals of banking have changed with the advent of digital modes of banking like net banking and mobile banking as well as digital payments systems like Unified Payment Interface (UPI). In FY 2024-25, digital payments surged 35% Y-o-Y by volume to 60.81 crore transactions per day, with UPI accounting for 83.73% of such transactions[5]. The extraordinary uptake of UPI

[2] Report of the Committee on Financial Inclusion.

[3] National Family Health Survey (NFHS - 5), 2019–21.

[4] https://pmjdy.gov.in/account

[5] As per Reserve Bank of India's Annual Report for 2024-25.

stands as a testament to the power of collaborative and use-case-driven innovation in driving financial inclusion. A particularly compelling example of this transformation can be seen in the informal sector—where today a street vendor or pop-up store owner nonchalantly places a QR code at the fore and receives payment for services without any hassle for cash and quietly integrating himself into the formal financial system with dignity and ease.

For further expanding and deepening the digital payments ecosystem in the country, a Payments Infrastructure and Development Fund has been constituted to encourage deployment of payment acceptance infrastructure. Further, all State and Union Territory Level Bankers' Committees have been advised to identify districts and assign them to designated banks, with an endeavour to make these districts 100 per cent digitally enabled. The objective is to provide every eligible individual in the identified district at least one mode of digital payments *viz.*, cards, net banking, UPI, AEPS[6], *etc.* It is understood that as on March 31, 2025, 514 districts across 15 states and 6 UTs are 100 percent digitally enabled. This marks a significant milestone in our journey towards a digitally inclusive economy.

RBI's Financial Inclusion Index

RBI's financial inclusion index, which captures the extent of financial inclusion across the country, with four iterations published till date, has increased from 60.1 in March 2023 to 64.2 in March 2024, showing a Y-o-Y increase of 6.82 per cent. While the progress is appreciable, credit gaps still exist in the system which may be attributed amongst others to a lack of documentation available with the individuals/ entities in the informal system and of awareness regarding the various government schemes. There is as such a need to make concerted efforts to fill them.

[6] Aadhaar Enabled Payment System.

Recent Regulatory Initiatives

The RBI has been sensitive to need to bring about improvement in the financial inclusion in the country. Some of the measures taken recently in this regard include raising the limit for collateral-free agriculture loans to ₹2 lakh per borrower, enhancing various loan limits under PSL, expansion of the list of eligible borrowers under the category of 'Weaker Sections' alongwith removal of existing cap on loans by UCBs to women beneficiaries. The scope of co-lending is proposed to be broadened by expanding the list of permitted regulated entities (REs) that can enter a co-lending arrangement and extending the same beyond PSL loans. A comprehensive review of the Lead Bank Scheme is also underway with an objective to enhance the effectiveness and impact of the scheme.

With respect to digital payments, permissible transaction limit on UPI Lite has been revised in FY 2025 from ₹500 to ₹1000 and on UPI 123PAY from ₹5,000 to ₹10,000 to encourage their wider adoption. Further, with a view to promote digital payments among individuals without bank accounts, UPI Circle has been introduced which allows a secondary user to make UPI transactions up to a limit from the primary user's bank account in a secure manner. Besides, in an effort to enhance ease of access to digital infrastructure for persons with disabilities, payment system participants (PSPs) have been advised to review their payment systems and devices and carry out necessary modifications so that all such systems and devices can be easily accessed and used by persons with disabilities.

Financial Literacy

Meaningful financial inclusion also requires access and awareness in right proportions for ensuring responsible and equitable service delivery of financial services. Therefore, financial literacy and financial inclusion need to be considered as two sides of the same coin – promoting financial

inclusion without adequate financial literacy would lead to underutilization of financial services and increased chances of errors and frauds. Conversely, educating the consumers without facilitating their access to the formal financial system would result into unmet demand for financial services. The efforts towards augmenting financing literacy have been institutionalised by setting up of the National Centre of Financial Education (NCFE) jointly by the financial sector regulators. RBI as a regulator has been at the forefront of financial literacy with the launch of annual Financial Literacy Week campaigns targeted at specified sections of the population. Financial awareness empowers borrowers to assess and understand financial products, thereby supporting informed decision-making. To facilitate informed decision making by the customers and enhance transparency by the lenders, the RBI has mandated that all REs provide a standardised disclosure of key terms and conditions in the form of Key Fact Statement (KFS) to all retail and MSME borrowers.

Challenges

Even as all the stakeholders in the financial system, including the regulator and the REs, play their part in advancing financial inclusion, certain issues that act as impediments to the efforts made in this regard have come to the fore and will need to be addressed. Let me briefly highlight a few such issues.

Grievance Redressal

Having an effective grievance redressal mechanism is non-negotiable for financial sector enterprises as non-resolution of consumer's concerns not only leads to erosion of customer base but also results in loss of trust in the broader financial system and deters new consumers from entering the system. It is concerning that the complaints received at the Offices of RBI Ombudsmen as well as Centralized Receipt and Processing Centres (CRPCs) marked a sharp 33% year-on-year increase[7] in FY2023-24. This raises questions on the products, practices, and handling of grievances at the level of the RE. REs, therefore, need to analyse the gaps and strengthen their processes to reverse the trend of increasing grievances.

Mis-selling

While financial inclusion entails a bouquet of financial services, pushing the same indiscriminately to unaware consumers may be detrimental to their well-being and undermine its stated intent. There are reports of mis-selling of financial services such as insurance products. The concern is that such mis-selling without regard to suitability and appropriateness would beget distrust in schemes aimed at providing a safety net to the low-income households by creating artificial boundaries. We are examining whether it necessitates framing of guidelines to address mis-selling of financial products and services by REs.

Cyber Safety and Digital Literacy

As digitalization becomes more pervasive, the need for increasing digital literacy becomes even more pronounced. Empowering individuals to use digital devices and platforms with confidence and security is essential to ensuring inclusive participation in the digital economy. Often, apprehensions related to uncertainty, the possibility of errors, or financial loss create psychological barriers that hinder the adoption of technological solutions such as ATMs, mobile banking, and other digital services. The rising incidents of frauds through novel techniques makes it imperative that REs collaborate with other stakeholders like SROs, NGOs, *etc.* to generate awareness and promote safe digital practices among customers.

At the same time, it is critical for REs to implement effective measures to combat digital frauds. One such

[7] Table 1.1 of the Annual Report of Ombudsman Scheme, 2023-24.

area warranting attention is the use of One-Time Passwords (OTPs) as a means of Additional Factor Authentication (AFA). While this method has served well in the past, the evolving threat landscape in the arena of cybersecurity now calls for the development and adoption of more secure and resilient alternatives. Further, REs must diligently adopt the designated 160 number series[8] for all service and transactional voice calls as prescribed by the Government. This initiative is critical to maintaining the integrity of communication channels and protecting customers from phishing and other forms of cyber-attacks.

RBI has been running extensive multimedia awareness campaigns using audio-visual messages under the name 'RBI Kehta Hai' and text messages as 'RBI Says'. Further, RBI has introduced the bank.in and fin.in domains exclusively for banks and non-bank entities to curb cyber security threats and malicious activities. Also, to aid the customers in verifying Digital Lending Apps' (DLAs) association with RE, the RBI has created a public repository of DLAs deployed by the REs which will soon be available on RBI's website.

Developments in Microfinance

Let me now focus on a few developments in Microfinance sector. Microfinance has placed itself as a promising avenue for providing formal financial services to the excluded sections of population. While microfinance has played an important role in financial inclusion, there are some issues which need attention. The sector continues to suffer from vicious cycle of over-indebtedness, high interest rates and harsh recovery practices. While some moderation in interest rates charged on microfinance loans has been observed in recent quarters, pockets of high interest rates and elevated margins continue to persist. Even lenders having access to low-cost funds have been found to be charging margins significantly higher than the rest of the industry and which in several instances appear to be excessive. The lenders should look beyond the conventional "high-yielding business" tag for the sector and approach it with an empathic and developmental perspective, recognising the socio-economic role that microfinance plays in empowering vulnerable communities.

The frequency of disruptions in the microfinance sector has increased of late. Incidents of high borrower indebtedness, coupled with coercive recovery practices, sometimes lead to tragic consequences. It is in the collective interest of all stakeholders that such disruptions are pre-emptively addressed and avoided. In this regard, REs must also enhance their credit appraisal frameworks to prevent over-leveraging of borrowers. Additionally, they must eschew any coercive or unethical recovery practices, ensuring that financial services are delivered in a manner that is both responsible and sustainable. While the business model may be sound, the organisational structure and the incentive schemes framed to deliver the services may be flawed resulting in perverse outcomes for customers. This calls for an introspection around the models.

Way Forward

Even as we reflect on some of these challenges, we need to be clear about the path that we must take to ensure greater financial inclusion. As we look to the future, the way forward for financial inclusion lies in the strategic deployment of emerging technologies to build a more accessible, equitable, and efficient financial ecosystem. Innovations such as AI, blockchain, and digital public infrastructure are revolutionizing how financial services are delivered, especially to the underserved and remote communities. One such innovation in this space is the Account Aggregator (AA) framework. By empowering

[8] To address the issue of unsolicited and spam calls from telemarketers, Department of Telecommunications (DoT) has allocated the 160-numbering series for solely making service and transactional calls to be used by banks, financial institutions, and other service providers, to keep away from the use of the 140-numbering series that was allocated to telemarketers.

individuals to securely share their financial data with consent, the AA system enables more accurate credit assessments and potentially facilitates the delivery of customized financial products. Building on this foundation, the Unified Lending Interface (ULI) standardizes and streamlines the digital lending process by providing lenders with a host of alternate data including digitised state land records, milk pouring data and satellite data. It's RBI's belief that the JAM trinity will be followed by the new trinity of JAM-UPI-ULI in revolutionizing digital infrastructure and credit delivery and provide necessary fillip to financial inclusion efforts, pushing it to new highs.

The development and implementation of India Stack has revolutionised the banking landscape in India and has been instrumental in furthering financial inclusion by reducing infrastructural, geographical, and linguistic frictions and plugging leakages. REs have been encouraged to innovate in product design, offering solutions that reflect the unique needs of their customer base; for instance, offering flexibility in repayment schedules, variable savings contributions, and locally tailored financial products shaped by seasonal income cycles, occupational patterns, or behavioural tendencies. Such customisation can go a long way in further improving access, usage, and quality of financial services. REs can bring some of these innovations under the theme neutral 'On Tap' Regulatory Sandbox framework, which provides a structured environment for testing state-of-the-art solutions in the interest of consumers and financial stability. As connectivity can pose challenges in remote and rural areas, REs can explore the development of lightweight mobile applications and web interfaces optimised for low-bandwidth environments. These measures will go a long way in extending the reach of digital financial services to the last mile, thereby ensuring inclusive and accessible banking for all.

A lot has been achieved in the journey for achieving financial inclusion thus far, yet a lot more needs to be done. It cannot be merely achieved by standalone policy initiatives but by implementation of such initiatives both in letter and spirit by all stakeholders in the financial ecosystem. Also, those who remain outside the ambit of formal finance today represent untapped potential that can meaningfully contribute to economic growth in the future. The dividends of such inclusion will not only accrue to the institutions involved but will also strengthen the foundation of a more resilient, equitable, and prosperous society. Financial inclusion should not be viewed as an act of philanthropy, but rather as a strategic investment in the nation's economic and social development. With the right mix of well thought of and carefully crafted regulation, technological advancement, and institutional empathy, our collective efforts can dismantle longstanding barriers and usher in a new era of inclusive and sustainable financial growth – one that leaves no citizen behind and resonates far beyond set boundaries.

Thank you.

ARTICLES

*State of the Economy**

The global economy is in a state of flux, reeling from the twin shocks of trade policy uncertainties and a spike in geo-political tensions. In this state of elevated global uncertainty, various high-frequency indicators for May 2025 point towards resilient economic activity in India across the industrial and services sectors. Agriculture showed a broad-based increase in production across most major crops during 2024-25. The domestic prices situation remains benign with headline inflation staying below the target for the fourth consecutive month in May. Financial conditions remained conducive to facilitate an efficient transmission of rate cuts to the credit market.

Introduction

The global economy is in a state of flux, reeling from the twin shocks of trade policy uncertainties and a spike in geo-political tensions. The optimism from a temporary tariff freeze and trade deals has kept financial market sentiments buoyed in May and early-June 2025. However, following the outbreak of the Iran-Israel conflict, heightened uncertainty and volatility have once again gripped financial markets. Meanwhile, the OECD and World Bank reports released in June have reaffirmed the possibility of a marked deterioration in the medium-term global economic prospects amidst rising trade barriers and restrictions.

Reflecting the trade policy uncertainties, high-frequency indicators on global manufacturing activity for the month of May contracted for the second consecutive month. Global supply chain pressures also intensified. While food prices softened, non-food commodity prices have shown volatile movements accentuated by geopolitical tensions. Crude oil prices surged since June 13 on renewed tensions in the Middle East while gold prices also rallied on safe-haven demand. In contrast, the US dollar witnessed a depreciating trend, hitting a three-year low on June 12 following tariff uncertainty and fiscal debt concerns. Since June 13, the US dollar, however, strengthened somewhat in response to rising geo-political risks. Headline inflation rates among Advanced Economies (AEs) and Emerging Markets and Developing Economies (EMDEs) showed marked variations in their trajectories during April-May, driven mostly by country-specific factors. Amidst heightened concerns on their domestic growth outlook, several central banks utilised the headroom provided by lower inflation prints to further reduce policy rates.

On the domestic front, the provisional estimates released in May have reaffirmed growth to be 6.5 per cent in 2024-25, with a significant sequential pick-up in Q4. Various high-frequency indicators for May point to signs of resilient economic activity across the industrial and services sector. In fact, among the countries surveyed for the Purchasing Managers' Index (PMI), overall expansion in activity was the highest in India with the expansion in new export orders witnessed in May being an outlier, amidst contraction seen in other major economies. Capacity utilisation by manufacturing firms remained above its long-period average. High-frequency indicators of aggregate demand for May also suggested a pick-up in rural demand, especially given the strong performance of the agricultural sector. Forward-looking surveys of consumer sentiments show stable consumer confidence for the current period and improved optimism about the future.[1] All of these indicate

* This article has been prepared by Rekha Misra, Asish Thomas George, Shashi Kant, Shahbaaz Khan, Biswajeet Mohanty, Durga G, Yamini Jhamb, Harshita Keshan, Harendra Kumar Behera, Sanjana Sejwal, Satyarth Singh, Aayushi Khandelwal, Amrita Basu, Radhika Singh, Love Kumar Shandilya, Prashant Kumar, Sritama Ray, Shivam, Parul Arora, Ashish Santosh Khobragade, Ayushi Agarwal, Shreya Bhan, Shubham Agnihotri, Avnish Kumar, Supriyo Mondal, Yuvraj Kashyap, Amit Pawar, Rajas Saroy and Samridhi. The guidance and comments provided by Dr. Poonam Gupta, Deputy Governor, is gratefully acknowledged. Peer review by Pallavi Chavan, Snehal S Herwadkar, Joice John and Pawan Gopalakrishnan is also acknowledged. Views expressed in this article are those of the authors and do not represent the views of the Reserve Bank of India.

[1] Reserve Bank of India's Urban Consumer Confidence Survey (UCCS) and Rural Consumer Confidence Survey (RCCS) for May 2025 (Annex Chart A1 and A2).

considerable resilience of the Indian economy, notwithstanding the global economic, trade, and geo-political uncertainties.

Domestic inflation remains benign with headline inflation remaining below the target for the fourth consecutive month in May. Record domestic crop production in 2024-25 agricultural season is translating into a sharp and sustained easing of food price inflation. Steady core [Consumer Price Index (CPI) excluding food and fuel] inflation, with indications of some softening after excluding the impact of volatile and elevated gold and silver prices, indicates that underlying inflationary pressures remain muted.

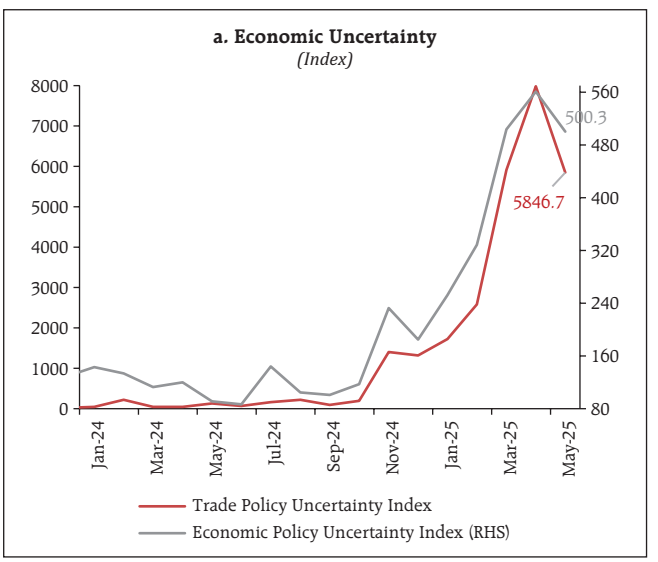
Equity markets registered modest gains during May-June, notwithstanding fluctuating movements caused by global cues on economic outlook, tariff-related news and the evolving domestic scenario. With the flaring up of geopolitical tensions in the Middle East, the equity market registered a brief sharp fall before witnessing a significant rebound on June 20. Although credit growth decelerated in April – notably in the agriculture and services sectors – non-bank sources of credit, including external commercial borrowing (ECB) inflows continued to be healthy, although it moderated from March. Overall, financial conditions remained conducive to facilitate an efficient transmission of rate cuts to the credit market. The external sector continued to be robust, with adequate forex reserve cover for imports and external debt.

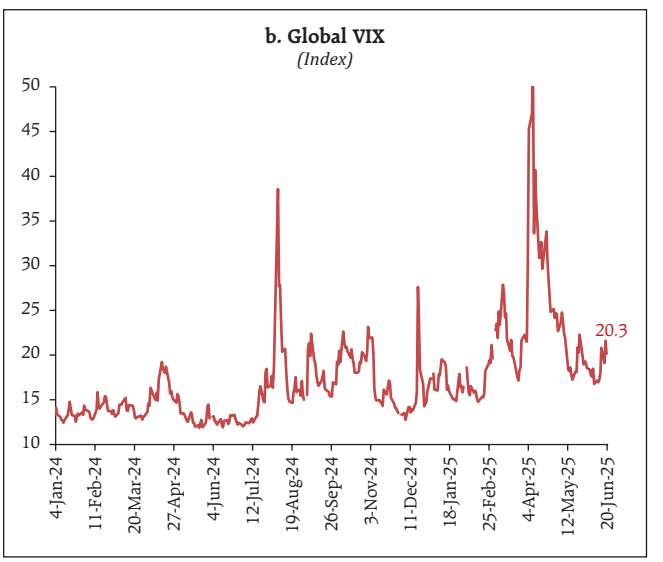
Set against this backdrop, the remainder of the article is structured into four sections. Section II covers the rapidly evolving developments in the global economy. Section III provides an assessment of domestic macroeconomic conditions. Section IV encapsulates financial conditions in India, while Section V presents the concluding observations.

II. Global Setting

Global economic prospects remained fragile even as economic and financial uncertainty receded from their heightened levels in April buoyed by optimism emanating from the US tariff freeze and bilateral trade deals (Chart II.1). Since June 13, however, uncertainty once again loomed large over the macroeconomic landscape in the wake of renewed geopolitical turbulence in the Middle East.

Chart II.1: Uncertainty Indicators





Sources: Chicago Board Options Exchange; and www.PolicyUncertainty.com.

The OECD's Economic Outlook released in June 2025 revised the global GDP growth forecast to 2.9 per cent for both 2025 and 2026. The growth forecasts are lower from their March release by 20 basis points (bps) for 2025 and 10 bps for 2026. This revision stemmed from the assumption that bilateral tariff regimes, as in mid-May, would persist unaltered throughout the remainder of 2025 and into 2026. The deteriorating economic prospects were most acutely visible for North America and parts of Asia, notably China (Table II.1). Moreover, the World Bank in its latest Global Economic Prospects (GEP), projected global GDP growth (using PPP weights) to decelerate to 2.9 per cent in 2025 but recover marginally to 3.0 per cent in 2026. The cumulative decline of 50 bps in projections [30 bps in 2025 and 20 bps in 2026] has been primarily attributed to increased trade tensions and heightened policy uncertainty. Global trade has also been projected to decelerate to 1.8 per cent in 2025, marking a downward revision of 1.3 percentage points from the previous release.

The global composite PMI expanded to 51.2 in May, *albeit* at a modest pace. While global PMI services showed an expansion led by the business services sector, the global manufacturing PMI contracted for the second successive month in May to a five-month low of 49.6 (Table II.2). Export orders across manufacturing and services remained in the contraction zone for the second consecutive month in May.

In May 2025, there were marked variations in the global composite PMI readings across jurisdictions. While the US and the UK showed an improvement in business conditions, the Eurozone and Japan reported a moderation (Chart II.2a). The significant expansion in new export orders for India was an exception,

Table II.1: GDP Growth Projections – Select AEs and EMDEs

Organisation	OECD				World Bank			
Projection for	2025		2026		2025		2026	
Month of Projection	March	June	March	June	January	June	January	June
World*	***3.1***	***2.9***	***3.0***	***2.9***	***3.2***	***2.9***	***3.2***	***3.0***
Advanced Economies					***1.7***	***1.2***	***1.8***	***1.4***
US	2.2	1.6	1.6	1.5	2.3	1.4	2.0	1.6
UK	1.4	1.3	1.2	1.0				
Euro Area	1.0	1.0	1.2	1.2	1.0	0.7	1.2	0.8
Japan	1.1	0.7	0.2	0.4	1.2	0.7	0.9	0.8
Emerging Market and Developing Economies					***4.1***	***3.8***	***4.0***	***3.8***
Russia	1.3	1.0	0.9	0.7	1.6	1.4	1.1	1.2
Emerging and Developing Asia								
India#	6.4	6.3	6.6	6.4	6.7	6.3	6.7	6.5
China	4.8	4.7	4.4	4.3	4.5	4.5	4.0	4.0
Latin America and the Caribbean					***2.5***	***2.3***	***2.6***	***2.4***
Mexico	-1.3	0.4	-0.6	1.1	1.5	0.2	1.6	1.1
Brazil	2.1	2.1	1.4	1.6	2.2	2.4	2.3	2.2
Middle East and North Africa					***3.4***	***2.7***	***4.1***	***3.7***
Saudi Arabia	3.8	1.8	3.6	2.5	3.4	2.8	5.4	4.5
Sub-Saharan Africa					***4.1***	***3.7***	***4.3***	***4.1***
South Africa	1.6	1.3	1.7	1.4	1.8	0.7	1.9	1.1

Notes: 1. *: Projections by the World Bank are PPP weighted.
2. #: India's data is on a fiscal year basis (April-March), while for all other countries it is for calendar years.
Sources: OECD Economic Outlook, June 2025; and Global Economic Prospects, World Bank, June 2025.

Table II.2: Global Purchasing Managers' Index

	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25
PMI Composite	53.7	52.9	52.5	52.9	51.9	52.3	52.4	52.6	51.8	51.5	52.1	50.8	51.2
PMI Manufacturing	51	50.8	49.7	49.6	48.7	49.4	50.1	49.6	50.1	50.6	50.3	49.8	49.6
PMI Services	54	53.1	53.3	53.9	52.9	53.1	53.1	53.8	52.2	51.5	52.7	50.8	52.0
PMI Export Orders	50.6	49.7	49.6	49.0	48.5	48.9	49.3	48.7	49.6	49.7	50.1	47.5	48.0
PMI Export Orders: Manufacturing	50.4	49.3	49.4	48.4	47.5	48.3	48.6	48.2	49.4	49.6	50.1	47.3	48.0
PMI Export Orders: Services	51.0	50.7	50.6	50.8	51.6	50.7	51.4	50.4	50.2	50.2	50.1	48.3	47.9

50

<<<<<<Contraction----------Expansion>>>>>>

Notes: 1. The Purchasing Managers' Index (PMI), a diffusion index, captures the change in each variable compared to the prior month, noting whether each has risen/improved, fallen/deteriorated or remained unchanged. A PMI value >50 denote expansion; <50 denote contraction; and =50 denote 'no change'.

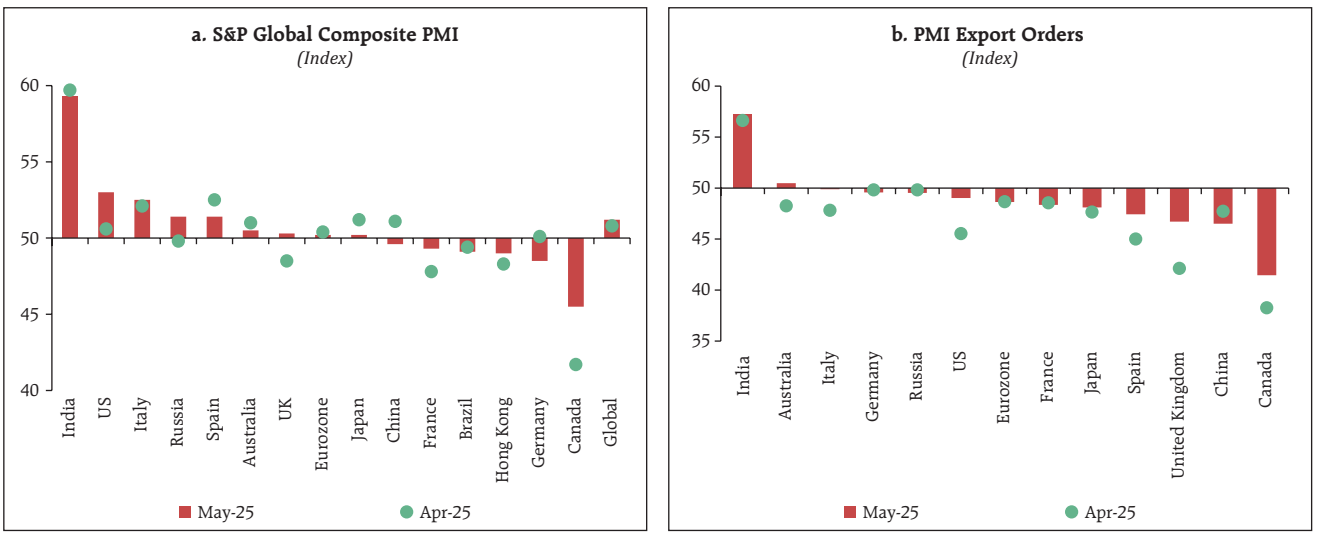
2. Heat map is applied on data from April 2023 till May 2025. The map is colour coded–red denotes the lowest value, yellow denotes 50 (or the no change value), and green denotes the highest value in each of the PMI series.

Source: S&P Global.

with most major economies continuing to record a contraction (Chart II.2b).

Commodity prices continued their downward movement in May 2025, as indicated by both the Bloomberg Commodity Index and the World Bank Commodity Price Index. This downtrend was aided by lower food prices that offset an uptick in energy and industrial metal prices. Food prices[2] moderated by 0.8 per cent month-on-month (m-o-m) in May, primarily driven by a decline in the prices of vegetable oil, sugar, and cereals (Chart II.3a). High frequency commodity price data for June indicate a sharp pick-up in crude oil prices from their end-May levels on account of escalating geopolitical tensions between Russia and Ukraine, as well as intensifying conflict between Israel and Iran. Copper prices also saw an uptick in June,

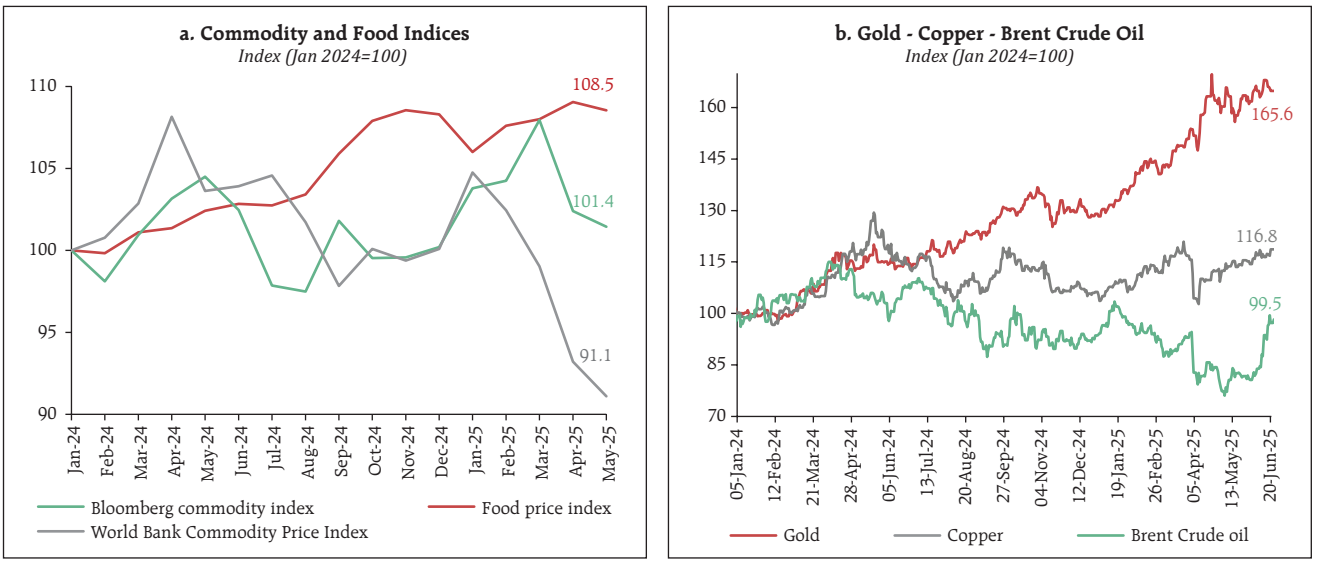
Chart II.2: Purchasing Managers' Index: Comparison across Jurisdictions



Note: A level of 50 indicates no change in activity, while a reading above 50 signals expansion and below 50 suggests contraction.
Source: S&P Global.

[2] Measured by the FAO's Food Price Index.

Chart II.3: Commodity and Food Prices

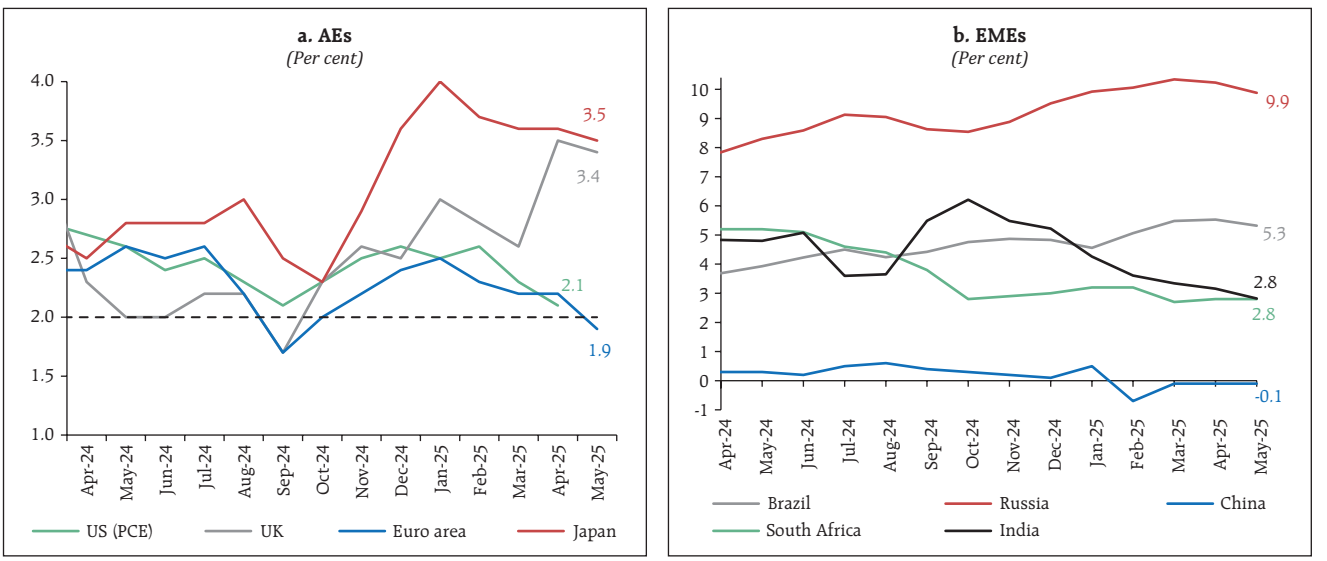


Sources: Bloomberg; World Bank Pink Sheet; and FAO.

aided by US-China trade truce and speculation over potential US import duties on the metal. Gold prices have remained elevated so far in June, bolstered by safe-haven demand amidst concerns about mounting US debt and geopolitical risks (Chart II.3b). Amidst ongoing trade tensions, the Global Supply Chain Pressure Index (GSCPI) rose above its historical average levels to 0.19 in May 2025 suggesting some stress in supply chain (Annex Chart A3).

Recent readings of inflation point to diverging trajectories in AEs as well as EMEs. While inflation in the Euro area moderated to below target in May supported by lower energy prices, inflation in the UK edged up while that in Japan and the US continued to remain sticky and above the target due to pressures from inflation in the services sector (Chart II.4a). Among EMEs, while CPI inflation in Brazil and Russia remained elevated above the target

Chart II.4: Headline Inflation

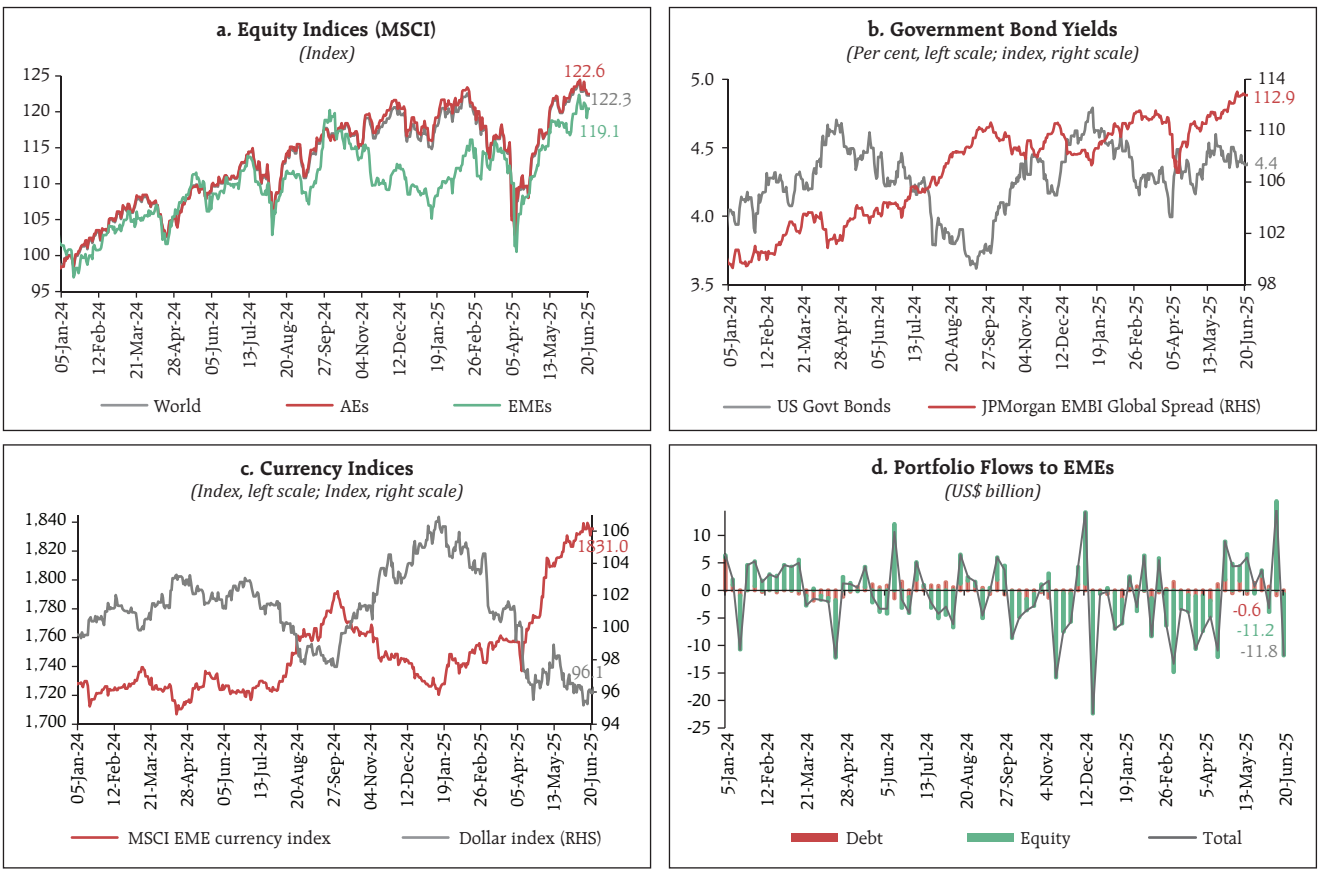


Sources: Bloomberg; and OECD.

rate, China continued to experience deflation amidst weak domestic demand and persistent employment uncertainty. Inflation in South Africa remained below target (Chart II.4b and Annex Chart A4).

In May, global equity markets regained their lost ground, buoyed by improved sentiments on signs of de-escalation of trade tensions and upbeat earnings report (Chart II.5a). The uptrend continued in early June, supported by the announcement of a breakthrough in trade negotiations between the US and China. With uncertainties receding from its heightened level of April, global VIX exhibited a decline in May, though punctuated with sporadic upticks within a tight range. However, the rally in global equities was subsequently capped by a resurgence in geopolitical risks. The global VIX also increased from around mid-June. Yields on US government securities hardened in May on concerns regarding higher near-term inflation and increased term premia on account of the worsening US fiscal outlook, while EME spreads widened amidst increased risk-off sentiment (Chart II.5b). In June (up to June 20, 2025), yields in the US remained volatile as rising geopolitical tensions also resulted in higher safe haven demand. EME spreads continued to increase on intensifying geopolitical tensions. The US dollar appreciated somewhat in the first half of May, fuelled by a US–China tariff suspension but shed gains subsequently on growth slowdown fears and fiscal concerns. In June (up to June 20, 2025), weak signals, emerging from the Institute for Supply Management (ISM) PMI, labour market and lower-than-expected CPI in the US, have continued to exert bearish pressure on the dollar though some appreciation was witnessed after the Israel-Iran conflict on safe haven demand

Chart II.5: Global Financial Markets



Sources: Bloomberg; and IIF.

(Chart II.5c). Mirroring the dollar movement, the MSCI EME Currency Index has increased since May, with equity markets recording inflows; however, a reversal in trend has been witnessed since mid-June (Chart II.5d).

In the monetary policy meetings conducted during May-June 2025, most central banks continued to lower policy rates amidst heightened macroeconomic uncertainties. Among AEs, New Zealand and South Korea reduced their policy rates by 25 bps in May while ECB and Sweden reduced their policy rates by 25 bps in their June meetings. Switzerland also reduced its key rate in June by 25 bps to zero amidst domestic deflation. On the other hand, Canada, Japan, the UK, and the US maintained *status quo* on policy rates in June amidst uncertain macroeconomic outlook (Chart II.6). Several EME central banks undertook policy easing to support growth. In May, Indonesia and South Africa reduced their policy rates by 25 bps each, while Mexico pared its benchmark interest rate by 50 bps. In June so far, Philippines cut its benchmark rate by 25 bps. In contrast, Brazil delivered 25 bps rate hike in June, following a 50 bps increase in May due to persistent domestic inflation, raising the policy rate to a near 20-year high.

III. Domestic Developments

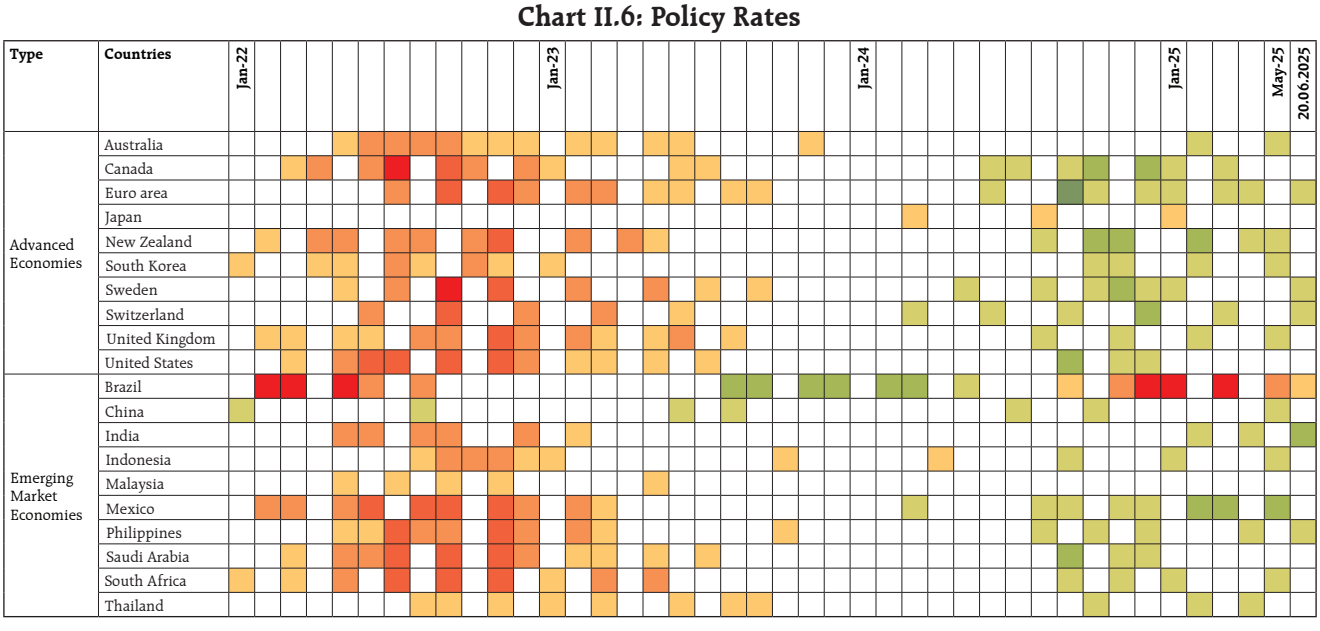
Amidst elevated global trade uncertainty, the Indian economy remained resilient, registering the highest growth among the world's major economies, with the latest estimates for Q4:2024-25 indicating a sharp pick-up in momentum.

Aggregate Demand

The provisional estimates (PE) of national income released by the National Statistical Office (NSO) on May 30, 2025 placed India's real gross domestic product (GDP) growth at 6.5 per cent for 2024-25, same as the second advance estimates (SAE). The dual engines of India's growth–private final consumption expenditure (PFCE) and gross fixed capital formation (GFCF)–contributed 4 percentage points and 2.4 percentage points, respectively, to GDP growth.

In terms of the quarterly trajectory, the Indian economy registered a growth of 7.4 per cent in Q4:2024-25, notably higher than 6.4 per cent recorded

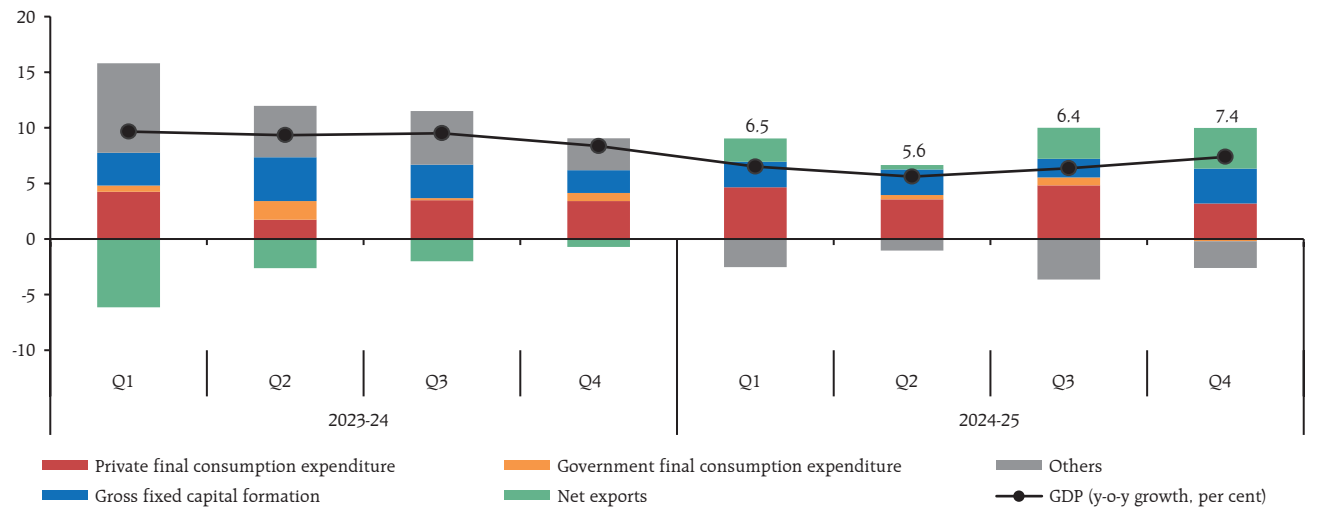
Chart II.6: Policy Rates



Source: Bloomberg.

Chart III.1: Weighted Contribution to GDP Growth

(Percentage points)



Note: Others include change in stock, valuables and statistical discrepancies.
Source: NSO.

in the preceding quarter. The pick-up in growth was mainly driven by fixed investment, which increased sharply to 9.4 per cent from a low of 5.2 per cent in the preceding quarter, owing to a sustained momentum in construction activity. Despite a challenging external environment, the contribution of net exports to GDP was the highest since Q2:2020-21. The contribution of PFCE and government final consumption expenditure (GFCE), however, moderated (Chart III.1).

High-frequency indicators for May present mixed signals on aggregate demand. Urban demand showed signs of moderation as passenger vehicle sales declined with a sharp drop in entry-level segment. However, rural demand improved as evident from the increase in the retail sales of two-wheelers.[3] During May 2025, household demand for work under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) picked up, following the pursuit of alternative avenues for employment

Table III.1: High-frequency Indicators–Rural and Urban Demand–Growth Rate

		May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25
Urban Demand	Domestic Air Passenger Traffic	5.9	6.9	7.6	6.7	7.4	9.6	13.8	10.8	14.1	12.1	9.9	9.7	3.7
	Retail Passenger Vehicle Sales	-1.0	-6.8	10.2	-4.5	-18.8	32.4	-13.7	-2.0	15.5	-10.3	6.3	1.6	-3.1
Rural Demand	Retail Automobile Sales	2.6	0.7	13.8	2.9	-9.3	32.1	11.2	-12.5	6.6	-7.2	-0.7	3.0	5.1
	Retail Tractor sales	-1.1	-28.4	-11.9	-11.4	14.7	3.1	29.9	25.8	5.2	-14.5	-5.7	7.6	2.8
	MGNREGA: Work Demand	-14.3	-21.7	-19.5	-16.0	-13.4	-7.6	3.9	8.2	14.4	2.8	2.2	-6.5	4.5
	Retail Two-wheeler Sales	2.5	4.7	17.2	6.3	-8.5	36.3	15.8	-17.6	4.2	-6.3	-1.8	2.3	7.3

<<Contraction ---------- Expansion>>

Notes: 1. The y-o-y growth (in per cent) has been calculated for all indicators.
2. Heat map, applied on data from April 2023 till May 2025, translates the data range for each indicator into a colour gradient scheme with red denoting the lowest values and green corresponding to the highest values of the respective data series.
3. The data on Domestic Air Passenger Traffic for May 2025 growth rate is calculated by aggregating daily data.

Sources: Airports authority of India; Federation of Automobile Dealers Associations (FADA); and Ministry of Rural Development, GoI.

[3] The retail sales of two-wheelers in rural areas increased by 9.9 per cent as compared to 3.6 per cent in urban areas in May, 2025 (FADA press release).

in the pre-sowing lean agricultural period and an increase in MGNREGS wage rates (Table III.1).

Employment indicators in May 2025 present a mixed picture. As per monthly Periodic Labour Force Survey (PLFS), the all-India unemployment rate rose to 5.6 per cent in May from 5.1 per cent last month, with a sharper increase in rural *vis-à-vis* urban areas. Increase in unemployment was partly driven by seasonal agricultural patterns and extreme heat in some regions, limiting outdoor work.[4] Organised job listings, as per the Naukri JobSpeak Index, moderated – dragged down by information technology (IT), retail, and banking and financial services – while sectors like insurance, real estate, oil and gas and emerging technologies recorded growth. However, the PMI employment diffusion indices signalled strong job creation in organised manufacturing and services, with 14 per cent of firms reporting increased payrolls (Table III.2).

Overall economic activity remained robust in May 2025, with key high-frequency indicators like E-way bills, Goods and Services Tax (GST) revenue, toll collections, and digital payments showing strong growth (Table III.3). GST revenue collections surpassed the ₹2 lakh crore mark for the second consecutive month in May, boosted by import-related GST receipts.[5] Petroleum consumption expanded for the first time in the last four months, driven by petrol. Unseasonal rains and premature onset of monsoon, however, led to a reduction in electricity demand.[6]

Government Finances

The provisional accounts (PA) for 2024-25 released on May 30, 2025, confirmed that the fiscal

Table III.2: High-frequency Indicators–Employment–Growth Rate

	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25
Unemployment rate (PLFS: All-India)												5.1	5.6
Unemployment rate (PLFS: Rural)												4.5	5.1
Unemployment rate (PLFS:Urban)												6.5	6.9
Naukri JobSpeak Index	-1.8	-7.6	11.8	-3.4	6.0	10.0	2.0	8.7	3.9	4.0	-1.5	8.9	0.3
EPFO Net pay roll addition	17.2	-6.2	-5.8	-11.2	-16.2	-50.6	-9.0	-23.4	-17.6	-14.2	1.2		
PMI Employment: Manufacturing	53.4	54.1	53.7	53.5	52.1	53.3	52.9	53.4	54.8	54.5	53.4	54.2	54.9
PMI Employment: Services	53.5	53.7	53.5	53.1	53.4	54.3	56.6	55.5	56.3	56.2	52.5	53.9	57.1

<<Contraction ---------- Expansion>>

Notes: 1. The y-o-y growth (in per cent) has been calculated for all indicators (except for PMI).
2. The heat map translates the data range for each indicator into a colour gradient scheme with red denoting the lowest values and green corresponding to the highest values of the respective data series.
3. Heat map is applied on data from April 2023 till May 2025, other than for EPFO Net Pay roll addition, where the data is till March 2025.
4. All PMI values are reported in index form. A PMI value >50 denote expansion; <50 denote contraction; and =50 denote 'no change'. In the PMI heat maps, red denotes the lowest value, yellow denotes 50 (or the no change value), and green denotes the highest value in each of the PMI series.
5. All PLFS indicators are in Usual Status and for persons aged 15 years and above.

Sources: Ministry of Statistics and Program Implementation (MoSPI), GoI; S&P Global; Employees' Provident Fund Organisation and Info edge.

[4] https://www.mospi.gov.in/sites/default/files/press_release/Press_note_MB05_Monthly_bulletin%20-Final_1.pdf

[5] https://economictimes.indiatimes.com/news/economy/finance/gst-collections-jump-16-4-to-rs-2-01-lk-cr-in-may/articleshow/121547915.cms?from=mdr

[6] https://www.thehindu.com/business/Industry/spot-electricity-prices-declined-substantially-in-may-amid-reduced-demand-indian-energy-exchange/article69655753.ece

Table III.3: High-frequency Indicators–Economic Activity–Growth Rate

	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25
GST E-way Bills	17	16.3	19.2	12.9	18.5	16.9	16.3	17.6	23.1	14.7	20.2	23.4	18.9
GST Revenue	10	7.6	10.3	10	6.5	8.9	8.5	7.3	12.3	9.1	9.9	12.6	16.4
Toll Collection	3.6	5.8	9.4	6.8	6.5	7.9	11.9	9.8	14.8	18.7	11.9	16.6	16.4
Electricity Demand	13.6	8	4	-5	-0.8	-0.4	3.7	5.1	1.3	2.4	5.7	2.8	-4.4
Petroleum Consumption	1.9	2.3	10.7	-3.1	-4.4	4.1	10.6	2	3	-5.2	-3.1	0	1.1
Of which: Petrol	3.4	4.6	10.5	8.6	3	8.7	9.6	11.1	6.7	5	5.7	5	9.2
Diesel	2.4	1	4.5	-2.5	-1.9	0.1	8.5	5.9	4.2	-1.3	0.9	4.3	2.2
Aviation Turbine Fuel	10.9	10.1	9.6	8.1	10.4	9.4	8.5	8.7	9.4	4.2	5.7	3.9	4.3
Digital Payments – Volume	40.1	40.6	36.7	34.9	36.3	40.3	30.1	33.1	33.0	26.7	30.8	30.0	27.5
Digital Payments – Value	18.6	13.5	22.1	16.7	21.5	27.5	9.5	19.6	18.6	9.5	17.3	18.4	12.9

<<Contraction ---------- Expansion>>

Notes: 1. Y-o-y growth (in per cent) has been calculated for all indicators.
2. The heat map, applied on data from April 2023 till May 2025, translates the data range for each indicator into a colour gradient scheme with red denoting the lowest values and green corresponding to the highest values of the respective data series. For digital payments data, zero growth is taken as the lower bound.

Sources: Goods and Services Tax Network (GSTN); RBI; Central Electricity Authority (CEA); and Ministry of Petroleum and Natural Gas, GoI.

indicators are more or less in line with the revised estimates (RE). The gross fiscal deficit (GFD) of the union government stood at 4.8 per cent of GDP, lower than the initially budgeted estimate (BE) but slightly above the revised estimate (RE). On the other hand, the revenue deficit (RD), at 1.7 per cent of GDP, was lower than BE and RE. The moderation in revenue expenditure, along with robust growth in revenue receipts paved the way for fiscal consolidation (Table III.4).

On the receipts side, the gross and net tax revenue posted healthy growth of 9.5 per cent and 7.4 per cent, respectively. Gross tax revenue stood at 11.5 per cent of GDP in 2024-25 (PA) [Annex Chart A5]. While the growth in the corporation tax was higher than RE, the growth in income tax was slightly lower

Table III.4: Key Fiscal Indicators of the Union Government

(as a per cent of GDP)

	2023-24 Actuals	2024-25			2025-26 BE
		BE	RE	PA	
1	2	3	4	5	6
Fiscal Deficit	5.49	4.94	4.74	4.77	4.40
Revenue Deficit	2.54	1.78	1.84	1.71	1.47
Primary Deficit	1.96	1.38	1.30	1.39	0.82
Gross Tax Revenue	11.50	11.77	11.64	11.48	11.96
Non-Tax Revenue	1.33	1.67	1.60	1.63	1.63
Revenue Expenditure	11.60	11.37	11.17	10.90	11.05
Capital Expenditure	3.15	3.40	3.08	3.18	3.14
Of which Capital Outlay	2.62	2.81	2.56	2.59	2.51

Note: GDP used for 2025-26 (BE) and 2024-25 (BE) are as per Union Budgets 2025-26 and 2024-25, respectively. For 2024-25 (RE) the GDP is as per Second Advance Estimates (SAE) released by NSO on February 28, 2025. For 2024-25 (PA), the GDP used is as per the Provisional Estimates (PE) released by NSO on May 30, 2025.

Sources: Union Budget Documents; and Controller General of Accounts (CGA).

than RE. Although the union excise duty and custom duty collections were broadly in line with RE, their growth rate contracted from the previous year. Apart from higher surplus transfer from the Reserve Bank, higher dividend transfer from central public sector enterprises (CPSEs) pushed non-tax revenue growth in 2024-25 above RE.

The total expenditure of the union government registered a growth of 4.8 per cent in 2024-25 (PA) over 2023-24. As per cent of GDP, while revenue expenditure declined in 2024-25 (PA) *vis-à-vis* RE, capital expenditure remained broadly unchanged (Annex Chart A6). The growth in interest payments moderated, while that of subsidy outgo saw a contraction during 2024-25 (PA) in line with RE. Furthermore, the ratio of revenue expenditure to capital outlay (RECO) declined to 4.2, lower than RE (from 4.4 in 2023-24), which bodes well for the quality of public expenditure.

Central government finances for April 2025 indicated an improvement in GFD and RD – both in absolute terms and as per cent of BE – *vis-à-vis* the corresponding period of the previous year, aided by substantial growth in non-tax revenue, and non-debt capital receipts (including disinvestment receipts). While revenue expenditure recorded a contraction due to a decline in interest payments, capital outlay grew by 20.9 per cent.

Consolidated state government finances for 2024-25 (PA)[7] witnessed some deterioration. The consolidated GFD to gross state domestic product (GFD-GSDP) ratio of states rose in 2024-25 owing to a shortfall in tax revenue and lower grants from the centre. The moderation in revenue receipts outweighed the decline in revenue expenditure, leading to a widening of the revenue deficit.

[7] Data for Provisional Accounts (PA) pertain to 27 states/union territories (UTs).

Table III.5: States' Key Fiscal Indicators

(Per cent of GDP/GSDP)

	2023-24	2024-25	2025-26
	Accounts	PA	BE
Revenue Receipts	13.3	12.4	14.4
Tax Revenue	10.4	10.0	11.1
Non-Tax Revenue	1.1	1.0	1.2
Grants from the Centre	1.8	1.3	2.0
Revenue Expenditure	13.6	13.0	14.6
Capital Expenditure	2.7	2.7	3.2
Of which: Capital Outlay	2.5	2.4	3.0
Revenue Deficit	0.3	0.6	0.2
Gross Fiscal Deficit	3.0	3.2	3.3
Primary Deficit	1.3	1.7	1.5

Notes: 1. PA: Provisional Accounts, BE: Budget Estimates;
2. Data for 2023-24 (Accounts), 2025-26 (BE) pertain to 31 States/UTs.
3. Data for 2024-25 (PA) pertain to 27 States/UTs. Data for 2024-25(PA) are taken as a per cent of GSDP.

Sources: Budget documents of States, Comptroller and Auditor General (CAG).

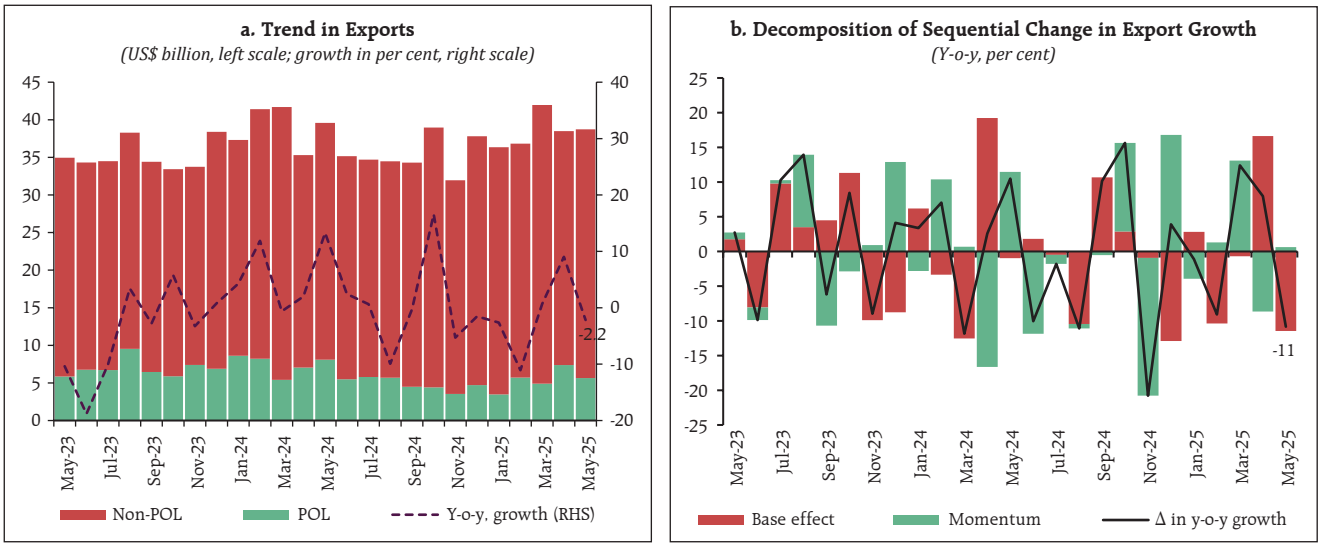
Meanwhile, capital expenditure, as a per cent of GSDP, remained stable, aided by a significant year-end surge in most states. For 2025-26, states have budgeted a GFD-GDP ratio of 3.3 per cent, along with a rise in capital outlay to 3.0 per cent of GDP, reflecting a continued focus on enhancing the quality of expenditure within a calibrated fiscal path (Table III.5).

Trade

India's merchandise exports contracted by (-) 2.2 per cent (y-o-y) to US$38.7 billion in May 2025 due to an unfavourable base effect (Chart III.2).

Exports of 13 out of 30 major commodities (accounting for 59.0 per cent of the export basket in 2024-25) contracted on a y-o-y basis in May. Petroleum products, gems and jewellery, iron ore, engineering goods and cotton yarn/fabrics contributed negatively while electronic goods, organic and inorganic chemicals, drugs and pharmaceuticals, marine products and readymade garments (RMG) of all textiles supported export growth in May. Exports

Chart III.2: India's Merchandise Exports



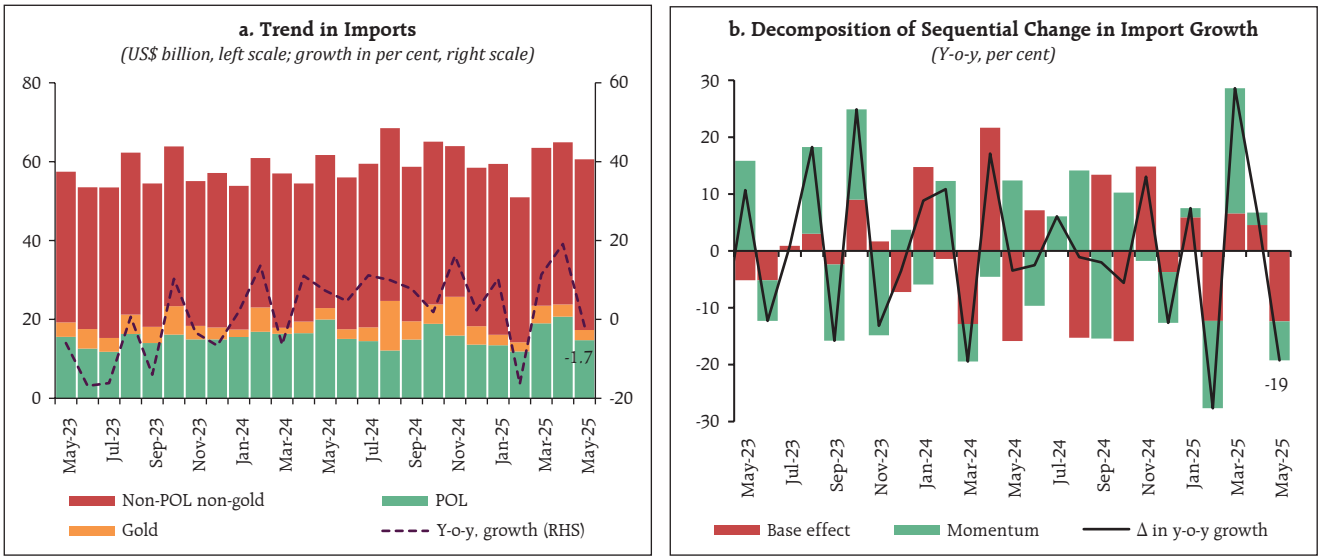
Note: POL: Petroleum, oil and lubricants.
Sources: PIB; DGCI&S; and RBI staff estimates.

to 10 out of 20 major destinations expanded in May 2025, including to the US, China and Singapore.

Merchandise imports also contracted by (-) 1.7 per cent (y-o-y) to US$60.6 billion in May 2025 (Chart III.3).

Imports of 10 out of 30 major commodities (accounting for 51.5 per cent of import basket in 2024-25) contracted on y-o-y basis in May. Petroleum, crude and products, transport equipment, coke, coal and briquettes, gold and pearls, precious and semi-precious stones pulled down import growth, while chemical material and products, electronic goods, machinery, silver, and non-ferrous metals supported import growth during May. Imports from 9 out of 20 major source countries contracted. Among major

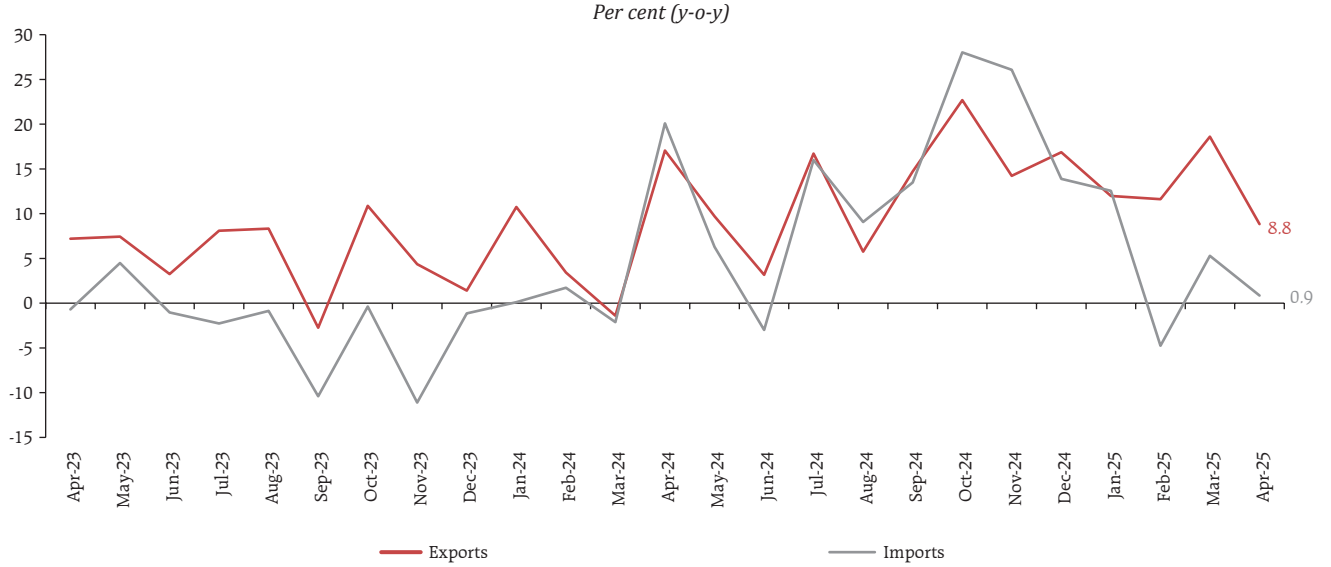
Chart III.3: India's Merchandise Imports



Sources: PIB; DGCI&S; and RBI staff estimates.

Chart III.4: Services Exports and Imports: Growth Rates

Per cent (y-o-y)



Source: RBI.

trading partners, imports from China, the UAE, and the US expanded in May.

Merchandise trade deficit narrowed to US$21.9 billion in May 2025 from US$22.1 billion in May 2024. Oil deficit narrowed to US$9.1 billion in May from US$11.9 billion a year ago. Consequently, its share in total trade deficit declined to 41.6 per cent in May from 53.8 per cent a year ago. In contrast, non-oil deficit widened to US$12.8 billion in May from US$10.2 billion a year ago.

In April 2025, net services export earnings expanded by 18.8 per cent (y-o-y). While imports increased modestly by 0.9 per cent to US$16.9 billion, exports rose by 8.8 per cent to US$32.8 billion, driven by software and business services (Chart III.4).

Aggregate Supply

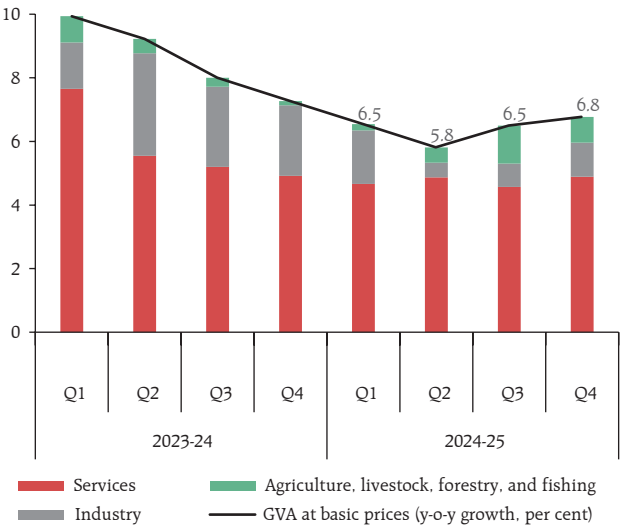
On the supply side, real gross value added (GVA) at basic prices registered a growth of 6.4 per cent in 2024-25, unchanged from the SAE. In terms of quarterly estimates, Q4:2024-25 registered an acceleration of GVA to 6.8 per cent from 6.5 per cent in the preceding quarter. The momentum in quarterly GVA growth was driven by the industrial and services sector (Chart III.5).

Agriculture

The third advance estimates (AE) released on May 29, 2025 reflected a broad-based increase in production over the previous year, across almost all major crops, barring sugarcane and cotton (Chart III.6). The rise in crop production was mainly attributed to good rainfall along with comfortable reservoir positions throughout the year.

Chart III.5: Weighted Contribution to GVA Growth

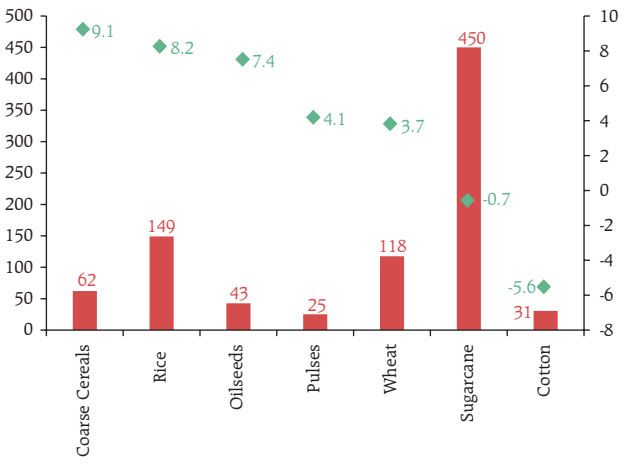
(Percentage points)



Source: RBI.

Chart III.6: Crop Production during 2024-25 (As per Third AE)

(Million tonnes, left scale; per cent, right scale)



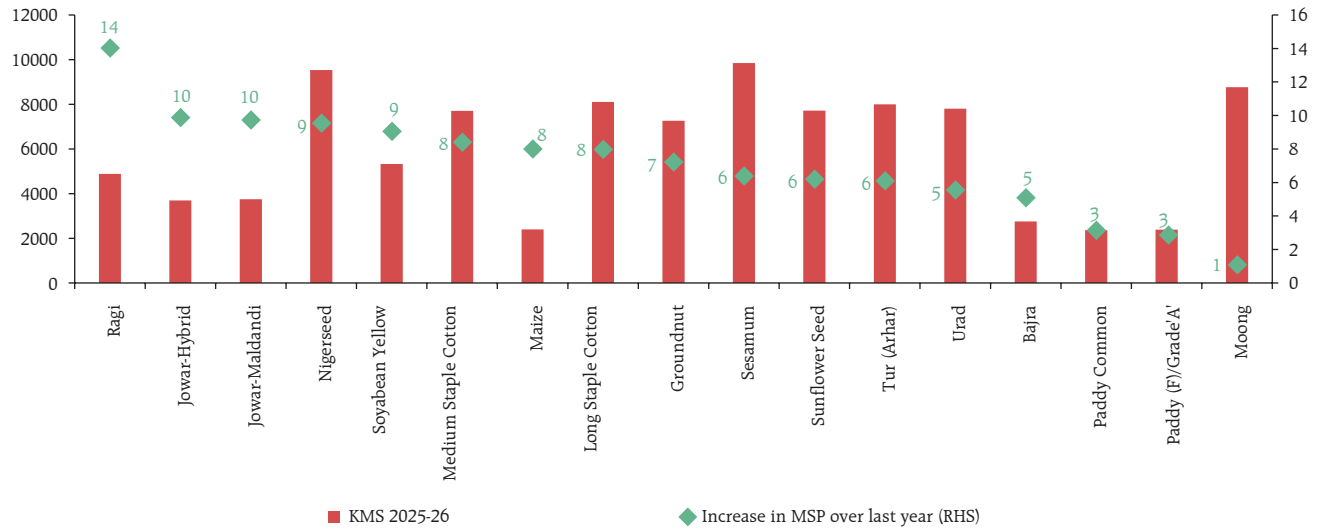
Source: Ministry of Agriculture and Farmers' Welfare.

High-frequency indicators for the ongoing *kharif* agricultural season indicate largely favourable conditions for good sowing, though uncertainties remain on the spatiotemporal distribution of monsoon.[8] The early onset of the monsoon has helped in reducing the incidence of heat waves on standing crops. However, it was followed by a monsoon break in the first half of June. Rainfall has picked up again leading to an increase in the reservoir storage to 32 per cent of its full capacity, which is higher than its decadal average[9] (as on June 19, 2025). The cumulative deficit in south-west monsoon (SWM) rainfall (June 1-20, 2025) has reduced to just 1 per cent of the long-period average (LPA), with central and northwest India receiving above normal rainfall.

The combined public stock of rice and wheat remains comfortable at 4.6 times the buffer norm and higher by 20.1 per cent over the last year on account of bumper *rabi* and *kharif* harvests (as on June 01, 2025). On May 28, 2025, the government announced minimum support prices (MSPs) for *kharif* marketing season (KMS) of 2025-26 for 14 major crops (Chart III.7). The announcement was in line with the government's efforts for the past few years to align MSPs in favour of oilseeds, pulses, and nutri-cereals to encourage crop diversification, correct the demand-supply imbalance and promote sustainable agriculture.

Chart III.7: Minimum Support Prices for KMS 2025-26

(₹/quintal, left scale; per cent, right scale)



Source: Government of India.

[8] As per the updated forecast by the Indian Meteorological Department (IMD) released on May 27, 2025, the southwest monsoon (SWM) rainfall is likely to be above normal this year at 106 per cent of the LPA.

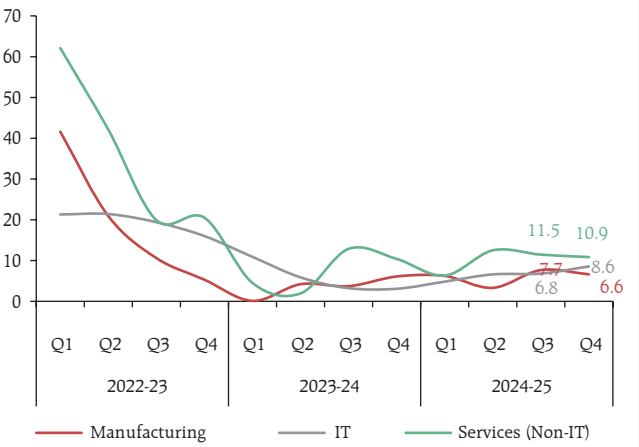
[9] The decadal average for the corresponding period is 22.9 per cent of full reservoir capacity.

Industry and Services

Quarterly results of listed private non-financial companies for Q4:2024-25 suggest slower revenue growth accompanied by increased profitability. At the aggregate level, sales growth of listed non-government non-financial companies witnessed a slight moderation as compared to the previous quarter, with listed private manufacturing companies experiencing an easing in sales performance amidst subdued demand conditions (Chart III.8).[10] Amid macroeconomic and global uncertainties, sales growth improved for IT companies, whereas non-IT services companies experienced a slowdown during the same period.

Chart III.8: Nominal Sales Growth (Non-Financial Companies)

(Y-o-y, Per cent)



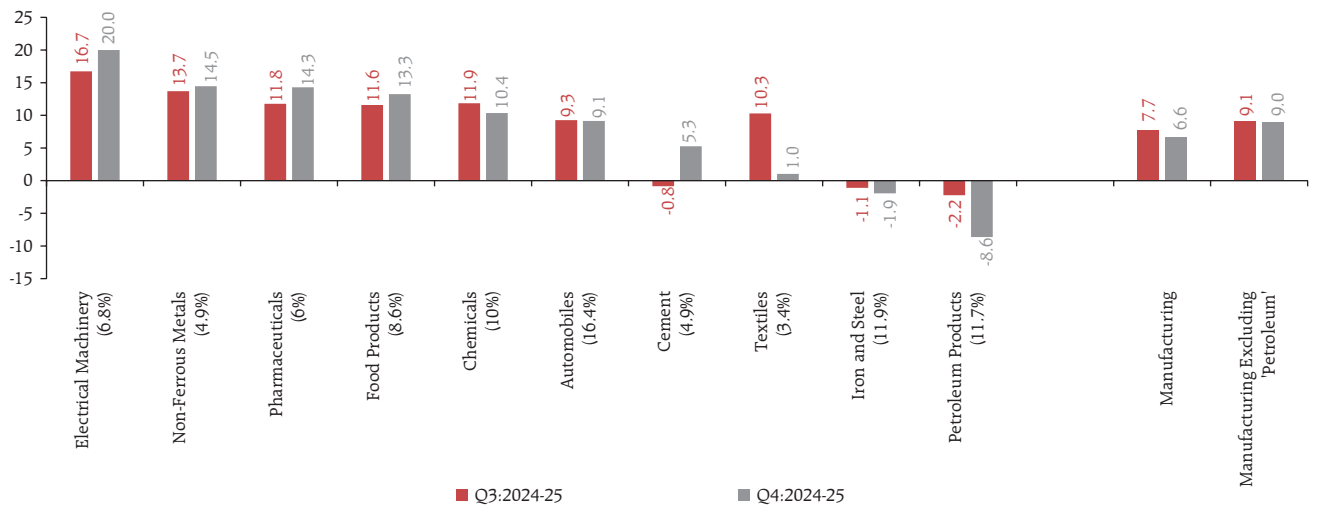
Note: The graph is based on 1,659 manufacturing, 185 IT and 839 non-IT listed companies.
Sources: Capitaline database; and RBI staff calculations.

Although major industries continued to record double-digit sales growth, weaker performance of petroleum industry weighed on the overall performance of the manufacturing sector. Excluding petroleum, sales growth in the manufacturing sector remained steady at 9.0 per cent (Chart III.9).

Industrial activity, as measured by the Index of Industrial Production (IIP), slowed to an eight-month low of 2.7 per cent in April 2025, with a major drag emanating from mining and quarrying, while manufacturing posted a modest growth. Within the use-based categories, capital goods and consumer durables expanded while consumer non-durables and primary goods dragged down growth. The growth of Eight Core Industries (ECI) Index also slowed to a

Chart III.9: Manufacturing Sector – Industry-wise Sales Growth

(Y-o-y, per cent)



Note: Numbers in parentheses represent share in sales during Q4:2024-25.
Sources: Capitaline database; and RBI staff calculations.

[10] Based on quarterly results of 2,936 listed non-government non-financial (NGNF) companies.

Table III.6: High Frequency Indicators–Industry–Growth Rate

	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25
IIP-Headline	6.3	4.9	5.0	0.0	3.2	3.7	5.0	3.7	5.2	2.7	3.9	2.7	
IIP Manufacturing	5.1	3.5	4.7	1.2	4.0	4.4	5.5	3.7	5.8	2.8	4.0	3.4	
IIP Capital Goods	2.6	3.6	11.7	0.0	3.5	2.9	8.9	10.5	10.2	8.2	3.6	20.3	
PMI Manufacturing	57.5	58.3	58.1	57.5	56.5	57.5	56.5	56.4	57.7	56.3	58.1	58.2	57.6
PMI Export Order	57.3	56.2	57.2	54.4	52.9	53.6	54.6	54.7	58.6	56.3	54.9	57.6	56.9
PMI Manufacturing: Future Output	67.4	64.0	64.1	62.1	61.6	62.1	65.5	62.5	65.1	64.9	64.4	64.6	63.1
Eight Core Index	6.9	5.0	6.3	-1.5	2.4	3.8	5.8	5.1	5.1	3.4	4.5	1.0	0.7
Electricity Generation: Conventional	14.5	9.7	6.8	-3.8	-1.3	0.5	2.7	4.5	-1.3	2.4	4.8	-1.9	-8.2
Electricity Generation: Renewable	8.6	2.0	14.2	-3.7	12.5	14.9	19.0	17.9	31.9	12.2	25.2	28.0	
Automobile Production	15.6	15.4	16.8	4.4	10.1	10.0	8.0	1.3	9.4	2.3	6.5	-1.7	5.2
Passenger Vehicle Production	7.0	0.8	1.2	0.7	-3.4	-4.0	6.5	9.2	3.7	4.5	11.2	10.8	5.4
Tractor Production	11.5	3.0	8.1	-1.0	2.7	0.4	24.7	20.9	23.7	-7.8	18.5	20.5	9.1
Two-wheelers Production	17.8	18.7	21.1	4.9	12.9	13.3	8.8	-0.6	10.3	1.6	5.6	-4.1	4.7
Three-wheelers Production	4.5	7.8	6.0	9.0	3.9	-6.7	-5.5	7.6	16.2	6.5	6.0	4.1	16.9
Crude Steel Production	4.6	3.4	5.8	2.6	0.3	4.2	4.5	8.3	7.4	6.0	8.5	5.6	9.5
Finished Steel Production	10.1	4.4	6.0	2.7	0.7	4.0	2.8	5.3	6.7	6.7	10.0	5.1	5.5
Import of Capital Goods	8.3	15.1	11.8	12.3	10.9	7.0	4.7	6.1	15.5	-0.5	8.6	21.5	14.3

<<Contraction ---------- Expansion>>

Notes: 1. The y-o-y growth (in per cent) has been calculated for all indicators (except for PMI).
2. The heat map translates the data range for each indicator into a colour gradient scheme with red denoting the lowest values and green corresponding to the highest values of the respective data series.
3. Heat map is applied on data from April 2023 till May 2025 other than for IIP, and Electricity Generation: Renewable, where the data is till April 2025.
4. All PMI values are reported in index form. A PMI value >50 denote expansion; <50 denote contraction; and =50 denote 'no change'. In the PMI heat maps, red denotes the lowest value, yellow denotes 50 (or the no change value), and green denotes the highest value in each of the PMI series.

Sources: Ministry of Statistics and Programme Implementation (MoSPI); S&P Global; Central Electricity Authority (CEA), Ministry of Power; Society of Indian Automobile Manufacturers (SIAM); Tractor and Mechanisation Association; Office of Economic Adviser, GoI; Joint Plant Committee; Directorate General of Commercial Intelligence & Statistics; and Ministry of Commerce and Industry.

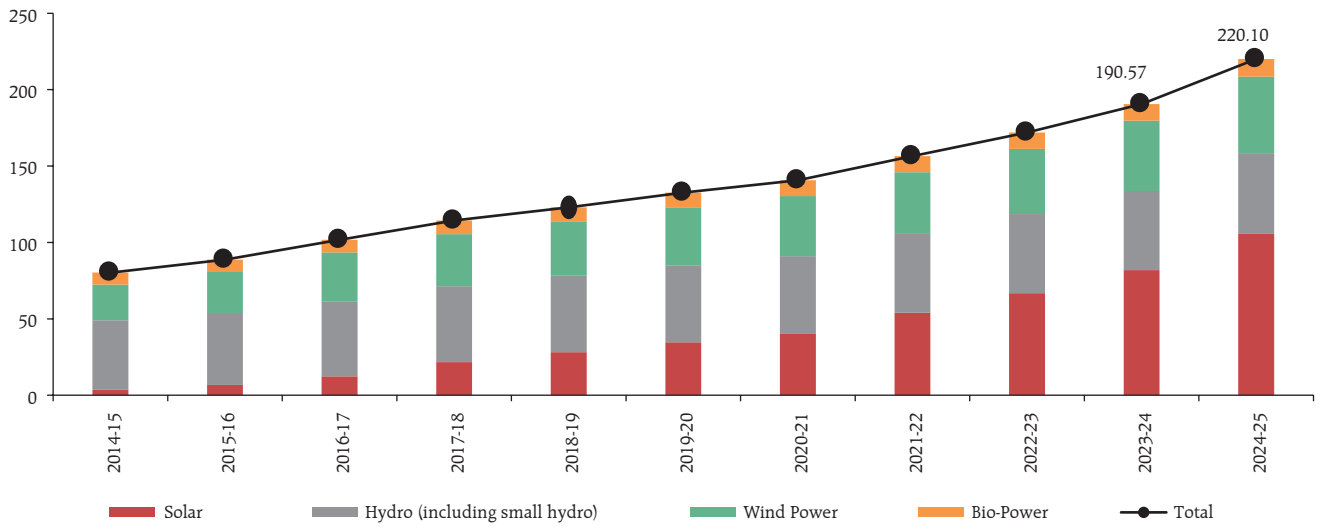
nine-month low of 0.7 per cent y-o-y in May 2025 as compared to 6.9 per cent in May 2024.

Available high-frequency indicators for May point to resilient industrial activity, with steady expansion in PMI manufacturing and strong growth in capital goods and steel output. Automobile production rebounded in May, with two-wheeler output recovering from last month's contraction and three-wheeler production recording a sharp acceleration. However, conventional electricity generation showed intermittent weakness for the second consecutive month (Table III.6). Supply chain pressures eased further to below their historical average levels due to improvements in both suppliers' delivery time and semiconductor supplies and a decline in new orders (Annex Chart A7).

In pursuit of its net zero targets, India's push for renewable energy capacity, gathered further momentum in FY 2024-25. The total installed renewable energy capacity increased by 29.52 gigawatts, driven mainly by the rise in the installed capacity under solar, wind and hydro energy projects (Chart III.10).

Chart III.10: Annual Total Installed Renewable Energy (RE) Capacity Composition

(Gigawatts)



Source: Central Electricity Authority (CEA).

India's services sector sustained a strong growth momentum in May, driven by a robust export demand and a record surge in hiring (Table III.7). Port traffic expanded for the sixth consecutive month in May, led by a higher growth in containerised cargo, iron ore and petroleum, oil and lubricants (POL). Growth in construction sector indicators – steel consumption and cement production – inched up in May.

Table III.7: High Frequency Indicators–Services–Growth Rate

	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25
PMI Services	60.2	60.5	60.3	60.9	57.7	58.5	58.4	59.3	56.5	59.0	58.5	58.7	58.8
International Air Passenger Traffic	19.6	11.3	8.8	11.1	11.2	10.3	10.7	9.0	11.1	7.7	6.8	13.0	4.8
Domestic Air Cargo	10.3	10.3	8.8	0.6	14.0	8.9	0.3	4.3	6.9	-2.5	4.9	16.6	
International Air Cargo	19.2	19.6	24.4	20.7	20.5	18.4	16.1	10.5	7.1	-6.3	3.3	8.6	
Port Cargo Traffic	3.8	6.8	5.9	6.7	5.8	-3.4	-4.9	3.4	7.6	3.6	13.3	7.0	4.3
Retail Commercial Vehicle Sales	-1.6	-4.7	5.9	-6.0	-10.4	6.4	-6.1	-5.2	8.2	-8.6	2.7	-1.0	-3.7
Hotel Occupancy	-2.6	-3.1	3.6	0.7	2.1	-5.3	11.1	-0.2	1.2	0.6	1.9	7.2	
Tourist Arrivals	-2.8	5.7	-1.3	-4.2	0.4	-1.4	-0.1	-6.6	-0.2	-8.6			
Steel Consumption	14.1	18.8	14.4	10.0	11.8	8.9	9.5	5.2	10.9	10.9	13.6	6.0	7.8
Cement Production	-0.6	1.8	5.1	-2.5	7.6	3.1	13.1	10.3	14.3	10.7	12.2	6.3	9.2

<<Contraction ---------- Expansion>>

Notes: 1. The y-o-y growth (in per cent) has been calculated for all indicators (except for PMI).
2. The heat map translates the data range for each indicator into a colour gradient scheme with red denoting the lowest values and green corresponding to the highest values of the respective data series.
3. Heat map is applied on data from April 2023 till May 2025 other than for Hotel Occupancy, Domestic Air Cargo and International Air Passenger Traffic, where the data is till April 2025. The latest data for tourist arrivals is till February 2025.
4. All PMI values are reported in index form. A PMI value >50 denote expansion; <50 denote contraction; and =50 denote 'no change'. In the PMI heat maps, red denotes the lowest value, yellow denotes 50 (or the no change value), and green denotes the highest value in each of the PMI series.

Sources: Federation of Automobile Dealers Associations (FADA); Indian Ports Association; Airports Authority of India; HVS Anarock; Ministry of Tourism, GoI; Joint Plant Committee; Office of Economic Adviser; and S&P Global.

Inflation

Headline inflation, as measured by y-o-y changes in the all-India consumer price index (CPI),[11] moderated to 2.8 per cent in May 2025 (the lowest since February 2019) from 3.2 per cent in April (Chart III.11). The decline in headline inflation by 34 bps came from a negative base effect of 54 bps, which more than offset a positive price momentum of 20 bps. A positive momentum was recorded across all groups within CPI.[12]

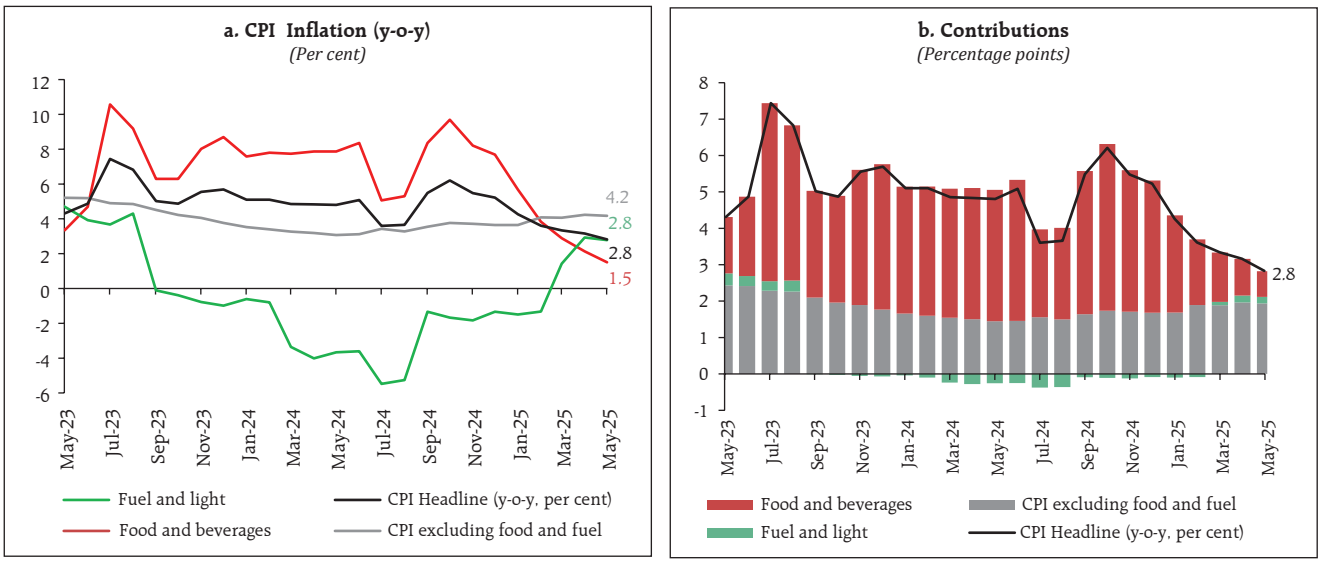
Food inflation (y-o-y) decelerated to 1.5 per cent in May, the lowest in 73 months. Within subgroups, vegetables, pulses, and meat and fish continued to record deflation. A moderation in inflation was also observed in cereals, eggs, sugar, and fruits. Inflation, however, picked up in milk and products, oils and fats, and non-alcoholic beverages. Spices continued to record deflation, *albeit* at a slower pace, while inflation in prepared meals remained steady (Chart III.12).

Fuel and light inflation softened marginally to 2.8 per cent in May from 2.9 per cent in April. While kerosene prices continued to remain in deflation and inflation for electricity moderated, it increased for LPG, firewood, and chips.

Core CPI inflation remained steady at 4.2 per cent in May, same as in April. An increase in inflation in its subgroups, such as pan, tobacco and intoxicants, housing, transport and communication, and personal care and effects, was offset by a moderation in household goods and services, and recreation and amusement. Inflation in clothing and footwear, and health remained steady.

In terms of regional distribution, rural and urban inflation eased to 2.6 per cent and 3.1 per cent, respectively, in May 2025. At the state level, inflation ranged from 0.6 per cent to 6.8 per cent. Majority of the states experienced inflation between 2 - 4 per cent (Chart III.13).

Chart III.11: Trends and Drivers of CPI Inflation



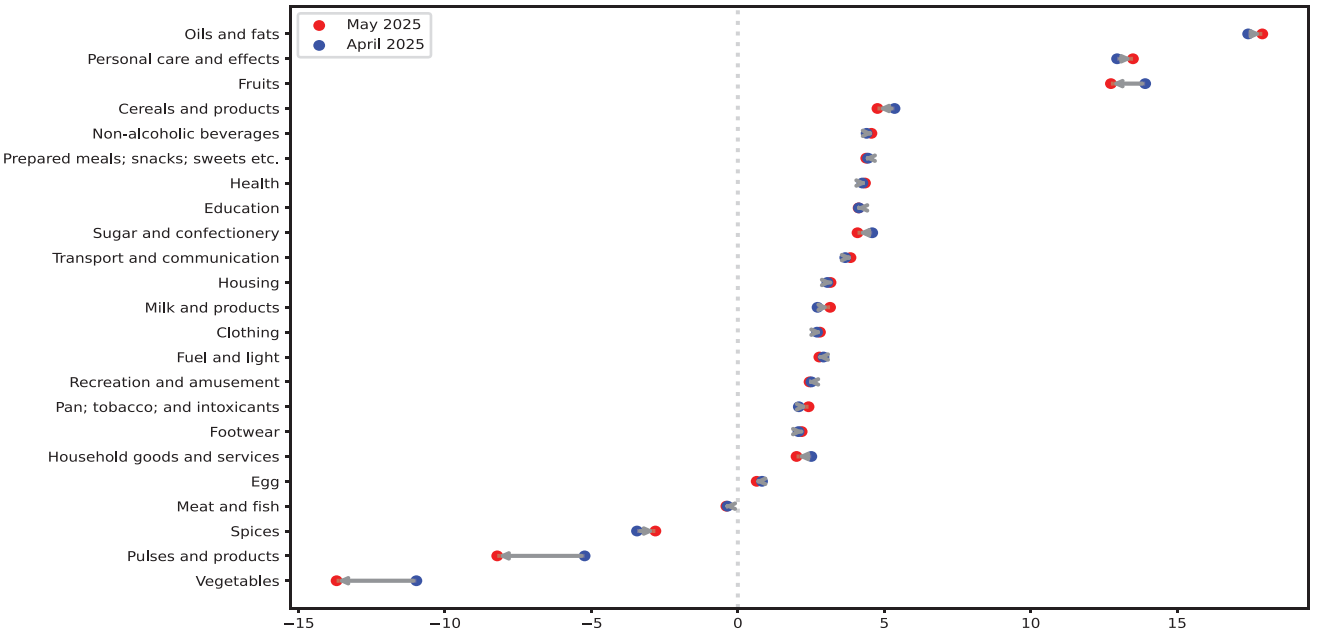
Sources: National Statistical Office (NSO); and RBI staff estimates.

[11] As per the provisional data released by the National Statistical Office (NSO) on June 12, 2025.

[12] The positive momentum recorded in CPI Food, Fuel and Core was 10, 80 and 30 bps, respectively.

Chart III.12: Annual Inflation across Sub-groups

(Y-o-y, per cent)

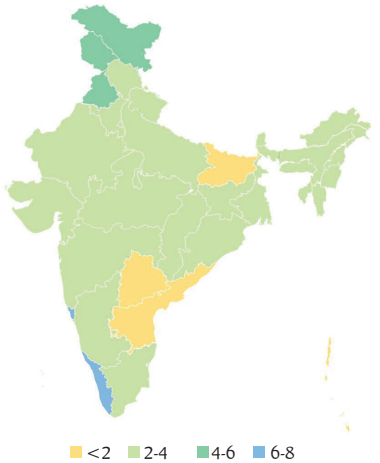


Sources: NSO; and RBI staff estimates.

High-frequency food price data for June so far (up to June 20, 2025) shows a moderation in prices of pulses while prices of cereals have risen marginally.

Chart III.13: Spatial Distribution of Inflation: May 2025 (CPI-Combined)

(Y-o-y, per cent)



Note: Map is for illustrative purposes only.
Sources: NSO; and RBI staff estimates.

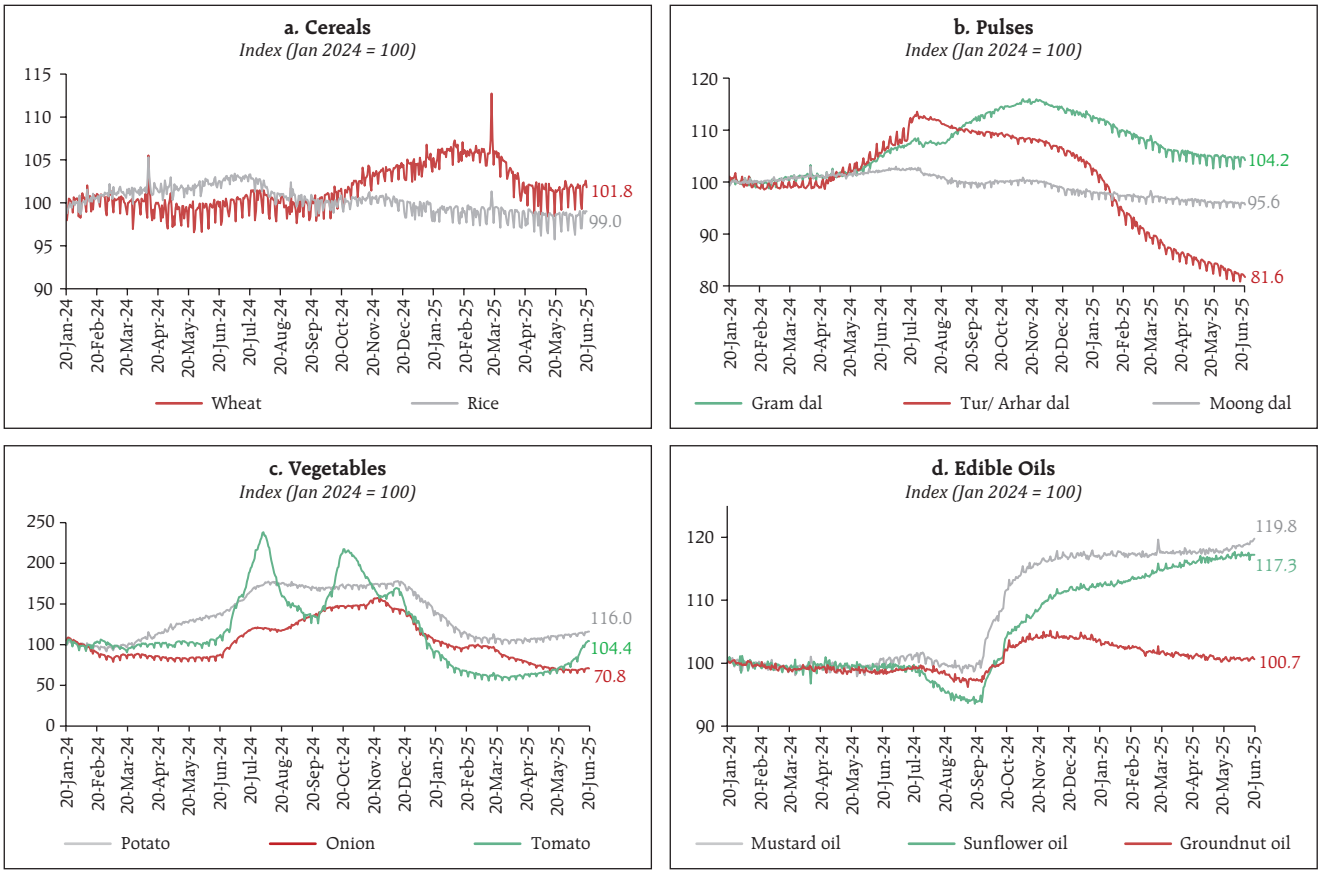
Edible oil prices, on the other hand, have firmed up-driven by soybean, sunflower, and mustard oil, while palm and groundnut oil prices have moderated. Among the key vegetables, prices of onion have recorded further correction, while potato and tomato prices have increased (Chart III.14).

Retail selling prices of petrol and diesel have remained broadly unchanged in June so far (up to June 20, 2025). Kerosene prices declined while LPG prices remained unchanged (Table III.8).

The PMIs for May 2025 recorded an uptick in the rate of expansion of input prices for manufacturing and services. Selling price pressures, however, firmed up in services but moderated for manufacturing firms (Annex Chart A8).

Rural labour wage growth continued to increase in April 2025, driven by occupations in the agricultural sector. Within agriculture, a pick-up

Chart III.14: DCA Essential Commodity Prices



Sources: Department of Consumer Affairs (DCA), Government of India (GoI); and RBI staff estimates.

in wage rates for harvesting, picking and horticulture workers drove the overall wage growth. Non-agricultural wage growth has remained stable since January 2025 (Chart III.15).

Table III.8: Petroleum Products Prices

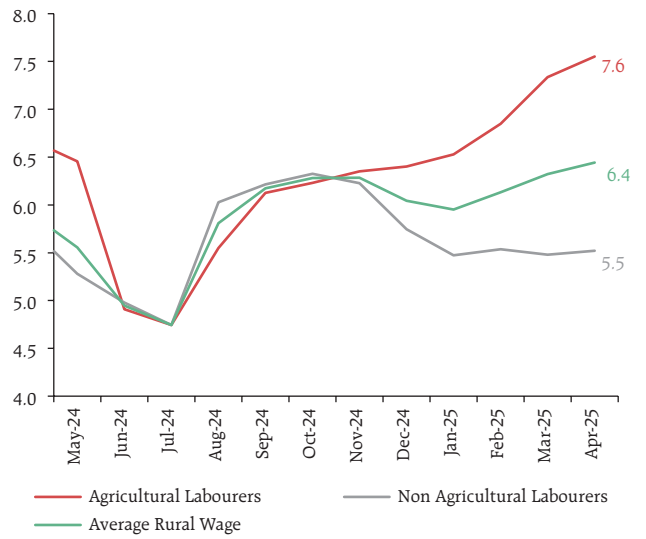
Item	Unit	Domestic Prices			Month-over-month (per cent)	
		Jun-24	May-25	Jun-25^	May-25	Jun-25^
Petrol	₹/litre	100.89	101.08	101.12	0.1	0.0
Diesel	₹/litre	90.68	90.51	90.53	0.0	0.0
Kerosene (subsidised)	₹/litre	46.61	41.51	40.19	-4.5	-3.2
LPG (non-subsidised)	₹/cylinder	813.25	863.25	863.25	0.0	0.0

Notes: 1. ^: For the period June 1-20, 2025.
2. Other than kerosene, prices represent the average Indian Oil Corporation Limited (IOCL) prices in four major metros (Delhi, Kolkata, Mumbai and Chennai). For kerosene, prices denote the average of the subsidised prices in Kolkata, Mumbai and Chennai.

Sources: IOCL; Petroleum Planning and Analysis Cell (PPAC); and RBI staff estimates.

Chart III.15: Rural Nominal Wage

(Y-o-y, per cent)



Source: Labour Bureau, Ministry of Labour and Employment.

IV. Financial Conditions

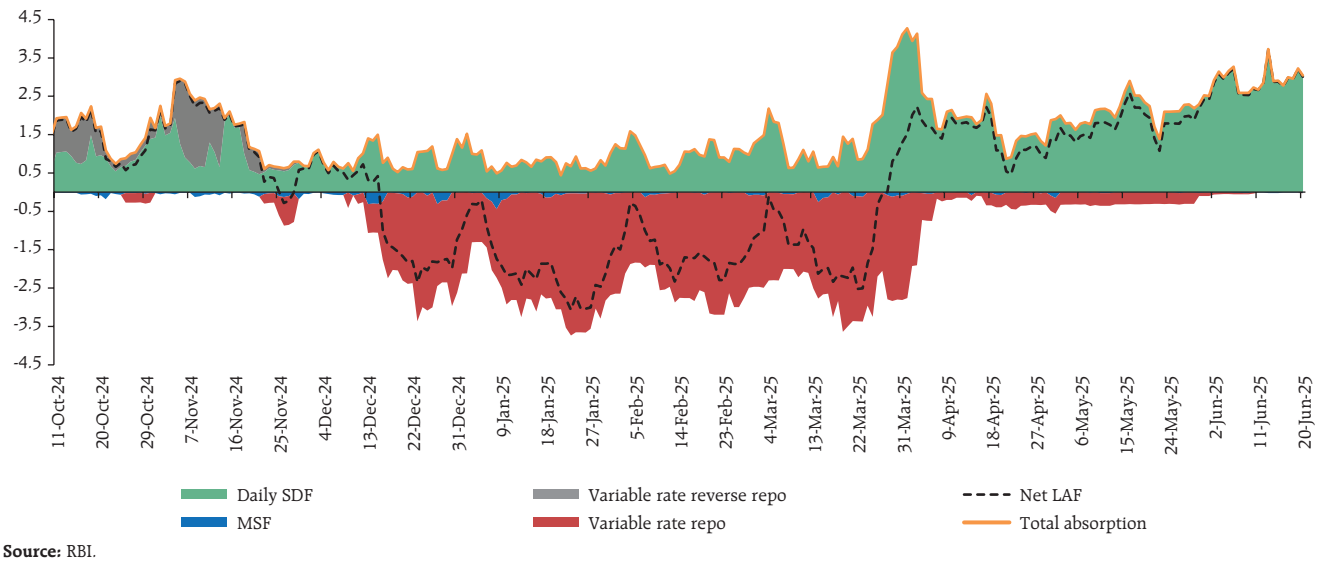
System liquidity continued to be in surplus during May and June (up to June 20, 2025). While the increase in currency in circulation (CiC) has exerted some pressure on banking system liquidity in FY:2025-26 so far, it has been offset by the expansion in liquidity from RBI's durable liquidity measures since January 2025.

The Reserve Bank injected a cumulative amount of ₹0.81 lakh crore into the banking system through 18 fine-tuning variable rate repo (VRR) operations with maturities ranging from 1 to 3 days during the period May 16 to June 10, 2025. Reflecting these developments, the average daily net absorption under the liquidity adjustment facility (LAF) stood at ₹2.47 lakh crore during the period May 16 to June 20, 2025, as compared to ₹1.42 lakh crore during the period April 16 to May 15, 2025 (Chart IV.1). Amidst surplus liquidity conditions, the average balances under the standing deposit facility (SDF) continued to remain elevated and stood at ₹2.62 lakh crore during the period May 16 to June 20, 2025, as compared to ₹1.77 lakh crore during the period April 16 to May 15, 2025. Banks' recourse to the marginal standing facility (MSF) was marginally lower, averaging ₹0.01 lakh crore during the period May 16 to June 20, 2025, as against ₹0.02 lakh crore during the period April 16 to May 15, 2025. High SDF balances, coupled with tepid response to daily VRR auctions in the recent period amidst muted credit offtake, suggest comfortable liquidity conditions. In view of this, the Reserve Bank decided to discontinue daily VRR auctions effective June 11, 2025.

The RBI also announced a reduction in the cash reserve ratio (CRR) by 100 bps to 3.0 per cent of net demand and time liabilities (NDTL) in a staggered manner during the latter half of the year. This reduction will be carried out in four equal tranches of 25 bps each with effect from the fortnights beginning September 6, October 4, November 1 and November 29, 2025. The reduction in CRR would release primary liquidity of about ₹2.5 lakh crore into the banking system by December 2025. Besides providing durable liquidity, it will reduce the cost of funds for banks, thereby facilitating monetary policy transmission to the credit market.

Chart IV.1: Liquidity Operations

(₹ lakh crore)



Source: RBI.

Money Market

In the overnight money market, rates have reflected the evolving liquidity conditions. The weighted average call rate (WACR) – the operating target of monetary policy – moderated further and hovered near the floor of the LAF corridor. The spread of WACR over the policy repo rate averaged (-) 20 bps during the period May 16 to June 20, 2025, as against (-) 14 bps during the period April 16 to May 15, 2025 (Chart IV.2a). Overnight rates in the collateralised segments, the triparty repo and market repo, moved in tandem with the WACR.

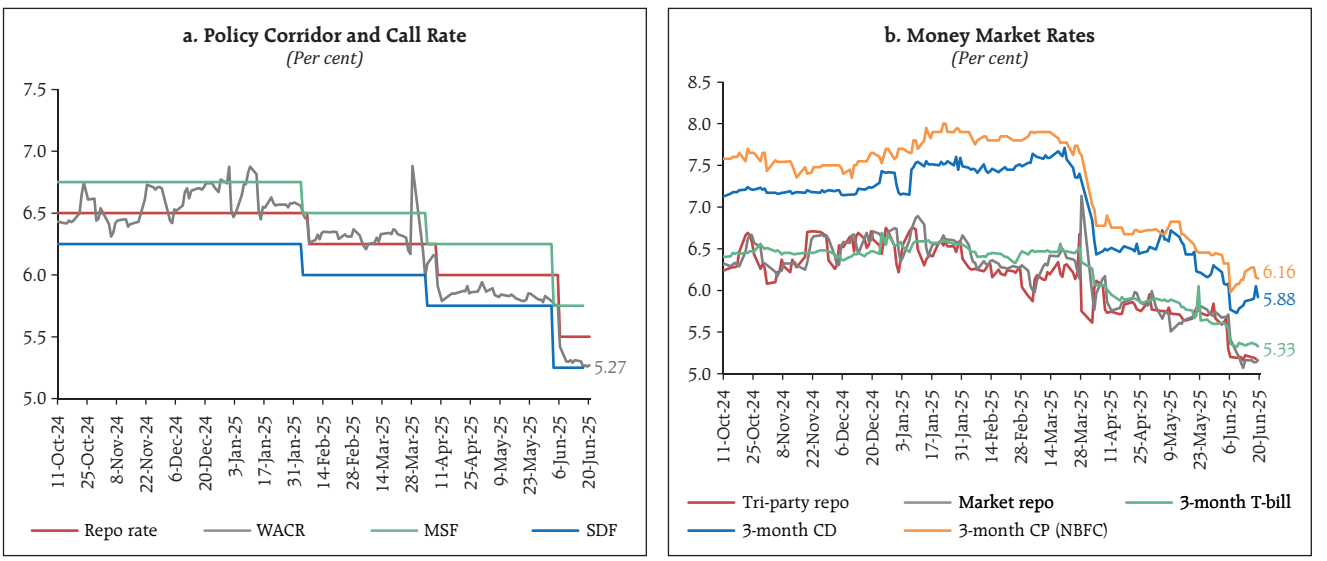
The comfortable liquidity surplus in the banking system has reinforced transmission of policy repo rate cuts to the term money market segments. Yields on three-month treasury bills (T-bills), certificates of deposit (CDs), and three-month commercial papers (CPs) issued by non-banking financial companies (NBFCs) moderated during the period May 16 to June 20, 2025, as compared to the period April 16 to May 15, 2025 (Chart IV.2b). The average risk premium in the money market – measured by the spread between the three-month CP and 91-day T-bill yields – narrowed to 79 bps during this period from 85 bps in the preceding period, indicating improved funding conditions and lower credit risk in the short-term market.

Government Securities (G-Sec) Market

In the fixed income segment, bond yields traded with a softening bias relative to the preceding month, on account of lower-than-expected CPI inflation prints and RBI's OMOs. The yield on the 10-year G-sec benchmark declined to 6.25 per cent on June 5, 2025 from 6.27 per cent on May 15, 2025. Since then, however, it has edged up and was placed at 6.38 per cent on June 20, 2025 (Chart IV.3a).

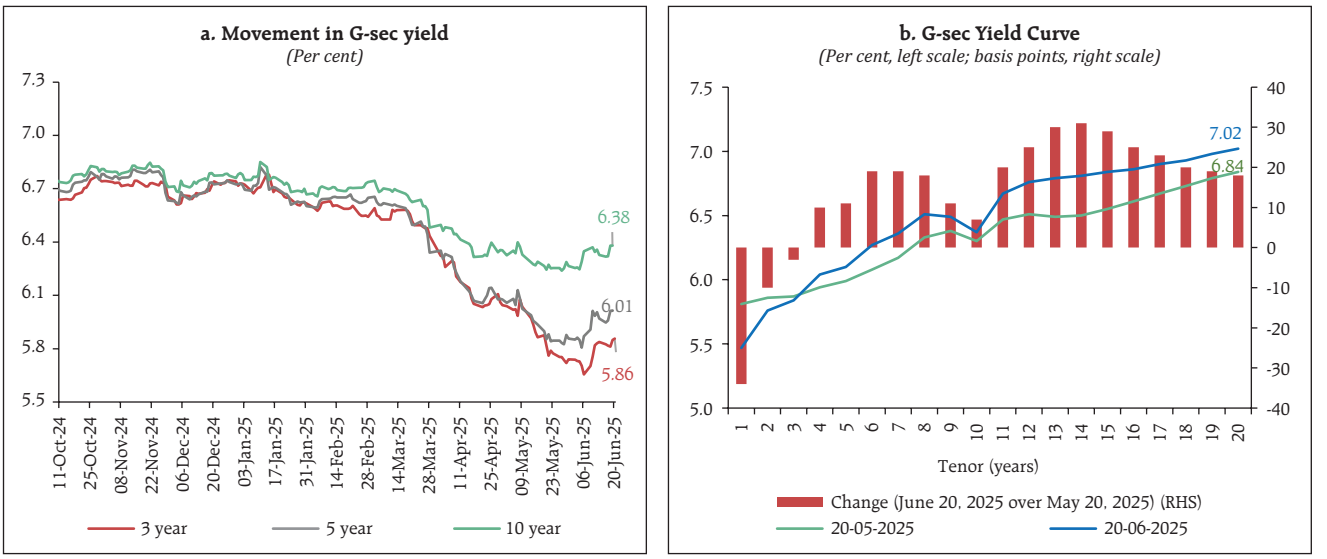
In comparison to a month ago, the domestic yield curve shifted downwards across the short end of the term structure, while it shifted upwards at the long end (Chart IV.3b). Between May 16 and June 20, 2025, the average term spread (10-year G-sec yield minus 91-day T-bills yield) increased by 29 bps over the period April 16 to May 15, 2025, indicating a steepening of the yield curve.

Chart IV.2: Policy Corridor and Money Market Rates



Sources: RBI; CCIL; and Bloomberg.

Chart IV.3: Developments in the G-sec Market



Sources: Bloomberg; FBIL; and RBI staff estimates.

Corporate Bond Market

Corporate bond issuances remained high at ₹0.93 lakh crore in April 2025, nearly three times the funds raised in April 2024. The sharp fall in bond yields amidst a slow pass-through to lending rates has prompted corporates to increasingly take recourse to the bond market for mobilizing resources. Corporate bond yields and the corresponding risk premia (except for AAA one-year) generally softened across tenors and rating spectrums during the period May 16 - June 19, 2025 (Table IV.1).

Money and Credit

Adjusting for the first-round impact of change in CRR, reserve money (RM) recorded a growth of 7.3 per cent (y-o-y) as on June 13, 2025 (8.1 per cent a year ago). During the current financial year, the growth in currency in circulation (CiC), the largest component of RM, was significantly higher at 7.3 per cent (y-o-y), as compared with 5.9 per cent a year ago (Chart IV.4). On the sources side (assets), growth in foreign currency assets accelerated to 5.6 per cent (y-o-y) as on June 13, 2025. Gold – the other major component

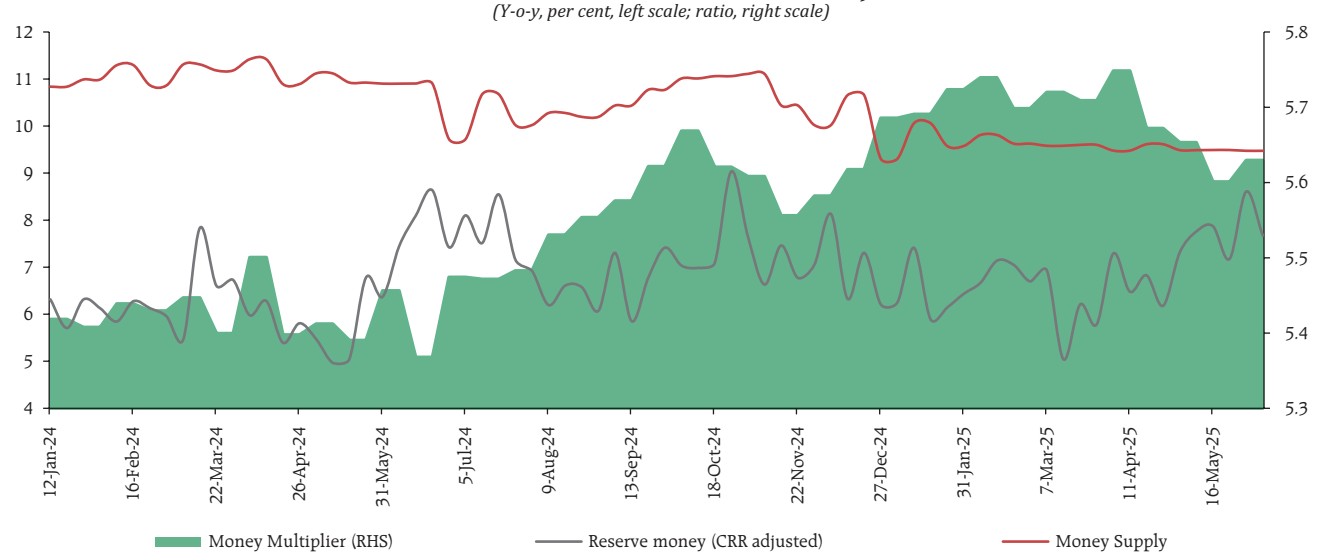
Table IV.1: Corporate Bonds - Rates and Spread

	Interest Rates (per cent)			Spread (bps) (Over Corresponding Risk-free Rate)		
Instrument	**Apr 16, 2025 – May 15, 2025**	**May 16, 2025 – June 19, 2025**	**Variation**	**Apr 16, 2025 – May 15, 2025**	**May 16, 2025 – June 19, 2025**	**Variation**
1	2	3	(4 = 3-2)	5	6	(7 = 6-5)
Corporate Bonds						
AAA (1-year)	6.96	6.77	-19	97	112	15
AAA (3-year)	7.14	6.87	-27	103	100	-3
AAA (5-year)	7.22	6.93	-29	101	89	-12
AA (3-year)	7.99	7.69	-30	188	183	-5
BBB- (3-year)	11.64	11.36	-28	550	549	-1

Note: Yields and spreads are computed as averages for the respective periods.
Sources: FIMMDA; and Bloomberg.

Chart IV.4: Growth in RM and M_3

(Y-o-y, per cent, left scale; ratio, right scale)



Sources: RBI.

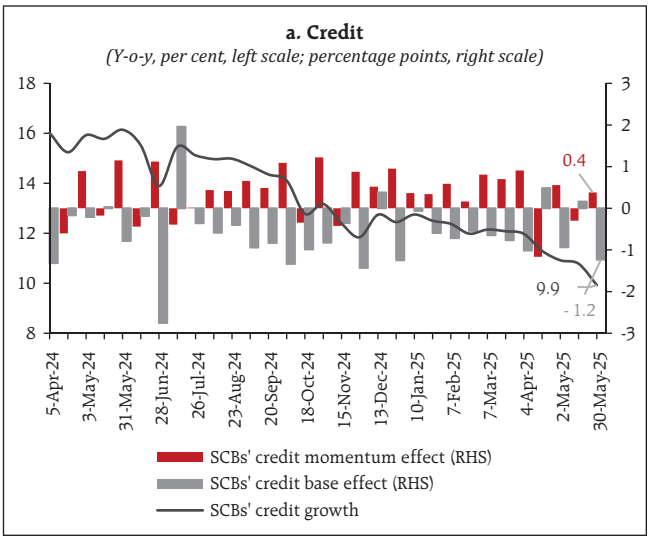
of net foreign assets (NFA) – grew by 58.9 per cent, mainly due to increase in gold prices, leading to a steady rise in its share in NFA, from 8.3 per cent as of end-March 2024 to 12.7 per cent as of June 13, 2025. As on May 30, 2025, money supply (M3) rose by 9.5 per cent (y-o-y) [10.9 per cent a year ago].[13]

Scheduled commercial banks (SCBs) credit growth[14] moderated to 9.9 per cent, as on May 30, 2025 (16.2 per cent a year ago) due to weaker momentum as well as unfavourable base effects (Chart IV.5a). SCBs' deposit growth (excluding the impact of the merger) decelerated from 10.6 per cent, as on March 21, 2025 to 10.1 per cent, as on May 30, 2025, with the base

Chart IV.5: SCBs: Credit and Deposit Growth

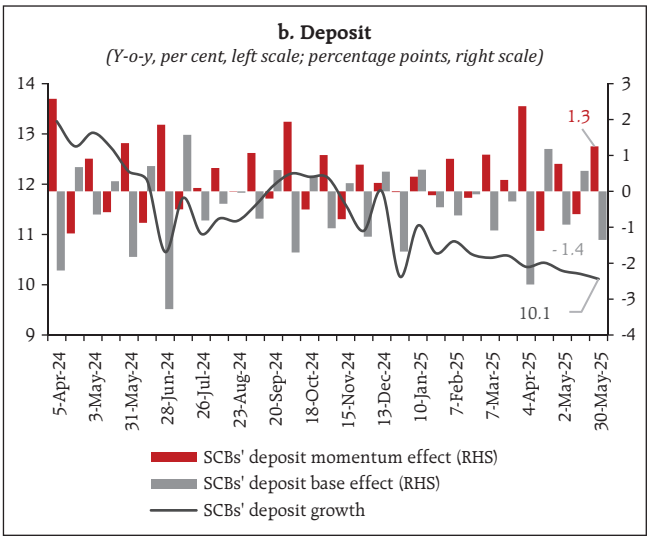
a. Credit

(Y-o-y, per cent, left scale; percentage points, right scale)



b. Deposit

(Y-o-y, per cent, left scale; percentage points, right scale)



Note: SCBs' data is inclusive of RRBs. Data exclude the impact of the merger of a non-bank with a bank.
Source: Fortnightly Section 42 Returns, RBI.

[13] Excluding the impact of the merger of a non-bank with a bank (with effect from July 1, 2023).

[14] Data are based on fortnightly Section 42 returns. Data exclude the impact of the merger of a non-bank with a bank.

and momentum effects offsetting each other (Chart IV.5b). Banks are increasingly relying on CDs to meet funding needs as competition intensified in the bulk deposit space.

Average bank credit growth to various sectors of the economy softened significantly during the period April 2024 to April 2025.[15] Growth in non-food bank credit declined to 11.2 per cent during the fortnight ending April 18, 2025, from 15.3 per cent during the corresponding fortnight of the previous year.[16] This was primarily driven by a moderation in growth of credit to services sector and agriculture and allied activities. Personal loans growth also showed deceleration over a year ago, though on a sequential basis, it witnessed an uptick after witnessing a softening in the last four months (Annex Chart A9).

Deposit and Lending Rates

The 50-bps cut in the policy repo rate during February-April 2025 reflected in banks' repo-linked external benchmark-based lending rates (EBLRs) and marginal cost of funds-based lending rate (MCLR). Consequently, the weighted average lending rate (WALR) on fresh and outstanding rupee loans of SCBs declined by 6 bps and 17 bps, respectively, during the period February-April 2025 (Table IV.2). On the deposit side, the weighted average domestic term deposit rates (WADTDRs) on fresh and outstanding deposits moderated by 27 bps and 1 bp, respectively, during the same period.

During the current easing cycle (February-April 2025), the decline in the WALR on fresh rupee loans was marginally higher for public sector banks (PSBs) as compared to private sector banks (PVBs). For outstanding loans, the transmission was higher for PVBs (Chart IV.6a). In case of deposits, PSBs reduced their fresh term deposit rates by a higher magnitude as compared to PVBs (Chart IV.6b).

Equity Markets

Indian equity markets remained range-bound in the second half of May amidst weak global cues, following the downgrade in US sovereign credit rating, caution on the possible India-US trade deal, and profit booking. Markets rose subsequently following the announcement of a record surplus transfer by the Reserve Bank to the government. Global tariff and geopolitical uncertainty imparted volatility

Table IV.2: Transmission to Banks' Deposit and Lending Rates

(Variation in bps)

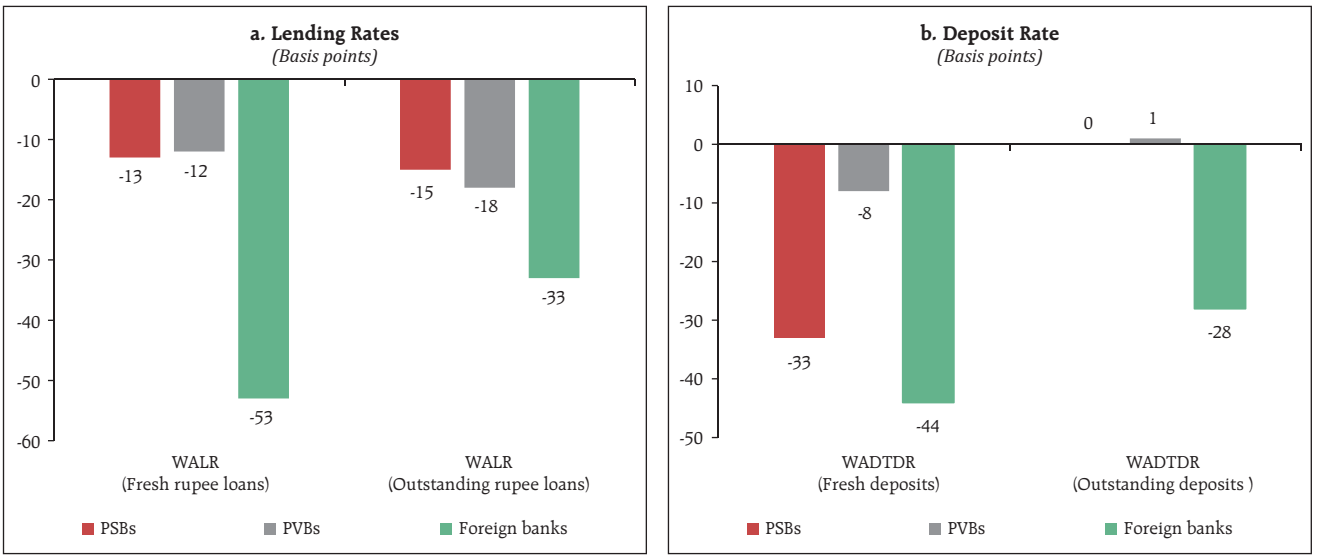
		Term Deposit Rates		Lending Rates			
Period	**Repo Rate**	**WADTDR-Fresh Deposits**	**WADTDR-Outstanding Deposits**	**EBLR**	**1-Yr. MCLR (Median)**	**WALR - Fresh Rupee Loans**	**WALR-Outstanding Rupee Loans**
Tightening Period May 2022 to Jan 2025	+250	253	199	250	178	181	115
Easing Phase Feb 2025 to May* 2025	-50	-27	-1	-50	-20	-6	-17

Notes: Data on EBLR pertain to 32 domestic banks.
*: Data on WADTDR and WALR pertain to April 2025.
WALR: Weighted Average Lending Rate; WADTDR: Weighted Average Domestic Term Deposit Rate;
MCLR: Marginal Cost of Funds-based Lending Rate; EBLR: External Benchmark-based Lending Rate.
Source: RBI.

[15] Data are provisional. Sectoral non-food credit data is based on sector-wise and industry-wise bank credit (SIBC) return, which covers select banks accounting for about 95 per cent of total non-food credit extended by all SCBs, pertaining to the last reporting Friday of the month. Data exclude the impact of the merger of a non-bank with a bank.

[16] For further details, refer to Sectoral Deployment of Bank Credit – April 2025 [https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=60554]

Chart IV.6: Transmission across Bank Groups (February 2025 - April 2025)

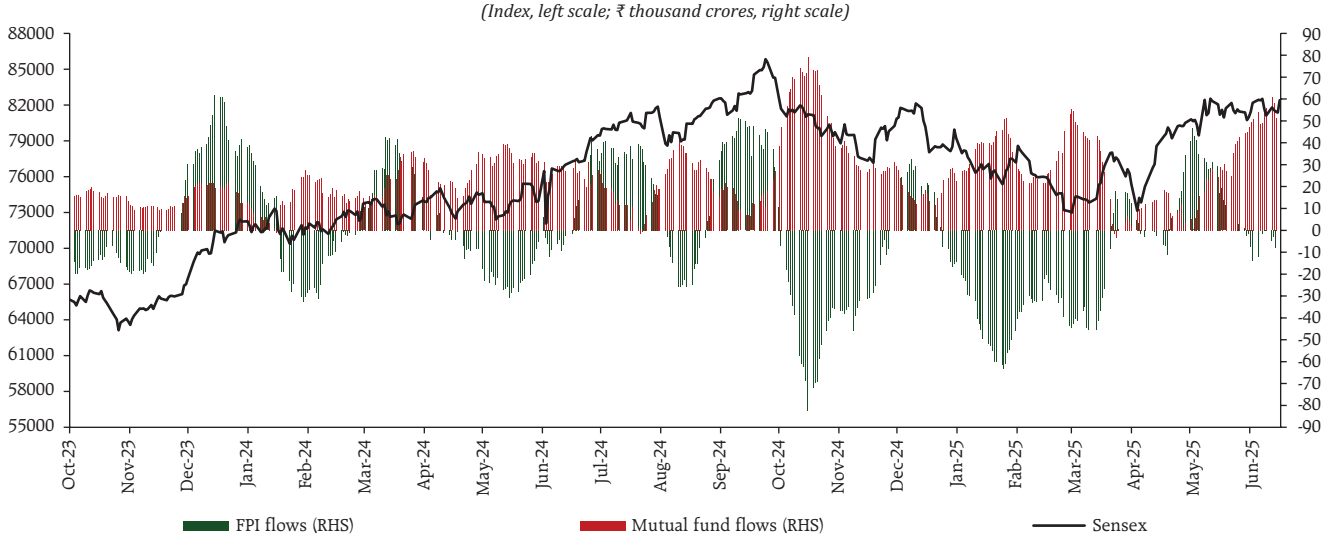


Source: RBI.

thereafter; however, larger-than-expected policy rate easing by the Reserve Bank led to an upward swing in markets, boosting the banking and financial sector stocks. Markets turned volatile subsequently amidst geopolitical tensions in the Middle East. Overall, Indian equity markets registered modest gains during the period May-June (up to June 20, 2025), with the BSE Sensex increasing by 2.7 per cent to close at 82,408 (Chart IV.7). The broader market indices outperformed the benchmark, with the BSE Midcap and BSE Smallcap indices gaining by 6.1 per cent and 10.5 per cent, respectively, during May-June (up to June 20, 2025).

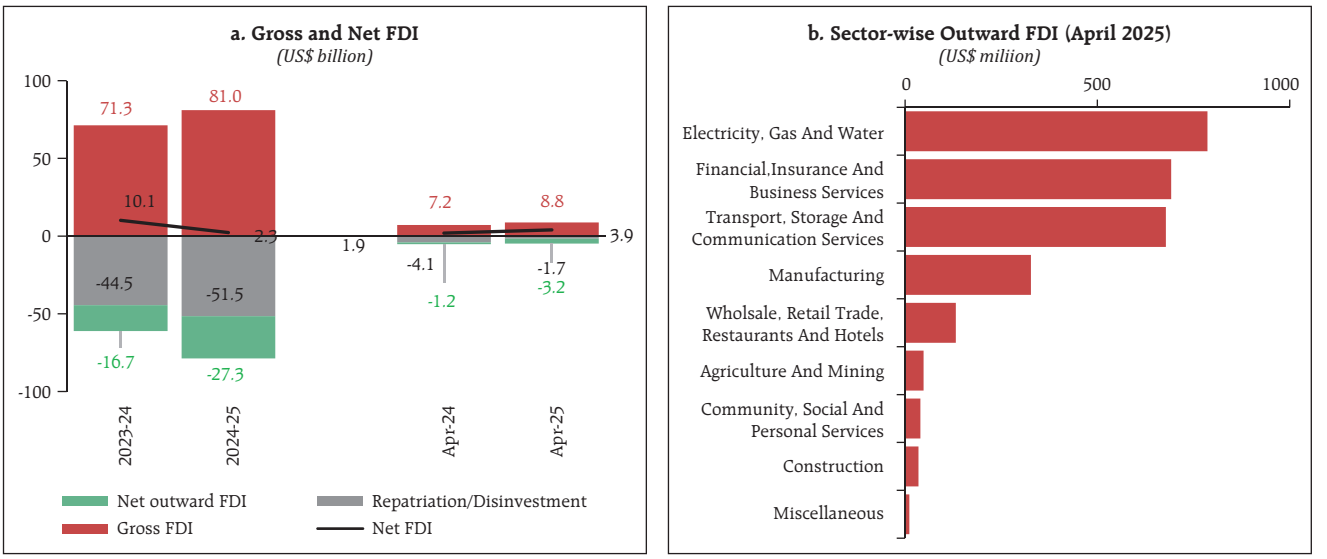
Chart IV.7: BSE Sensex and Institutional Flows

(Index, left scale; ₹ thousand crores, right scale)



Note: FPI and MF flows are represented on 15-days rolling sum basis.
Source: Bloomberg.

Chart IV.8: Foreign Direct Investment Flows



Source: RBI.

Foreign portfolio investors (FPIs) remained net buyers to the tune of ₹24,966 crore during May-June (up to June 20, 2025). Domestic institutional investors (DIIs), including mutual funds and insurance companies, also remained net buyers in the domestic equity markets to the tune of ₹1,24,429 crore during May-June (up to June 20, 2025).

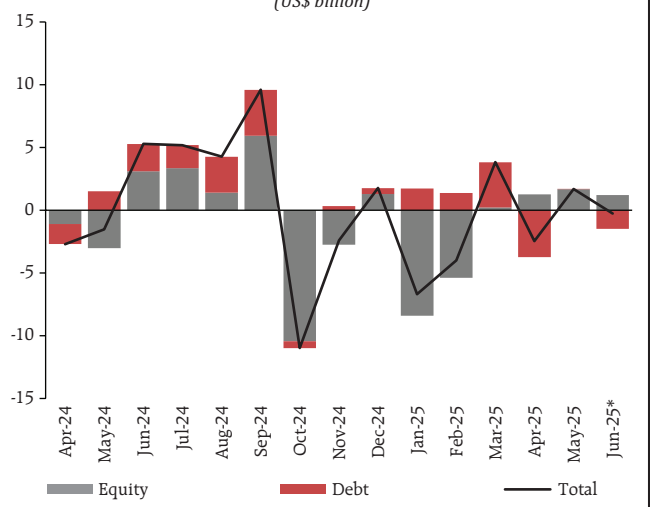
External Sources of Finance

Gross inward foreign direct investment (FDI) amounted to US$8.8 billion in April 2025, higher than US$5.9 billion in March 2025 and US$7.2 billion in April 2024 (Chart IV.8a). Manufacturing and business services accounted for nearly half of the gross FDI inflows in this month. Net outward FDI also increased, along with a moderation in repatriation. Top sectors for outward FDI included electricity, gas and water, and financial, insurance and business services, while major destinations included Singapore, Mauritius, and Germany (Chart IV.8b). Together, these movements resulted in net FDI inflows of US$3.9 billion in April 2025, more than double the level in April 2024. Furthermore, India ranked 16th globally in FDI inflows and recorded US$114 billion in greenfield investment in digital economy sectors over the last five years (2020-2024), the highest among all countries in the Global South.[17]

Foreign portfolio investment (FPI) recorded net inflows of US$1.7 billion in May 2025, driven

Chart IV.9: Foreign Portfolio Investments

(US$ billion)



Notes: 1. Debt also includes investments under the hybrid instruments.
2. *: Data up to June 20.

Source: National Securities Depository Limited (NSDL).

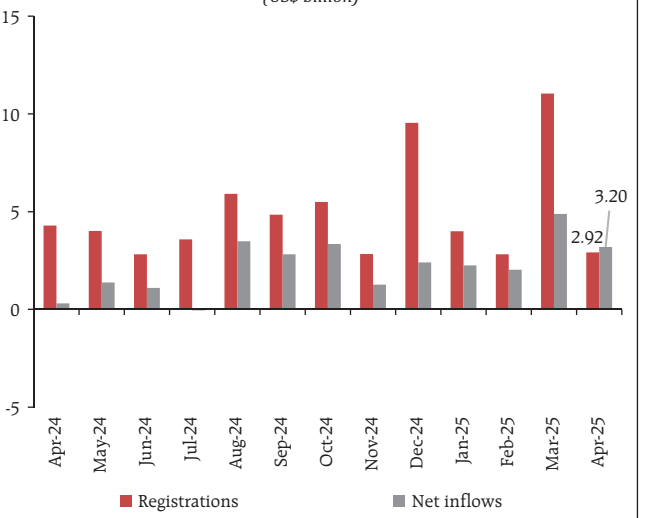
[17] World Investment Report, UNCTAD, 2025.

by the equity segment (Chart IV.9). Equities gained for the third consecutive month as the India-Pakistan ceasefire, the US-China trade truce, and better-than-expected corporate earnings results in Q4:2024-25 lifted investor sentiment and spurred portfolio rebalancing towards Indian assets. Telecommunication, services, and capital goods emerged as the top recipient sectors. The debt segment, which had experienced outflows in the previous month, observed a pause in net withdrawals in May, even as the yield differential between Indian and US government bonds remained below 2 per cent for most of the month.

External commercial borrowing (ECB) registrations slowed to US$2.9 billion during April 2025, down from US$11 billion in March 2025 and US$4.3 billion in April 2024. Despite the slowdown, inflows outpaced outflows, resulting in positive net flows of US$3.2 billion in April 2025 (Chart IV.10). Notably, 72 per cent of the total ECBs raised during April 2025 were intended for capital expenditure (capex), including on-lending and sub-lending for capex.

Chart IV.10: External Commercial Borrowings - Registrations and Flows

(US$ billion)



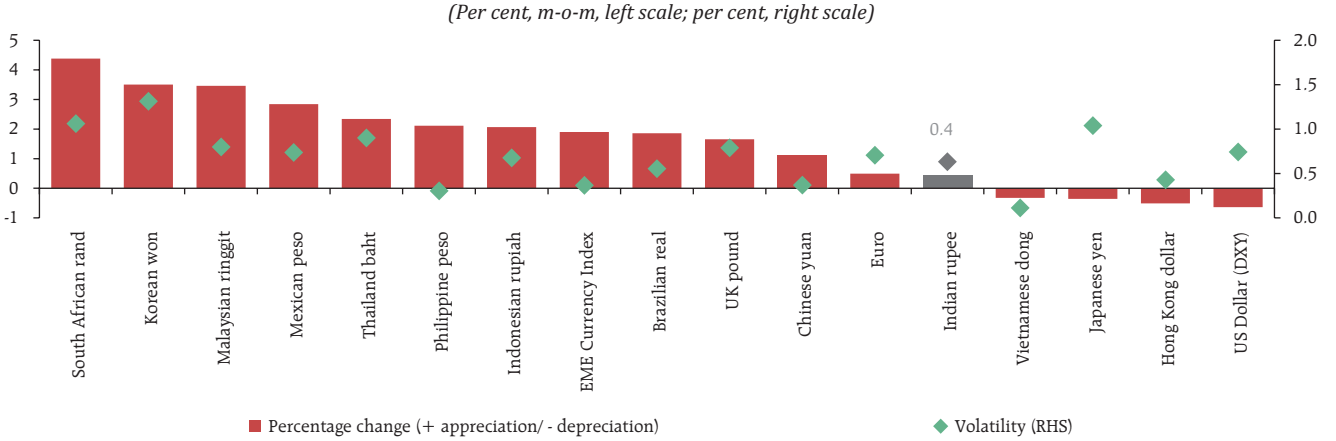
Source: Form ECB, RBI.

Foreign Exchange Market

The Indian rupee (INR) appreciated by 0.4 per cent (m-o-m) *vis-à-vis* the US dollar and exhibited low volatility during May 2025 (Chart IV.11). Uncertainty surrounding the US trade and its fiscal policy contributed to a general strengthening of EME currencies *vis-à-vis* the US dollar.

Chart IV.11: Movements in Major Currencies against the US Dollar in May 2025

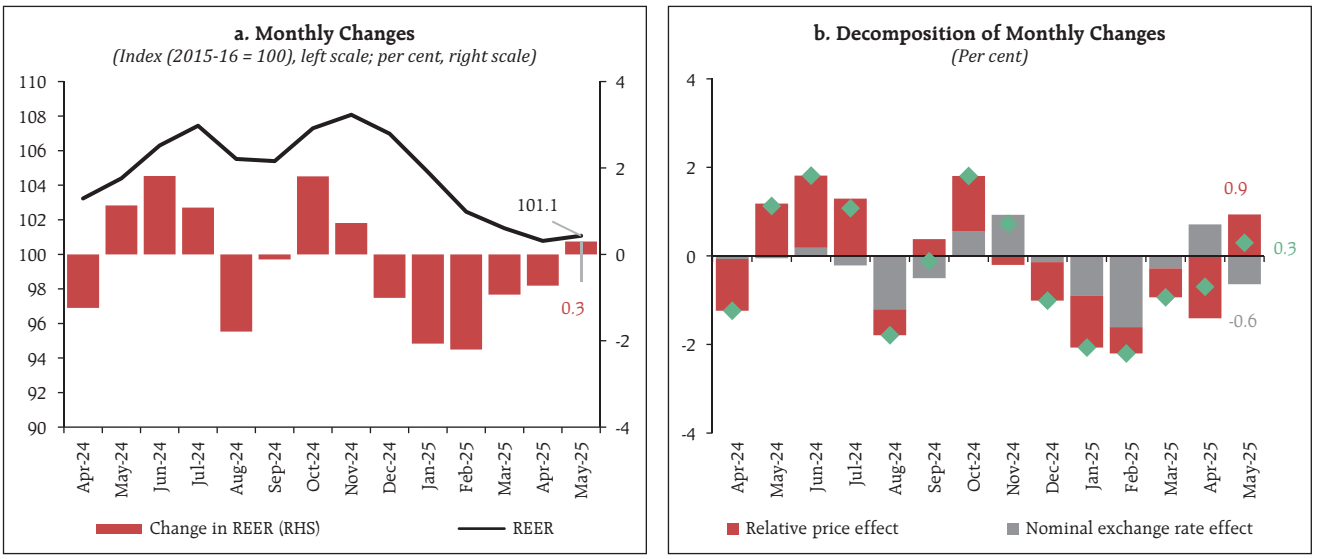
(Per cent, m-o-m, left scale; per cent, right scale)



Notes: 1. Appreciation/depreciation (m-o-m) calculated using monthly average exchange rates.
2. US dollar (DXY) measures the movements of the US dollar against a basket of major currencies (Euro, Japanese yen, British pound, Canadian dollar, Swedish krona, Swiss franc).
3. For each currency, volatility is measured as the coefficient of variation (100*Standard Deviation/Mean) using daily exchange rate data for the month of May 2025.

Sources: FBIL; Thomson Reuters; and RBI staff estimates.

Chart IV.12: Movements in the 40-Currency Real Effective Exchange Rate

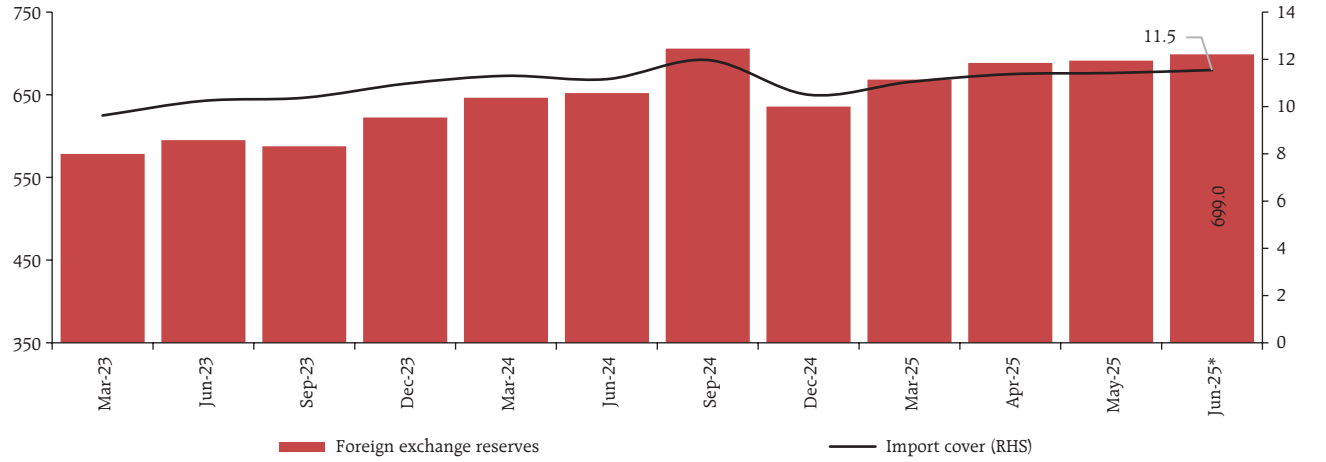


Source: RBI.

In real effective terms, the INR appreciated (m-o-m) by 0.3 per cent in May 2025 as India's inflation (on a m-o-m basis) was 0.9 percentage points higher than the weighted average inflation of its major trading partners, more than offsetting the depreciation in the nominal effective exchange rate (NEER) [Chart IV.12].

As on June 13, 2025, India's foreign exchange reserves stood at US$699 billion, providing a cover for more than 11 months of goods imports,[18] and for 97 per cent of external debt outstanding at end-December 2024 (Chart IV.13).

Chart IV.13: India's Foreign Exchange Reserves



Notes: 1. *: As on June 13, 2025.
2. The import cover data for December 2024 to June 2025 is based on annualised merchandise imports for the quarter ending December 2024, as per the balance of payments statistics.

Source: RBI.

[18] However, the import cover for goods and services was around nine months.

V. Conclusion

Protracted trade policy uncertainties and rising trade barriers pose the risk of significantly scarring the global economy. The intensifying geopolitical tensions too may further debilitate the already-weakened growth impulses. In this context, the trade policy outcomes in July, after the temporary tariff hiatus is over, and the future course of geo-political events would likely shape the medium-term economic prospects.

Amidst a challenging global environment and heightened uncertainty, the Monetary Policy Committee (MPC) in its meeting held during June 4-6, 2025, decided by a majority vote (5-1) to reduce the policy repo rate by 50 bps to 5.50 per cent to stimulate domestic private consumption and investment. A likely undershoot of inflation to below the target rate, at the margin, during the current financial year and evidence of further anchoring of inflation expectations provided the MPC with the policy space to decisively focus on growth by frontloading the rate cut.[19]

The MPC also decided to change the stance from accommodative to neutral, considering the very limited space to further support growth in current circumstances after the cumulative 100 bps reduction in the policy repo rate since February 2025. Going forward, as noted by the MPC in its resolution, the MPC decided to remain data-dependent to chart the future course of monetary policy and strike the appropriate growth-inflation balance.

[19] The MPC retained the real GDP growth projection for FY 2025-26 at 6.5 per cent. The headline CPI inflation projection for FY 2025-26 was revised downwards by 30 bps to 3.7 per cent. As per the survey of professional forecasters held in May 2025, headline CPI inflation is projected at 3.8 per cent for 2025-26 and at 4.2 per cent for 2026-27. The May 2025 round of the inflation expectations survey of households showed one-year ahead inflation expectations moderating by 20 bps. The May 2025 round of the rural consumer confidence survey also showed a moderation in the one year ahead inflation expectations by 40 bps (Annex Charts 10 and 11).

Annex

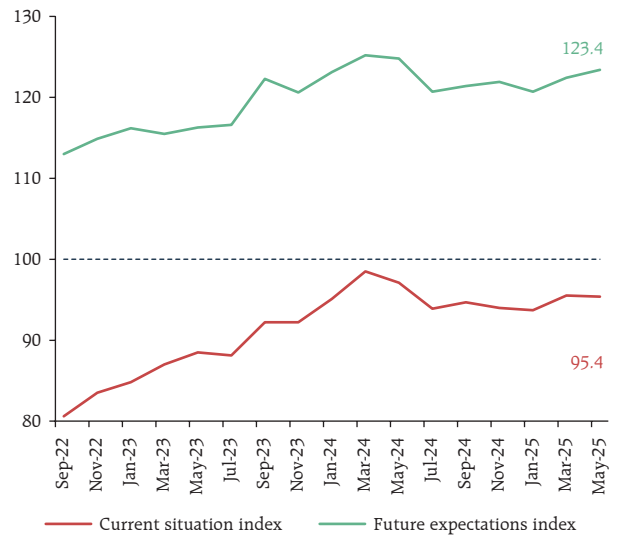
Chart A1: Rural Consumer Confidence Indices

(Index)

Source: RCCS, RBI.

Chart A2: Urban Consumer Confidence Indices

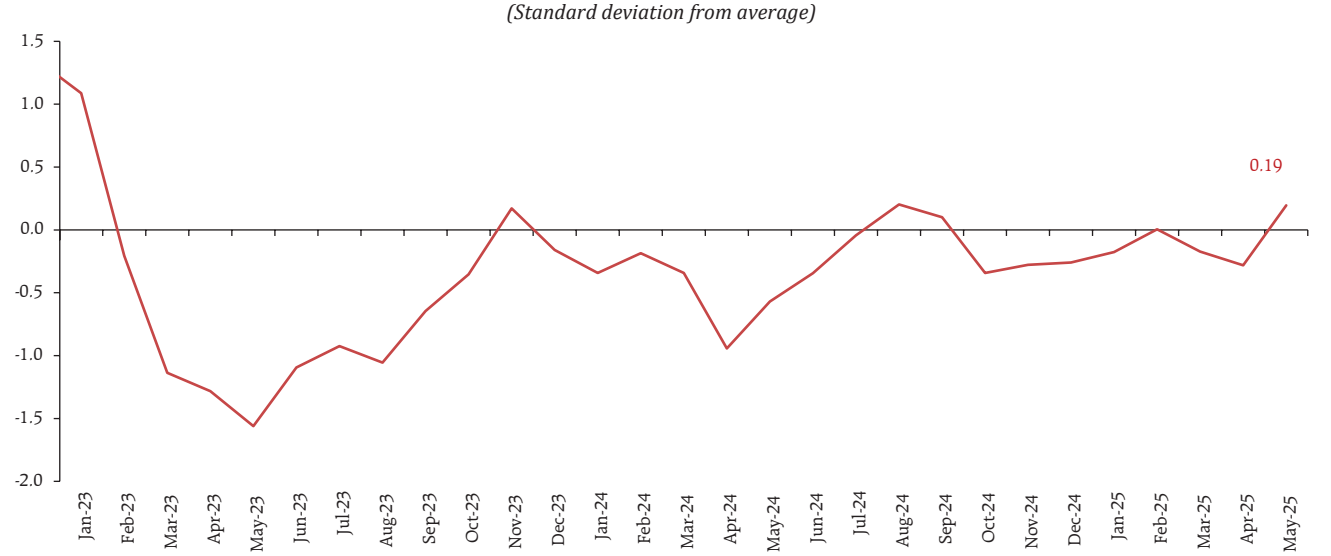
(Index)



Source: UCCS, RBI.

Chart A3: Global Supply Chain Uncertainty Index

(Standard deviation from average)



Source: Federal Reserve Bank of New York.

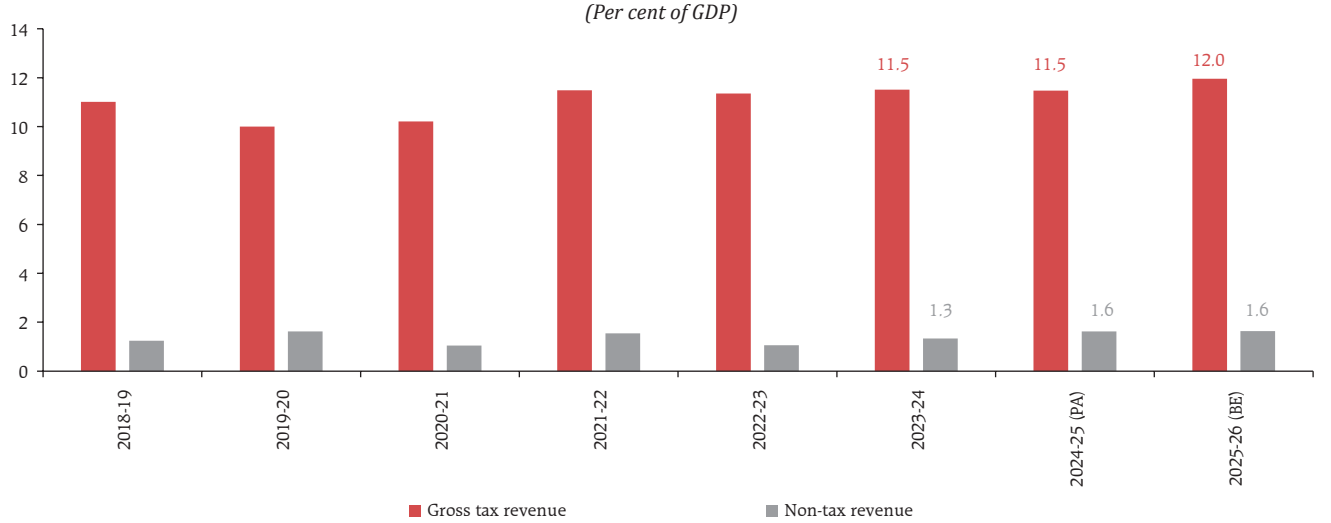
Chart A4: Inflation Gap (Actual *minus* Target)

(Percentage points)

Sources: Bloomberg; and RBI staff estimates.

Chart A5: Trend in Revenue Receipts of the Union Government (April-March, 2024-25)

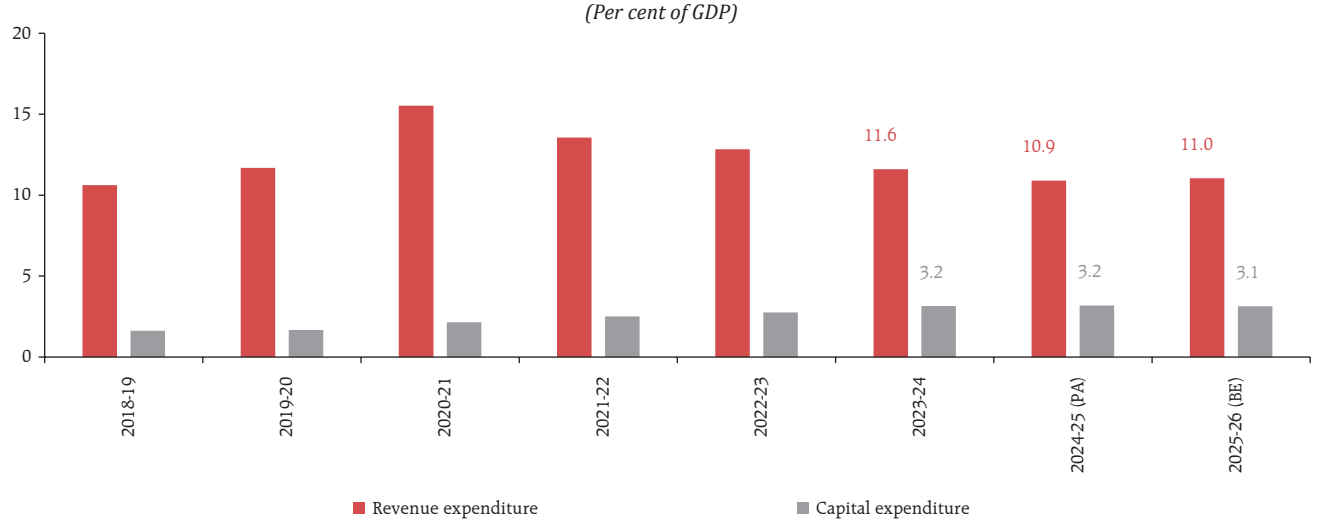
(Per cent of GDP)



Sources: Union Budget Documents; and CGA.

Chart A6: Trend in Expenditure of the Union Government (April-March, 2024-25)

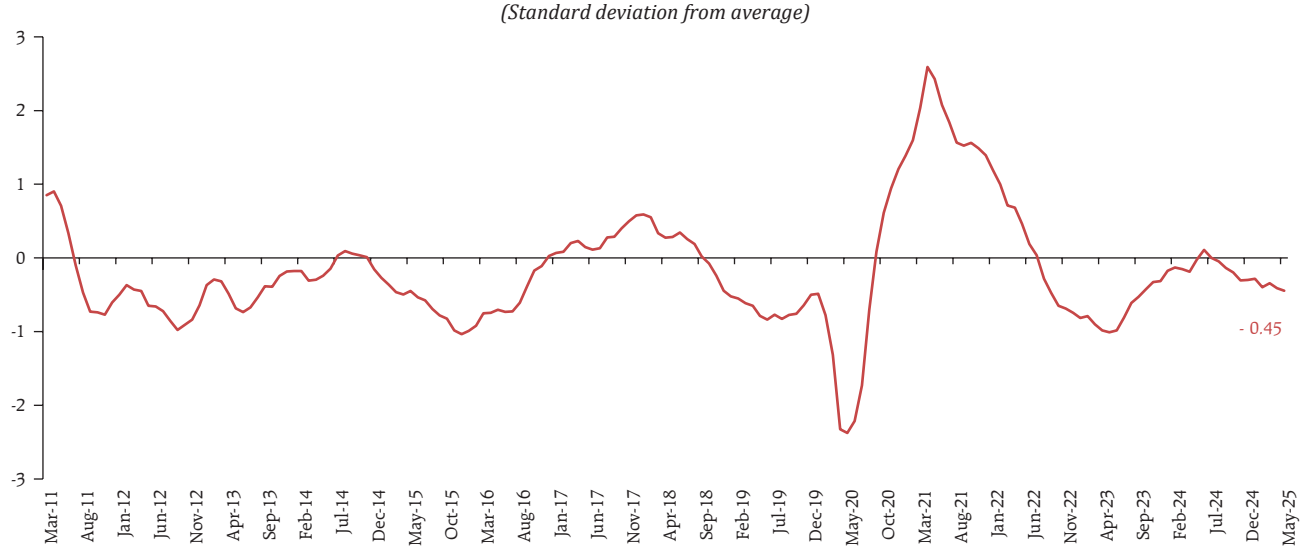
(Per cent of GDP)



Sources: Union Budget Documents; and CGA.

Chart A7: Index of Supply Chain Pressures for India

(Standard deviation from average)

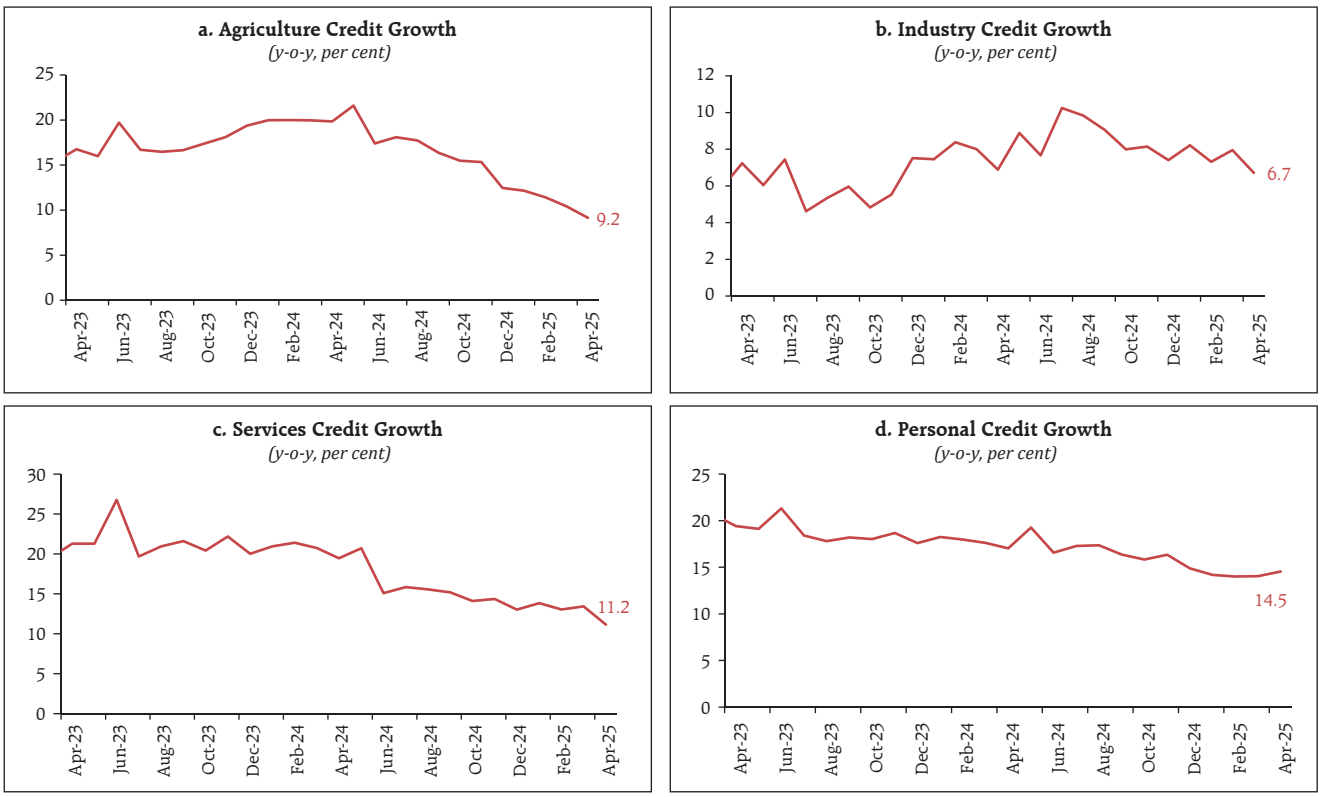


Source: RBI staff estimates.

Chart A8: PMI: Input and Output Prices

Note: A level of 50 indicates no change in activity, while a reading above 50 signals expansion, and below 50 suggests contraction.
Source: S&P Global.

Chart A9: Sectoral Deployment of Bank Credit

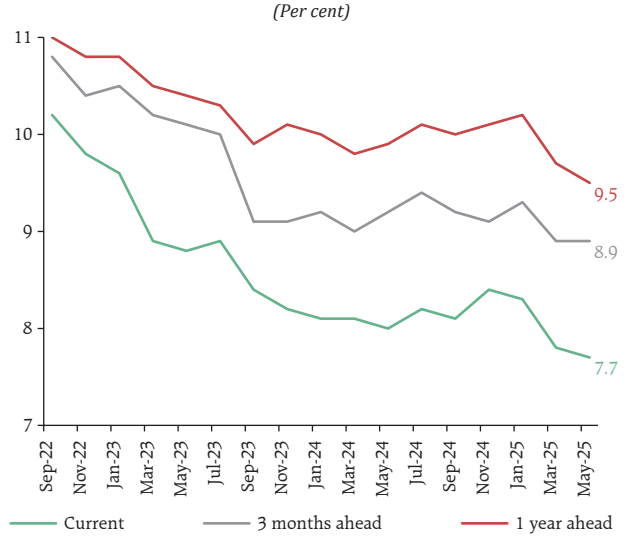


Notes: 1. Data are provisional. Sectoral non-food credit data is based on sector-wise and industry-wise bank credit (SIBC) return, which covers select banks accounting for about 95 per cent of total non-food credit extended by all SCBs, pertaining to the last reporting Friday of the month.
2. Data exclude the impact of the merger of a non-bank with a bank.

Source: RBI.

Chart A10: Households' Median Inflation Expectations

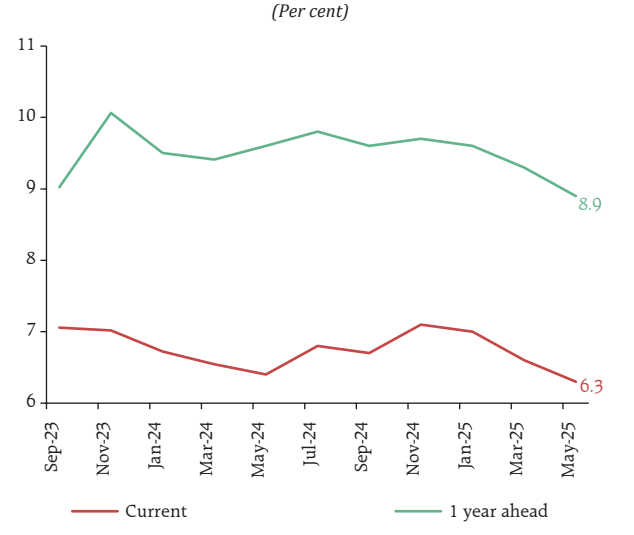
(Per cent)



Source: IESH, RBI.

Chart A11: Rural Households' Median Inflation Expectations

(Per cent)



Source: RCCS, RBI.

Financial Conditions Index for India: A High-Frequency Approach

by Pulastya Bandyopadhyay, Avnish Kumar, Pankaj Kumar and Indranil Bhattacharyya ^

This article attempts to construct a financial conditions index (FCI) for India at daily frequency, using select indicators from the money, G-sec, corporate bond, equity, and forex markets. The primary objective is to construct a composite indicator that tracks overall conditions in financial markets at a high frequency. The FCI assesses the degree of relatively tight or easy financial market conditions with reference to its historical average since 2012. The estimated FCI traces movements in financial conditions in India across both periods of relative calm as well as crisis episodes. The index suggests that in the aftermath of the pandemic, exceptionally easy financial condition was driven by the combined impact of amiable conditions across all market segments. Financial conditions continued to remain relatively easy since mid-2023 before firming up from November 2024. In the current financial year, however, it has remained congenial riding on a buoyant equity market and a money market suffused with liquidity.

Introduction

A financial conditions index (FCI) is a summary measure that encapsulates the information contained in a broad array of financial variables and helps to gauge the relative tightness or ease in overall financial conditions. Monetary policy actions impact financial conditions through the usual channels of monetary transmission although financial conditions, independent of policy decisions, often change because of news events, macroeconomic data releases and market microstructure issues. Thus, the FCI is a valuable input for monetary policy as it provides lead information on real economic activity, over and above the direct effects of monetary policy (Hatzius *et al.*, 2010). It can, therefore, serve as a guide on the effective stance of policy (Bowe *et al.*, 2023).

One of the key takeaways of the Global Financial Crisis (GFC) was that financial innovation had made it difficult to capture broad financial conditions in a small number of variables covering traditional financial markets. Thus, FCI emerged as a key tool in assessing macro-financial conditions in the post-GFC era. Apart from gauging the state of financial markets, FCI has been used by policymakers and practitioners to predict the future state of the economy as well as the risks associated with economic forecasts. The use of FCI in the conduct of monetary policy, forecasting models and stress testing is still limited among emerging market economy (EME) central banks compared to their advanced economy (AE) counterparts. Most studies in the Indian context relied on monthly or quarterly data to construct FCI, thus constraining their use in reacting to sudden market developments, real time policy making and forecasting.

In view of the above, this article attempts to construct a new FCI for India at daily frequency using select indicators from various market segments. The primary objective is to construct a summative measure that is able to track overall conditions in financial markets. The paper is structured in the following manner: Section II presents an overview of the existing literature on construction of FCIs in the global as well as the Indian context. The choice of variables and the empirical methodology are discussed in Section III. Section IV evaluates the robustness of the derived measure and discusses its features and drivers while Section V presents some concluding observations.

^ The authors are from the Reserve Bank of India. They are grateful to an anonymous referee for comments and Priyanka Sachdeva for data support. The views expressed in this article are those of the authors and do not represent the views of the Reserve Bank of India.

II. Related Literature

The following discussion provides an overview of the existing literature on financial condition indices, with a focus on the methodological approaches followed by global as well as Indian studies in this area. A vast literature has proliferated exploring the construction of FCIs across AEs; however, EMEs in general and India in particular have relatively drawn limited attention. As mentioned before, the concept of FCI gained prominence in the aftermath of the GFC. International institutions and multilateral bodies like the International Monetary Fund (IMF), Organization for Economic Co-operation and Development (OECD), Bank for International Settlements (BIS) and several AE central banks have since refined and institutionalised FCIs as part of their macro-financial surveillance toolkit.

Early work derived FCIs for the G7 countries as a weighted average of the short-term real interest rate, the effective real exchange rate, and real property and share prices by looking at reduced form coefficient estimates and vector autoregression (VAR) impulse responses (Goodhart and Hofmann, 2001). A Goldman Sachs FCI was constructed as a weighted sum of a short-term bond yield, a long-term corporate yield, exchange rate, and a stock market variable (Dudley and Hatzius, 2000; Dudley *et al.,* 2005). Deutsche Bank uses principal component analysis (PCA) for constructing the index from a set of seven financial variables that included the exchange rate, bond, stock, and housing market indicators (Hooper *et al.*, 2007). Developed in 2008, the OECD FCI is a weighted sum of six financial variables with their weights being in proportion to their impact on GDP (Guichard and Turner, 2008; Guichard *et al.*, 2009). Similarly, Citi Financial Conditions Index is a weighted sum of six financial variables, *viz.*, corporate spreads, money supply, equity values, mortgage rates, the trade-weighted dollar, and energy prices. The weights were determined according to reduced form forecasting equations of the Conference Board's index of coincident indicators (D'Antonio, 2008). The Bloomberg FCI index, on the other hand, is an equally weighted sum of three major sub-indices including indicators from money, bond, and equity markets (Rosenberg, 2009). Vector autoregressions and impulse-response functions were used to construct an FCI for the US; in addition to the usual indicators, credit availability from bank lending survey was also used to construct the FCI (Swiston, 2008).

An FCI for the Asian economies was constructed based on an unrestricted VAR using financial variables *viz.*, private sector credit growth, real lending rates, interest rate spreads, lending standards, equity price movements and real effective exchange rate changes (IMF, 2010). Subsequently, IMF staff economists have combined this method with a dynamic factor model (DFM) to further develop an index for the Asian economies (Osorio *et al.*, 2011). These institutions have periodically improved the methodology to construct their individual FCIs. Several studies on the US, the Euro Area, Sweden, Germany and Norway further refined the methodology and updated their indices (Hatzius *et al.*, 2010; Brave and Butters, 2011; Alsterlind *et al.*, 2020; Metiu, 2022; Bowe *et al.*, 2023).

In the Indian context, the work on FCI gained traction over the past decade. A financial conditions index was first developed for India using monthly data on money, bond, foreign exchange and stock markets, using a PCA approach (Shankar, 2014). Subsequently, a monthly financial conditions composite indicator was constructed based on ten indicators by using PCA to extract the top factors containing maximum information (Roy *et al.*, 2015). VAR-based weighted sum approach for five indicators as well as PCA using a larger set of ten indicators was used to estimate FCI at a monthly frequency (Khundrakpam *et al.*, 2017). Similarly, a VAR-based weighted sum approach and a DFM of five indicators were employed to compute FCI at a quarterly frequency (Kumar *et al.*, 2022). In contrast, the CII-IBA Financial Conditions Index (FCI) is

based on a quarterly Financial Conditions Expectation Survey of major banks and financial institutions on their expectations of key financial and economic variables that determine financial conditions in the Indian economy.

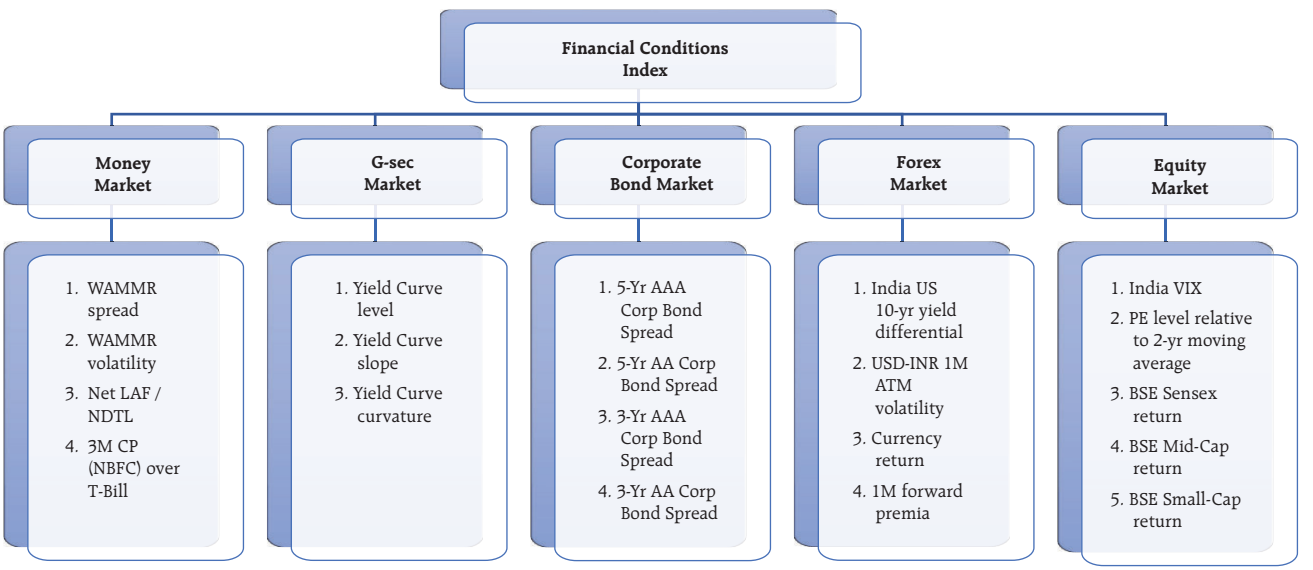
The construction of FCIs differ across studies in terms of the aim of the measure, indicators selected, data frequency and econometric methodologies. The range of indicators included in the construction of various FCIs differ across studies, although there are some commonalities. Most FCIs include some measures of interest rates, risk premia, equity market performance, exchange rates and volatility measures. In terms of methodology, while early studies mostly used the weighted-sum approach and PCA, recent literature has relied mostly on DFM or time-varying parameter models to construct FCIs. In the weighted-sum approach, the weight of the chosen indicator is generally assigned based on the impact it has on the target variable such as the real GDP. These estimates or weights have been generated in a variety of ways, including simulations using large-scale macroeconomic models, VAR models, or reduced-form demand equations. On the other hand, the PCA extracts a common factor from a group of several financial variables. PCA is purely a static estimation tool and does not incorporate information along the time dimension for constructing the index. In contrast, DFM allows for the incorporation of time-series dynamics of some finite order to extract the latent factors (Brave and Butters, 2011).

III. Constructing a Financial Conditions Index

III.1 Selection of Variables

The existing literature provides valuable insights for selecting appropriate variables in the construction of FCI. An FCI for India is constructed using twenty financial market indicators at daily frequency. The chosen indicators represent five market segments, *viz.*, (i) the money market; (ii) the Government securities (G-sec) market; (iii) the corporate bond market; (iv) the forex market; and (v) the equity market (Chart 1). To some extent, the selection of variables is also influenced by the primary objective of this study, *i.e.*, to construct a high frequency FCI, thus necessitating the use of financial indicators that are readily available at a daily frequency.

Chart 1: Financial Market Indicators



a. Money Market

The money market assumes special significance in gauging financial market conditions as it is the fulcrum of monetary policy operations – most central banks operationalise monetary policy *via* the overnight money market. Monetary policy actions and stance get seamlessly conveyed to the overnight market, which then propagates through the money market spectrum. Hence, the operating target of monetary policy in India, *i.e.*, the weighted average call rate (WACR) becomes an important indicator of the money market. The rates in the collateralised segment of the overnight market track the movements in WACR. Also, the volume in collateralised money market – triparty repo and market repo – are significantly higher, which necessitates their inclusion; hence, the weighted average money market rate[1] (WAMMR) is considered for our analysis. The WAMMR captures the cost of overnight funds for banks and non-banks; however, it is not the level of WAMMR but its deviation from the policy repo rate which is reflective of financial conditions in the overnight money market. Hence, we include WAMMR spread over the policy repo rate as one of the indicators. Volatility in WAMMR and liquidity conditions [net balances under the liquidity adjustment facility (LAF) adjusted for net demand and time liabilities (NDTL)] are also considered. In order to capture the credit risk at the short end of the interest rate spectrum, the spread of 3-month CP rate over 3-month T-bill rate is also included.

b. G-sec Market

The importance of the G-sec market lies in providing the risk-free term structure for pricing of financial instruments issued by other sectors of the economy. It also provides an avenue for raising the financing requirements of the government in meeting the budgetary gap. Any change in G-sec yields would alter the borrowing cost for the government as well as other market players. Hence, indicators which capture the dynamics of G-sec market are included in the FCI. G-sec market is represented by the latent factors of the sovereign yield curve *i.e.*, level, slope, and curvature. The level[2] of the yield curve has a positive association with financial conditions as an increase in interest rate increases financing costs, thus tightening financial conditions. The slope[3] of the yield curve is the term spread that captures the difference between long term and short-term yields. Theoretically, if long-term rates are notably higher than short-term rates, it indicates that market expects short-term rates to increase in the near future, leading to tighter financial conditions. Similarly, higher curvature[4] implying greater concavity of the yield curve and higher interest rates in the middle of the term structure suggests tighter financial conditions, besides reflecting *market segmentation* and *preferred habitat* of investors. Contrary to theoretical prediction, however, higher slope and curvature contribute to easier financial conditions in our empirical exercise, as they mostly reflect very low short-term rates.

c. Corporate Bond Market

The corporate bond market provides an alternative avenue to raise medium and long-term funds for private sector participants. Hence, bond yields serve as a barometer for the health of the credit market. The credit spreads – difference between corporate bond yields and G-sec yields of corresponding maturity – offer insights into financial conditions. The change in credit spreads often signal change in credit risk perceptions and investor sentiments about economic conditions. This segment is represented by credit risk indicators across various ratings and tenors. Increase in credit risk premia reflects higher risk associated with the private sector *vis-à-vis* the government. A higher

[1] WAMMR is the weighted average of overnight money market rates with the weights being the respective volumes in each segment.

[2] Average yield of 91-day t-bill, and 3, 5, 10 and 30-year dated securities.

[3] Difference in yield between 10-year g-sec and 91-day t-bill.

[4] Measured as 2*(10-year yield) – (91-day t-bill yield + 30-year yield).

credit risk premium is indicative of tighter financial conditions making borrowing more expensive for corporates.

d. Forex Market

Forex market indicators include India-US yield differential, INR return[5], 1-month forward premia and 1-month at-the-money (ATM) implied volatility to capture financial conditions in the foreign exchange market. Higher India-US yield differential and rupee depreciation are assumed to be associated with tighter financial conditions in our analysis. This is because an increase in yield differential reflects relatively higher domestic interest rate, which compensates for the expected rupee depreciation and country risk premium under the interest rate parity condition. The impact of rupee depreciation works through trade and finance channels. Since, the trade channel works with a lag and is found to be weaker, we have considered the finance channel to be predominant in the short run. Rupee depreciation leads to an increase in debt servicing cost, thus leading to tighter financial conditions. Further, 1-month ATM implied volatility is a measure of market expectations of future volatility of the currency exchange rate. Higher values depict more volatility and hence more uncertainty. Increase in 1-month ATM volatility and forward premia is associated with tighter financial conditions.

e. Equity Market

The equity market is represented mostly by price indicators capturing returns and volatility. The equity market indicators are return [Sensex, midcap and small cap return, price to earnings (PE) ratio] and volatility (India VIX). Conditions in the stock market affect the ability of corporates to raise fresh capital. Higher returns attract greater FII and FPI inflows, which affect valuations and have a positive impact on the overall market sentiment. Higher stock prices enhance wealth, which may boost consumer spending and business investment. Therefore, higher return in the equity market is associated with easier financial conditions. The PE ratio is indicative of how much investors are willing to pay per rupee of earnings. Higher values are realised when market sentiments are buoyant. Decline in the PE ratio and increase in volatility are associated with tighter financial conditions. Hence, the confluence of widening spreads in money and bond market, elevated market volatility, diminishing asset returns and shrinking volumes is reflective of a tightening in overall financial conditions.

III.2 Empirical Methodology

This study uses daily data of twenty financial market indicators for the period January 1, 2012 to May 30, 2025 to construct FCI for India. All indicators are factored into the index in such a manner so that an increase in these indicate a tightening of financial conditions. Accordingly, the transformations are carried out for select indicators so that a higher value of the transformed variable indicates tighter financial conditions (Appendix Table 1). We employ both PCA and DFM approach to estimate the FCI.

(i) *PCA Approach*

We use PCA to extract the common factor from the selected twenty indicators. PCA is a statistical technique used to reduce the dimensionality of a dataset by transforming a large set of correlated variables into a smaller set of uncorrelated components. These PCs are linear combinations of the original variables that capture the maximum variance in the data, thereby retaining most of the information embedded in the data while reducing its dimensionality. The loadings associated with each principal component – derived from the eigenvectors of the data's covariance or correlation matrix – are used to construct indices or scores that summarize the information contained in the original variables.

[5] Y-o-Y change in INR/USD rate [appreciation (+) / depreciation (-)].

Table 1: Contribution of Market Segments in the FCI

Market Segment	Contribution (in per cent)
G-Sec	16.4
Corporate Bond	26.0
Forex	21.6
Equity	23.0
Money	13.0

Source: Authors' calculations.

In our analysis, the first principal component explains about 40 per cent of the total variation in the chosen indicators. The variable loadings (Appendix Table 2) are observed to be on expected lines for most indicators, except for those of the slope and curvature of the yield curve. Contrary to theoretical prediction, higher slope and curvature contribute to easier financial conditions in our empirical exercise, as they mostly reflect lower rates at the short end of the yield curve. The contributions of the various market segments in the FCI are found to be well distributed (Table 1).

Since PCA is purely a static estimation tool and does not incorporate information along the time dimension, we also use DFM to estimate the FCI.

(ii) *DFM Approach*

DFM is widely used to extract a common set of underlying trends which captures the bulk of covariation among a large set of time series indicators. DFM lends itself naturally to the problem of index construction, as in a DFM with a single underlying unobserved factor, the estimate of the latent factor stands for an index of the co-movement in the indicators (Stock and Watson, 2016). We use a DFM framework for the construction of the FCI:

$$X_t = \lambda(L) f_t + \xi_t \quad (1)$$

$$f_t = \psi(L) f_{t-1} + \eta_t \quad (2)$$

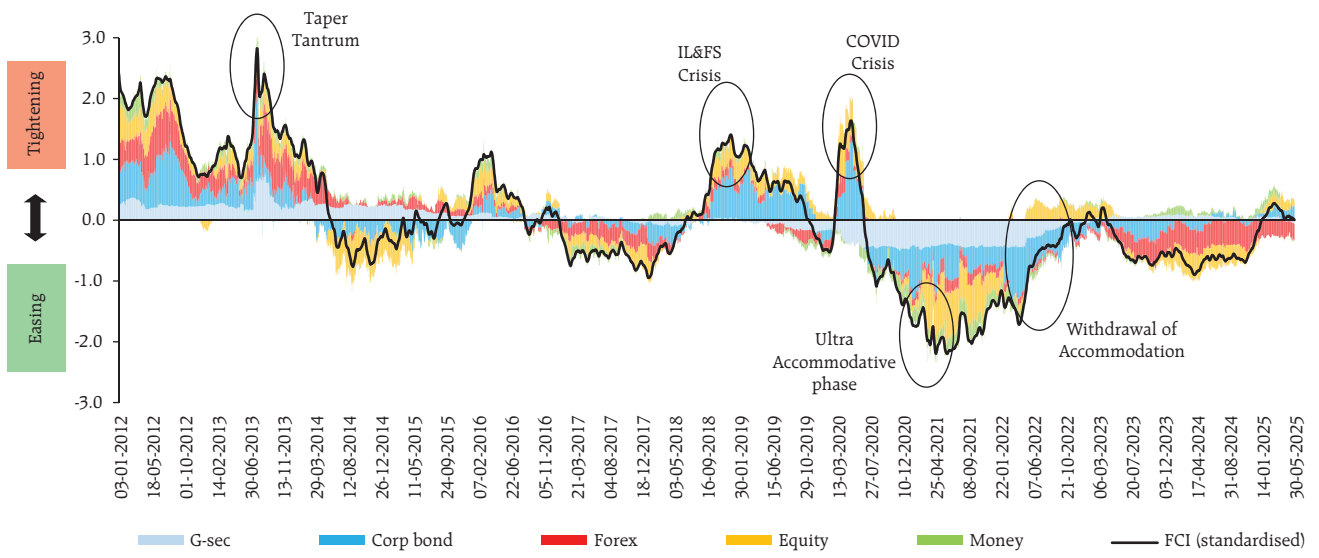
where, X_t is a $N \times 1$ vector of observed time series variables, variations in which are explained by a reduced number of unobserved (latent) factors and mean-zero idiosyncratic components ξ_t. The lag polynomials $\lambda(L)$ and $\psi(L)$ are $N \times q$ and $q \times q$ matrices, respectively, and η_t is a $q \times 1$ vector of serially uncorrelated mean zero innovations to the factors. The idiosyncratic disturbances are assumed to be uncorrelated with factor innovations at all leads and lags, that is $E(\xi_t \eta'_{t-k}) = 0$ for all k. The ith row of $\lambda(L)$ is the dynamic factor loading for the ith series X_{it}. The q unobserved (latent) factors f_t are the source of co-movement across observed indicators, which is the identification strategy to estimate this state-space model. We estimate the DFM for a single common factor, which is the FCI, and allow for two lags in Equation (2).[6] Following the literature, we employ a two-step estimator in which the first step involves estimating the parameters of the model using an ordinary least square (OLS) on principal components and, in the next step, the factors are estimated using the Kalman filter and smoother (Doz *et al.*, 2011). The factor loadings for the chosen indicators are presented in Appendix Table 3. In our empirical exercise, the FCI estimated using PCA broadly tracks the FCI estimated using the DFM approach. We present our results for the FCI obtained from the DFM.

IV. Evaluation of the FCI

FCI is a broader metric of the state of financial markets as it captures the interaction of financial conditions and economic activity. The index gives a sense of how tight or loose financial markets are relative to their historical average. The FCI provides a metric based on its historical average; in this context, a zero value of FCI corresponds to a financial system operating at the historical average level of all the financial indicators included in the FCI, *i.e.*, essentially, a "neutral" financial condition. A higher positive value of the FCI is indicative of tighter financial conditions. To present our results, we use the standardised FCI. Standardisation helps in interpreting the changes in financial condition in terms of standard deviation

[6] The model is estimated using the "dfms" package in R.

Chart 2: FCI and its Drivers



Source: Authors' calculations.

units. For example, within our sample period, financial condition was at its tightest at end-July 2013 during the *taper tantrum* episode, with the estimated standardised FCI at 2.826 – almost a 3-standard deviation tightening relative to the historical average. On the other hand, the FCI stood at -2.197 at mid-June 2021 – indicating the exceptionally easy financial conditions post-Covid. Chart 2 plots the estimated FCI and the drivers[7] of the financial conditions. To assess the reliability of the newly constructed index, the following analysis examines the performance of the index through a narrative approach.

The Index through History

One way to evaluate the newly constructed index as a measure of financial conditions is to follow a narrative approach and link it to significant events in the Indian financial system over the sample period. The estimated FCI closely tracks the evolution of financial conditions in India over the years and captures the key turning points. Specific periods of crisis as well as periods of relative calm are well captured by the index.

The peaks in FCI are associated with major events like the *taper tantrum* in 2013, stress in the non-banking financial companies (NBFC) sector during the Infrastructure Leasing and Financial Services (IL&FS) episode and the onset of the COVID-19 pandemic. During May to July 2013, apprehensions of the likely tapering of US bond purchases under quantitative easing (QE) triggered outflows of portfolio investment from EMEs including India, particularly from the debt segment. This prompted increase in credit risk premiums in bond market and pressures on INR. The exceptional tightening of financial conditions during the *taper tantrum* was primarily driven by bond and forex market (Chart 2). During the IL&FS episode, bond and equity markets were the major drivers of tightening financial conditions. Default by IL&FS in September 2018 led to panic in the bond market amidst tight liquidity conditions in the system, thereby increasing the credit risk premium. The tremors were felt in the equity market also as retail

[7] To decompose the changes in the FCI into contribution by the indicators, we regress the estimated FCI on the indicators and estimate the coefficients using OLS. Contribution of a market is derived as the sum of the contributions of its constituent indicators.

investors started selling shares of other NBFCs and redemption pressures grew on mutual funds.

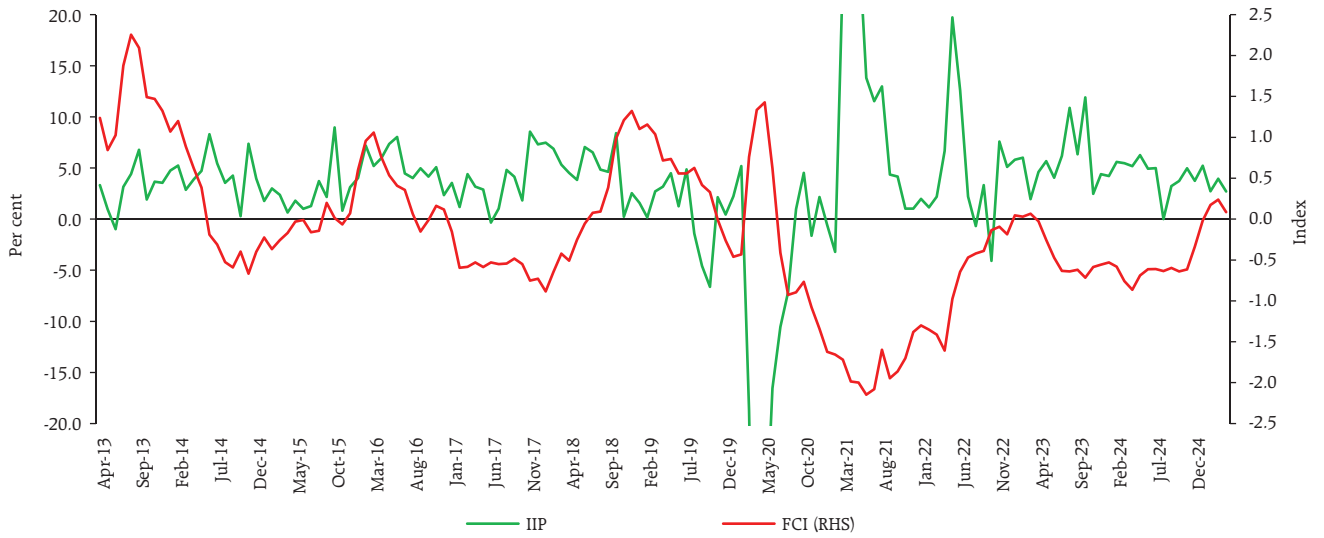
The next peak in the index is evident during the early COVID-19 period. The onset of the COVID-19 pandemic resulted in seizure of economic and trading activity that triggered market turmoil on an unprecedented scale. The tightening of financial conditions at the beginning of the Covid period was driven by a sharp sell-off in the equity and corporate bond markets. The exceptionally easy financial condition that followed this tightening was driven by the combined impact of easing across all market segments, facilitated by the conventional and unconventional measures of the Reserve Bank during 2021-2022. The conditions continued to remain relatively easy since mid-2023 before firming up from November 2024 on account of the relative tightness in equity, bond and money markets triggered by the rising US exceptionalism after the presidential elections. After peaking in early March 2025, the FCI has since reverted to its historical average, suggesting close to neutral financial conditions. The major drivers of the easing during this period were easy money market conditions due to large liquidity injection by the RBI, change in the policy rate and the stance, followed by a buoyant equity and G-Sec market.

FCI and Economic Activity

Apart from being a composite indicator of financial conditions, the utility of FCI also lies in its ability to predict or serve as the lead indicator of economic activity. Fluctuations in financial conditions are transmitted to the real economy; accordingly, any change in FCI should correspond to variations in real economic indicators. In our preliminary analysis to evaluate the robustness of FCI, we check the efficacy of FCI as the lead indicator of economic activity proxied by the growth of index of industrial production (IIP). In doing so, we check whether there is any correlation between the FCI and IIP growth. Chart (3) illustrates that IIP growth and FCI exhibit a generally inverse relationship over the observed period, as also evidenced by a Pearson correlation coefficient of (-) 0.32.

Moreover, results from Granger causality test indicate that FCI granger causes IIP growth, suggesting a unidirectional predictive relationship between the two (Appendix Table 4).

Chart 3: FCI and IIP Growth



Note: Data on IIP growth during Covid is not captured in the chart.
Source: RBI; and Authors' calculations.

V. Conclusion

The newly constructed FCI for India assesses the degree of relatively tight or easy financial market conditions with reference to its historical average since 2012. The FCI is based on twenty financial market indicators at daily frequency for a long period and closely tracks the turning points in financial conditions, as observed across major episodes in the sample period. Further work in this regard would incorporate quantity variables and lower frequency indicators, and the predictive power of financial conditions as a lead indicator of future economic activity will be evaluated with the objective of onboarding this index as a regular input for monetary policy formulation in India.

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Appendix

Table 1: Financial Indicators

Sr. No.	Indicator	Transformation	Source
	Money Market		
1.	WAMMR Spread over Repo rate	N	RBI
2.	3M CP Spread over 3M T-bill Rate	N	Bloomberg
3.	Net LAF adjusted for NDTL	In negative terms	RBI
4.	WAMMR Volatility	N	RBI
	G-Sec Market		
5.	Yield curve level	N	Bloomberg
6.	Yield curve slope	N	Bloomberg
7.	Yield curve curvature	N	Bloomberg
	Corporate bond Market		
8.	Spread of 3-year AAA CB over 3-yr G-sec	N	Bloomberg
9.	Spread of 3-year AA CB over 3-yr G-sec	N	Bloomberg
10.	Spread of 5-year AAA CB over 5-yr G-sec	N	Bloomberg
11.	Spread of 5-year AA CB over 5-yr G-sec	N	Bloomberg
	Equity Market		
12.	BSE Sensex return	In negative terms	Bloomberg
13.	BSE Mid-Cap return	In negative terms	Bloomberg
14.	BSE Small-Cap return	In negative terms	Bloomberg
15.	PE level relative to 2yr moving average	Reciprocal of PE level	Bloomberg
16.	India VIX	N	
	Forex Market		
17.	India US 10yr yield differential	N	Bloomberg
18.	USD-INR 1M ATM volatility	N	Bloomberg
19.	Currency return	In negative terms	Bloomberg
20.	1M forward premia	N	Bloomberg

Note: All indicators are transformed in a manner such that an increase in these indicate relative tightening of financial conditions. 'N' denotes no transformation.

Table 2: Variable Loadings (from PCA)

Indicator	Variable Loadings
Money Market	
WAMMR Spread over Repo rate	0.165
3M CP Spread over 3M T-bill Rate	0.173
Net LAF adjusted for NDTL	0.250
WAMMR Volatility	0.098
G-Sec Market	
Yield curve level	0.244
Yield curve slope	-0.228
Yield curve curvature	-0.230
Corporate bond Market	
Spread of 3-year AAA CB over 3-yr G-sec	0.314
Spread of 3-year AA CB over 3-yr G-sec	0.256
Spread of 5-year AAA CB over 5-yr G-sec	0.220
Spread of 5-year AA CB over 5-yr G-sec	0.219
Equity Market	
BSE Sensex return	0.233
BSE Mid-Cap return	0.259
BSE Small-Cap return	0.279
PE level relative to 2yr moving average	0.141
India VIX	0.107
Forex Market	
India US 10yr yield differential	0.175
USD-INR 1M ATM volatility	0.270
Currency return	0.267
1M forward premia	0.203

Source: Authors' calculations.

Table 3: Factor Loadings (from DFM)

Indicator	Factor Loadings
Money Market	
WAMMR Spread over Repo rate	0.115
3M CP Spread over 3M T-bill Rate	0.182
Net LAF adjusted for NDTL	0.202
WAMMR Volatility	0.075
G-Sec Market	
Yield curve level	0.182
Yield curve slope	-0.179
Yield curve curvature	-0.186
Corporate bond Market	
Spread of 3-year AAA CB over 3-yr G-sec	0.317
Spread of 3-year AA CB over 3-yr G-sec	0.283
Spread of 5-year AAA CB over 5-yr G-sec	0.239
Spread of 5-year AA CB over 5-yr G-sec	0.250
Equity Market	
BSE Sensex return	0.243
BSE Mid-Cap return	0.276
BSE Small-Cap return	0.294
PE level relative to 2yr moving average	0.140
India VIX	0.110
Forex Market	
India US 10yr yield differential	0.141
USD-INR 1M ATM volatility	0.237
Currency return	0.249
1M forward premia	0.151

Source: Authors' calculations.

Table 4: Granger Causality Test

Pairwise Granger Causality Tests Sample: 2013M04 2025M04 Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
FCI does not Granger Cause IIP	143	3.29952	0.0398
IIP does not Granger Cause FCI		0.45890	0.6329

Source: Authors' estimates.

Balance Sheet Channel of Monetary Policy Transmission: Insights from Indian Manufacturing Firms

Bhavesh Salunkhe, Sapna Goel, Amit Kumar, Preetika, Kunal Priyadarshi and Satyananda Sahoo ^

Monetary policy partly influences investment through the balance sheet channel – a mechanism where interest rate changes affect a firm's financial health (cashflow and net worth) – which in turn impacts its borrowing capacity and investment decisions. The study investigates the existence of balance sheet channel of monetary policy transmission in India by estimating instrumental variable fixed-effects panel regression model for manufacturing firms spanning 2003-2023. It assesses whether investment sensitivity to cashflow changes during different monetary policy phases and varies between constrained (small, highly leveraged) and unconstrained (large, less leveraged) firms. The results confirm the presence of the balance sheet channel, particularly among small firms.

Introduction

Investment plays a critical role in driving economic growth, and monetary policy is a key tool used by central banks to influence investment activity. The empirical estimates suggest that a one percentage point reduction in the real policy interest rate can increase the investment rate by about 9 basis points (bps) in the short-run and 109 bps in the long-run (RBI, 2020). While the extant literature has empirically examined the effectiveness of monetary policy transmission in India across various channels [Patra *et al.*, (2016); Khundrakpam and Jain (2012); Mohan (2008) *etc.*], the studies on balance sheet channel which operates by affecting a firm's financial health – cashflow and net worth – influencing its borrowing capacity and investment decisions are limited [Angelopoulou and Gibson (2009); Bernanke and Gertler (1995); and Oliner and Rudebusch (1994) *etc.*] and under-researched in India.

Tight monetary policy can weaken firms' financial positions by lowering equity prices, reducing net worth, and raising borrowing costs, thereby limiting access to credit and curbing investment. This mechanism— central to the balance sheet channel of monetary policy transmission— has been observed in countries like Japan (Masuda, 2015) and the U.S. (Kashyap *et al.*, 1992). Weaker balance sheets raise the external finance premium—the additional cost of external funds (such as debt and equity) over internal funds—making borrowing more expensive and further constraining investment, particularly for financially constrained firms.

This study seeks to fill this gap by examining whether changes in monetary policy affects the sensitivity of investment to cashflow in Indian manufacturing firms (2002-03 to 2022-23), and whether this sensitivity differs between financially constrained (small, highly leveraged) and unconstrained (large, less leveraged) firms. Following Angelopoulou and Gibson (2009), the study estimates Tobin's Q-model to assess the cashflow sensitivity of investment under different monetary policy periods. The findings suggest that the balance sheet channel of monetary policy transmission is active amongst the Indian manufacturing firms, particularly in small firms, while no conclusive differences are found across leverage groups.

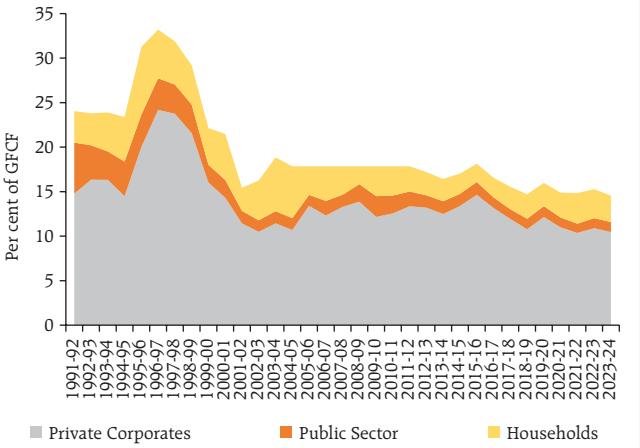
^ Bhavesh Salunkhe, Sapna Goel, Amit Kumar and Satyananda Sahoo (ssahoo@rbi.org.in) are from the Department of Economic and Policy Research (DEPR), Kunal Priyadarshi is from Financial Markets Regulation Department (FMRD) and Preetika was a research intern in DEPR. The views expressed in this article are those of the authors and do not represent the views of the Reserve Bank of India (RBI).

The rest of the study is organised as follows – section II highlights stylised facts about investment in India, followed by literature review in section III. Section IV discusses data sources and methodology, while section V elucidates the empirical exercise and results. Finally, section VI concludes.

II. Investment Trends in India: Stylised facts

Post the liberalisation reforms of 1991, fixed investment[1] in India gained traction with manufacturing sector commanding an average share of 31.4 per cent in overall gross fixed capital formation (GFCF) during 1995-99. Since 2000s, however, with a shift in foreign direct investment inflows from manufacturing to services sector and emergence of new services activity, India's overall GFCF has been driven by services thereafter. Fixed investment rate in India peaked at 35.8 per cent in 2007-08. It was 28.5 per cent in 2019-20, before regaining some momentum in the post-pandemic period (Chart 1). At the institutional level, within the manufacturing sector, the share of public sector investment has reduced, while private corporates have managed to hold ground *albeit* with some moderation since 2015-16. Investment by the household sector, however, has risen since 2016-17 (Chart 2).

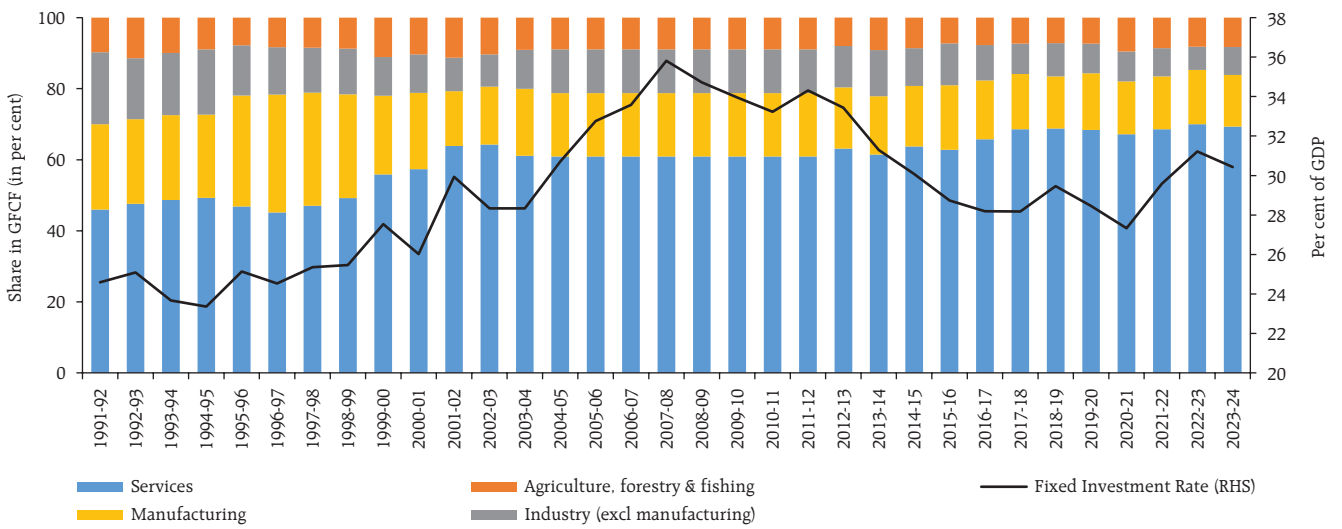
Chart 2: GFCF in Manufacturing Sector



Notes: (i) All the computations are at current prices; (ii) public sector comprises investment by departmental and non-departmental enterprises; and (iii) investment by the private corporates for the period prior to 2011-12 has been computed by subtracting the public sector investment from the registered manufacturing GFCF.
Sources: NSO; and Authors' calculations.

Fazzari *et al.* (1988) conducted a pioneering study estimating the sensitivity of investment

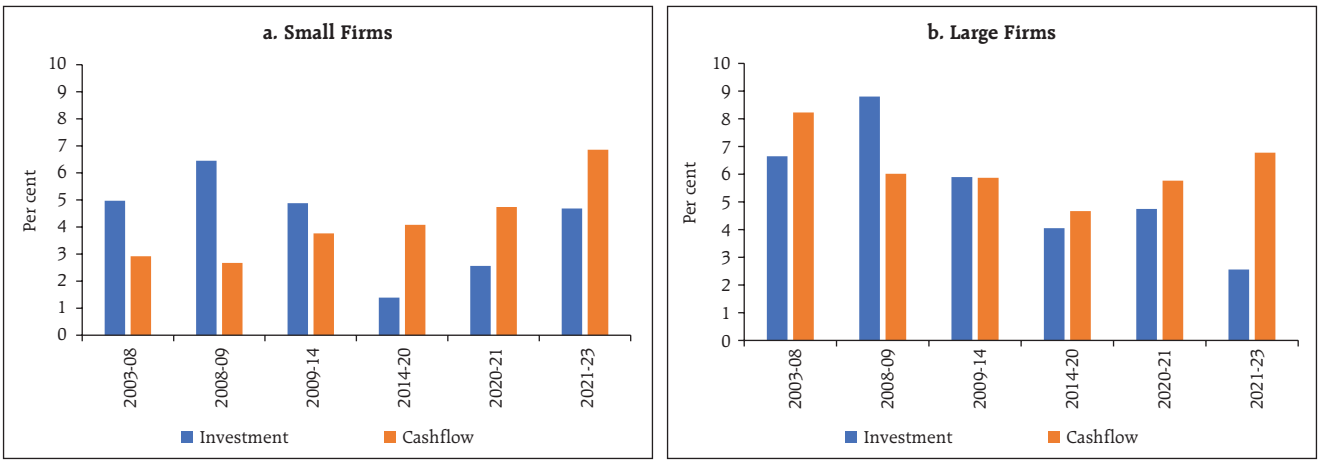
Chart 1: Fixed Investment across Sectors



Note: All the computations are at current prices.
Sources: National Statistical Office (NSO); and Authors' calculations.

[1] Since, GFCF roughly comprises 90 per cent share in overall investment, the section focuses on trends relating to fixed investment only.

Chart 3: Cashflow and Investment by Size of the Firms



Notes: 1. Cashflow is defined as a ratio of profit after tax to total assets.
2. Investment is a ratio of difference of gross fixed assets (F(t)-F(t-1)) divided by average of total assets ((T(t)+T(t-1))/2).
3. Small firms comprise those with an average size of total assets less than the 50th percentile of the average size distribution over the sample period. All the remaining firms constitute the large category.
4. The sample size of small firms and large firms are 390 and 389, respectively.

Sources: ProwessIQ, Centre for Monitoring Indian Economy (CMIE); and Authors' calculations.

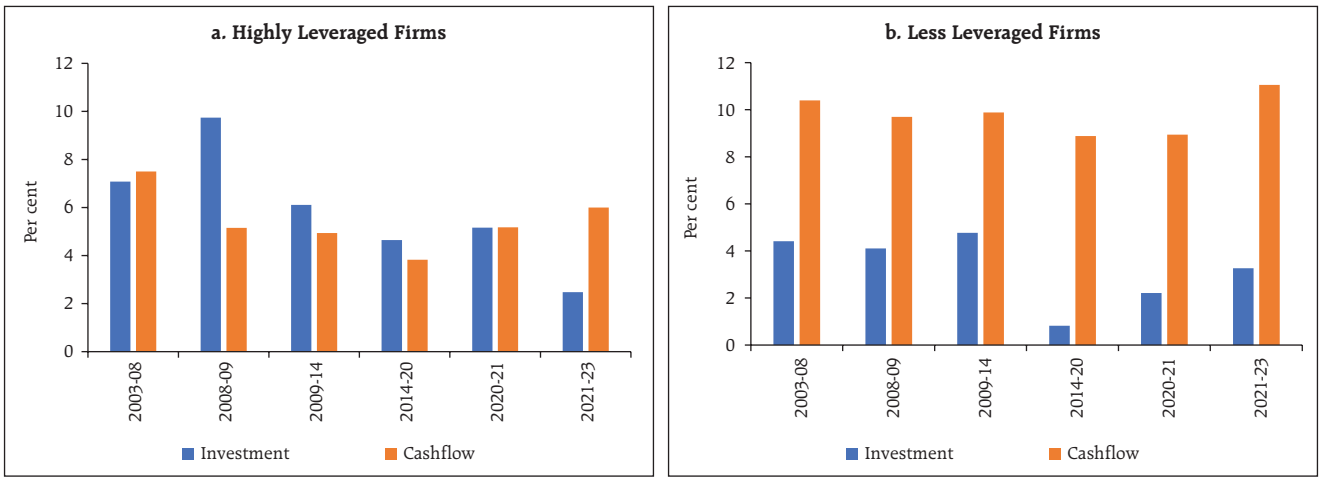
to cashflow across different types of firms. They found that internal and external finances are not perfectly substitutable, with internal funds offering a cost advantage. Notably, investment by financially constrained firms is highly sensitive to cashflow, unlike unconstrained firms that can more easily access external financing. Similarly, firm-level data for Indian manufacturing firms reveal that both size and leverage[2] of firms significantly affect investment decisions. While large firms have historically maintained higher investment and cashflow, small firms experienced a notable rise in both during 2021–23, indicating a potential shift in financial dynamics (Chart 3).

Highly leveraged firms had consistently higher investment than cashflow until 2021-23, when cashflow surpassed investment. These firms have initially focused on high investment despite moderate cashflow, especially during 2008-09. Recent trends (especially 2021-23), however, indicate a shift towards improving cashflow, possibly to manage debt better or strengthen liquidity. In contrast, significantly higher cashflow than investment for less leveraged firms, implies a cautious and self-sufficient approach focused on maintaining liquidity and reducing financial risk (Chart 4).

Different phases of monetary policy tightening, based on policy rate movements, have been identified for the study period. The first phase (October 2005-September 2008) witnessed a 300 bps hike in repo rate and 400 bps in cash reserve ratio (CRR). Owing to heightened supply-side pressures, the second phase (March 2010-March 2012) featured a 375 bps repo rate increase. In the third phase (September 2013-December 2014), the repo rate rose by 75 bps and the fourth phase (June 2018-January 2019) saw a 50 bps hike due to elevated crude oil prices and certain policy measures. Lastly, in the fifth phase (May 2022–Dec 2023), a 250 bps increase

[2] The criteria of splitting the sample based on size and leverage have been discussed in detail in section IV.

Chart 4: Cashflow and Investment based on Firm's Leverage



Notes: 1. Cashflow is defined as a ratio of profit after tax to total assets.
2. Investment is a ratio equal to difference of gross fixed assets (F(t)-F(t-1)) divided by average of total assets ((T(t)+T(t-1))/2).
3. The firms with mean leverage ratio greater than 50th percentile across all firms over sample period are considered as highly leveraged.
4. The sample size of highly leveraged firms and less leveraged firms are 389 and 390, respectively.
Sources: ProwessIQ, CMIE; and Authors' calculations.

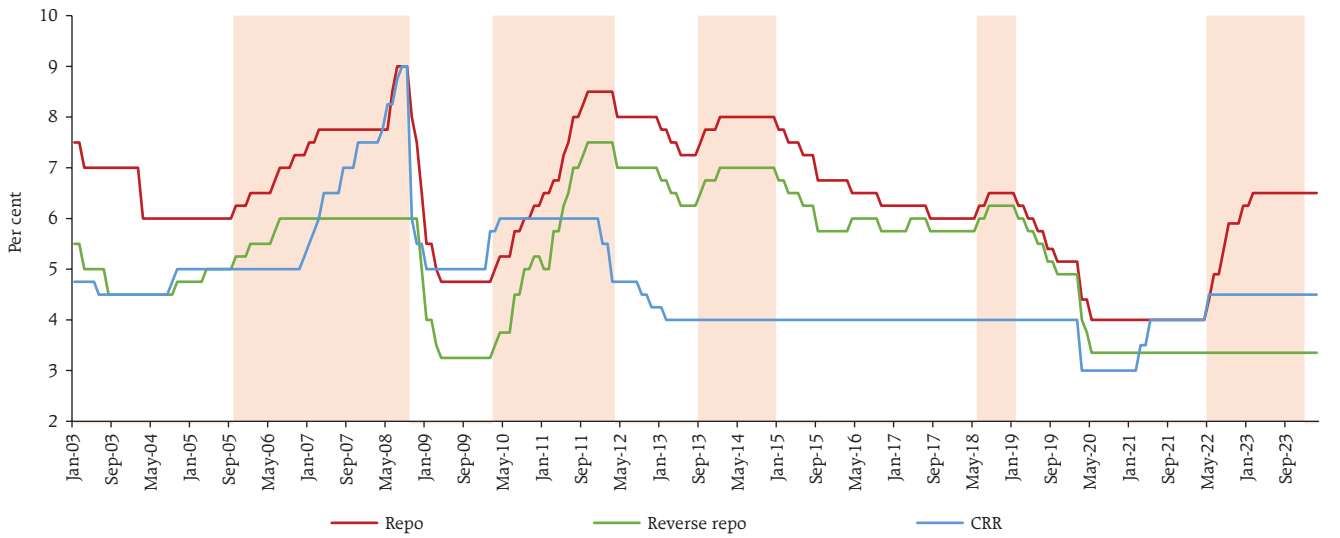
was implemented to counter inflationary risks (Chart 5).[3]

III. Literature Review

The literature on transmission mechanisms of monetary policy, in general, documents four key channels – (i) interest rate, (ii) credit aggregates comprising balance sheet and bank lending, (iii) exchange rate and (iv) asset prices (Mishkin, 1995). In recent times, however, expectations channel has gained significance, given the forward-looking nature of the monetary policy.

The credit channel, which gained recognition following the seminal work of Bernanke and Gertler

Chart 5: Changes in Monetary Policy Rates



Note: Shaded area depicts the phases of monetary policy tightening based on the direction of change in the policy repo rate.
Sources: RBI; and Authors' calculations.

[3] The details of each phase are discussed in Annex Table 1.

(1995), highlights that due to the existence of information asymmetries, investment is impacted by net worth of a firm. Therefore, even a minor monetary policy shock can have a notable impact on firm's investment behaviour. Reinforcing these findings, Angelopoulou and Gibson (2009); and Oliner and Rudebusch (1996) examined the balance sheet channel and concluded that firms, especially the constrained ones, become more sensitive to cashflow fluctuations during periods of monetary policy tightening as the cost of external finance would be higher relative to internal financing. Similarly, using loan-level data, Aysun and Hepp (2013) also supported the existence of balance sheet channel. However, several studies such as Erickson and Whited (2000), present a critique of cashflow as a variable by reporting no statistical significance of the variable. While Sahoo and Bishnoi (2023) and Rafique *et al.* (2021) posit a positive significant impact of cashflow on firm investment, Cleary (1991) inferred that the unconstrained firms are more sensitive to cashflow availability to fund their investments. Additionally, a positive link has been affirmed between a firm's Tobin's Q ratio and their investment in studies by Fazzari *et al.* (1988), Masuda (2015) and Rafique *et al.* (2021). Sahoo and Bishnoi (2023) further support this association, specifically, for manufacturing firms in India.

The prevailing literature underscores the intricate nature of monetary policy transmission and its impact on firm's investment behaviour. Further, financial indicators such as Tobin's Q ratio and profit after tax (PAT) offer insights into firm's valuation and cashflow dynamics, highlighting their critical role in investment decisions under varying financial conditions. Building on this vast body of knowledge and dearth of such studies in Indian context, this study aims to gauge the understanding and effectiveness of the balance sheet channel of monetary policy transmission and its impact on Indian manufacturing firms.

IV. Data Description and Methodology

The study uses firm level annual data on 779 listed Indian manufacturing firms spanning 2002-03 to 2022-23. The data have been sourced from the ProwessIQ database, maintained by the Centre for Monitoring Indian Economy (CMIE). The measures to capture monetary policy phases are constructed using data from Handbook of Statistics on Indian Economy published by the RBI.

For disaggregated analysis, following Masuda (2015) and Balfoussia and Gibson (2018), the firms are categorised by size (small *vs.* large) and leverage (high *vs.* less). The size of a firm is measured by its total assets. Average total assets of a firm are computed over the sample period thereby, providing the size distribution of the firms. Small firms are then defined as those with an average total assets below the 50th percentile of the size distribution, while the rest are classified as large. Being relatively young and less established, small firms typically have limited collateral and are considered financially constrained (Angelopoulou and Gibson, 2007). Similarly, leverage, the amount of debt a firm uses to finance its assets, is measured as the ratio of total (long-term) debt to equity. Firms above the median leverage ratio are classified as highly leveraged. Due to higher default risk, such firms also face financial constraints.

IV.1 Variable Description

Dependent Variable (INV_{it}): 'Firm level investment' defined as annual change in gross fixed assets of the firm, scaled by the firm's average total assets over period 't' and 't-1' has been used. This adjustment ensures that the investment metric is standardised across companies of different sizes,

thereby, controlling for bias due to variation in company size within the sample.

Independent Variables

(i) Cashflow ($Cash_{it}$)

Profit after tax (PAT) scaled by firm's total assets has been used as a proxy for a firm's cashflow (Angelopoulou and Gibson, 2009; and Gupta and Mahakud, 2019).

(ii) Tobin's Q Ratio ($Qratio_{it}$)

It is a ratio developed to compare the market value of a firm's assets to their replacement cost. A $Q > 1$ implies that the market values the firm's assets more than the cost of replacing its assets, suggesting an incentive to invest. On the other hand, a $Q < 1$ indicates that the firm's assets are valued less by the market than their replacement cost, signalling disinvestment. It thus helps to control for firm's opportunities and incentives to investment. However, the replacement cost of capital is not directly observable and accordingly, as suggested in literature, the average total assets has been taken as its proxy. Following Sahoo and Bishnoi (2023), the Q-ratio has been specifically tailored for the Indian context as follows:

$$Tobin's\ Q\ = \frac{Market\ value\ of\ equity + Book\ value\ of\ debt}{Average\ total\ assets}$$

where, 'Market value of the equity' is the product of 'shares outstanding' and 'weighted average price of share' of the firm, while 'Book value of debt' is proxied by 'Long term borrowing'.

(iii) Monetary Policy Measures

Two monetary policy measures have been used to represent the monetary policy phases in India.

(a) Narrative Measure (NM): Following Angelopoulou and Gibson (2007), monetary policy dummies at monthly frequency have been constructed that take value '1' during the months of monetary policy tightening and '0' otherwise. They are then averaged over the year to match yearly frequency of firm level data. Different tightening phases of monetary policy identified based on direction of change in the policy repo rate are October 2005-September 2008, March 2010-March 2012, September 2013-December 2014, June 2018-January 2019, and May 2022-December 2023.

(b) Weighted Average Call Money Rate (WACR): Over the estimation period, the Reserve Bank followed two broad approaches of monetary policy, *viz.*, multiple indicator approach (2003 to Q3 of 2016) and inflation targeting framework thereafter, with repo rate as the main tool. Initially, policy signals were conveyed through both repo and reverse repo rates under the liquidity adjustment facility, with the effective rate depending on liquidity conditions (Kapur and Behera, 2012). Since May 2011, the repo rate became the sole policy rate and the WACR was explicitly recognised as the operating target of monetary policy due to faster transmission of signals (RBI, 2011). Under the current flexible inflation-targeting framework adopted in May 2016, the WACR continues to be the operating target of monetary policy and this study, therefore, uses the WACR to represent monetary policy phases.

(iv) Real GDP Growth

Annual real GDP growth has been included with one-period lag.

(v) Dummy Variables

Taking cognisance of three major crises that have occurred during the sample period, three dummy variables are included – global financial crisis (GFC) dummy (2008-09), high non-performing assets (NPA) dummy (2013-18) and Covid-19 dummy (2020-22). These dummies take value '1' for crisis years and '0' otherwise.

IV.2 Model Specification

Instrumental variable fixed-effects panel regression model has been used to estimate the relationship among investment, firm specific financial variables, real GDP growth and monetary policy. This relationship can be expressed in the form of following regression model, also called augmented specification of Q-model (Fazzari *et al.*, 1988).

$$INV_{it} = \alpha_0 + \alpha_1 Qratio_{it} + \alpha_2 Cash_{it} + \alpha_3 (Cash_{it} * MPM_{t-1}) + \alpha_4 GDPgr_{t-1} + \alpha_5 GFC\_Dummy_{t-1} + \alpha_6 NPA\_Dummy_{t-1} + \alpha_7 Covid\_Dummy_{t-1} + \omega_i + \varepsilon_{it} \ldots\ldots (1)$$

where, subscript '*it*' indicates firm '*i*' in period '*t*'. MPM_{t-1} is monetary policy measure in the previous period, $'\omega_i'$ controls for firm-specific fixed effects, and ε_{it} is the error term. The instrumental variable fixed effects model has been used due to possible endogeneity of 'Q' variable in the model (investment decisions of firms affect their market value and replacement cost of assets). The Hausman specification test suggests rejection of random effects model in favour of fixed effects.

V. Summary Statistics and Econometric Findings

V.1 Descriptive Statistics

Small firms, being younger and less established, have lower and more volatile investment and cashflow than large firms on average. Highly leveraged firms exhibit higher average investment than their less leveraged counterparts. Moreover, the lower average Tobin's Q ratios of small and highly leveraged firms suggest that large and less leveraged firms enjoy better opportunities and incentives to invest (Table 1).

V.2 Econometric Results

As stated, NM and WACR have been used to represent monetary policy phases. While column (1) of Table 2 shows the baseline specification of Equation 1 (specified in section IV.2), columns (2) and (3) include interaction of cashflow variable with NM and WACR, respectively, to test if cashflow sensitivity of investment varies with monetary policy phases. Assuming one-year period as sufficient for the transmission process, lagged values of monetary policy measures (NM and WACR) have been used in the interaction term.

Table 1: Descriptive Statistics

Firms	Based on Size						Based on Leverage					
	Small			Large			Highly Leveraged			Less Leveraged		
	Investment	Cash Flow	Tobin's Q	Investment	Cash Flow	Tobin's Q	Investment	Cash Flow	Tobin's Q	Investment	Cash Flow	Tobin's Q
Mean	0.03	0.04	0.98	0.05	0.06	1.56	0.05	0.05	1.16	0.03	0.06	1.38
Median	0.02	0.03	0.64	0.03	0.06	0.87	0.03	0.04	0.73	0.02	0.05	0.74
Std Dev.	0.19	0.17	1.24	0.12	0.11	2.04	0.14	0.14	1.43	0.18	0.16	1.95
	Average Total Assets (₹ million)						Average Leverage Ratio					
	1320.88			61902.67			49.20			1.11		
No. of Firms	390			389			389			390		

Note: Investment, Cashflow and Tobin's Q are ratios.
Sources: ProwessIQ, CMIE; and Authors' calculations.

The cashflow coefficient in normal times is statistically significant and negative[4] (Columns 2 and 3 in Table 2), implying less investment in the current period indicated by a build-up of cashflow. The interaction term, however, is positive and statistically significant for both measures of monetary policy. It implies that during periods of tight monetary policy, firms face financing constraints, making them rely more on internal funds for investment. This suggests the presence of balance sheet channel of monetary policy transmission across manufacturing firms. Alternatively, during expansionary monetary policy periods, the firms are less constrained by internal finances (cashflow) as access to external finance becomes easier. This underscores the proposition that monetary policy affects the investment not only through cost of capital channel but also by increasing external finance premium. Tobin's 'Q' is positive and statistically significant across all specifications, reflecting the vital role played by capital markets in a firm's investment opportunities. GDP growth also has a positive and statistically significant impact on firm's investment. Covid-19 and NPA dummies are negative and statistically significant, as expected.

Table 2: Investment, Cash flow and Monetary Policy (All Firms)

Independent Variables	All firms (Dependent Variable: Investment)		
	1	Monetary Policy Measures	
		2 (Narrative Measure)	3 (WACR)
Constant	0.0244*** (0.0040)	0.0247*** (0.0040)	0.0239*** (0.0040)
Tobin's Q	0.0158*** (0.0017)	0.0156*** (0.0016)	0.0153*** (0.0017)
Cashflow	0.0004 (0.0094)	-0.0229** (0.0111)	-0.1786*** (0.0324)
Cashflow*MPM(-1)		0.0786*** (0.0202)	0.0331*** (0.0057)
GDPgr(-1)	0.0017*** (0.0005)	0.0016*** (0.0005)	0.0017*** (0.0005)
GFC_Dummy(-1)	0.0058 (0.0063)	0.0050 (0.0063)	0.0031 (0.0067)
NPA_Dummy(-1)	-0.0619*** (0.0032)	-0.0609*** (0.0032)	-0.0635*** (0.0032)
Covid_Dummy(-1)	-0.0301*** (0.0051)	-0.0282*** (0.0051)	-0.0242*** (0.0052)
Observations	15580	15580	15580
No. of Firms	779	779	779
Wald Test	$x^2(6) = 1246.39$ $Prob > x^2 = 0.00$	$x^2(7) = 1257.54$ $Prob > x^2 = 0.00$	$x^2(7) = 1288.80$ $Prob > x^2 = 0.00$
F-test fixed effects	F(778,14795) =1.53 Prob> F=0.00	F(778,14794) =1.54 Prob> F=0.00	F(778,14794) =1.53 Prob> F=0.00
Hausman specification test	$x^2(6) = 176.23$ $Prob > x^2 = 0.00$	$x^2(7) = 181.48$ $Prob > x^2 = 0.00$	$x^2(7) = 171.82$ $Prob > x^2 = 0.00$

Notes: (i) '***', '**', and '*' indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively; (ii) Figures in parentheses are standard errors; (iii) Estimation is by instrumental variable method where a lag of Tobin's Q, cashflow term, lag of GDPgr, crises dummies are used as instruments; and (iv) F-test is test of significance of fixed effects.
Source: Authors' calculations.

Delving into the sub-samples, Tables 3 and 4 demonstrate the estimation results for small and large firms, respectively.[5] In normal times, the cashflow coefficient is negative and statistically significant for small firms, while for large firms, it is positive but statistically significant only in case of model with WACR (Table 4). When monetary policy is tight, the cashflow sensitivity of small firms becomes positive and statistically significant (columns 2 and 3 in Table 3), showing that their investment decisions depend more on their internal funds due to financial constraints. Conversely, an expansionary monetary policy would ease these constraints, reducing their reliance on cashflow for investment. For large firms, tight monetary policy reduces cashflow sensitivity. These findings are in consonance with Angelopoulou and Gibson (2009); and Oliner and Rudebusch (1994) and indicate the presence of balance sheet channel in case of small firms.

[4] Although cash flow coefficient is negative and statistically significant in the current period, it was positive and statistically significant at lag 1, indicating lagged impact of cash flow on investment of firms.

[5] For robustness check, in an alternate scenario, small firms have also been defined as the firms whose average size is less than the 75th percentile of average size distribution over the sample period. The results are similar and provided in the annex tables 2(a) and 2(b).

Table 3: Investment, Cash flow and Monetary Policy (Small Firms)

Independent Variables	Small firms (Dependent Variable: Investment)		
	1	Monetary Policy Measures	
		2 (Narrative Measure)	3 (WACR)
Constant	0.0162** (0.0067)	0.0172** (0.0063)	0.0173** (0.0067)
Tobin's Q	0.0226*** (0.0036)	0.0216*** (0.0036)	0.0198*** (0.0036)
Cashflow	0.0032 (0.0132)	-0.0373** (0.0162)	-0.3794*** (0.0524)
Cashflow*MPM(-1)		0.1274*** (0.0293)	0.0688*** (0.0091)
GDPgr(-1)	0.0012 (0.0008)	0.0011 (0.0008)	0.0013 (0.0008)
GFC_Dummy(-1)	0.0069 (0.0108)	0.0061 (0.0107)	0.0031 (0.0107)
NPA_Dummy(-1)	-0.0596*** (0.0055)	-0.0579*** (0.0055)	-0.0614*** (0.0055)
Covid_Dummy(-1)	-0.0271*** (0.0090)	-0.0241*** (0.0090)	-0.0155* (0.0092)
Observations	7800	7800	7800
No. of Firms	390	390	390
Wald Test	$x^2(6)$ =312.25 *Prob* > x^2 = 0.00	$x^2(7)$ =329.56 *Prob* > x^2 = 0.00	$x^2(7)$ = 378.98 *Prob* > x^2 = 0.00
F-test fixed effects	F(389, 7404) =1.38 Prob> F=0.00	F(389,7403) =1.38 Prob> F=0.00	F(389,7403) =1.37 Prob> F=0.00
Hausman pecification test	$x^2(6)$ =151.21 *Prob* > x^2 = 0.00	$x^2(7)$ =168.96 *Prob* > x^2 = 0.00	$x^2(7)$ =152.79 *Prob* > x^2 = 0.00

Notes: (i) '***', '**', and '*' indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively; (ii) Figures in parentheses are standard errors; (iii) Estimation is by instrumental variable method where a lag of Tobin's Q, cash flow term, lag of GDPgr, crises dummies are used as instruments; and (iv) F-test is test of significance of fixed effects.
Source: Authors' calculations.

Table 4: Investment, Cash flow and Monetary Policy (Large Firms)

Independent Variables	Large firms (Dependent Variable: Investment)		
	1	Monetary Policy Measures	
		2 (Narrative Measure)	3 (WACR)
Constant	0.0313*** (0.0042)	0.0314*** (0.0042)	0.0326*** (0.0042)
Tobin's Q	0.0129*** (0.0015)	0.0129*** (0.0015)	0.0131*** (0.0015)
Cashflow	0.0005 (0.0137)	0.0116 (0.0153)	0.1178*** (0.0359)
Cashflow*MPM(-1)		-0.0472* (0.0269)	-0.0237*** (0.0068)
GDPgr(-1)	0.0021*** (0.0005)	0.0022*** (0.0004)	0.0020*** (0.0005)
GFC_Dummy(-1)	0.0034 (0.0064)	0.0041 (0.0064)	0.0059 (0.0064)
NPA_Dummy(-1)	-0.0649*** (0.0033)	-0.0656*** (0.0033)	-0.0636*** (0.0033)
Covid_Dummy(-1)	-0.0368*** (0.0052)	-0.0379*** (0.0052)	-0.0415*** (0.0054)
Observations	7780	7780	7780
No. of Firms	389	389	389
Wald Test	$x^2(6)$ =1605.24 *Prob* > x^2 = 0.00	$x^2(7)$ =1613.38 *Prob* > x^2 = 0.00	$x^2(7)$ =1615.39 *Prob* > x^2 = 0.00
F-test fixed effects	F(388, 7385) =1.87 Prob> F=0.00	F(388,7384) =1.87 Prob> F=0.00	F(388,7384) =1.88 Prob> F=0.00
Hausman specification test	$x^2(6)$ =45.00 *Prob* > x^2 = 0.00	$x^2(7)$ =45.63 *Prob* > x^2 = 0.00	$x^2(7)$ =17.88 *Prob* > x^2 = 0.00

Notes: (i) '***', '**', and '*' indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively; (ii) Figures in parentheses are standard errors; (iii) Estimation is by instrumental variable method where a lag of Tobin's Q, cash flow term, lag of GDPgr, crises dummies are used as instruments; and (iv) F-test is test of significance of fixed effects.
Source: Authors' calculations.

Tobin's 'Q' has positive and statistically significant impact on investment of both small and large firms. Moreover, the NPA and Covid-19 dummies are negative and statistically significant as expected for both firm sizes. While the impact of these crises on small firms is expected, large firms may have experienced a decline in investment activity due to supply chain disruptions, heightened global uncertainty, falling demand and increased underutilisation of capacity. GDP growth variable is significant only in case of large firms. GFC dummy has a positive but statistically insignificant impact on investment of both firm sizes.

The estimation results for highly leveraged and less leveraged firms are presented in Tables 5 and 6, respectively.[6] In normal times, the cashflow coefficient is negative for both highly leveraged and less leveraged firms but is only statistically significant in specific cases. During tight monetary policy, the cashflow sensitivity of investment becomes positive for both firm types, suggesting increased reliance on internal funds and presence of balance sheet channel. Unlike in case of size based classification, the difference in cashflow sensitivity of investment between these two firm types is inconclusive.

Tobin's Q ratio has a positive and statistically significant impact on investment of both highly leveraged and less leveraged firms. GDP growth has a positive and statistically significant impact

Table 5: Investment, Cash flow and Monetary Policy (Highly Leveraged Firms)

Independent Variables	Highly leveraged firms (Dependent Variable: Investment)		
	1	Monetary Policy Measures	
		2 (Narrative Measure)	3 (WACR)
Constant	0.0292*** (0.0049)	0.0298*** (0.0049)	0.0290*** (0.0049)
Tobin's Q	0.0211*** (0.0022)	0.0210*** (0.0022)	0.0209** (0.0022)
Cashflow	-0.0169 (0.0121)	-0.0455*** (0.0158)	-0.1009** (0.0399)
Cashflow*MPM(-1)		0.0695*** (0.0243)	0.0164** (0.0074)
GDPgr(-1)	0.0023*** (0.0006)	0.0022*** (0.0006)	0.0023*** (0.0006)
GFC_Dummy(-1)	0.0046 (0.0076)	0.0039 (0.0076)	0.0033 (0.0076)
NPA_Dummy(-1)	-0.0724*** (0.0038)	-0.0718*** (0.0038)	-0.0730*** (0.0038)
Covid_Dummy(-1)	-0.0429*** (0.0062)	-0.0414*** (0.0062)	-0.0405*** (0.0063)
Observations	7780	7780	7780
No. of Firms	389	389	389
Wald Test	$x^2(6) = 1252.41$ $Prob > x^2 = 0.00$	$x^2(7) = 1256.21$ $Prob > x^2 = 0.00$	$x^2(7) = 1260.27$ $Prob > x^2 = 0.00$
F-test fixed effects	F(388,7385) =1.84 Prob> F=0.00	F(388, 7384) =1.85 Prob> F=0.00	F(388, 7384) =1.83 Prob> F=0.00
Hausman specification test	$x^2(6) = 62.44$ $Prob > x^2 = 0.00$	$x^2(7) = 88.52$ $Prob > x^2 = 0.00$	$x^2(7) = 60.48$ $Prob > x^2 = 0.00$

Notes: (i) '***', '**', and '*' indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively; (ii) Figures in parentheses are standard errors; (iii) Estimation is by instrumental variable method where a lag of Tobin's Q, cash flow term, lag of GDPgr, crises dummies are used as instruments; and (iv) F-test is test of significance of fixed effects.
Source: Authors' calculations.

Table 6: Investment, Cash flow and Monetary Policy (Less Leveraged Firms)

Independent Variables	Less leveraged firms (Dependent Variable: Investment)		
	1	Monetary Policy Measures	
		2 (Narrative Measure)	3 (WACR)
Constant	0.0192*** (0.0064)	0.0189*** (0.0064)	0.0184*** (0.0064)
Tobin's Q	0.0117*** (0.0024)	0.0113*** (0.0024)	0.0107*** (0.0024)
Cashflow	0.0127 (0.0142)	-0.0123 (0.0158)	-0.2511*** (0.0515)
Cashflow*MPM(-1)		0.1238*** (0.0344)	0.0469*** (0.0088)
GDPgr(-1)	0.0010 (0.0007)	0.0009 (0.0007)	0.0012* (0.0007)
GFC_Dummy(-1)	0.0069 (0.0099)	0.0054 (0.0099)	0.0033 (0.0090)
NPA_Dummy(-1)	-0.0508*** (0.0051)	-0.0490*** (0.0051)	-0.0534*** (0.0051)
Covid_Dummy(-1)	-0.0168** (0.0081)	-0.0135* (0.0082)	-0.0068 (0.0084)
Observations	7800	7800	7800
No. of Firms	390	390	390
Wald Test	=308.44	=320.43	=341.36
F-test fixed effects	F(389,7404) =1.22 Prob> F=0.002	F(389, 7403) =1.19 Prob> F=0.006	F(389, 7403) =1.22 Prob> F=0.003
Hausman specification test	=108.66	=104.20	=110.72

Notes: (i) '***', '**', and '*' indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively; (ii) Figures in parentheses are standard errors; (iii) Estimation is by instrumental variable method where a lag of Tobin's Q, cash flow term, lag of GDPgr, crises dummies are used as instruments; and (iv) F-test is test of significance of fixed effects.
Source: Authors' calculations.

[6] Highly leveraged firms have also been defined based on the mean leverage ratio being greater than the 75th percentile and the rest being considered as less leveraged. The results were inconclusive and are provided in the annex tables 3(a) and 3(b).

on investment only for highly leveraged firms while the NPA and Covid-19 dummies are negative and statistically significant for both types of firms. This could be due to shrinkage in their cashflow, heightened risk of default during Covid-19 and limited access to credit during NPA crisis.

VI. Conclusion

The balance sheet channel of monetary policy transmission emphasises how changes in interest rates affect a firm's net worth, cashflow, and liquidity – factors that influence its borrowing capacity and investment decisions. This study investigates the presence of balance sheet channel in India using firm level data on manufacturing firms over two decades (2003-2023). The analysis employs an instrumental variable fixed-effects panel regression model to examine the relationship between investment, firm-specific financial variables, real GDP growth, and monetary policy. The findings confirm the presence of the balance sheet channel in manufacturing firms.

Furthermore, a detailed analysis, segmented by firm size and leverage, suggests that small firms, being more financially constrained, are more sensitive to internal funds under tight monetary policy. Large firms, with better access to external finance, are relatively less affected. While the balance sheet channel operates for both highly leveraged and less leveraged firms, there is no clear evidence of differences in their sensitivity to cashflow.

These findings suggest that strengthening corporate balance sheets and targeted credit support – particularly for small firms – can enhance the effectiveness of accommodative monetary policy in stimulating investment. Future research can explore sector-specific patterns to deepen understanding of transmission dynamics across industries.

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Annex Table 1: Phases of Monetary Policy Tightening

Sl. No.	Period of Tightening	Policy Measures	Additional Measures	Policy Rationale
1	October 2005 to September 2008	Repo rate increased by 175 bps from 6.00 per cent to 7.75 per cent; 7 rate hikes of 25 bps each in the first sub-phase; Repo rate increased by 125 bps from 7.75 per cent to 9.00 per cent; 1 rate hike of 25 bps, 2 rate hikes of 50 bps each in the second phase.	CRR increased over this period from 5.00 per cent in October 2006 to 9.00 per cent in August 2008.	In the first sub-phase, repo rate was increased to stress upon greater emphasis on price stability through measured but timely and even pre-emptive policy action to anchor inflation expectations (RBI Annual Report, 2005-06). In the second sub-phase, repo rate was increased to address the issue of volatile food and energy prices along with the need to managing inflation expectations. Wholesale price index (WPI) inflation had surged sharply from February 2008 (RBI Annual Report, 2008-09).
2	March 2010 to March 2012	Repo rate increased by 375 bps from 4.75 per cent to 8.50 per cent; 11 rate hikes of 25 bps each, 2 rate hikes of 50 bps each	CRR increased to 6.00 per cent in April 2010 from 5.00 per cent in April 2009. CRR stood at 6.00 per cent till October 2011. Thereafter, CRR was reduced to 4.75 per cent in March 2012.	Headline WPI inflation on a year-on-year basis overshot the Reserve Bank's baseline projection for year-end inflation to reach 9.9 per cent (provisional) in February 2010. The rate of increase in the prices of non-food manufactured goods accelerated quite sharply. Furthermore, increasing capacity utilisation and rising commodity and energy prices were exerting pressure on the overall inflation. Taken together, these factors were seen to heighten the risks of supply-side pressures translating into a generalised inflationary process (RBI Annual Report, 2009-10).
3	September 2013 to December 2014	Repo rate increased by 75 bps from 7.25 per cent to 8.00 per cent 3 rate hikes of 25 bps each	Reduced the marginal standing facility (MSF) rate by 75 bps from 10.25 per cent to 9.5 per cent; and reduced the minimum daily maintenance of the cash reserve ratio (CRR) from 99 per cent of the requirement to 95 per cent effective from the fortnight beginning September 21, 2013.	WPI inflation, which had eased in Q1 of 2013-14, has started rising again as the pass-through of fuel price increases has been compounded by the sharp depreciation of the rupee and rising international commodity prices (RBI Mid-Quarter Monetary Policy Review, September 2013)
4	June 2018 to January 2019	Repo rate increased by 50 bps from 6.00 per cent to 6.50 per cent 2 rate hikes of 25 bps each	The stance of the monetary policy was changed from neutral to calibrated tightening in October 2018.	Major risks to base inflation path *viz.*, elevated price of the Indian crude basket, rise in household inflation expectations and possible second-round impact of the staggered impact of housing rent allowance (HRA) revisions by various state governments were observed. Additionally, the announcement of hike in minimum support prices (MSPs) by the central government was expected to lead to a rise in inflation. (Monetary Policy Committee Resolution, June and August 2018)
5	May 2022 to December 2023	Repo rate increased by 250 bps from 4.00 per cent to 6.50 per cent; 1 rate hike of 40 bps, 3 rate hikes of 50 bps each, 1 rate hike of 35 bps, 1 rate hike of 25 bps	CRR increased to 4.5 per cent from 4.00 per cent.	The MPC assessed that the ratcheting up of geopolitical tensions, the generalised hardening of global commodity prices, the likelihood of prolonged supply chain disruptions, dislocations in trade and capital flows, divergent monetary policy responses and volatility in global financial markets posed sizeable upside risks to the inflation trajectory and downside risks to domestic growth (Monetary Policy Report, September 2022). Furthermore, the MPC posited that continued shocks to food inflation, elevated international crude oil prices and pending pass-through of input costs to selling prices were likely to sustain pressures on headline inflation (Monetary Policy Report, September 2022)

Source: Authors' illustration.

Annex Table 2: Investment, Cash flow and Monetary Policy

a) Small Firms:

Independent Variables	Small firms (Dependent Variable: Investment)		
	1	Monetary Policy Measures	
		2 (Narrative Measure)	3 (WACR)
Constant	0.0192*** (0.0050)	0.0197*** (0.0050)	0.0192*** (0.0050)
Tobin's Q	0.0207*** (0.0025)	0.0202*** (0.0025)	0.0197*** (0.0025)
Cashflow	0.0070 (0.0107)	-0.0214* (0.0127)	-0.1967*** (0.0379)
Cashflow*MPM(-1)		0.0969*** (0.0238)	0.0379*** (0.0068)
GDPgr(-1)	0.0017*** (0.0006)	0.0016*** (0.0006)	0.0018*** (0.0006)
GFC_Dummy(-1)	0.0036 (0.0079)	0.0027 (0.0079)	0.0008 (0.0079)
NPA_Dummy(-1)	-0.0637*** (0.0041)	-0.0625*** (0.0041)	-0.0651*** (0.0041)
Covid_Dummy(-1)	-0.0300*** (0.0066)	-0.0279*** (0.0066)	-0.0239*** (0.0067)
Observations	11680	11680	11680
No. of Firms	584	584	584
Wald Test	$x^2(6) = 694.58$ $Prob > x^2 = 0.00$	$x^2(7) = 708.12$ $Prob > x^2 = 0.00$	$x^2(7) = 731.11$ $Prob > x^2 = 0.00$
F-test fixed effects	F(583,11090) =1.47 Prob> F=0.00	F(583,11089) =1.47 Prob> F=0.00	F(583,11089) =1.45 Prob> F=0.00
Hausman specification test	$x^2(6) = 171.73$ $Prob > x^2 = 0.00$	$x^2(7) = 178.67$ $Prob > x^2 = 0.00$	$x^2(7) = 164.64$ $Prob > x^2 = 0.00$

Notes: (i) '***', '**', and '*' indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively; (ii) Figures in parentheses are standard errors; (iii) Estimation is by instrumental variable method where a lag of Tobin's Q, cash flow term, lag of GDPgr, crises dummies are used as instruments; and (iv) F-test is test of significance of fixed effects.

Source: Authors' calculations.

b) Large Firms:

Independent Variables	Large firms (Dependent Variable: Investment)		
	1	Monetary Policy Measures	
		2 (Narrative Measure)	3 (WACR)
Constant	0.0394*** (0.0053)	0.0394*** (0.0053)	0.0395*** (0.0053)
Tobin's Q	0.0114*** (0.0016)	0.0114*** (0.0016)	0.0114*** (0.0016)
Cashflow	-0.0716*** (0.0245)	-0.0589** (0.0280)	-0.0604 (0.0653)
Cashflow*MPM (-1)		-0.0358 (0.0349)	-0.0019 (0.0103)
GDPgr(-1)	0.0016*** (0.0006)	0.0016*** (0.0006)	0.0016*** (0.0006)
GFC_Dummy(-1)	0.0116 (0.0079)	0.0120 (0.0079)	0.0118 (0.0080)
NPA_Dummy(-1)	-0.0608*** (0.0041)	-0.0614*** (0.0042)	-0.0607*** (0.0042)
Covid_Dummy(-1)	-0.0378*** (0.0064)	-0.0389*** (0.0065)	-0.0383*** (0.0069)
Observations	3900	3900	3900
No. of Firms	195	195	195
Wald Test	$x^2(6) = 1113.01$ $Prob > x^2 = 0.00$	$x^2(7) = 1117.80$ $Prob > x^2 = 0.00$	$x^2(7) = 1112.73$ $Prob > x^2 = 0.00$
F-test fixed effects	F(194, 3699) =2.05 Prob> F=0.00	F(194,3698) =2.05 Prob> F=0.00	F(194,3698) =2.05 Prob> F=0.00
Hausman specification test	$x^2(6) = 23.54$ $Prob > x^2 = 0.00$	$x^2(7) = 23.53$ $Prob > x^2 = 0.00$	$x^2(7) = 23.55$ $Prob > x^2 = 0.00$

Notes: (i) '***', '**', and '*' indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively; (ii) Figures in parentheses are standard errors; (iii) Estimation is by instrumental variable method where a lag of Tobin's Q, cash flow term, lag of GDPgr, crises dummies are used as instruments; and (iv) F-test is test of significance of fixed effects.

Source: Authors' calculations.

Annex Table 3: Investment, Cash flow and Monetary Policy

a) Highly Leveraged Firms:

Independent Variables	Highly leveraged firms (Dependent Variable: Investment)		
	1	Monetary Policy Measures	
		2 (Narrative Measure)	3 (WACR)
Constant	0.0365*** (0.0074)	0.0358*** (0.0074)	0.0364*** (0.0073)
Tobin's Q	0.0190*** (0.0030)	0.0191*** (0.0030)	0.0191*** (0.0030)
Cashflow	0.0470*** (0.0156)	0.0631*** (0.0219)	0.0572 (0.0557)
Cashflow*MPM(-1)		-0.0324 (0.0309)	-0.0019 (0.0102)
GDPgr(-1)	0.0024*** (0.0009)	0.0024*** (0.0009)	0.0024*** (0.0009)
GFC_Dummy(-1)	-0.00005 (0.0115)	0.0002 (0.0115)	0.0001 (0.0115)
NPA_Dummy(-1)	-0.0811*** (0.0058)	-0.0814*** (0.0058)	-0.0810*** (0.0058)
Covid_Dummy(-1)	-0.0539*** (0.0092)	-0.0549*** (0.0092)	-0.0543*** (0.0094)
Observations	3900	3900	3900
No. of Firms	195	195	195
Wald Test	$x^2(6) = 714.44$ $Prob > x^2 = 0.00$	$x^2(7) = 718.01$ $Prob > x^2 = 0.00$	$x^2(7) = 714.24$ $Prob > x^2 = 0.00$
F-test fixed effects	F(194,3699) =2.05 Prob> F=0.00	F(194, 3698) =2.02 Prob> F=0.00	F(194, 3698) =2.05 Prob> F=0.00
Hausman specification test	$x^2(6) = 31.88$ $Prob > x^2 = 0.00$	$x^2(7) = 51.74$ $Prob > x^2 = 0.00$	$x^2(7) = 32.54$ $Prob > x^2 = 0.00$

Notes: (i) '***', '**', and '*' indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively; (ii) Figures in parentheses are standard errors; (iii) Estimation is by instrumental variable method where a lag of Tobin's Q, cash flow term, lag of GDPgr, crises dummies are used as instruments; and (iv) F-test is test of significance of fixed effects.

Source: Authors' calculations.

b) Less Leveraged Firms:

Independent Variables	Less leveraged firms (Dependent Variable: Investment)		
	1	Monetary Policy Measures	
		2 (Narrative Measure)	3 (WACR)
Constant	0.0209*** (0.0048)	0.0208*** (0.0048)	0.0202*** (0.0047)
Tobin's Q	0.0145*** (0.0019)	0.0141*** (0.0019)	0.0136*** (0.0019)
Cashflow	-0.0201* (0.0116)	-0.0470*** (0.0129)	-0.2828*** (0.0394)
Cashflow*MPM(-1)		0.1293*** (0.0276)	0.0479*** (0.0069)
GDPgr(-1)	0.0017*** (0.0006)	0.0013** (0.0006)	0.0016*** (0.0006)
GFC_Dummy(-1)	0.0079 (0.0074)	0.0065 (0.0074)	0.0042 (0.0074)
NPA_Dummy(-1)	-0.0549*** (0.0038)	-0.0533*** (0.0038)	-0.0574*** (0.0038)
Covid_Dummy(-1)	-0.0214*** (0.0061)	-0.0185*** (0.0061)	-0.0125** (0.0063)
Observations	11680	11680	11680
No. of Firms	584	584	584
Wald Test	$x^2(6) = 683.13$ $Prob > x^2 = 0.00$	$x^2(7) = 702.90$ $Prob > x^2 = 0.00$	$x^2(7) = 740.73$ $Prob > x^2 = 0.00$
F-test fixed effects	F(583,11090) =1.33 Prob> F=0.00	F(583, 11089) =1.31 Prob> F=0.00	F(583, 11089) =1.32 Prob> F=0.00
Hausman specification test	$x^2(6) = 164.75$ $Prob > x^2 = 0.00$	$x^2(7) = 154.89$ $Prob > x^2 = 0.00$	$x^2(7) = 162.68$ $Prob > x^2 = 0.00$

Notes: (i) '***', '**', and '*' indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively; (ii) Figures in parentheses are standard errors; (iii) Estimation is by instrumental variable method where a lag of Tobin's Q, cash flow term, lag of GDPgr, crises dummies are used as instruments; and (iv) F-test is test of significance of fixed effects.

Source: Authors' calculations.

Drivers of CD Issuances: An Empirical Assessment

*Anshul, Priyanka Priyadarshini and Dipak R. Chaudhari**

In the recent period, banks have been relying more on certificates of deposit (CDs) issuances, with credit growth outpacing the deposits growth. The CDs have been majorly issued by public sector banks in the recent years while foreign banks have limited presence in the CD market. Post-covid, mutual funds have increasingly invested in CDs to further reinforce their dominant share, with a concomitant decline in other investors such as banks, financial institutions, and corporates. This article, using autoregressive distributed lag (ARDL) model, found that higher credit growth along with tight system liquidity encourages CD issuances, while increase in market volatility decreases CD issuances.

Introduction

In the financial system money market is the fulcrum of monetary policy operations conducted by the central bank. It provides equilibrium mechanism for short term demand and supply of funds and enables price discovery. Money market instruments like treasury bills and commercial papers enable the government and corporates, respectively, to meet their short-term funding requirements, while certificates of deposits (CDs) allow banks to access a cheaper source of funds than borrowing in the interbank market (Darpeix, 2022).

CD is a negotiable, unsecured money market instrument issued by banks as a promissory note against funds deposited for a maturity period up to one year.[1] CDs being bearer documents are readily negotiated and are attractive for both – the issuer banks and investors. Banks benefit from the specified maturity of deposit while investors are attracted to higher returns, short maturity and ready liquidity in the secondary market (Faniband, 2020). CDs act as an alternate source of short-term funding to complement other traditional funding sources for commercial banks, giving them liquidity and solvency support. Banks can use CDs to comply with their reserve management, especially during periods of liquidity tightness, such as the imposition of incremental cash reserve ratio (CRR) in 2023 (RBI, 2023). Furthermore, CDs are considered as safe instruments; as a result, the returns on CDs are less attractive *vis-à-vis* corporate bonds (Puri, 2012). As CDs have fixed tenor, banks can better manage their cash flows and plan for future banking activities.

Banks find it attractive to raise funds through CDs at the beginning of interest rate upcycle, locking lower interest rates for CDs up to a year as well as meeting liquidity requirements. The CD issuances gained momentum in post-covid period with the hike in policy rates and shift in monetary policy stance at the time of robust credit growth (Chart 1). During Q4:2024-25, CD issuances had reached an all-time high of ₹3.70 lakh crore, in the backdrop of higher credit demand coupled with deficit liquidity[2] and subdued deposits' growth. Similarly, earlier in 2013, CD issuances had increased to a 15-year high on the back of higher

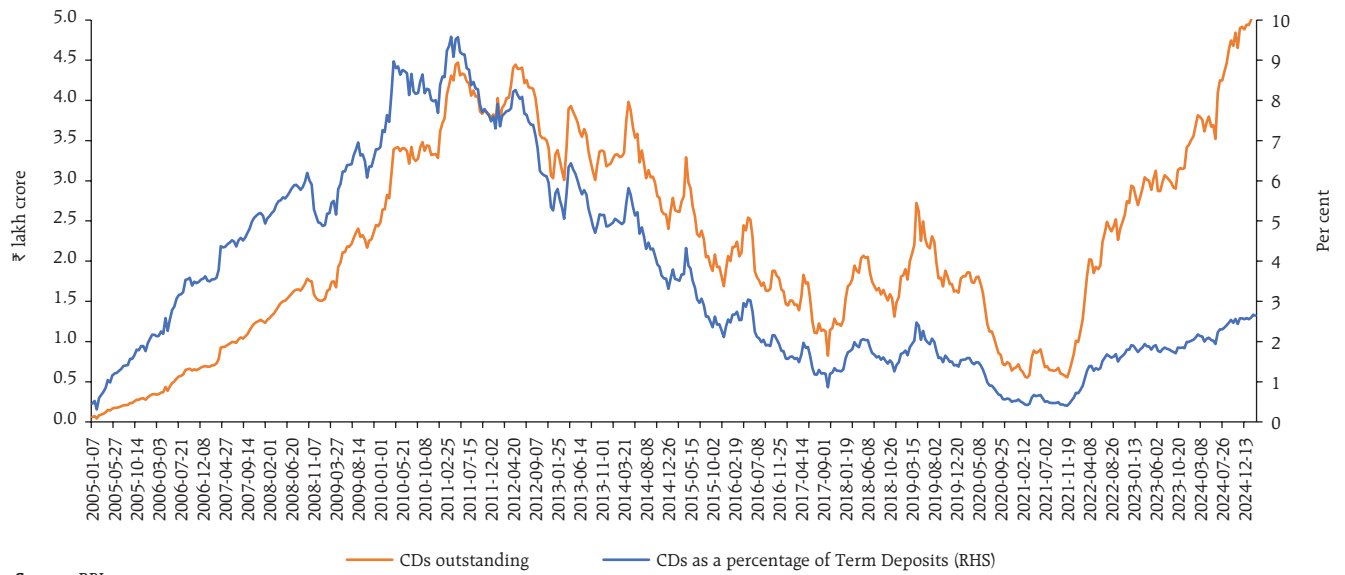
* Anshul and Dipak R. Chaudhari are from Financial Markets Operations Department. Priyanka Priyadarshini is from Issue Department, Bengaluru RO. Authors are grateful to Shri G. Seshsayee, Vikram Rajput and Saurabh Gupta for their comments on the earlier version of the article. The authors would like to thank the anonymous reviewer and the editorial team for their helpful comments and feedback. The views expressed in this article are those of the authors and do not represent the views of the Reserve Bank of India.

[1] CDs can also be issued by all India financial institutions (AIFIs) for 1 to 3 years, are not considered in the article.

[2] Liquidity here is RBI's net liquidity adjustment facility (LAF) position. If banks borrow more than lend back, it indicates liquidity deficit.

[3] https://www.business-standard.com/article/finance/cd-issuances-hit-15-year-high-106031001082_1.html

Chart 1: CDs Outstanding and as a percent of Term Deposits



Source: RBI.

credit growth[3] while, deposit growth was lagging behind the credit growth. This raises an important question whether banks are substituting traditional deposits with CDs in the scenario of deposit growth trailing credit growth. If so, what could be the reasons as banks may sometimes have to pay higher interest rates for CD issuance than traditional deposits, which may be another policy question to address.

In terms of rates, CDs have to compete with other similar money market instruments such as commercial papers (CPs), treasury bills (T-bills), and non-convertible debentures (NCDs). Therefore, understanding their issuance, investor profile and the weighted average effective interest rate (WAEIR) helps in gauging the market microstructure of CDs coupled with available system liquidity and funding requirements of the banking system. Further, CD rates can provide insights into the future interest rate expectations by banks as well as the prevailing liquidity conditions. There is a dearth of studies on the dynamics of CD market both globally as well as in the Indian context. An initial study by Cohan (1973) on the determinants of CD market in the US shows that supply of CDs is the response to the anticipated strength of loan demand in the economy. During the global financial crisis (GFC), investors turned to CDs indicating that CDs are a safer investment option during crisis period (Aquilina *et al.*, 2023). Prevailing liquidity conditions and investors' appetite in the market were found to be the major factors impacting CD issuance in the European markets (Darpeix, 2022). Therefore, CD market could also provide a barometer of the credit demand-supply dynamics of the economy. Against this backdrop, the article examines market microstructure of CDs in India, including issuers profile and investor profile, and assesses the potential drivers of the CD issuances using transaction level data.

The article is divided into six sections. Section II provides an overview of the CD market and cross-country experience. Section III analyses CD issuance, tenors and rates, investor profiles and credit ratings. Section IV discusses potential factors impacting CD issuance. Section V empirically examines determinants of CD issuance volume using the autoregressive distributed lag (ARDL) approach and

market volatility (VIX), liquidity conditions, returns on equity, and banks credit to deposit ratio uses as explanatory variables. Section VI concludes the article with overall findings.

II. CD Market: Some Preliminaries

II.1 Cross-Country Experience

The development of CDs began in the US by New York banks in mid-1960s as a result of rising credit demand and dampened deposit growth during the economic growth cycle (McKinney, 1967). In 1978, the US Federal Reserve introduced 'money market certificate of deposit' to prevent rising interest rates from adversely affecting the flow of savings into financial institutions (Winningham, 1979). This was closely associated with the US interest rate liberalisation process (Liu, 2018). In the US, CDs are considered as special type of deposit account with a bank or financial institution with tenor up to five years and can be bought through federally insured banks where the funds are insured up to USD 250,000.[4] During the global financial crisis (GFC), many American investors turned to CDs as it is a safer investment in volatile market conditions.[5] Globally, CDs are rarely traded in the secondary markets and investors tend to hold them till maturity (Aquilina *et al.*, 2023).

In the Euro area, banks account for around 70 per cent of outstanding CD issuance, with the French banks being most active. CDs are mainly issued in domestic currency; however, it can be issued in other currencies in the US and UK market. In contrast to the advanced countries, in China the CD market is nascent and grew after the Chinese central bank liberalised interest rates in 2015. Liu (2018) found that growth in the CD improved monetary policy transmission in China; however, it also resulted in maturity mismatch, increasing leverage and decline in credit ratings of banks, thereby increasing financial stability concerns.

The cross-country experience shows that banks or deposit taking institutions are the major issuers of CDs while mutual funds, pension funds and insurance companies including cash rich non-financial corporations are the investors in CDs (FSB, 2024). Generally, issuance of CD is concomitant with the increase in policy rates, as banks scout for money market instruments during the policy tightening phase. Although CD markets function well in normal times, they are susceptible to illiquidity in times of stress. Generally, CDs are held till maturity given the short-term nature of these instruments, which results in very limited secondary market activity in normal times. Further, the primary issuance market, where most activity takes place, is intermediated by a small number of core dealers that typically act as a single point of market entry. The limited number of intermediaries means that they may not be able to respond to spikes in liquidity demand in times of stress (FSB, 2024).

Unlike other money market instruments, there is no definitive source of data that compiles and reports global CD issuances. Countries have varying reporting requirements and methodologies for tracking CD market, which makes it difficult to get a concise idea about the CD market. A Report based on survey data, estimates global CD market size USD 1 trillion in 2023 and it is projected to reach USD 1.5 trillion in 2032.[6] Another report projected to reach CD market to USD 2.3 trillion by 2033 from USD 1.5 trillion in 2024.[7] Whatsoever the estimates are, it still reflects smaller

[4] https://www.investor.gov/introduction-investing/investing-basics/investment-products/certificates-deposit-cds

[5] https://www.sec.gov/reportspubs/investor-publications/investorpubscertific

[6] https://dataintelo.com/report/global-certificate-of-deposit-market

[7] https://www.verifiedmarketreports.com/product/certificate-of-deposit-market

share in the outstanding USD 128 trillion global debt market as on August 2020, estimated by international capital market association (ICMA). Lack of public data across CD markets presents a challenge when it comes to monitoring these markets, and thus may discourage broader investor participation (FSB, 2024).

II.2 Indian Experience

In India, although CDs are mentioned in the Reserve Bank of India Act 1934, due to the lack of an active secondary market, administered interest rates and possible danger of fictious transactions, CDs were not issued until 1989. The Vaghul Committee on money market reforms recommended issuances of CDs in 1987 (RBI, 1987). Major milestones in the development of CD market in India is given in Annex table A2. Since their inception, CDs are issued by banks for up to 1 year, while the non-bank financial institutions can issue CDs for a duration of 1 to 3 years. Details about the CD product, eligible issuers and investors along with regulatory requirement are given in Annex Table A1.

Typically, CD issuances go up when there is a boom in credit demand with lower growth in bank deposits. During Covid, the CD market had become dormant due to limited requirement for funds by banks and surplus liquidity conditions. Recently, there has been an increase in CD issuances and the CD rates *i.e.*, WAEIR. CD issuance, which was muted during the Covid period (April 2020-November 2021), jumped to ₹ 68,973 crore in the fortnight ending March 22, 2024, from a low of ₹386 crore on May 8, 2020 (Chart 2a). As Covid-related uncertainties waned, hike in policy rates and shift in monetary policy stance at the time of robust credit growth led to the rise in outstanding CDs. On the back of Reserve Bank's introduction of 10 per cent incremental CRR (I-CRR) from May 19, 2023, to mop up the excess liquidity emanating from withdrawal of ₹2000 denominated currency, CD issuances increased. Further, quarter-end effects of advance tax payments and goods and services tax (GST) outflows, coupled with lesser government spending leading to liquidity tightening, result in higher CD issuance by banks. Along with these factors, slowdown in CASA deposit growth for banks as bank depositors shift to alternate assets, has resulted in increased reliance on CDs by banks.[8]

It is found that banking liquidity and CD issuance were negatively correlated (-0.62) during the study period. Therefore, CD issuances spike in March as Banks use CDs as a way to manage liquidity needs arising as a result of tight liquidity conditions during the year-end. Since April 2022, CD issuance has been increasing and reached ₹1.17 lakh crore in March 2025. Outstanding CD issuances increased to all time high of ₹11.75 lakh crore during 2024-25 (Chart 2a and b).

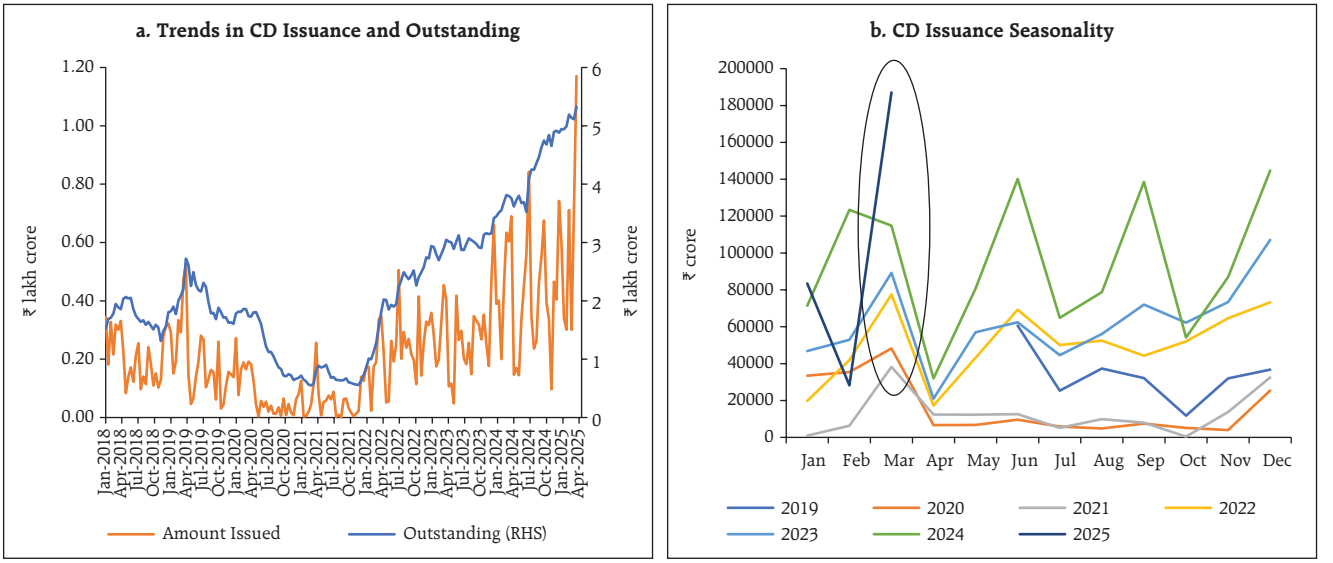
III. CD Issuers and Investors

Among the CD issuers, public sector banks (PSBs) and private sector banks (PVBs) are the dominant players, while CD issuance by foreign banks (FBs) and small finance banks (SFBs) is muted and intermittent. The share of PVBs has declined from 85 per cent in January 2022 to 30 per cent in December 2024, concomitantly the share of PSBs has increased from 6 per cent to 69 per cent during the period. This contrasts with the general belief that issuance of CDs is dominated by PVBs to complement their current and savings account (CASA) deposits (Chart 3).

Though CDs can be issued for a period up to

[8] https://economictimes.indiatimes.com/industry/banking/finance/banking/more-savers-ditch-bank-deposits-to-flirt-with-equity/articleshow/107923540.cms

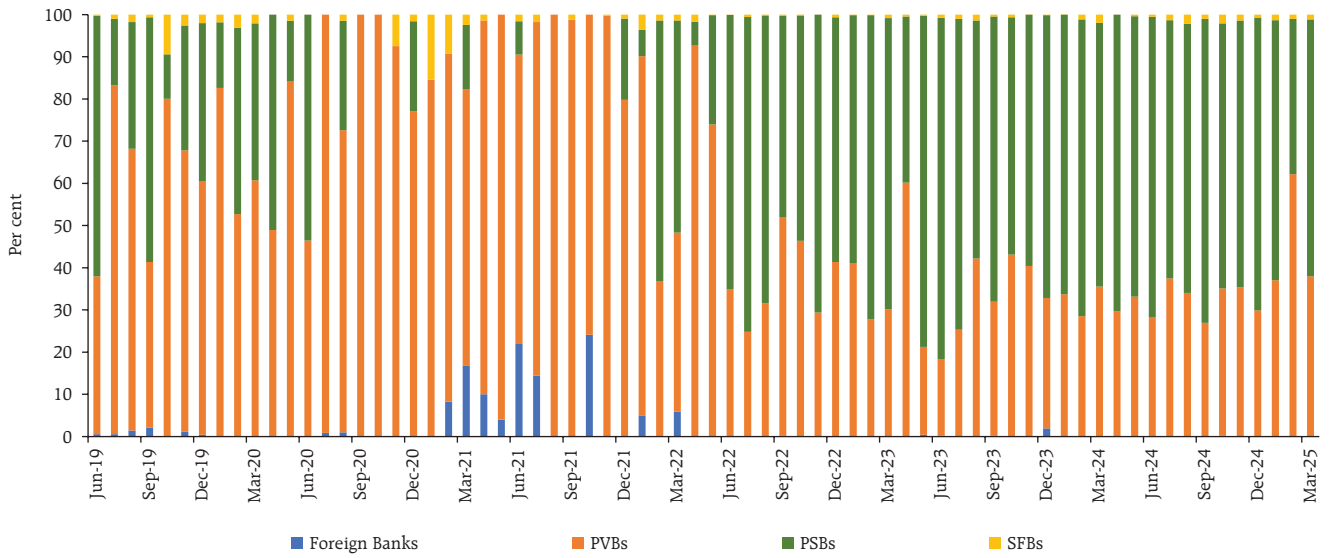
Chart 2: Trends in CD Issuance



Sources: F-Trac and authors' calculations.

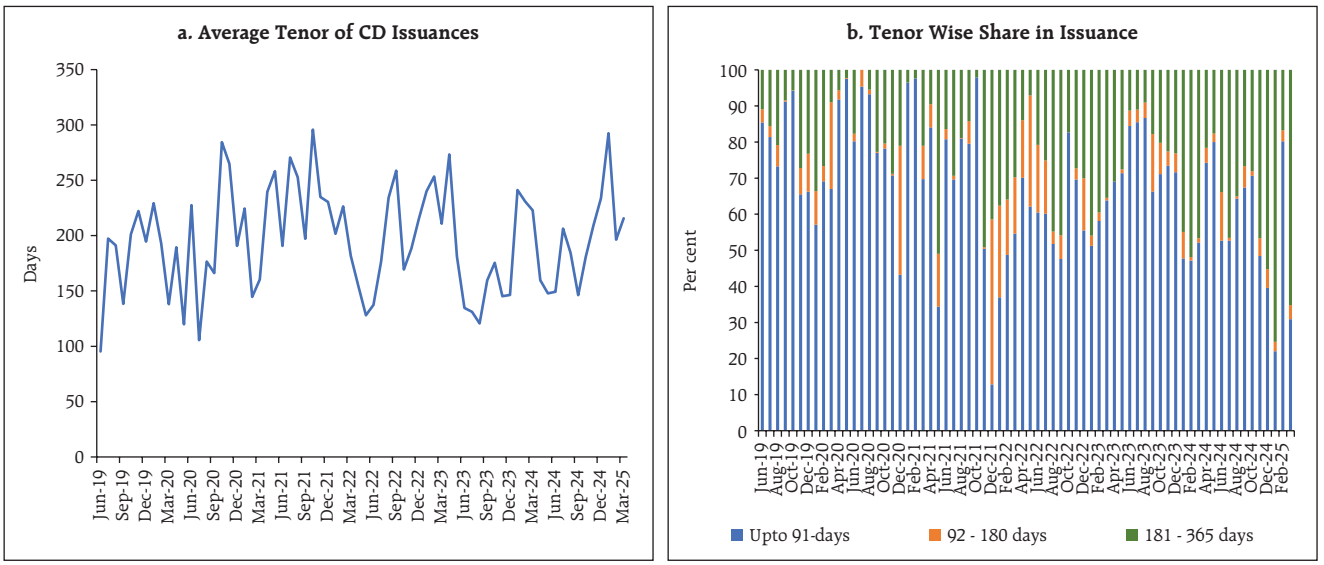
365 days, the average tenor depends on the liquidity needs of banks and expectations of the future interest rates. During interest rate hike cycle, banks benefit by locking longer tenor CDs, while in easing cycle banks usually have no benefit in issuing longer tenor CDs unless there is high credit demand. The average tenor of CDs witnessed increasing trend from 95 days in June 2019 to 296 days in October 2021, which coincides around the start and peak of interest rate easing cycle; and thereafter, the average tenor has decreased to 128 days in May 2022 when Reserve Bank raised policy rate. In September 2024 the average tenor of CD issuances was lower at 146 days indicating that banks were raising CDs for short-term funding and expecting decline in interest rates (Chart 4a).

Chart 3: Share of CD Issuers



Sources: F-Trac and Authors' calculations.

Chart 4: Maturity Profile of CD Issuance



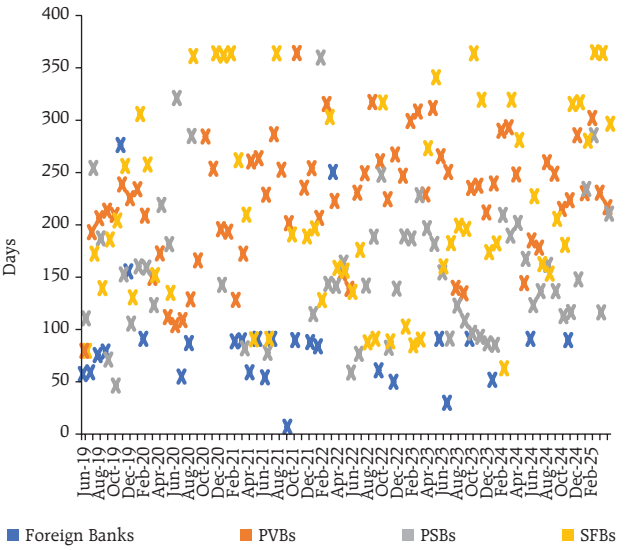
Sources: F-Trac and Authors' calculations.

Amongst the various tenors, the share of CDs issued up to 91 days and between 180-365 days dominate the CD issuance, thus making CDs either an instrument of short-term liquidity management or an instrument to lock short-term rates for longer period (up to 1 year), which may be beneficial for banks during the interest rate upcycle. This is further corroborated by the fact that the share of CDs between 180-365 days has declined since April 2023, when RBI paused interest rate hikes. Since then, the share of CDs issued up to 91 days dominate the CDs issuance, indicating the use of CDs as instrument to meet short-term liquidity needs (Chart 4b).

As CDs are unsecured debt instruments, the average tenor of the CD issuance and WAEIR provide insights into short-term funding dynamics among the four broad categories of commercial banks. The average tenor for PVBs is higher at 222 days, *vis-à-vis* both PSBs as well as SFBs at 155 and 215 days, respectively. Longer tenor of CDs issuance by PVBs imply that they raise funds to not just meet the short-term funding requirements but also for locking in lower interest rates. PSBs have an average tenor of 155 days, indicating use of CDs mostly as instruments for their short-term funding needs (Charts 5).

The CD WAEIR increased steeply after February 2022 alongside increase in policy rate, signalling deficit liquidity conditions. A comparison of WAEIR of different categories of issuing banks shows that on an average, PSBs had lower WAEIR than others. However, this spread in the WAEIR among the banks

Chart 5: Issuer-wise Tenor



Sources: F-Trac and Authors' calculations.

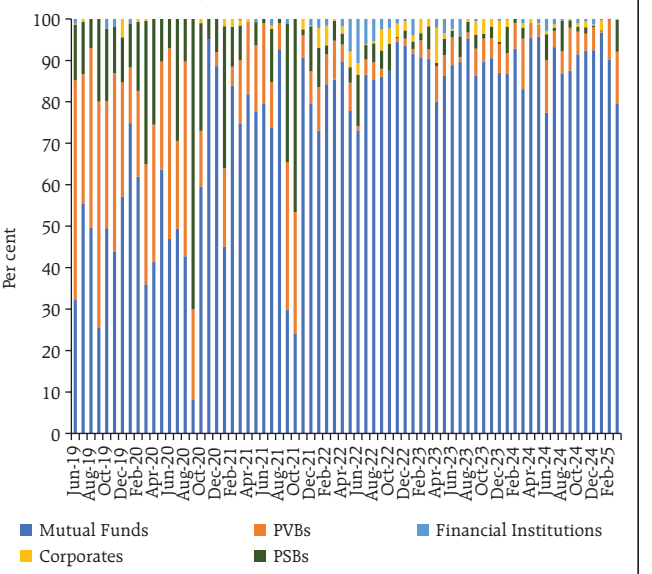
narrowed since July 2022. For SFBs, the WAEIR is usually higher than others, reflecting higher risk premia (Chart 6).

III.1 Who are the CD Investors?

Globally, it has been found that money market mutual funds are the major investors in the CD market (Aquilina *et al.*, 2023). In the Indian context also, mutual funds remain the dominant investors, with an average share of 85 per cent since November 2021. Among other investors, PVBs and PSBs have an average share of 11 and 6 per cent, respectively, while corporates have a marginal share (Chart 7).

As debt mutual funds are mandated to invest in shorter duration instruments they are always on the lookout for investment opportunities in the CD market. Thus, an increase in assets under management (AUM) of debt MFs further might have boosted the MFs' share in the total investment in CDs during the post-covid period. The AUM of debt MFs registered a compounded annual growth rate of 12.2 per cent from March 2022 to September 2022 (Gupta *et al.*, 2022) [Chart 8].

Chart 7: Share of CD Investors

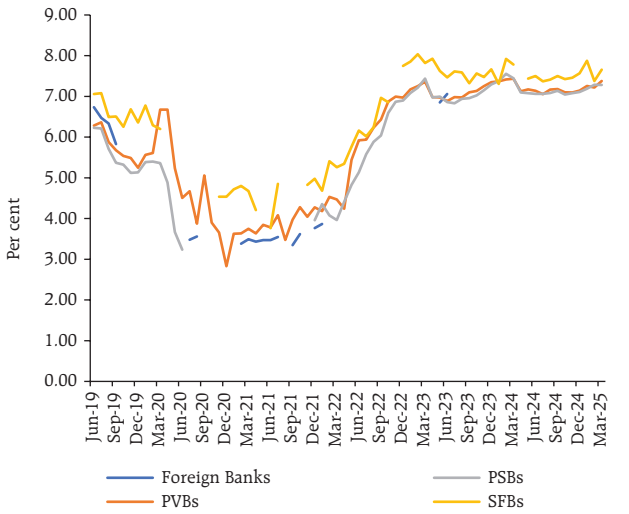


Sources: F-Trac and Authors' calculations.

III.2 Credit Rating Across CD Issuance

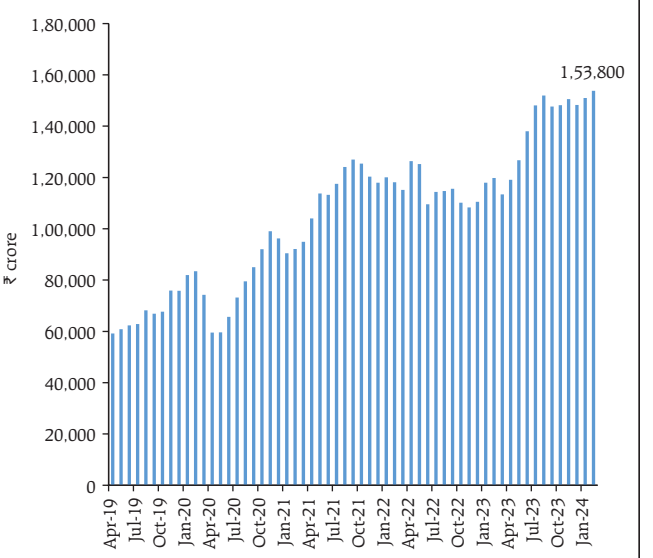
The credit risk of the underlying assets held by the issuing banks is reflected in its credit rating. If a bank is less creditworthy, it has to pay higher rate for CD issuance. This is in line with global experience (Johnson *et al.* 2008). However, CD market is considered to be less efficient and as CD rates are negotiated bilaterally, market stakeholders

Chart 6: Issuer-wise WAEIR



Note: The breaks in between are due to no CD issuance in the issuer category for that time period.
Sources: F-Trac and Authors' calculations.

Chart 8: AUM of Debt Mutual Funds



Sources: FIMMDA and Authors' calculations.

and bank specific characteristics can influence CD rates. Almost all the CD issuances are A1+ rated while among the rating agencies, CRISIL dominates with 55 per cent share (Chart 9).

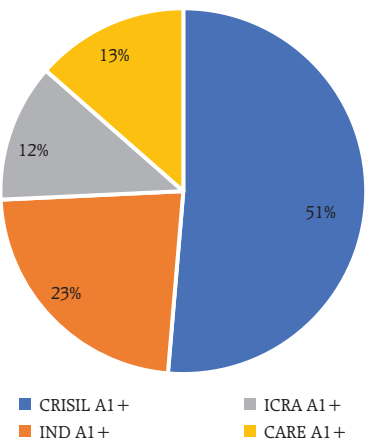
IV. CD Issuance in India: Trends and Correlates

Allen (1971) observed that CD issuance is sensitive to interest rates of other money market instruments, thus CDs' outstanding volume is dependent on the ability of CDs to compete with other money market instruments and banks' funding requirements. A positive correlation between CD issuance and WAEIR with the weighted average call rate (WACR) is found in the Indian CD market. The WAEIR of CD issuance follows the path of policy rate cycle. For instance, it increased consistently between the fortnight ending May 6, 2022 to December 31, 2023, from 4.2 per cent to 7.5 per cent, in line with the increase in policy repo rate.

The 3-month CDs traded marginally above the repo rate before the onset of COVID pandemic, however, it was below the repo rate during the surplus liquidity phase and mostly traded around the repo rate till the first hike on May 4, 2022; thereafter, remained above the repo rate, which points to tight liquidity conditions in accordance with RBI's withdrawal of accommodation stance. Consequent to the rate hike, liquidity conditions tightened whereby liquidity absorption declined from average of ₹6.5 lakh crore in January 2022 to ₹4,547 crore in February 2023, further to an injection of ₹1.17 lakh crore in December 2023 (Chart 10).

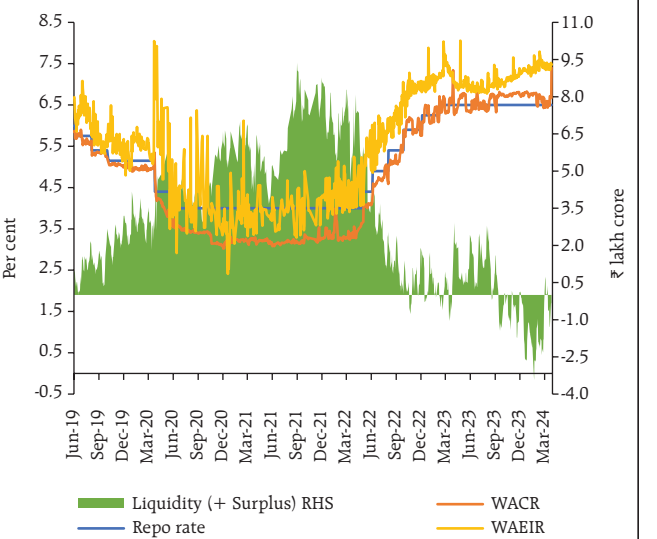
Macroeconomic shocks can affect banks' risk premia on CDs *i.e.*, spread between the WAEIR of CDs and the risk free rate (Kishan and Opiela, 2015) as it can be seen that during the US regional banking crisis in March 2023, The CD WAEIR spiked. In India, the spread between WAEIR of CDs and repo rate has decreased since the pause in policy rate hikes in April 2023. The narrowing of spread between CD issuances of various tenors implies that the compensation for term premia is declining in the CD market, following a pattern similar to the G-sec market. The spread of 3-month CDs over 3-month T-Bill has moved in sync with the liquidity conditions, remaining broadly

Chart 9: CD Issuance - Credit Ratings



Note: CRISIL (Credit Rating Information Services of India Limited), ICRA (Investment Information and Credit Rating Agency of India Limited), CARE (Credit Analysis and Research Limited) and IND (India Ratings) are rating agencies, while A1+ is a rating indicates very high degree of safety for timely repayment.
Sources: F-Trac and Authors' calculations.

Chart 10: Liquidity and Key Rates



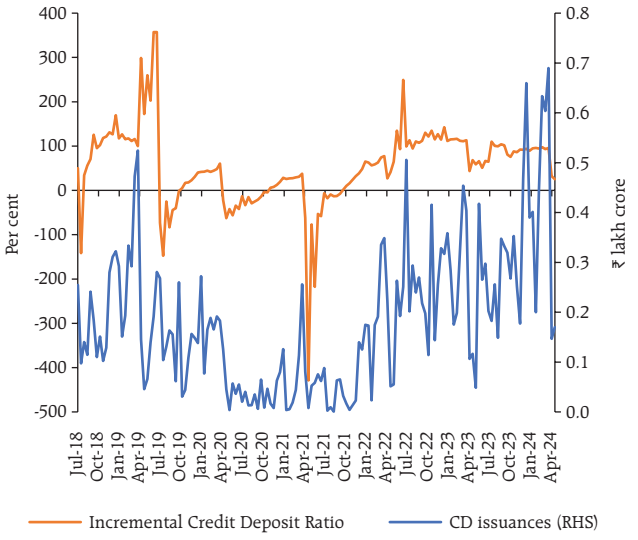
Sources: F-Trac, RBI and Authors' calculations. **Note:** liquidity is Repo + MSF – SDF - Reverse Repo.

range bound during the period. The spread was less than 40 basis points (bps) in December 2021 and increased thereafter to 100 bps around March 2023. The range between the minimum and maximum rate of CD issuance on fortnightly basis reflects the heterogeneity among the issuers as well as future interest rate expectations and liquidity needs of market participants (Chart 11).

CDs can also act as a substitute to traditional deposits, especially during stressed liquidity conditions (Cohan, 1973). CDs and shorter tenor deposits are strong substitutes for one another and banks tend to prefer CDs over deposits as the latter are more sensitive to rates than the former (Humphrey 1979). A positive relationship between incremental credit deposit (ICD) ratio and CD issuances during the fortnight may exist as higher credit offtake compared to deposits could lead to higher issuance of CDs to meet the liquidity requirement of banks (Chart 12).

Further, robust CD issuances during Q4:2023-24 may be due to sustained increase in credit growth along with trailed deposit growth because

Chart 12: CD Issuances and Incremental Credit Deposit Ratio

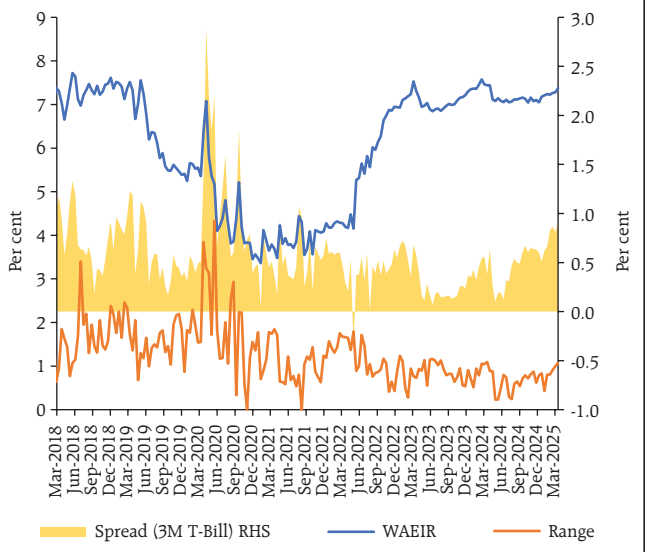


Sources: RBI, Authors' calculations, and Bloomberg.

of moderate increase in deposits rates during the period. The weighted average term deposit rate (WATDR) of PSBs, PVBs and Foreign banks on outstanding deposits increased by 188 bps, 177 bps and 295 bps, respectively, during April 2022 to May 2024 (RBI, 2024) [Chart 13].

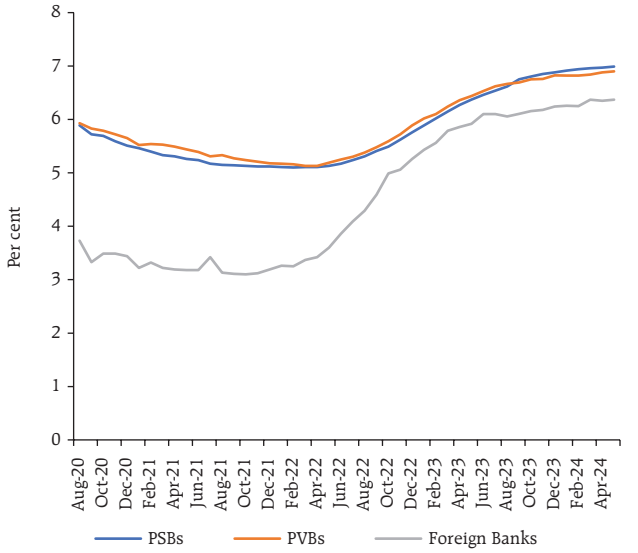
During highly uncertain market conditions, it is expected that CD issuance could be less due to muted

Chart 11: WAEIR and Range



Sources: F-Trac, RBI and Authors' calculations.

Chart 13: Weighted Average Term Deposit Rate



Source: RBI.

credit demand by industry. This limits the need for banks to issue CDs. Further, during heightened volatility period, some investors may shift towards safer assets, such as T-bills. The India volatility index (VIX), being an indicator of uncertainty in the market, is a market fear gauge, and has negative correlation with CD issuance (Chart 14).

V. Empirical Analysis

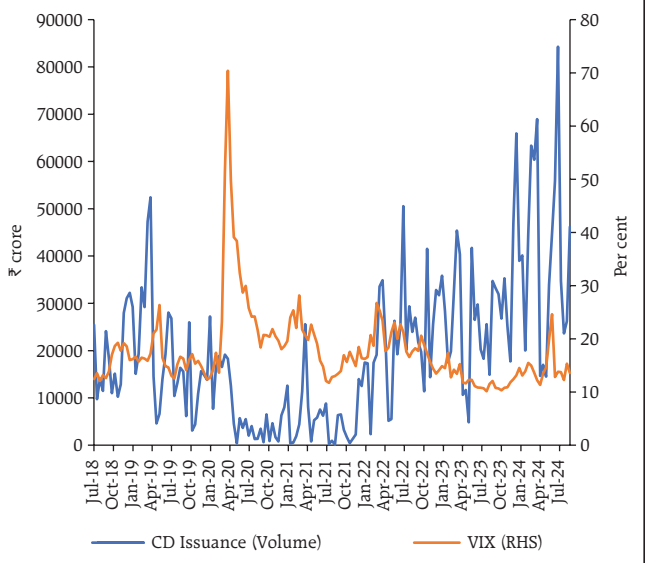
CD issuances tend to be influenced by a number of factors as discussed above (section IV). In order to further understand the contribution of various factors towards growth/decline in CD issuances over time, a regression model is estimated using fortnightly data (July 2018-November 2023).

To understand the factors driving CD issuance, the following equation is estimated:

$$\Delta CD_t = \psi(CD_{t-1} - \beta x_t) + \sum_{i=1}^{p-1} \propto_i \Delta CD_{t-i} + \sum_{j=0}^{q-1} \delta_j \Delta x_{t-j} + \xi_t \quad (1)$$

In the estimated model, dependent variable CD_t depicts fortnightly CD issuances which is represented by the natural logarithm of seasonally adjusted CD issuances during a fortnight. ψ is the error correction term. The independent variable X_t includes market volatility index (VIX) which measures the uncertainty in the markets, Sensx_return as a proxy of equity returns, CD_RATE_CH as a measure of variation in CD rate (WAEIR), ICD_ratio for how much new deposits are being utilised for lending, LAF_CH as a measure of variation in liquidity over a fortnight and OIS_CH as a measure of variation in OIS rates. The variable description and descriptive statistics are presented in Annex Tables A3 and A5, respectively.

Chart 14: CD Issuance and VIX Movements



Sources: RBI and Bloomberg.

CD rate change (CD_RATE_CH) indicates fortnightly variation in the rates (WAIER) at which CDs are issued. The relationship of WAIER with CD issuances depends on the RBI policy cycle, credit growth and availability of other short term deposit instruments among others. When CD issuance act as a substitute to the deposits (short term up to 1 year) especially when credit demand is soaring, and deposit growth is lagging behind an increase in CD rates (WAIER) should lead to a decline in CD issuances and vice versa. Incremental Credit Deposit ratio (ICD_ratio) indicates the fortnightly change in credit deposit ratio; therefore, a positive relationship may exist as higher credit offtake relative to deposits could lead to higher issuance of CDs to meet the increasing reserve requirements.

The liquidity adjustment facility change (LAF_CH) indicates the variation in banking liquidity during the fortnight *vis-à-vis* previous fortnight. While a positive value implies increase in surplus liquidity, a negative value indicates decline in system liquidity during the fortnight. A period of liquidity shortage encourages banks to explore alternative avenues to raise the funds. Thus, CD issuances tend to increase with the decline in liquidity and decrease with the increase in surplus liquidity. It is therefore expected that CD issuances, in the long run, are negatively related to system liquidity measure, LAF_CH variable in the model. A dummy for liquidity tightness has also been taken, where 1 indicates period

when RBI pivoted monetary policy stance towards withdrawal of accommodation post pandemic, otherwise zero.

Interest rate expectations impact money market instruments' behaviour. For the CD issuance, increase in market expectation of interest rates could lead to increase in CD issuance and vice versa. The variable overnight indexed swap (OIS_CH), in our model, indicates the variation in OIS rates over a fortnight. While a positive value indicates increase in OIS rate, a negative value implies a decline in the rate over the fortnight. The increase in OIS rates reflects expectations of higher interest rates and lower credit growth, could lead to decline in CD issuances.

In time series econometrics, divergence from mean over time implies non-stationarity and it is considered as a violation of assumption of the classical linear regression estimation as it may lead to misleading or spurious regression. The Augmented Dicky Fuller (ADF) tests for stationarity of selected variables depict a mix of I(0) and I(1). In order to measure the predictive power of the independent variables, a Granger causality test (Granger, 1969) is applied (Annex Table A4). The results reconfirm that liquidity and higher credit growth relative to deposits growth can predict the future volume of CD issuances (Annex Table A6). Further as the F-statistic establishes a single long run relationship, the ARDL technique is appropriate for estimation (Annex Table A7).

The cointegration technique is a powerful way of detecting the presence of steady state equilibrium between non-stationary variables. As per Pesaran *et al.* (2001), the autoregressive distributed lag (ARDL) cointegration technique can be used in determining the long run relationship between series with different order of integration like, I(0) and I(1) but not I(2). The coefficient of error correction term (ECT) associated with the ARDL model reflects the speed of adjustment to long-run path following a short run deviation. If the F-statistics (Wald test) establishes that there is a single long run relationship and the sample data size is small ($n \leq 30$) or finite, the ARDL error correction representation becomes relatively more efficient. However, limitation of the ARDL approach is that when there are multiple long-run relationships, the model cannot be applied.

As per the estimation results in the short run, CD issuances are negatively impacted by increase in surplus liquidity. On the other hand, withdrawal of accommodation (DUMMY) impacted CD issuances positively, which is indicative of the fact that CD issuances increased after the Reserve Bank shifted its monetary policy stance to withdrawal of accommodation. Among the variables that have long run impact over CD issuances include market volatility measure (VIX), incremental CD ratio, LAF variation over the fortnight and fortnightly variation in OIS rates (Table 1).

Table 1: ARDL Model Estimation Results

Variable	Coefficient	p-value
Long-Run		
Error Correction Term	-0.499***	0.000
constant	9.446***	0.000
VIX	-0.042*	0.081
Sensx_return	0.0004	0.994
CD_RATE_CH	-0.009	0.536
ICD_ratio	0.005***	0.005
LAF_CH	-0.001**	0.040
OIS_CH	-0.144***	0.006
Short-Run		
D(LAF_CH)	-0.0014***	0.000
DUMMY	0.442**	0.002
Adj-R2	0.52	
D-W statistics	2.06	
LM-p-value	0.28	
ARCH-p-value	0.26	

Note: ***, **, * denote significance level of 1 per cent, 5 per cent, and 10 per cent, respectively.
Source: Authors' estimate.

The estimation results confirm that liquidity situation, interest rate expectation, and volatility (VIX) determine CD issuance in the long run. A positive ICD coefficient indicates increase in credit with lower deposits mobilisation prompts CD issuances. In the short run also, liquidity is found to be the major driver of CD issuances. The findings reconfirm that CD issuances are mainly driven by liquidity management and short-term funding requirements.

VI. Conclusion

CD is a money market instrument issued by banks to meet their short-term funding requirement. However, in the recent period it was in focus due to higher issuances accompanied by robust credit growth and a lagging deposit growth. It has been observed that during the covid induced liquidity surplus phase private banks were front runner in issuing the CDs; however, after February 2022 PSBs dominates the share in CD issuance. Foreign banks and relatively new SFBs have limited presence in the CD market. CD rates are relatively higher for SFBs while PSBs were able to raise CDs at relatively lower rates. Mutual funds continued to remain the major investor in CDs as higher retail participation in equity market led to higher asset allocation by mutual funds.

The empirical results depict a positive impact of withdrawal of accommodation and incremental credit deposit ratio over the volume of CD issuances during the study period. This indicates banks' inclination towards increased usage of CDs, amidst tightened liquidity conditions coupled with credit growth outpacing deposits growth. Although, CD market is largely a bilaterally negotiated market, CD issuances is found to be sensitive to current and expected rate of interest. Furthermore, during uncertainty banks tend to reduce CD issuances.

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Annex

Table A1: Certificates of Deposit: Current Specification

Product	Negotiable, unsecured money market instrument issued as a promissory note against funds deposited.
Issuance Form	A CD shall be issued in dematerialised form through any of the depositories approved by and registered with SEBI. A CD can be issued at a discount to face value. CDs can be issued in fixed or floating rate basis.
Denomination	Minimum of ₹5 lakh and multiples of ₹5 lakh thereafter.
Secondary market	CDs can be treaded over the counter (OTC), electronic trading platform (ETP) or recognised stock exchanges approved by RBI. Settlement will be T+0 or T+1. CDs shall be settled on delivery versus payment (DvP) basis through clearing corporation of any recognised stock exchange or any other platform approved by RBI.
Maturity	Minimum: 7 Days and Maximum: 1 Year from the date of issuance. Settlement on a T+1 basis.
Loan against CDs	Loan against CDs not allowed, unless specified by RBI.
Buyback of CDs	CDs buyback allowed after 7 days of the issuance. The buyback should be offered to all investors and investors shall have option to accept or reject the buyback offer.
Regulators	RBI and FIMMDA (Market Self-Regulatory Organisation - SRO).
Eligible Issuers	Scheduled commercial banks, Regional Rural Banks, Small Finance Banks and all India financial institutions (AIFIs). For AIFIs tenor should not be less than 1 year and not exceeding 3 years.
Reporting	CD details shall be reported by the issuer to trade repository, i.e., Financial Market Trade Reporting and Confirmation Platform (F-TRAC) of the CCIL. Secondary market transactions shall be reported on the F-TRAC platform by each counterparty to the transaction.
Reserve Requirement	Banks are required to maintain cash reserve ratio (CRR) and statutory liquidity ratio (SLR), on the issue price of the CDs.
Eligible Investors	All persons' resident in India.

Sources: RBI and FIMMDA.

Table A2: Development of Certificates of Deposit Market in India

Year	Major Development
1934	RBI Act 1934 mentions "certificate of Deposit" as a money market instrument
1985	First comprehensive recommendations on development of money market made by Chakrvarty Committee
1987	RBI constituted a working group on the money market (Chairman: Shri N. Vaghul), recommended the feasibility of introducing CD.
1989	CDs introduced in India, can be issued by scheduled commercial banks (excluding RRBs and local area banks) Banks can account the issue price under the head of "CD issued" and show them under deposits. CD amount should be included under the section 42 returns. Minimum CD issuance size was ₹1 crore.
2002	Reduced minimum issuance size to ₹1 lakh from ₹1 crore. To impart transparency and encourage secondary market transactions, CDs to be issued only in dematerialised form.
2005	The minimum maturity period of CDs reduced from 15 days to 7 days.
2020	Small Finance Banks allowed to issue CDs
2021	Regional Rural Banks allowed to issue CDs. Banks allowed to buy-back CDs. CDs shall be issued in minimum denomination of ₹5 lakh and in multiples of ₹5 lakh thereafter.

Sources: RBI and FIMMDA.

Table A3: Description of Variables

Variable	Description	Source
CD	Natural logarithm of seasonally adjusted sum of Certificate of Deposit issuances during a fortnight.	CCIL
VIX	Market volatility index.	National Stock Exchange (NSE)
Sensex_retrn	Fortnightly return in stock market.	Bombay Stock Exchange
CD_RATE_CH	Fortnightly change in the Weighted Average Effective Interest Rate (WAEIR) for CD market.	CCIL, authors calculation
LAF_CH	Fortnightly change in liquidity available in the system.	RBI
OIS_CH	Fortnightly change in OIS rates (1 year tenor).	Bloomberg
ICD_ratio	Incremental Credit Deposit ratio during the fortnight.	RBI
Dummy	Dummy for increase in liquidity tightness (1 indicates period when RBI shifted its focus towards withdrawal of accommodation post pandemic, otherwise 0)	RBI; authors calculation

Source: Authors' estimate.

Table A4: Pairwise Granger Causality Tests

Null Hypothesis:	Obs	F-Statistic	Prob.	Remarks
ICD does not Granger Cause CD_VOL	139	6.55	0.00	Causality
CD_VOL does not Granger Cause ICD		0.13	0.88	No causality
IIP does not Granger Cause CD_VOL	139	2.11	0.13	No causality
CD_VOL does not Granger Cause IIP		0.27	0.77	No causality
LAF_S does not Granger Cause CD_VOL	139	4.91	0.01	Causality
CD_VOL does not Granger Cause LAF_S		2.08	0.13	No causality
LG_SNSX does not Granger Cause CD_VOL	139	1.71	0.18	No causality
CD_VOL does not Granger Cause LG_SNSX		0.98	0.38	No causality
MCLR does not Granger Cause CD_VOL	139	9.91	0.00	Causality
CD_VOL does not Granger Cause MCLR		6.92	0.00	Causality
OIS does not Granger Cause CD_VOL	139	1.62	0.20	No causality
CD_VOL does not Granger Cause OIS		0.34	0.71	No causality
VIX does not Granger Cause CD_VOL	139	1.62	0.20	No causality
CD_VOL does not Granger Cause VIX		0.34	0.71	No causality
WACR does not Granger Cause CD_VOL	139	8.78	0.00	Causality
CD_VOL does not Granger Cause WACR		3.27	0.04	Causality
WAEIR does not Granger Cause CD_VOL	139	7.95	0.00	Causality
CD_VOL does not Granger Cause WAEIR		2.19	0.12	No causality
BSI does not Granger Cause CD_VOL	139	2.62	0.08	Causality
CD_VOL does not Granger Cause BSI		1.94	0.15	No causality
IIP does not Granger Cause ICD	137	1.06	0.35	No causality
ICD does not Granger Cause IIP		0.37	0.69	No causality

Sources: Authors' estimate.

Table A5: Descriptive Statistics

	Ln CD Volume (seasonally adjusted)	Incremental credit deposit ratio	LAF_CH	Snsx_retrn	OIS_CH	VIX	CDR_ CH
Mean	9.261	49.09	-6.38	0.38	0.04	18.27	-0.44
Max	11.842	357.47	3045	11.78	25.81	70.38	26.65
min	4.751	-428.89	-2184	-12.57	-11.16	10.13	-100
Std Deviation	1.278	88.69	968.91	3.48	3.44	7.84	11.06
Skewness	-0.99	-0.85	0.23	-0.37	2.96	3.37	-5.09
Kurtosis	4.37	9.40	3.06	5.39	25.29	19.24	49.04
Jarque-Bera	33.81	257.96	1.26	36.71	3104.81	1817.39	12876.05
Probability	0.00	0.00	0.53	0.00	0.00	0.00	0.00
Observations	140	141	140	140	140	141	139

Source: Authors' estimate.

Table A6: ADF Unit Root Test Results

Variable	t-statistic	Probability
D(Ln_cdvol_sa)	-10.366***	0.00
D(Incremental CD ratio)	-18.673***	0.00
LAF_CH	-21.340***	0.00
Snsx_retrn	-5.966***	0.00
OIS_CH	-5.93***	0.00
VIX	-4.463***	0.00
CDR_CH	-10.463**	0.00

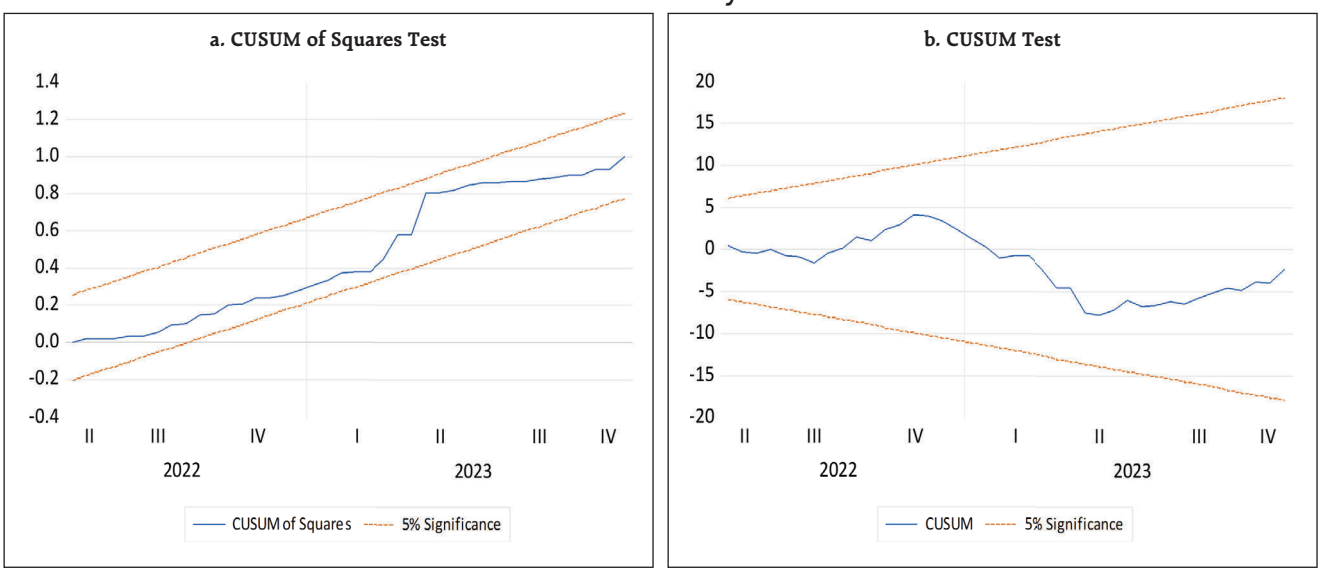
Note: *** denote significant level of 1 per cent, while** denote significance at 5 per cent confidence level.
Source: Authors' estimate.

Table A7: Bounds Test Results

F-Bounds Test	Null Hypothesis: No levels relationship			
Test Statistic	**value**	**Signif.**	**I(0)**	**I(1)**
F-statistic	4.88	10%	1.99	2.94
k	6	5%	2.27	3.28
		1%	2.88	3.99

Source: Authors' estimate.

Chart A1: Stability Tests



Source: Authors' estimate.

Predicting CPI inflation in India: Combining Forecasts from a 'Suite' of Statistical and Machine Learning Models

by Renjith Mohan, Saquib Hasan, Sayoni Roy, Suvendu Sarkar, and Joice John ^

This article attempts to develop a methodology for forecasting the headline Consumer Price Index (CPI) inflation as well as CPI excluding food and fuel inflation for India using various statistical, machine learning, and deep learning models, which are then combined using a performance-weighted forecasts combination approach. This framework can also be used to generate density forecasts and can provide estimates of standard deviation as well as the asymmetry, around the weighted average inflation forecasts. The results indicate a clear advantage in using all model classes together. It is also seen that a performance-weighted combination of statistical, ML and DL models leverages the strengths of each approach, resulting in more accurate and reliable inflation forecasts in the Indian context.

Introduction

Inflation forecasts are a key set of information for the conduct of monetary policy in Inflation Targeting (IT) central banks as forward-looking policies would have to take into account conditional predictions of various key macroeconomic variables given the lags in transmission and other nominal rigidities. It is also important to assess and communicate risks around those predictions, which helps in building credibility and improving transparency. Acknowledging that no single model can capture all economic complexities, central banks around the globe generally adopt a '*Suite of Models*' approach, integrating diverse frameworks to improve the predictive accuracy. Traditionally, models that are dependent on macro and/or micro economic theories detailing the complex macroeconomic relationships have often been used in most central banks for informing the policy decision-making. More recently, with the advancement in computational capacity, large-scale statistical and Machine Learning (ML) models are also becoming popular. While traditional models attempt to predict the macroeconomic outcomes from the interactions of economic agents, ML and Deep Learning (DL) models are more data-dependent and focus more on the state of the economy. In practice, both can function in complementarity to provide valuable information to the policy makers. Traditional statistical models are useful for their stability[1] and interpretability, whereas ML models may offer advancements in forecast accuracy. However, its inability to provide a coherent interpretation remains a concern.

In this context, this article attempts to a develop a 'suite' of statistical and ML models for forecasting CPI headline and core inflation[2] in India. It attempts to synthesise two earlier works done in the Indian context *viz.* Bhoi and Singh (2022) which focused on ML models for inflation forecasting, and John *et al.* (2020) which explored the forecast combination approach using different time series and statistical models for forecasting CPI inflation. While Bhoi and Singh (2022) found relative gains in using ML-based techniques over traditional ones in forecasting inflation in India, John *et al.* (2020) established the relative advantage of using forecast combination approaches for inflation forecasting in India.

^ The authors are from the Department of Statistics and Information Management (DSIM), Reserve Bank of India (RBI). The views expressed in this article are those of the authors and do not represent the views of the Reserve Bank of India.

[1] Stability here implies the robustness of model forecasts against variations in hyperparameter tuning. Unlike traditional statistical models, which rely on well-defined parametric structures, ML and DL models often exhibit sensitivity to hyperparameter choices, leading to forecast volatility across different tuning configurations.

[2] CPI excluding food and fuel. This notion is used in the rest of the article

Building on these results, this article employs a combination approach for forecasting CPI headline and core inflations in India, generated from a large number (say 216) of statistical, ML, and DL models[3], and evaluates its *pseudo-out of sample*[4] forecast performance. Availability of large number of individual forecasts enable this framework to sum up those into density forecasts and hence can also be used to estimate the standard deviation and skewness. The article is structured as follows: Section 2 reviews the relevant literature; the data and methodologies are outlined in Section 3; Section 4 discusses the empirical results; and concluding remarks are put together in Section 5.

2. Literature Review

With the increase in computational power over the years, as shown in Bates and Granger (1969), the world has shifted from using a 'single best model' approach to 'forecast combination' approach, thereby, overcoming the uncertainties arising from usage of different datasets, assumptions and various specifications of the models thus, by increasing the reliability of the results.

Stock and Watson (2004) employed the benefits of combination techniques to macroeconomic forecasting, particularly for output growth across seven countries. They found that simple methods such as averaging multiple forecasts, often outperformed more complex and adaptive techniques, and aided to mitigate the instability often seen in individual economic forecasts. Their findings underscored the point that complexity in forecasting models does not necessarily result in better accuracy, especially in uncertain environments. They found that forecasts from even simple combination approaches proved more accurate than sophisticated models in many cases.

The "M" competitions initiated by Spyros Makridakis in 1982 have had a colossal impact on the forecasting sphere. Instead of focusing on the mathematical properties of the models (which was the traditional way of looking at the forecasting models), they paid sole attention to out of sample forecast accuracy. They found that complex forecasting models do not necessarily always offer more precise projections than simpler ones. Following the legacy, the "M4" competition, launched in 2017, tested a range of methods, including traditional statistical models like Auto-Regressive Integrated Moving Average (ARIMA) and Exponential Smoothing (ETS) alongside various ML and DL models. A key takeaway from the competition was that simple combination methods, such as *Comb*[5]—a straightforward average of several ETS variants—outperformed more advanced techniques across various data frequencies. This reinforced the idea that simpler methods often outperform more sophisticated models. The competition also revealed the limitations of pure ML models, which at times underperformed to traditional statistical methods. This highlighted the need for a hybrid approach that combines ML/DL algorithms and traditional statistical methods in a forecast combination framework to improve overall forecasting accuracy.

In the Indian context, John *et al.* (2020) explored inflation forecast combination approach in the Indian

[3] Statistical models are structured mathematical framework-based model built on probability theory and assumptions about data generating process. ML models are data-driven algorithms that identify patterns and optimise predictions without strict parametric assumptions. DL models are subset of ML models where multi-layered neural networks are employed to extract hierarchical representations from large datasets for complex tasks.

[4] In a *pseudo* out-of-sample forecasting exercise (usually conducted ex-post the availability of the actual data for verifying the forecastablity of the framework), the forecasts are generated at some time t in the past, using only the data available till that time for the parametrisation of the model as well as for generating the forecast of exogenous variables.

[5] *Comb* model is the simple arithmetic average of single exponential smoothing, Holt and damped exponential smoothing.

context, using 26 different time series and statistical models, but not including ML and DL approaches. Their study emphasised the value of traditional econometric methods while acknowledging the growing importance of ML and DL models. John *et al.* (2020) further pointed to the need for an integrated approach that combines the forecasts from individual models to enhance the forecasting accuracy. Bhoi and Singh (2022) focused on refining econometric models for inflation forecasting in India, stressing the enhanced performance of ML/DL models for forecasting CPI inflation in the Indian context.

3. Data and Methodology

3.1 Data

The time-series CPI data released by the National Statistical Office (NSO) for the period January 2012 to July 2024 has been used as the primary (dependent) variable of interest. Apart from headline inflation, core inflation (derived from CPI by excluding food and fuel) is also separately modelled for generating forecasts using the same methodology. The other explanatory variables used as the determinants of headline and core inflations in various models are – (i) crude oil price (Indian basket), (ii) Rupee-United States Dollar (INR-USD) exchange rate, (iii) real gross domestic product (GDP) and output gap[6] and (iv) policy repo rate[7].

3.2 Methodology

A large number of *h*-period ahead inflation forecasts are generated using various statistical, ML, and DL models, which are then aggregated using weights that are being derived based on the out of sample forecast performance of these models. The detailed steps for estimating the inflation forecasts using performance-weighted combinations are as under:

i. Inflation series are seasonally adjusted using the X-13 ARIMA[8] technique.

ii. Exogenous variables like INR-USD, Indian basket of crude oil price, real GDP and output gap are used for the estimations in some models. The series which are available only on quarterly frequency (GDP and output gap) are converted to monthly frequency using the temporal disaggregation method[9].

iii. Seasonally adjusted annualised rates (SAAR) of CPI (headline and core, separately) are then calculated.

iv. Two different window sizes are used for the estimation – 36 months (3 years) and 96 months (8 years). These windows are rolled over for the entire sample period. This produced multiple sub-samples of data. A shorter window size of 3 years and a longer window size of 8 years are used to minimise the bias emanating from a fixed sample size.

v. Each model in Table 1 is estimated separately in each sub-sample using SAAR (headline and core, separately) as the dependent variable (or as one of the dependent variables).

[6] Output gap is defined as (actual GDP level minus potential GDP level)*100/(potential GDP level). Potential GDP is estimated by using Hodrick-Prescott (HP) filter.

[7] Crude oil prices (Indian Basket) are obtained from the Petroleum Planning & Analysis Cell (PPAC) under the Ministry of Petroleum & Natural Gas, Government of India (GoI). Real Gross Domestic Product data is sourced from the Ministry of Statistics and Programme Implementation (MoSPI), GoI. The INR-USD exchange rate and the repo rate are sourced from the Database of Indian Economy (DBIE) maintained by the Reserve Bank of India (RBI).

[8] X-13 ARIMA uses Seasonal ARIMA (SARIMA) models to determine the seasonal pattern in the economic series. The order of the SARIMA models is determined based on the in-sample goodness of fit of different models and the best model is selected using suitable information criteria. The selected model, therefore, represents the underlying data-generating process through average parameter estimates.

[9] Temporal disaggregation has been carried out using Denton-Cholette method (Denton, 1971).

Table 1: Suite of Models

Class of Models	Type of Models	Specifications (Number)	Sample Window Sizes (Number)	Total number of models
Statistical Models	RW, AR, MA, ARMA, ARX, MAX, ARMAX, ARCH, MACH, ARMACH, VAR, VARX, BVAR, BVARX	46	2	92
Machine Learning Models	SVM, EL, RF, GPR, NARNET-LM, NARNET-SCG, NARNET-BR, NARNETX-LM, NARNETX-SCG, NARNETX-BR	44	2	88
Deep Learning Models	LSTM-SGDM, LSTM-ADAM	18	2	36
TOTAL	**26**	**108**	**-**	**216**

Note: RW: Random Walk; AR: Autoregressive, MA: Moving average, X: with exogenous variables, CH: Conditional heteroskedastic, VAR: Vector autoregression, BVAR: Bayesian VAR, SVM: Support Vector Machine, EL: Ensemble Learning, RF: Random Forest, GPR: Gaussian Process Regression, NARNET: Non-linear auto regressive neural network, LM: Levenberg–Marquardt, SCG: Scaled conjugate gradient; BR: Bayesian Regularization, LSTM: Long-short term memory, SGDM: Stochastic gradient descent with momentum, ADAM: Adaptive Moment Estimation.
Refer to **Annex Table 1** for details.
Source: Authors' estimates

vi. The year-on-year inflation ($\hat{y}_{t+h|t,i}$) for each model in each sub-sample are then forecasted up to 12 months ahead horizon.

vii. *Pseudo*-out-of-sample errors are then calculated. The *pseudo*-out-of-sample error is defined as the difference between the actual value ($y_{t+h|t,i}$) and the forecasted value ($\hat{y}_{t+h|t,i}$).

viii. The 12-month ahead root mean squared forecast error (RMSE) for the model i is estimated using the following formulae. A window size of 12 months has been used to calculate the RMSEs. These are estimated for each subsample.

$$RMSE_{t+h|t,i} = \sqrt{\left\{\frac{1}{h}\sum_{l=1}^{h}\left(y_{t+l|t,i} - \hat{y}_{t+l|t,i}\right)^2\right\}}$$

ix. The weights for the forecast combination are estimated as follows:

$$w_{t+h|t,i} = \frac{\left(1/RMSE_{t+h|t,i}\right)}{\sum_{i=1}^{N}\left(1/RMSE_{t+h|t,i}\right)}$$

where, N is the total number of models.

x. These weights are used to calculate the weighted average of inflation forecasts from the individual models.

$$\hat{y}_{t+h|t} = \sum_{i=1}^{N} w_{t+h|t,i} * \hat{y}_{t+h|t,i}$$

xi. Furthermore, 216 different inflation point forecasts for each horizon are bifurcated in two groups – (a) above the weighted average forecast, (b) below the weighted average forecast. Then, the RMSE-weighted standard deviation is calculated for both groups (σ_1 and σ_2, where σ_1 is the standard deviation of the forecasts above the weighted average forecast and σ_2 is the standard deviation of the forecasts below the weighted average forecast).

xii. Assuming a split-normal distribution asymmetric confidence intervals of desired significant levels can be calculated around each h-period ahead forecasts.

xiii. Finally, the asymmetry of the forecast can be determined using the formulae:

$$Asymmetry = \frac{\sigma_1}{\sigma_2}$$

3.3 Toolbox / Software

The entire methodology described above has been programmed and a toolbox has been developed in MATLAB.

4. Empirical Findings

4.1 Estimated Inflation Forecast, Standard Deviation and Asymmetry: An Illustration

The 12-month ahead performance-weighted inflation forecasts, standard deviation and asymmetry, which are estimated using the suit of models generated using the data till December 2023 is presented in Chart 1.

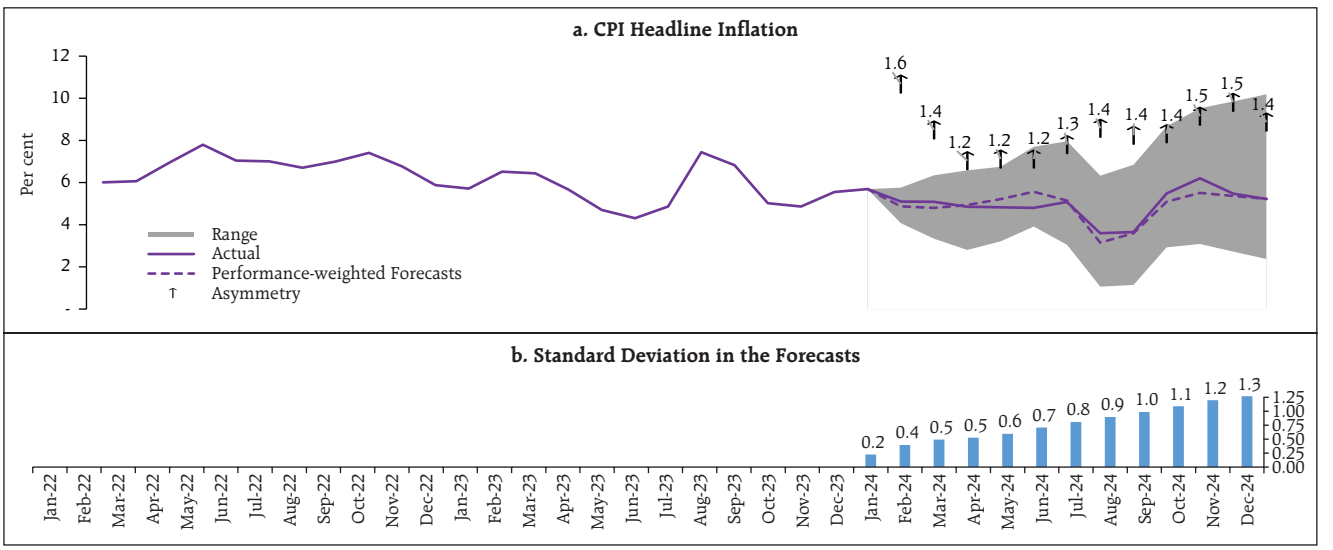
The realised monthly inflation numbers for 2024 forecasted using the data till December 2023 fell well within the range of forecasts and was broadly aligned with performance-weighted forecasts. As expected, the standard deviations were higher for longer horizons. The asymmetricity was pointing towards an upward bias in the forecast. The comparison of the forecast accuracy of the performance-weighted forecasts *vis-à-vis* that of the individual models and the simple average forecasts for the entire sample period is carried out in the following sub-sections.

4.2 A Comparison of RMSEs: Individual Models *Versus* Performance-weighted:

The average RMSE across the 12-month horizon of the performance-weighted forecasts for the headline and core inflation are found to be approximately 70 per cent lower than the benchmark random walk (RW) forecast. It is also found to be better than the forecasts generated by more than 75 per cent of models in all horizons. Certain models produce better forecasts in some horizons and for some windows. The best performers are not the same throughout all the horizons as well as for all the windows. However, a judicious combination of forecasts (like performance-weighting) helps to reduce biases arising out of such divergences (Charts 2 & 3). Unlike what witnessed for core inflation forecasts, the plateauing nature of the RMSEs for headline inflation forecasts as horizon increases may be due to the influence of the effect of the transitory shocks.

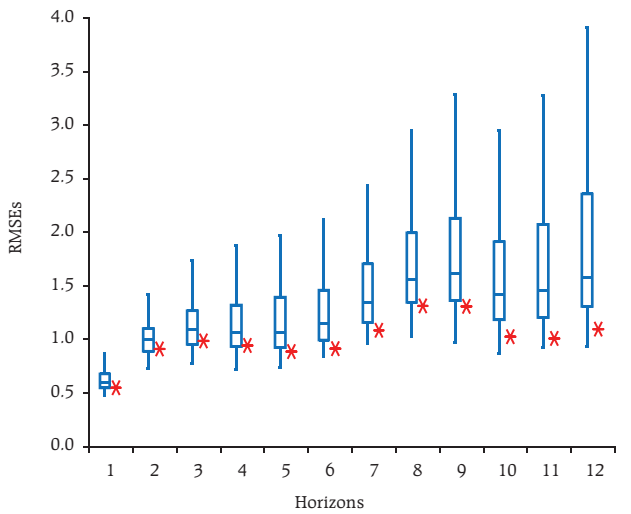
4.3 Forecast Accuracy[10]: Performance-weighted

Chart 1: CPI Headline Inflation Forecasts: An Illustration



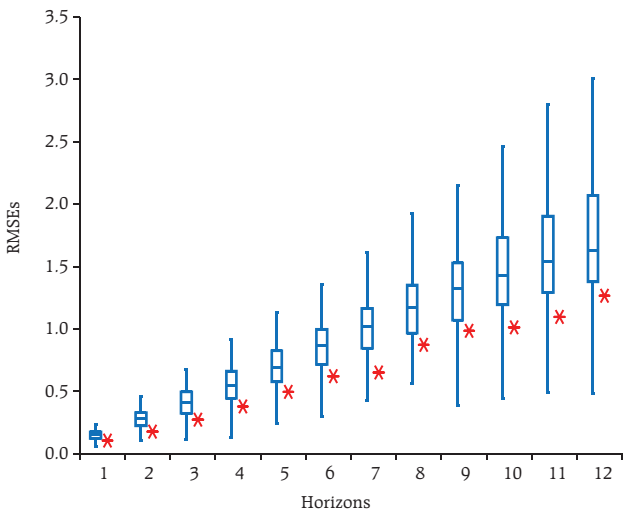
Note: The upside arrow indicates an upside bias (> 1).
Source: Authors' estimates

Chart 2. *Pseudo*-out of sample RMSE for Headline Inflation



Note: Red markers are RMSEs of performance-weighted forecast.
Source: Authors' estimates.

Chart 3. *Pseudo*-out of sample RMSE for Core Inflation



Note: Red markers are RMSEs of performance-weighted forecast.
Source: Authors' estimates.

Versus Simple Average

The Diebold-Mariano (DM)[11] test has been used for a formal statistical comparison of the performance-weighted combination method from that of a simple average forecast for each class of models (Statistical, ML and DL) as well as for the entire basket of all 216 forecasts, separately, over different forecast horizons.

In the DM test, the null hypothesis is that the simple average is as accurate as the performance-weighted forecast combinations, while the alternative hypotheses are: (i) the simple average is less accurate than the performance-weighted combination, and (ii) the simple average is more accurate than the performance-weighted combination. To minimise the 'size bias' in small samples, the bias correction suggested by Harvey, Leybourne, and Newbold (1998) was applied, using Student's t critical values instead of standard normal values. Table 2 presents the results for four forecast horizons, applied separately to two different rolling window sizes for both headline and core inflation. The DM test was performed separately for each model type — Statistical, ML, DL, and a combination of all models — for headline and core inflation, as well as for each rolling window size. This resulted in sixteen instances (forecast horizon (4) x model types (4)) for each combination of window size and inflation type.

Overall, the performance-weighted forecasts for both headline and core inflations were found to be at par or better than simple average forecasts for all model classes and across horizons, attaching a minimum guarantee of forecast accuracy for the performance-weighted forecasts. The comparison between the two aggregation methods for headline inflation using a rolling window of three years (column (1) in Table 2) revealed that the performance-weighted method significantly outperformed the simple average method in 12 out of 16 instances. However, with a rolling window of eight years for headline inflation, the performance-weighted method

[10] Root Mean Squared Error (RMSE) is mostly used as the metric of the accuracy of forecasting models. Lower RMSEs indicates better accuracy of the forecast. This notion is interchangeably used in this article.

[11] DM Test compares forecast accuracy between two models and test whether the difference in forecast errors between two models is statistically significant.

only outperformed the simple average in two cases (out of 16) (column (2) in Table 2). On the other hand, simple average forecasts did not significantly outperform the performance-weighted in any cases. For core inflation, the performance-weighted method surpassed the simple average in six and four cases

Table 2: Comparison of RMSEs - Simple Average *Versus* Performance-weighted: Diebold-Mariano (DM) Test

Class of Models	Forecast Horizon	Alternative (1 or 2)	Headline Inflation		Core Inflation	
			Window size=3 years	Window size=8 years	Window size=3 years	Window size=8 years
			(1)	(2)	(3)	(4)
			p-values			
Statistical Models	3 months	1	0.08*	0.07*	0.31	0.47
		2	0.92	0.93	0.69	0.53
	6 months	1	0.14	0.20	0.37	0.28
		2	0.86	0.80	0.63	0.72
	9 months	1	0.14	0.17	0.32	0.22
		2	0.86	0.83	0.68	0.78
	12 months	1	0.15	0.21	0.21	0.22
		2	0.85	0.79	0.79	0.78
Machine Learning Models	3 months	1	0.08*	0.21	0.03**	0.06*
		2	0.92	0.79	0.97	0.94
	6 months	1	0.01***	0.29	0.04**	0.02**
		2	0.99	0.71	0.96	0.98
	9 months	1	0.05**	0.22	0.03**	0.02**
		2	0.96	0.78	0.97	0.98
	12 months	1	0.04**	0.29	0.00***	0.00***
		2	0.96	0.71	1.00	1.00
Deep Learning Models	3 months	1	0.07*	0.17	0.01***	0.27
		2	0.93	0.83	0.99	0.73
	6 months	1	0.06*	0.19	0.10	0.18
		2	0.94	0.81	0.90	0.82
	9 months	1	0.01***	0.21	0.03**	0.02
		2	0.99	0.79	0.97	0.98
	12 months	1	0.00***	0.02**	0.05	0.14
		2	1.00	0.98	0.95	0.86
All Models	**3 months**	1	0.05**	0.39	0.17	0.14
		2	0.95	0.61	0.83	0.86
	6 months	1	0.08*	0.17	0.40	0.35
		2	0.92	0.83	0.60	0.65
	9 months	1	0.10*	0.20	0.29	0.35
		2	0.90	0.80	0.71	0.65
	12 months	1	0.14	0.20	0.16	0.24
		2	0.86	0.80	0.84	0.76

*: Significant at 10% level; **: Significant at 5% level; ***: Significant at 1% level.

Note: Null Hypothesis (H_0): Forecast Accuracy of Simple Average of Forecasts is equal to Forecast Accuracy of Performance-weighted Forecast Average

Alternative 1: Forecast Accuracy of Simple Average of Forecasts < Forecast Accuracy for Performance-weighted Forecast Average

Alternative 2: Forecast Accuracy of Simple Average of Forecasts > Forecast Accuracy for Performance-weighted Forecast Average

DM statistics presented in this table are adjusted for autocorrelation following Harvey, Leybourne, and Newbold (1998).

Source: Authors' estimates.

(out of 16) for window sizes of three and eight years, respectively (columns (3) and (4) in Table 2). Notably, the simple average never significantly outperformed the performance-weighted method. To reiterate the results, RMSEs for the simple average and performance-weighted forecasts are compared using the paired Wilcoxon signed-rank test[12] (Table 3).

Table 3 compares the RMSEs of simple average forecasts *versus* performance-weighted forecast averages of headline and core inflations, under different model classes and rolling window sizes. The null hypothesis is that the RMSE of the simple average forecast is as accurate as that of the performance weighted one, with the alternatives being that the simple average is either more or less accurate. Results show that the RMSE of the performance-weighted forecast average is significantly lower than that of the simple average on a consistent basis, reinforcing the DM test findings in Table 2 that performance-weighted combinations yield more or similarly accurate inflation forecasts than that of simple average forecast in the Indian context.

4.4 Forecast accuracy of performance-weighted forecasts among various classes of models

After confirming the efficacy of the performance-weighted forecast over the simple average forecast, now we turn towards the comparison of the forecast performance of the weighted average forecasts across different classes of models *viz.* Statistical, ML, DL, and the super-class of all models. First, using the DM test, the forecast accuracy of the individual model classes (statistical, ML and DL) – aggregated using performance weights – is compared with the all-models combined forecasts, which aggregates the forecasts from all 216 individual models using performance-weighted weights. The DM test is applied across different forecast horizons, rolling window sizes, and for inflation categories (headline and core).

Table 3: Comparison of RMSEs of Forecast Combinations (1 month to 12 months horizon) - Simple Average *Versus* Performance-weighted: Paired Wilcoxon Signed-Rank Test

Class of Models	Alternative (1 or 2)	Headline Inflation		Core Inflation	
		Window size=3 years	Window size=8 years	Window size=3 years	Window size=8 years
		(1)	(2)	(3)	(4)
		p-values			
Statistical Models	1	0.99	1.00	1.00	1.00
	2	0.00***	0.00***	0.00***	0.00***
Machine Learning Models	1	1.00	0.76	1.00	0.96
	2	0.00***	0.00***	0.00***	0.046***
Deep Learning Models	1	1.00	1.00	0.99	1.00
	2	0.00***	0.00***	0.00***	0.00***
All Models together	1	1.00	1.00	1.00	1.00
	2	0.00***	0.00***	0.00***	0.00***

*: Significant at 10% level; **: Significant at 5% level; ***: Significant at 1% level.
Note: Null Hypothesis (H_0): RMSEs of Simple Average of Forecasts are equal to RMSEs of Performance-weighted Forecast Average
Alternative 1: RMSEs of Simple Average of Forecasts < RMSEs of Performance-weighted Forecast Average
Alternative 2: RMSEs of Simple Average of Forecasts > RMSEs of Performance-weighted Forecast Average
Source: Authors' estimates.

[12] This non-parametric test is useful for comparing two matched samples, providing a robust alternative to the paired t-test when the focus is on comparative performances. The test assesses whether there is a greater-than-50 per cent probability that RMSEs of the performance-weighted average forecasts of 1-month to 12-month ahead horizon from a particular class of model is greater than that from the other classes, separately.

The results show that for the 3-year rolling window, the all-combined forecasts significantly outperform the performance-weighted forecasts from different class of models in four out of 12 instances, for both core and headline inflation (columns (1) and (3) in Table 4), while for others all-combined forecasts are at par across different class of models. However, for an 8-year rolling window, the all-combined forecasts perform better in only one case (columns (2) and (4) in Table 4). More importantly, weighted forecasts from neither of the model classes (statistical, ML or DL) in both horizons or for either headline or core inflations, significantly outperformed the all-models combined forecasts (Table 4). When each model class is analysed separately *vis-à-vis* the all-models combined, performance-weighted forecast significantly outperformed the weighted forecast from the class of DL models in most instances (six out

Table 4: Comparison of RMSEs among Classes of Models: Diebold-Mariano (DM) Test

Class of Models against All Models Together		Forecast Horizon	Alternative (1 or 2)	Headline Inflation		Core Inflation	
				Window size=3 years	Window size=8 years	Window size=3 years	Window size=8 years
				(1)	(2)	(3)	(4)
				p-values			
Class of Models	Statistical Models	3 months	1	0.15	0.14	0.09*	0.48
			2	0.85	0.86	0.91	0.52
		6 months	1	0.13	0.16	0.36	0.29
			2	0.87	0.84	0.64	0.71
		9 months	1	0.15	0.19	0.19	0.22
			2	0.85	0.81	0.81	0.78
		12 months	1	0.15	0.21	0.16	0.22
			2	0.85	0.79	0.84	0.78
	Machine Learning Models	3 months	1	0.03**	0.13	0.19	0.01***
			2	0.97	0.87	0.81	0.99
		6 months	1	0.18	0.16	0.39	0.21
			2	0.82	0.84	0.61	0.79
		9 months	1	0.15	0.19	0.30	0.38
			2	0.85	0.81	0.70	0.62
		12 months	1	0.15	0.21	0.16	0.25
			2	0.85	0.79	0.84	0.75
	Deep Learning Models	3 months	1	0.06*	0.14	0.00***	0.13
			2	0.94	0.86	1.00	0.87
		6 months	1	0.08*	0.03**	0.00***	0.26
			2	0.92	0.97	1.00	0.74
		9 months	1	0.09*	0.33	0.07*	0.45
			2	0.91	0.67	0.93	0.56
		12 months	1	0.47	0.25	0.18	0.27
			2	0.53	0.75	0.82	0.73

*: Significant at 10% level; **: Significant at 5% level; ***: Significant at 1% level.

Note: Null Hypothesis (H_0): Forecast Accuracy of performance-weighted forecast average of a particular class of models is equal to Forecast Accuracy of Performance-weighted Forecast Average of all models

Alternative 1: Forecast Accuracy of performance-weighted forecast average of a particular class of models < Forecast Accuracy of Performance-weighted Forecast Average of all models

Alternative 2: Forecast Accuracy of performance-weighted forecast average of a particular class of models > Forecast Accuracy of Performance-weighted Forecast Average of all models

DM statistics presented in this table are adjusted for autocorrelation following Harvey, Leybourne, and Newbold (1998).

Source: Authors' estimates.

Table 5: Comparison of RMSEs of Performance-weighted Forecast Combinations (1 month to 12 months horizon) among Classes of Model: Paired Wilcoxon Signed-Rank Test

All Models together *vis à vis*		Alternative (1 or 2)	Headline Inflation		Core Inflation	
			Window size=3 years	Window size=8 years	Window size=3 years	Window size=8 years
			(1)	(2)	(3)	(4)
			p-values			
Class of Models	Statistical Models	1	0.00***	0.00***	0.88	0.00***
		2	1.00	0.99	0.13	1.00
	Machine Learning Models	1	0.78	0.99	0.15	0.00***
		2	0.26	0.00***	0.87	1.00
	Deep Learning Models	1	0.37	0.00***	0.42	1.00
		2	0.66	1.00	0.60	0.00***

*: Significant at 10% level; **: Significant at 5% level; ***: Significant at 1% level.

Note: Null Hypothesis (H0): RMSEs of Performance-weighted Forecast Average of All models are equal to RMSEs of Performance-weighted Forecast Average of particular class of models

Alternative 1: RMSEs of Performance-weighted Forecast Average of All models < RMSEs of Performance-weighted Forecast Average of particular class of models

Alternative 2: RMSEs of Performance-weighted Forecast Average of All models > RMSEs of Performance-weighted Forecast Average of particular class of models

Source: Authors' estimates.

of eight) but performs mostly similarly to that from statistical and ML models.

The paired Wilcoxon signed-rank test supports these findings, showing that the all-models combined forecasts outperformed the weighted forecasts from statistical models in most cases. Further, the accuracy of the all-models combined forecasts is found to be at par with the forecast combination derived separately from ML and DL models.

5. Concluding Remarks

The findings strongly support the effectiveness of forecast combination of statistical, ML and DL methods in improving inflation forecasting accuracy in the Indian context. The results indicate a clear advantage in using all model classes together, with a guarantee that the forecast accuracy never deteriorate while combining forecasts from all classes of models and getting better in most cases. It further reiterates that a performance-weighted combination of statistical, ML and DL models leverages the strengths of each approach, resulting in more accurate and reliable inflation forecasts in the Indian context. Additionally, forecast combination approach provides a confidence band that allows policymakers to assess risks and make more informed decisions.

This approach is particularly valuable in the Indian context given the complexities of its inflation dynamics, which is often influenced by global uncertainties and food price volatility. However, it is crucial to acknowledge that there are time-variations, asymmetries and nonlinearities that influence the inflationary developments emanating from overlapping shocks. Even then the combination of forecasts generated from statistical, ML and DL models ensures robustness, as it minimises the model misspecifications biases, making it a much more reliable benchmark.

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Annex

Table 1. List of Models

Sr. No.	Class of Models	Type of Models	Algorithm/ Optimizer	Lag Length	Hidden layers
1	Statistical Models	Random Walk Models	-	-	-
2		Autoregressive (AR) Models	-	1 - 3	-
3		Moving average (MA) Models	-	1	-
4		ARMA Models	-	AR: 1 - 3 MA: 1	-
5		AR conditional heteroscedastic (ARCH) Models	-	AR: 1 - 3 GARCH: 1	-
6		MACH Models	-	MA: 1 GARCH: 1	-
7		ARMACH Models	-	AR: 1 - 3 MA: 1 GARCH: 1	-
8		Vector Auto Regressive (VAR) models	-	1 - 3	-
9		Bayesian VAR models	-	1 - 3	-
10		AR Models with Exogenous Variables	-	1 - 3	-
11		MA Models with Exogenous Variables	-	1	-
12		ARMA Models with Exogenous Variables	-	1 - 3	-
13		VAR models with Exogenous Variables	-	1 - 3	-
14		Bayesian VAR models with Exogenous Variables	-	1 - 3	-
15	Machine Learning Models	Support Vector Machine (SVM) for regression	-	1 - 3	-
16		Ensemble learning technique for regression	-	1 - 3	-
17		Binary decision tree for regression (Random Forest)	-	1 - 3	-
18		Gaussian process regression (GPR) model for regression	-	1 - 3	-
19-21		Nonlinear autoregressive neural network (NARNET) models	Levenberg-Marquardt optimizer Bayesian Regularization optimizer Scaled Conjugate Gradient optimizer	1 - 3	5 & 10
22-24		Nonlinear autoregressive neural network models with Exogenous Variables (NARNETX)	Levenberg-Marquardt optimizer Bayesian Regularization optimizer Scaled Conjugate Gradient optimizer	1 - 3	5 & 10
25-26	Deep Learning Models	Long Short-Term Memory (LSTM) Networks	Stochastic gradient descent with momentum (SGDM) optimizer Adaptive Moment Estimation (ADAM) optimizer	1 - 3	25, 50 & 75

Source: Authors' estimates.

CURRENT STATISTICS

Select Economic Indicators

Reserve Bank of India

Money and Banking

Prices and Production

Government Accounts and Treasury Bills

Financial Markets

External Sector

Payment and Settlement Systems

Occasional Series

Contents

Notes: .. = Not available.

– = Nil/Negligible.

P = Preliminary/Provisional. PR = Partially Revised.

No. 1: Select Economic Indicators

Item	2024-25	2023-24		2024-25	
		Q3	Q4	Q3	Q4
	1	2	3	4	5
1 Real Sector (% Change)					
1.1 GVA at Basic Prices	6.4	8.0	7.3	6.5	6.8
1.1.1 Agriculture	4.6	1.5	0.9	6.6	5.4
1.1.2 Industry	4.5	12.6	9.9	3.5	4.7
1.1.3 Services	7.5	8.5	8.0	7.5	7.9
1.1a Final Consumption Expenditure	6.5	5.3	6.3	8.3	4.7
1.1b Gross Fixed Capital Formation	7.1	9.3	6.0	5.2	9.4
	2024-25	**2024**		**2025**	
		Mar.	**Apr.**	**Mar.**	**Apr.**
	1	2	3	4	5
1.2 Index of Industrial Production	4.0	5.5	5.2	3.9	2.7
2 Money and Banking (% Change)					
2.1 Scheduled Commercial Banks					
2.1.1 Deposits	10.6	12.9	12.0	10.6	10.1
	(10.3)	(13.5)	(12.6)	(10.3)	(9.8)
2.1.2 Credit #	12.1	16.3	15.5	12.1	11.1
	(11.0)	(20.2)	(19.2)	(11.0)	(10.1)
2.1.2.1 Non-food Credit #	12.0	16.3	15.5	12.0	11.0
	(11.0)	(20.2)	(19.2)	(11.0)	(10.0)
2.1.3 Investment in Govt. Securities	10.6	11.1	10.7	10.6	9.8
	(9.7)	(12.8)	(12.3)	(9.7)	(9.0)
2.2 Money Stock Measures					
2.2.1 Reserve Money (M0)	4.3	5.6	5.8	4.3	3.7
2.2.2 Broad Money (M3)	9.6	11.1	10.9	9.6	9.6
	(9.4)	(11.6)	(11.4)	(9.4)	(9.4)
3 Ratios (%)					
3.1 Cash Reserve Ratio	4.00	4.50	4.50	4.00	4.00
3.2 Statutory Liquidity Ratio	18.00	18.00	18.00	18.00	18.00
3.3 Cash-Deposit Ratio	4.3	5.0	5.4	4.3	4.5
	(4.3)	(5.0)	(5.3)	(4.3)	(4.5)
3.4 Credit-Deposit Ratio	79.1	78.1	77.4	79.1	78.1
	(80.8)	(80.3)	(79.5)	(80.8)	(79.7)
3.5 Incremental Credit-Deposit Ratio #	89.2	95.8	37.4	89.2	-8.4
	(86.1)	(113.4)	(34.4)	(86.1)	(-11.2)
3.6 Investment-Deposit Ratio	29.5	29.5	29.2	29.5	29.1
	(29.7)	(29.8)	(29.5)	(29.7)	(29.3)
3.7 Incremental Investment-Deposit Ratio	29.5	25.8	8.1	29.5	-5.3
	(28.1)	(28.4)	(6.9)	(28.1)	(-5.8)
4 Interest Rates (%)					
4.1 Policy Repo Rate	6.25	6.50	6.50	6.25	6.00
4.2 Fixed Reverse Repo Rate	3.35	3.35	3.35	3.35	3.35
4.3 Standing Deposit Facility (SDF) Rate *	6.00	6.25	6.25	6.00	5.75
4.4 Marginal Standing Facility (MSF) Rate	6.50	6.75	6.75	6.50	6.25
4.5 Bank Rate	6.50	6.75	6.75	6.50	6.25
4.6 Base Rate	9.10/10.40	9.10/10.25	9.10/10.25	9.10/10.40	9.10/10.40
4.7 MCLR (Overnight)	8.15/8.45	8.00/8.60	8.00/8.60	8.15/8.45	8.15/8.45
4.8 Term Deposit Rate >1 Year	6.00/7.25	6.50/7.25	6.00/7.25	6.00/7.25	6.00/7.15
4.9 Savings Deposit Rate	2.70/3.00	2.70/3.00	2.70/3.00	2.70/3.00	2.70/2.75
4.10 Call Money Rate (Weighted Average)	6.35	6.85	6.65	6.35	5.86
4.11 91-Day Treasury Bill (Primary) Yield	6.52	7.01	6.92	6.52	5.90
4.12 182-Day Treasury Bill (Primary) Yield	6.52	7.14	7.04	6.52	5.93
4.13 364-Day Treasury Bill (Primary) Yield	6.47	7.08	7.07	6.47	5.91
4.14 10-Year G-Sec Par Yield (FBIL)	6.62	7.07	7.16	6.62	6.40
5 Reference Rate and Forward Premia					
5.1 INR-US$ Spot Rate (Rs. Per Foreign Currency)	85.58	83.37	83.34	85.58	85.58
5.2 INR-Euro Spot Rate (Rs. Per Foreign Currency)	92.32	90.22	89.43	92.32	97.12
5.3 Forward Premia of US$ 1-month (%)	3.12	1.00	1.16	3.12	2.57
3-month (%)	2.56	1.11	1.26	2.56	2.34
6-month (%)	2.28	1.31	1.37	2.28	2.15
6 Inflation (%)					
6.1 All India Consumer Price Index	4.6	4.9	4.8	3.3	3.2
6.2 Consumer Price Index for Industrial Workers	3.39	4.2	3.9	19.7	9.0
6.3 Wholesale Price Index	2.3	0.3	1.2	2.2	0.9
6.3.1 Primary Articles	5.2	4.6	5.2	1.3	-1.4
6.3.2 Fuel and Power	-1.3	-2.7	-0.9	0.0	-2.2
6.3.3 Manufactured Products	1.7	-0.8	-0.1	3.2	2.6
7 Foreign Trade (% Change)					
7.1 Imports	6.2	-6.4	11.1	11.4	19.1
7.2 Exports	0.1	-0.6	2.0	0.7	9.0

Note : Financial Benchmark India Pvt. Ltd. (FBIL) has commenced publication of the G-Sec benchmarks with effect from March 31, 2018 as per RBI circularFMRD.DIRD. 7/14.03.025/2017-18 dated March 31, 2018. FBIL has started dissemination of reference rates w.e.f. July 10, 2018.

#: Bank credit growth and related ratios for all fortnights from December 3, 2021 to November 18, 2022 are adjusted for past reporting errors by select scheduled commercial banks (SCBs).

Figures in parentheses include the impact of merger of a non-bank with a bank.

*: As per Press Release No. 2022-2023/41 dated April 08, 2022.

Reserve Bank of India

No. 2: RBI - Liabilities and Assets *

(₹ Crore)

Item	As on the Last Friday/ Friday						
	2024-25	2024	2025				
		May	May 02	May 09	May 16	May 23	May 30
	1	2	3	4	5	6	7
1 Issue Department							
1.1 Liabilities							
1.1.1 Notes in Circulation	3683836	3537514	3774260	3804149	3805608	3805396	3798507
1.1.2 Notes held in Banking Department	11	14	11	17	16	16	13
1.1/1.2 Total Liabilities (Total Notes Issued) or Assets	**3683847**	**3537528**	**3774272**	**3804166**	**3805624**	**3805412**	**3798520**
1.2 Assets							
1.2.1 Gold	235379	174725	244792	260985	245932	252131	255367
1.2.2 Foreign Securities	3448129	3362365	3529249	3542838	3559415	3553110	3542856
1.2.3 Rupee Coin	340	437	231	343	278	171	297
1.2.4 Government of India Rupee Securities	-	-	-	-	-	-	-
2 Banking Department							
2.1 Liabilities							
2.1.1 Deposits	1709285	1733922	1500535	1556544	1603369	1861354	1824626
2.1.1.1 Central Government	100	101	100	100	100	100	101
2.1.1.2 Market Stabilisation Scheme	-		-	-	-	-	-
2.1.1.3 State Governments	42	42	42	42	42	42	42
2.1.1.4 Scheduled Commercial Banks	943060	951109	933070	925199	928136	935087	956086
2.1.1.5 Scheduled State Co-operative Banks	7776	8555	8423	8277	8276	8169	8301
2.1.1.6 Non-Scheduled State Co-operative Banks	5963	5224	5252	5299	5114	5200	5002
2.1.1.7 Other Banks	46963	49246	47516	47751	47161	47374	47182
2.1.1.8 Others	593085	589411	400591	472917	506200	757766	704649
2.1.1.9 Financial Institution Outside India	112296	130234	105541	96958	108338	107616	103263
2.1.2 Other Liabilities	2150508	1612560	2269533	2337286	2312623	2076485	2112709
2.1/2.2 Total Liabilities or Assets	**3859793**	**3346482**	**3770068**	**3893830**	**3915992**	**3937839**	**3937335**
2.2 Assets							
2.2.1 Notes and Coins	11	14	11	17	17	16	13
2.2.2 Balances Held Abroad	1413591	1456002	1414408	1453056	1447619	1473711	1489277
2.2.3 Loans and Advances							
2.2.3.1 Central Government	-	-	-	-	-	-	-
2.2.3.2 State Governments	26284	10723	38480	51342	36404	24410	27482
2.2.3.3 Scheduled Commercial Banks	251984	71305	23458	25291	23081	23717	6516
2.2.3.4 Scheduled State Co-op.Banks	-	-	-	-	-	-	-
2.2.3.5 Industrial Dev. Bank of India	-	-	-	-	-	-	-
2.2.3.6 NABARD	-	-	-	-	-	-	-
2.2.3.7 EXIM Bank	-	-	-	-	-	-	-
2.2.3.8 Others	36426	9311	18700	17267	17019	15797	12340
2.2.3.9 Financial Institution Outside India	111768	129564	105709	97151	108184	107187	103071
2.2.4 Bills Purchased and Discounted							
2.2.4.1 Internal	-	-	-	-	-	-	-
2.2.4.2 Government Treasury Bills	-	-	-	-	-	-	-
2.2.5 Investments	1560630	1365532	1704903	1755757	1817035	1814629	1813740
2.2.6 Other Assets	459101	304031	464398	493949	466633	478373	484895
2.2.6.1 Gold	429510	296897	446686	476236	448768	460079	465984

* Data are provisional.

No. 3: Liquidity Operations by RBI

(₹ Crore)

Date	Liquidity Adjustment Facility						Standing Liquidity Facilities	OMO (Outright)		Net Injection (+)/ Absorption (-) (1+3+5+7+9-2-4-6-8)
	Repo	Reverse Repo	Variable Rate Repo	Variable Rate Reverse Repo	MSF	SDF		Sale	Purchase	
	1	2	3	4	5	6	7	8	9	10
Apr. 1, 2025	-	-	-	-	2804	357282	-	-	-	-354478
Apr. 2, 2025	-	-	9170	-	176	393917	-664	-	-	-385235
Apr. 3, 2025	-	-	6012	-	1494	413054	-2052	-	-	-407600
Apr. 4, 2025	-	-	12419	-	2167	259087	600	-	20000	-223901
Apr. 5, 2025	-	-	-	-	3959	208842	-	-	-	-204883
Apr. 6, 2025	-	-	-	-	3834	181582	-	-	-	-177748
Apr. 7, 2025	-	-	16505	-	542	165387	-	-	-	-148340
Apr. 8, 2025	-	-	23515	-	385	163624	-207	-	-	-139931
Apr. 9, 2025	-	-	19295	-	757	209696	946	-	20000	-168698
Apr. 10, 2025	-	-	-	-	43	155389	-	-	-	-155346
Apr. 11, 2025	-	-	14317	-	39	191464	-	-	-	-177108
Apr. 12, 2025	-	-	-	-	19	137537	-	-	-	-137518
Apr. 13, 2025	-	-	-	-	20	134809	-	-	-	-134789
Apr. 14, 2025	-	-	-	-	8324	139007	-	-	-	-130683
Apr. 15, 2025	-	-	9564	-	32	177126	-	-	-	-167530
Apr. 16, 2025	-	-	10346	-	102	188292	194	-	-	-177650
Apr. 17, 2025	-	-	32245	-	2018	256201	-	-	-	-221938
Apr. 18, 2025	-	-	-	-	3	211023	-	-	-	-211020
Apr. 19, 2025	-	-	-	-	5036	134001	-	-	-	-128965
Apr. 20, 2025	-	-	-	-	4798	105973	-	-	-	-101175
Apr. 21, 2025	-	-	6332	-	879	87351	175	-	40000	-39965
Apr. 22, 2025	-	-	17892	-	413	91222	768	-	-	-72149
Apr. 23, 2025	-	-	18872	-	304	133629	1089	-	20000	-93364
Apr. 24, 2025	-	-	9634	-	323	146584	-	-	-	-136627
Apr. 25, 2025	-	-	6947	-	298	145006	-	-	-	-137761
Apr. 26, 2025	-	-	-	-	189	133722	-	-	-	-133533
Apr. 27, 2025	-	-	-	-	223	125923	-	-	-	-125700
Apr. 28, 2025	-	-	4998	-	3190	132959	-1330	-	-	-126101
Apr. 29, 2025	-	-	5901	-	716	121701	8	-	-	-115076
Apr. 30, 2025	-	-	14952	-	8471	187714	770	-	20000	-143521

No. 4: Sale/ Purchase of U.S. Dollar by the RBI

i) Operations in onshore / offshore OTC segment

Item	2024-25	2024	2025	
		Apr.	Mar.	Apr.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1-1.2)	-34511	-3647	14355	-1660
1.1 Purchase (+)	364200	8006	41515	10110
1.2 Sale (–)	398711	11653	27160	11770
2 ₹ equivalent at contract rate (₹ Crores)	-291233	-30488	124586	-14635
3 Cumulative (over end-March) (US $ Million)	-34511	-3647	-34511	-1660
(₹ Crore)	-291233	-30488	-291233	-14635
4 Outstanding Net Forward Sales (-)/ Purchase (+) at the end of month (US $ Million)	-84345	-16257	-84345	-72575

ii) Operations in currency futures segment

Item	2024-25	2024	2025	
		Apr.	Mar.	Apr.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1-1.2)	0	0	0	0
1.1 Purchase (+)	31415	1519	1202	0
1.2 Sale (–)	31415	1519	1202	0
2 Outstanding Net Currency Futures Sales (-)/ Purchase (+) at the end of month (US $ Million)	0	-2424	0	0

No. 4 A : Maturity Breakdown (by Residual Maturity) of Outstanding Forwards of RBI (US $ Million)

Item	As on April 30 , 2025		
	Long (+)	Short (-)	Net (1-2)
	1	2	3
1. Upto 1 month	0	7360	-7360
2. More than 1 month and upto 3 months	0	7365	-7365
3. More than 3 months and upto 1 year	0	37750	-37750
4. More than 1 year	0	20100	-20100
Total (1+2+3+4)	**0**	**72575**	**-72575**

No. 5: RBI's Standing Facilities

(₹ Crore)

Item	As on the Last Reporting Friday							
	2024-25	2024		2025				
		May 31	Dec. 27	Jan. 24	Feb. 21	Mar. 21	Apr. 18	May 30
	1	2	3	4	5	6	7	8
1 MSF	9961	14601	31127	3232	500	9961	2003	1540
2 Export Credit Refinance for Scheduled Banks								
2.1 Limit	-	-	-	-	-	-	-	-
2.2 Outstanding	-	-	-	-	-	-	-	-
3 Liquidity Facility for PDs								
3.1 Limit	9900	9900	9900	9900	9900	9900	14900	14900
3.2 Outstanding	9517	9311	8459	9556	9096	9517	7999	8595
4 Others								
4.1 Limit	76000	76000	76000	76000	76000	76000	76000	76000
4.2 Outstanding	-	-	-	-	-	-	-	-
5 Total Outstanding (1+2.2+3.2+4.2)	19478	23912	39586	12788	9596	19478	10002	10135

Money and Banking

No. 6: Money Stock Measures

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/ reporting Fridays				
	2024-25	2024	2025		
		Apr. 19	Mar. 21	Apr. 04	Apr. 18
	1	2	3	4	5
1 Currency with the Public (1.1 + 1.2 + 1.3 – 1.4)	3630751	3454255	3620845	3650071	3693751
1.1 Notes in Circulation	3686799	3532885	3677221	3702330	3749799
1.2 Circulation of Rupee Coin	35889	32689	35563	35889	35889
1.3 Circulation of Small Coins	743	743	743	743	743
1.4 Cash on Hand with Banks	93696	112314	93696	89913	93722
2 Deposit Money of the Public	2953329	2693081	2950448	3029352	2886362
2.1 Demand Deposits with Banks	2840023	2606729	2840023	2926145	2782612
2.2 'Other' Deposits with Reserve Bank	113307	86352	110426	103207	103750
3 M1 (1 + 2)	**6584081**	**6147336**	**6571293**	**6679423**	**6580113**
4 Post Office Saving Bank Deposits	201999	195445	201999	201999	201999
5 M2 (3 + 4)	**6786080**	**6342781**	**6773292**	**6881422**	**6782112**
6 Time Deposits with Banks	20643062	19006639	20643062	21104486	20992039
	(20702508)	(19112622)	(20702508)	(21164353)	(21050572)
7 M3 (3 + 6)	27227143	25153975	27214355	27783909	27572152
	(27286589)	(25259958)	(27273801)	(27843776)	(27630685)
8 Total Post Office Deposits	1395485	1324920	1395485	1395485	1395485
9 M4 (7 + 8)	28622628	26478895	28609840	29179394	28967637
	(28682074)	(26584878)	(28669286)	(29239261)	(29026170)

Figures in parentheses include the impact of merger of a non-bank with a bank.

No. 7 : Sources of Money Stock (M_3)

(₹ Crore)

Sources	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2024-25	2024	2025		
		Apr. 19	Mar. 21	Apr. 04	Apr. 18
	1	2	3	4	5
1 Net Bank Credit to Government	**8463065**	**7589043**	**8135829**	**8501313**	**8576102**
1 Net Bank Credit to Government (Including Merger)	(8510825)	(7676346)	(8183590)	(8549079)	(8623867)
1.1 RBI's net credit to Government (1.1.1–1.1.2)	1508105	1221629	1180870	1577390	1626509
1.1.1 Claims on Government	1591591	1372757	1528323	1626086	1654545
1.1.1.1 Central Government	1558903	1355261	1509131	1587786	1617753
1.1.1.2 State Governments	32688	17496	19192	38299	36792
1.1.2 Government deposits with RBI	83485	151128	347453	48695	28036
1.1.2.1 Central Government	83443	151086	347411	48653	27993
1.1.2.2 State Governments	42	42	42	42	42
1.2 Other Banks' Credit to Government	6954959	6367414	6954959	6923923	6949593
1.2 Other Banks Credit to Government (Including Merger)	(7002720)	(6454717)	(7002720)	(6971689)	(6997358)
2 Bank Credit to Commercial Sector	**18646762**	**16729391**	**18644339**	**18794027**	**18583507**
2 Bank Credit to Commercial Sector (Including Merger)	(19068129)	(17250209)	(19065706)	(19210628)	(18995997)
2.1 RBI's credit to commercial sector	38246	10804	35823	21538	19280
2.2 Other banks' credit to commercial sector	18608516	16718586	18608516	18772489	18564228
2.2 Other banks credit to commercial sector (Including Merger)	(19029883)	(17239405)	(19029883)	(19189091)	(18976717)
2.2.1 Bank credit by commercial banks	17822605	15970978	17822605	17984731	17775378
2.2.1 Bank credit by commercial banks (Including Merger)	(18243972)	(16491796)	(18243972)	(18401333)	(18187868)
2.2.2 Bank credit by co-operative banks	766659	729036	766659	768373	769470
2.2.3 Investments by commercial and co-operative banks in other securities	19252	18573	19252	19385	19379
2.2.3 Investments by commercial and co-operative banks in other securities (Including Merger)	(19252)	(18573)	(19252)	(19385)	(19379)
3 Net Foreign Exchange Assets of Banking Sector (3.1 + 3.2)	**6027804**	**5520761**	**5977361**	**6079051**	**6169394**
3.1 RBIs net foreign exchange assets (3.1.1 - 3.1.2)	5550947	5194340	5500504	5602194	5692537
3.1.1 Gross foreign assets	5550956	5194342	5500509	5602201	5692537
3.1.2 Foreign liabilities	9	2	5	7	1
3.2 Other banks' net foreign exchange assets	476857	326421	476857	476857	476857
4 Government's Currency Liabilities to the Public	**36632**	**33432**	**36306**	**36632**	**36632**
5 Banking Sector's Net Non-monetary Liabilities	**5947120**	**4718651**	**5579480**	**5627113**	**5793482**
5 Banking Sectors Net Non-monetary Liabilities (Including Merger)	(6356801)	(5220790)	(5989161)	(6031614)	(6195205)
5.1 Net non-monetary liabilities of RBI	2147427	1752989	2159098	2205404	2308158
5.2 Net non-monetary liabilities of other banks (residual)	3799694	2965662	3420382	3421709	3485324
5.2 Net non-monetary liabilities of other banks (residual) (Including Merger)	(4209375)	(3467801)	(3830063)	(3826210)	(3887047)
M_3(1+2+3+4–5)	**27227143**	**25153975**	**27214355**	**27783909**	**27572152**
M3 (1+2+3+4-5) (Including Merger)	(27286589)	(25259958)	(27273801)	(27843776)	(27630685)

Figures in parentheses include the impact of merger of a non-bank with bank.

No. 8: Monetary Survey

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2024-25	2024	2025		
		Apr. 19	Mar. 21	Apr. 04	Apr. 18
	1	2	3	4	5
Monetary Aggregates					
NM_1 (1.1+1.2.1+1.3)	6584081	6147336	6571293	6679423	6580113
NM_2 (NM_1 + 1.2.2.1)	15741937	14598412	15729149	16047804	15896809
NM2 (NM1 + 1.2.2.1) (Including Merger)	(15768688)	(14646104)	(15755900)	(16074744)	(15923149)
NM_3 (NM_2 +1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	27850121	25702843	27837333	28418643	28152487
NM3 (NM2 + 1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 - 2.4 - 2.5) (Including Merger)	(27909568)	(25808825)	(27896780)	(28478509)	(28211019)
1 Components					
1.1 Currency with the Public	3630751	3454255	3620845	3650071	3693751
1.2 Aggregate Deposits of Residents	23190815	21386899	23190815	23744768	23486381
1.2 Aggregate Deposits of Residents (Including Merger)	(23250261)	(21492881)	(23250261)	(23804635)	(23544913)
1.2.1 Demand Deposits	2840023	2606729	2840023	2926145	2782612
1.2.2 Time Deposits of Residents	20350792	18780169	20350792	20818624	20703768
1.2.2 Time Deposits of Residents (Including Merger)	(20410239)	(18886151)	(20410239)	(20878490)	(20762301)
1.2.2.1 Short-term Time Deposits	9157856	8451076	9157856	9368381	9316696
1.2.2.1 Short-term Time Deposits (Including Merger)	(9184607)	(8498768)	(9184607)	(9395321)	(9343035)
1.2.2.1.1 Certificates of Deposits (CDs)	527375	370047	527375	523653	521063
1.2.2.2 Long-term Time Deposits	11192936	10329093	11192936	11450243	11387073
1.2.2.2 Long-term Time Deposits (Including Merger)	(11225631)	(10387383)	(11225631)	(11483170)	(11419265)
1.3 'Other' Deposits with RBI	113307	86352	110426	103207	103750
1.4 Call/Term Funding from Financial Institutions	915248	775338	915248	920596	868605
2 Sources					
2.1 Domestic Credit	28333316	25413620	28003657	28570901	28425537
2.1 Domestic Credit (Including Merger)	(28802443)	(26021742)	(28472785)	(29035269)	(28885792)
2.1.1 Net Bank Credit to the Government	8463065	7589043	8135829	8501313	8576102
2.1.1 Net Bank Credit to the Government (Including Merger)	(8510825)	(7676346)	(8183590)	(8549079)	(8623867)
2.1.1.1 Net RBI credit to the Government	1508105	1221629	1180870	1577390	1626509
2.1.1.2 Credit to the Government by the Banking System	6954959	6367414	6954959	6923923	6949593
2.1.1.2 Credit to the Government by the Banking System (Including Merger)	(7002720)	(6454717)	(7002720)	(6971689)	(6997358)
2.1.2 Bank Credit to the Commercial Sector	19870251	17824577	19867828	20069588	19849435
2.1.2 Bank Credit to the Commercial Sector (Including Merger)	(20291618)	(18345395)	(20289195)	(20486190)	(20261925)
2.1.2.1 RBI Credit to the Commercial Sector	38246	10804	35823	21538	19280
2.1.2.2 Credit to the Commercial Sector by the Banking System	19832006	17813773	19832006	20048051	19830156
2.1.2.2 Credit to the Commercial Sector by the Banking System (Including Merger)	(20253372)	(18334591)	(20253372)	(20464652)	(20242645)
2.1.2.2.1 Other Investments (Non-SLR Securities)	1208294	1079540	1208294	1259278	1249654
2.2 Government's Currency Liabilities to the Public	36632	33432	36306	36632	36632
2.3 Net Foreign Exchange Assets of the Banking Sector	5605462	5106924	5555018	5682160	5727331
2.3.1 Net Foreign Exchange Assets of the RBI	5550947	5194340	5500504	5602194	5692537
2.3.2 Net Foreign Currency Assets of the Banking System	54514	-87416	54514	79966	34794
2.4 Capital Account	4481192	4058263	4550842	4559109	4715903
2.5 Other items (net)	2053777	1295009	1616487	1716442	1722833

Figures in parentheses include the impact of merger of a non-bank with a bank.

No. 9: Liquidity Aggregates

(₹ Crore)

Aggregates	2024-25	2024	2025		
		Apr.	Feb.	Mar.	Apr.
	1	2	3	4	5
1 NM_3	**27837333**	**25702843**	**27461802**	**27837333**	**28152487**
	(27896780)	(25808825)	(27523665)	(27896780)	(28211019)
2 Postal Deposits	739921	702549	739921	739921	739921
3 L_1 (1 + 2)	**28577254**	**26405392**	**28201723**	**28577254**	**28892408**
	(28636701)	(26511374)	(28263586)	(28636701)	(28950940)
4 Liabilities of Financial Institutions	95148	78167	80416	95148	102284
4.1 Term Money Borrowings	10	1858	16	10	4
4.2 Certificates of Deposit	80810	63595	66365	80810	87705
4.3 Term Deposits	14328	12713	14035	14328	14575
5 L_2 (3 + 4)	**28672403**	**26483559**	**28282140**	**28672403**	**28994692**
	(28731849)	(26589541)	(28344002)	(28731849)	(29053224)
6 Public Deposits with Non-Banking Financial Companies	121178	..	..	121178	..
7 L_3 (5 + 6)	**28793581**	**..**	**..**	**28793581**	**..**

Notes : 1. Figures in the columns might not add up to the total due to rounding off of numbers.
2. Figures in parentheses include the impact of merger of a non-bank with a bank.

No. 10: Reserve Bank of India Survey

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2024-25	2024	2025		
		Apr. 19	Mar. 21	Apr. 04	Apr. 18
	1	2	3	4	5
1 Components					
1.1 Currency in Circulation	3724448	3566568	3714541	3739984	3787473
1.2 Bankers' Deposits with the RBI	991488	1007174	941950	990201	969883
1.2.1 Scheduled Commercial Banks	926001	944236	882415	930337	909269
1.3 'Other' Deposits with the RBI	113307	86352	110426	103207	103750
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	4829243	4660094	4766917	4833392	4861106
2 Sources					
2.1 RBI's Domestic Credit	1389090	1185311	1389205	1399970	1440096
2.1.1 Net RBI credit to the Government	1508105	1221629	1180870	1577390	1626509
2.1.1.1 Net RBI credit to the Central Government (2.1.1.1.1 + 2.1.1.1.2 + 2.1.1.1.3 + 2.1.1.1.4 – 2.1.1.1.5)	1475460	1204176	1161720	1539133	1589760
2.1.1.1.1 Loans and Advances to the Central Government	-	-	-	-	-
2.1.1.1.2 Investments in Treasury Bills	-	-	-	-	-
2.1.1.1.3 Investments in dated Government Securities	1558574	1354918	1508724	1587489	1617568
2.1.1.1.3.1 Central Government Securities	1558574	1354918	1508724	1587489	1617568
2.1.1.1.4 Rupee Coins	329	343	407	297	185
2.1.1.1.5 Deposits of the Central Government	83443	151086	347411	48653	27993
2.1.1.2 Net RBI credit to State Governments	32646	17454	19150	38257	36749
2.1.2 RBI's Claims on Banks	-157261	-47122	172512	-198958	-205693
2.1.2.1 Loans and Advances to Scheduled Commercial Banks	-157261	-47122	172512	-198958	-205693
2.1.3 RBI's Credit to Commercial Sector	38246	10804	35823	21538	19280
2.1.3.1 Loans and Advances to Primary Dealers	9182	8770	9517	7066	7999
2.1.3.2 Loans and Advances to NABARD	-	-	-	-	-
2.2 Government's Currency Liabilities to the Public	36632	33432	36306	36632	36632
2.3 Net Foreign Exchange Assets of the RBI	5550947	5194340	5500504	5602194	5692537
2.3.1 Gold	668162	474181	664219	676510	721972
2.3.2 Foreign Currency Assets	4882794	4720161	4836289	4925691	4970566
2.4 Capital Account	1875114	1697208	1944763	1927539	2035757
2.5 Other Items (net)	272313	55781	214335	277865	272401

No. 11: Reserve Money - Components and Sources

(₹ Crore)

Item	2024-25	Outstanding as on March 31/last Fridays of the month/Fridays					
		2024	2025				
		Apr. 26	Mar. 28	Apr. 04	Apr. 11	Apr. 18	Apr. 25
	1	2	3	4	5	6	7
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 + 2.4 + 2.5 – 2.6)	4829243	4734241	4836336	4833392	4875039	4861106	4909934
1 Components							
1.1 Currency in Circulation	3724448	3566523	3720468	3739984	3780610	3787473	3797541
1.2 Bankers' Deposits with RBI	991488	1081463	1003762	990201	991277	969883	1008614
1.3 'Other' Deposits with RBI	113307	86255	112106	103207	103153	103750	103780
2 Sources							
2.1 Net Reserve Bank Credit to Government	1508105	1115036	1388403	1577390	1614985	1626509	1581741
2.2 Reserve Bank Credit to Banks	-157261	149292	-27049	-198958	-185651	-205693	-121917
2.3 Reserve Bank Credit to Commercial Sector	38246	11266	38467	21538	18411	19280	21982
2.4 Net Foreign Exchange Assets of RBI	5550947	5166731	5526072	5602194	5669221	5692537	5714171
2.5 Government's Currency Liabilities to the Public	36632	33632	36632	36632	36632	36632	36922
2.6 Net Non- Monetary Liabilities of RBI	2147427	1741717	2126189	2205404	2278560	2308158	2322965

No. 12: Commercial Bank Survey

(₹ Crore)

Item	Outstanding as on last reporting Fridays of the month/ reporting Fridays of the month				
	2024-25	2024	2025		
		Apr. 19	Mar. 21	Apr. 04	Apr. 18
	1	2	3	4	5
1 Components					
1.1 Aggregate Deposits of Residents	22228885	20420942	22228885	22769964	22514062
	(22288331)	(20526924)	(22288331)	(22829831)	(22572594)
1.1.1 Demand Deposits	2698049	2461947	2698049	2781234	2638562
1.1.2 Time Deposits of Residents	19530836	17958995	19530836	19988730	19875499
	(19590283)	(18064977)	(19590283)	(20048596)	(19934032)
1.1.2.1 Short-term Time Deposits	8788876	8081548	8788876	8994928	8943975
1.1.2.1.1 Certificates of Deposits (CDs)	527375	370047	527375	523653	521063
1.1.2.2 Long-term Time Deposits	10741960	9877447	10741960	10993801	10931525
1.2 Call/Term Funding from Financial Institutions	915248	775338	915248	920596	868605
2 Sources					
2.1 Domestic Credit	25687563	23118372	25687563	25868218	25678284
	(26156690)	(23726494)	(26156690)	(26332586)	(26138539)
2.1.1 Credit to the Government	6649537	6059797	6649537	6615848	6645062
	(6697298)	(6147101)	(6697298)	(6663613)	(6692827)
2.1.2 Credit to the Commercial Sector	19038025	17058575	19038025	19252371	19033223
	(19459392)	(17579393)	(19459392)	(19668972)	(19445712)
2.1.2.1 Bank Credit	17822605	15970978	17822605	17984731	17775378
	(18243972)	(16491796)	(18243972)	(18401333)	(18187868)
2.1.2.1.1 Non-food Credit	17786074	15952888	17786074	17955374	17743253
	(18207441)	(16473706)	(18207441)	(18371976)	(18155742)
2.1.2.2 Net Credit to Primary Dealers	15458	15910	15458	16547	16537
2.1.2.3 Investments in Other Approved Securities	630	1110	630	777	616
2.1.2.4 Other Investments (in non-SLR Securities)	1199332	1070577	1199332	1250315	1240692
2.2 Net Foreign Currency Assets of Commercial Banks (2.2.1-2.2.2-2.2.3)	54514	-87416	54514	79966	34794
2.2.1 Foreign Currency Assets	529621	288100	529621	541180	501919
2.2.2 Non-resident Foreign Currency Repatriable Fixed Deposits	292270	226470	292270	285863	288271
2.2.3 Overseas Foreign Currency Borrowings	182837	149045	182837	175352	178853
2.3 Net Bank Reserves (2.3.1+2.3.2-2.3.3)	1165137	1091678	791777	1206720	1196674
2.3.1 Balances with the RBI	926001	944236	882415	930337	909269
2.3.2 Cash in Hand	81874	100321	81874	77425	81713
2.3.3 Loans and Advances from the RBI	-157261	-47122	172512	-198958	-205693
2.4 Capital Account	2581908	2336884	2581908	2607399	2655975
2.5 Other items (net) (2.1+2.2+2.3-2.4-1.1-1.2)	1181172	589471	807812	856945	871111
2.5.1 Other Demand and Time Liabilities (net of 2.2.3)	878795	748203	878795	846530	836232
2.5.2 Net Inter-Bank Liabilities (other than to PDs)	118268	196397	118268	122227	120132

Figures in parentheses include the impact of merger of a non-bank with a bank.

No. 13: Scheduled Commercial Banks' Investments

(₹ Crore)

Item	As on March 21, 2025	2024	2025		
		Apr. 19	Mar. 21	Apr. 04	Apr. 18
	1	2	3	4	5
1 SLR Securities	6697928	6148210	6697928	6664391	6693443
	(6650167)	(6060907)	(6650167)	(6616625)	(6645677)
2 Other Government Securities (Non-SLR)	165500	165537	165500	163820	164973
3 Commercial Paper	63163	47918	63163	61210	68491
4 Shares issued by					
4.1 PSUs	13874	12835	13874	15170	15355
4.2 Private Corporate Sector	95984	88509	95984	102895	102574
4.3 Others	7664	7378	7664	7896	8182
5 Bonds/Debentures issued by					
5.1 PSUs	130308	115109	130308	129762	127728
5.2 Private Corporate Sector	248138	249472	248138	254454	253869
5.3 Others	150000	125034	150000	153185	156987
6 Instruments issued by					
6.1 Mutual funds	119867	85830	119867	155449	144485
6.2 Financial institutions	204865	175705	204865	206473	198048

Notes: Data against column Nos. (1), (2) & (3) are final and for column Nos. (4) & (5) data are Provisional.
1. Data since July 14, 2023 include the impact of the merger of a non-bank with a bank.
2. Figures in parentheses exclude the impact of the merger.

No. 14: Business in India - All Scheduled Banks and All Scheduled Commercial Banks

(₹ Crore)

Item	As on the Last Reporting Friday (in case of March)/ Last Friday							
	All Scheduled Banks				All Scheduled Commercial Banks			
	2024-25	2024	2025		2024-25	2024	2025	
		Apr.	Mar.	Apr.		Apr.	Mar.	Apr.
	1	2	3	4	5	6	7	8
Number of Reporting Banks	208	209	208	208	135	136	135	135
1 Liabilities to the Banking System	**458011**	**541798**	**458011**	**485692**	**451305**	**537356**	**451305**	**480018**
1.1 Demand and Time Deposits from Banks	315675	296469	315675	354621	309414	292303	309414	349245
1.2 Borrowings from Banks	112027	170567	112027	107502	111976	170542	111976	107500
1.3 Other Demand and Time Liabilities	30310	74763	30310	23569	29916	74511	29916	23272
2 Liabilities to Others	**25053097**	**22917159**	**25053097**	**25236728**	**24557481**	**22440579**	**24557481**	**24727930**
2.1 Aggregate Deposits	23055487	21264492	23055487	23332769	22580601	20804308	22580601	22840577
	(22996040)	(21160334)	(22996040)	(23274855)	(22521155)	(20700150)	(22521155)	(22782663)
2.1.1 Demand	2748263	2530730	2748263	2680697	2698049	2480773	2698049	2630004
2.1.2 Time	20307224	18733762	20307224	20652072	19882552	18323535	19882552	20210573
2.2 Borrowings	920568	789091	920568	888614	915248	784526	915248	884265
2.3 Other Demand and Time Liabilities	1077042	863576	1077042	1015345	1061632	851745	1061632	1003088
3 Borrowings from Reserve Bank	**311466**	**209301**	**311466**	**23088**	**311466**	**209301**	**311466**	**23088**
3.1 Against Usance Bills /Promissory Notes	-	-	-	-	-	-	-	-
3.2 Others	311466	209301	311466	23088	311466	209301	311466	23088
4 Cash in Hand and Balances with Reserve Bank	985044	1131231	985044	1051971	964289	1108501	964289	1030327
4.1 Cash in Hand	84399	93173	84399	85275	81874	90784	81874	82976
4.2 Balances with Reserve Bank	900645	1038058	900645	966696	882415	1017716	882415	947351
5 Assets with the Banking System	**432645**	**435794**	**432645**	**463223**	**348496**	**363001**	**348496**	**372327**
5.1 Balances with Other Banks	273720	244270	273720	302288	215801	193978	215801	237512
5.1.1 In Current Account	13239	12215	13239	12946	10619	9388	10619	10653
5.1.2 In Other Accounts	260481	232055	260481	289342	205182	184590	205182	226859
5.2 Money at Call and Short Notice	44772	30878	44772	38697	25838	13390	25838	19488
5.3 Advances to Banks	43856	48078	43856	41915	39504	45925	39504	38818
5.4 Other Assets	70296	112568	70296	80323	67353	109708	67353	76510
6 Investment	**6850574**	**6281775**	**6850574**	**6837270**	**6697928**	**6129440**	**6697928**	**6682751**
	(6802814)	(6194450)	(6802814)	(6790686)	(6650167)	(6042115)	(6650167)	(6636167)
6.1 Government Securities	6842024	6274221	6842024	6828474	6697298	6128369	6697298	6682185
6.2 Other Approved Securities	8550	7553	8550	8796	630	1070	630	566
7 Bank Credit	**18708286**	**16981402**	**18708286**	**18680190**	**18243972**	**16545337**	**18243972**	**18214777**
	(18286919)	(16462061)	(18286919)	(18266000)	(17822605)	(16025997)	(17822605)	(17800587)
7a Food Credit	87145	81990	87145	98699	36531	28213	36531	46725
7.1 Loans, Cash-credits and Overdrafts	18370704	16662862	18370704	18337163	17909851	16230106	17909851	17875224
7.2 Inland Bills-Purchased	76523	65609	76523	80991	74963	64286	74963	79561
7.3 Inland Bills-Discounted	222320	212417	222320	224117	221059	211116	221059	222677
7.4 Foreign Bills-Purchased	15357	19194	15357	14893	15122	18965	15122	14661
7.5 Foreign Bills-Discounted	23382	21320	23382	23026	22977	20865	22977	22655

Notes: 1. Data in column Nos. (4) & (8) are Provisional.
2. Data since July 2023 include the impact of the merger of a non-bank with a bank.
3. Figures in parentheses exclude the impact of the merger.

No. 15: Deployment of Gross Bank Credit by Major Sectors

(₹ Crore)

Sector	Outstanding as on				Growth(%)	
	Mar. 21, 2025	2024	2025		Financial year so far	Y-o-Y
		Apr. 19	Mar. 21	Apr. 18	2025-26	2025
	1	2	3	4	%	%
I. Bank Credit (II + III)	**18243936**	**16491796**	**18243936**	**18186759**	**-0.3**	**10.3**
	(17822569)	(15970978)	(17822569)	(17774269)	(-0.3)	(11.3)
II. Food Credit	**36531**	**18090**	**36531**	**32126**	**-12.1**	**77.6**
III. Non-food Credit	**18207404**	**16473706**	**18207404**	**18154634**	**-0.3**	**10.2**
	(17786038)	(15952888)	(17786038)	(17742144)	(-0.2)	(11.2)
1. Agriculture & Allied Activities	**2287071**	**2115986**	**2287071**	**2309631**	**1.0**	**9.2**
2. Industry (Micro and Small, Medium and Large)	**3937149**	**3655455**	**3937149**	**3895471**	**-1.1**	**6.6**
	(3925090)	(3639138)	(3925090)	(3883660)	(-1.1)	(6.7)
2.1 Micro and Small	791721	731994	791721	798669	0.9	9.1
2.2 Medium	360475	309427	360475	365378	1.4	18.1
2.3 Large	2784953	2614034	2784953	2731423	-1.9	4.5
3. Services	**5161462**	**4605915**	**5161462**	**5088547**	**-1.4**	**10.5**
	(5094021)	(4509188)	(5094021)	(5012374)	(-1.6)	(11.2)
3.1 Transport Operators	258409	234760	258409	260093	0.7	10.8
3.2 Computer Software	32915	24774	32915	33451	1.6	35.0
3.3 Tourism, Hotels & Restaurants	83091	77054	83091	84692	1.9	9.9
3.4 Shipping	7305	6884	7305	7778	6.5	13.0
3.5 Aviation	46026	44998	46026	46540	1.1	3.4
3.6 Professional Services	195956	173429	195956	194449	-0.8	12.1
3.7 Trade	1186787	1020885	1186787	1163877	-1.9	14.0
3.7.1. Wholesale Trade[1]	648619	537086	648619	621874	-4.1	15.8
3.7.2 Retail Trade	538168	483799	538168	542003	0.7	12.0
3.8 Commercial Real Estate	532757	468803	532757	549472	3.1	17.2
	(488689)	(402521)	(488689)	(503090)	(2.9)	(25.0)
3.9 Non-Banking Financial Companies (NBFCs)[2] of which,	1636098	1564519	1636098	1610587	-1.6	2.9
3.9.1 Housing Finance Companies (HFCs)	323146	330115	323146	314881	-2.6	-4.6
3.9.2 Public Financial Institutions (PFIs)	228678	232074	228678	220806	-3.4	-4.9
3.10 Other Services[3]	1182118	989810	1182118	1137607	-3.8	14.9
	(1166422)	(969994)	(1166422)	(1116037)	(-4.3)	(15.1)
4. Personal Loans	**5952299**	**5346354**	**5952299**	**5980893**	**0.5**	**11.9**
	(5610478)	(4938617)	(5610478)	(5656449)	(0.8)	(14.5)
4.1 Consumer Durables	23402	23577	23402	23279	-0.5	-1.3
4.2 Housing	3010477	2741455	3010477	3008941	-0.1	9.8
	(2689068)	(2358299)	(2689068)	(2704137)	(0.6)	(14.7)
4.3 Advances against Fixed Deposits	141101	121868	141101	143518	1.7	17.8
4.4 Advances to Individuals against share & bonds	10080	8472	10080	10488	4.0	23.8
4.5 Credit Card Outstanding	284366	259641	284366	287172	1.0	10.6
4.6 Education	137456	119125	137456	137454	0.0	15.4
4.7 Vehicle Loans	622794	578504	622794	629691	1.1	8.8
4.8 Loan against gold jewellery[4]	208735	101552	208735	223034	6.9	119.6
4.9 Other Personal Loans	1513889	1392161	1513889	1517316	0.2	9.0
	(1493525)	(1367743)	(1493525)	(1497721)	(0.3)	(9.5)
5. Priority Sector (Memo)						
(i) Agriculture & Allied Activities[5]	2287804	2060244	2287804	2233685	-2.4	8.4
(ii) Micro & Small Enterprises[6]	2240503	1964032	2240503	2313293	3.2	17.8
(iii) Medium Enterprises[7]	601451	498958	601451	604299	0.5	21.1
(iv) Housing	746651	753576	746651	744228	-0.3	-1.2
	(665107)	(659843)	(665107)	(663951)	(-0.2)	(0.6)
(v) Education Loans	62825	61027	62825	62637	-0.3	2.6
(vi) Renewable Energy	10325	5712	10325	11979	16.0	109.7
(vii) Social Infrastructure	1316	2619	1316	1147	-12.9	-56.2
(viii) Export Credit	12361	12539	12361	13086	5.9	4.4
(ix) Others	47900	75152	47900	48689	1.6	-35.2
(x) Weaker Sections including net PSLC- SF/MF	1820904	1605821	1820904	1789687	-1.7	11.5

Notes:

(1) Data are provisional. Bank credit, Food credit and Non-food credit data are based on Section-42 return, which covers all scheduled commercial banks (SCBs), while sectoral non-food credit data are based on sector-wise and industry-wise bank credit (SIBC) return, which covers select banks accounting for about 95 per cent of total non-food credit extended by all SCBs, pertaining to the last reporting Friday of the month.

(2) Data since July 28, 2023 include the impact of the merger of a non-bank with a bank.

(3) Figures in parentheses exclude the impact of the merger.

1 Wholesale trade includes food procurement credit outside the food credit consortium.

2 NBFCs include HFCs, PFIs, Microfinance Institutions (MFIs), NBFCs engaged in gold loan and others.

3 "Other Services" include Mutual Fund (MFs), Banking and Finance other than NBFCs and MFs, and other services which are not indicated elsewhere under services.

4 Since May 2024, a bank has changed the classification of a category of agricultural loan into "Loans against gold jewellery" under retail segment.

5 "Agriculture and Allied Activities" under the priority sector also include priority sector lending certificates (PSLCs).

6 "Micro and Small Enterprises" under the priority sector include credit to micro and small enterprises in industry and services sectors and also include PSLCs.

7 "Medium Enterprises" under the priority sector include credit to medium enterprises in industry and services sectors.

No. 16: Industry-wise Deployment of Gross Bank Credit

(₹ Crore)

Industry	Outstanding as on				Growth(%)	
	Mar. 21, 2025	2024	2025		Financial year so far	Y-o-Y
		Apr. 19	Mar. 21	Apr. 18	2025-26	2025
	1	2	3	4	%	%
2 Industries (2.1 to 2.19)	3937149	3655455	3937149	3895471	-1.1	6.6
	(3925089)	(3639138)	(3925089)	(3883660)	(-1.1)	(6.7)
2.1 Mining & Quarrying (incl. Coal)	56756	55315	56756	53970	-4.9	-2.4
2.2 Food Processing	219527	210714	219527	224436	2.2	6.5
2.2.1 Sugar	28522	27896	28522	28381	-0.5	1.7
2.2.2 Edible Oils & Vanaspati	20927	20149	20927	21239	1.5	5.4
2.2.3 Tea	5084	5721	5084	4981	-2.0	-12.9
2.2.4 Others	164994	156948	164994	169834	2.9	8.2
2.3 Beverage & Tobacco	35513	31592	35513	34580	-2.6	9.5
2.4 Textiles	277267	253819	277267	275379	-0.7	8.5
2.4.1 Cotton Textiles	107227	97390	107227	103692	-3.3	6.5
2.4.2 Jute Textiles	4288	4266	4288	4333	1.1	1.6
2.4.3 Man-Made Textiles	49091	44282	49091	49321	0.5	11.4
2.4.4 Other Textiles	116661	107882	116661	118032	1.2	9.4
2.5 Leather & Leather Products	12980	12488	12980	13157	1.4	5.4
2.6 Wood & Wood Products	27826	23840	27826	27842	0.1	16.8
2.7 Paper & Paper Products	52848	46270	52848	52465	-0.7	13.4
2.8 Petroleum, Coal Products & Nuclear Fuels	154178	133967	154178	135500	-12.1	1.1
2.9 Chemicals & Chemical Products	267814	251949	267814	267186	-0.2	6.0
2.9.1 Fertiliser	32011	36872	32011	31850	-0.5	-13.6
2.9.2 Drugs & Pharmaceuticals	88738	81941	88738	86357	-2.7	5.4
2.9.3 Petro Chemicals	26892	25666	26892	29823	10.9	16.2
2.9.4 Others	120172	107470	120172	119157	-0.8	10.9
2.10 Rubber, Plastic & their Products	103464	88937	103464	103555	0.1	16.4
2.11 Glass & Glassware	13443	12199	13443	13668	1.7	12.0
2.12 Cement & Cement Products	59752	58089	59752	58452	-2.2	0.6
2.13 Basic Metal & Metal Product	433502	381616	433502	436006	0.6	14.3
2.13.1 Iron & Steel	300156	269936	300156	299924	-0.1	11.1
2.13.2 Other Metal & Metal Product	133345	111680	133345	136083	2.1	21.9
2.14 All Engineering	240135	197017	240135	240016	0.0	21.8
2.14.1 Electronics	52862	44296	52862	52978	0.2	19.6
2.14.2 Others	187272	152722	187272	187038	-0.1	22.5
2.15 Vehicles, Vehicle Parts & Transport Equipment	119057	111469	119057	119583	0.4	7.3
2.16 Gems & Jewellery	85734	83491	85734	90892	6.0	8.9
2.17 Construction	150701	131369	150701	150407	-0.2	14.5
2.18 Infrastructure	1322831	1322295	1322831	1311402	-0.9	-0.8
2.18.1 Power	682953	647359	682953	687776	0.7	6.2
2.18.2 Telecommunications	118940	137366	118940	108302	-8.9	-21.2
2.18.3 Roads	311219	331069	311219	313483	0.7	-5.3
2.18.4 Airports	9156	7443	9156	9293	1.5	24.9
2.18.5 Ports	5916	6342	5916	5467	-7.6	-13.8
2.18.6 Railways	13595	13138	13595	12121	-10.8	-7.7
2.18.7 Other Infrastructure	181052	179580	181052	174959	-3.4	-2.6
2.19 Other Industries	303822	249019	303822	286975	-5.5	15.2

Notes: (1) Data since July 28, 2023 include the impact of the merger of a non-bank with a bank.
(2) Figures in parentheses exclude the impact of the merger.

No. 17: State Co-operative Banks Maintaining Accounts with the Reserve Bank of India

(₹ Crore)

Item	Last Reporting Friday (in case of March)/Last Friday/ Reporting Friday								
	2023-24	2024	2025						
		Mar. 29	Jan. 31	Feb. 07	Feb. 21	Feb. 28	Mar. 07	Mar. 21	Mar. 28
	1	2	3	4	5	6	7	8	9
Number of Reporting Banks	33	33	34	34	34	34	34	34	34
1 Aggregate Deposits (2.1.1.2+2.2.1.2)	**138788.9**	**138788.9**	**137422.7**	**141128.7**	**141197.5**	**141021.9**	**141431.2**	**142953.8**	**146871.0**
2 Demand and Time Liabilities									
2.1 Demand Liabilities	**30226.7**	**30226.7**	**25128.9**	**25006.3**	**25232.3**	**25377.7**	**26240.2**	**29033.2**	**29215.6**
2.1.1 Deposits									
2.1.1.1 Inter-Bank	9101.3	9101.3	6389.8	6957.9	6678.7	6336.1	7072.2	8543.2	9022.9
2.1.1.2 Others	15000.4	15000.4	12576.7	12842.5	12977.2	13305.9	13485.0	13597.0	14063.9
2.1.2 Borrowings from Banks	130.0	130.0	789.3	355.0	615.0	537.7	445.0	827.0	700.0
2.1.3 Other Demand Liabilities	5995.0	5995.0	5373.1	4851.0	4961.4	5197.9	5238.0	6066.1	5428.9
2.2 Time Liabilities	**198141.8**	**198141.8**	**178875.8**	**181832.3**	**181707.7**	**181395.7**	**182829.0**	**188026.7**	**201100.7**
2.2.1 Deposits									
2.2.1.1 Inter-Bank	72308.4	72308.4	52326.4	51828.6	51761.4	52005.7	53235.4	57013.2	66874.3
2.2.1.2 Others	123788.5	123788.5	124846.0	128286.2	128220.3	127715.9	127946.1	129356.8	132807.1
2.2.2 Borrowings from Banks	673.6	673.6	650.8	650.8	650.3	650.3	650.3	650.3	643.9
2.2.3 Other Time Liabilities	1371.3	1371.3	1052.6	1066.8	1075.8	1023.8	997.2	1006.3	775.4
3 Borrowing from Reserve Bank	0.0						699.8	699.7	699.5
4 Borrowings from a notified bank / Government	95914.5	95914.5	111993.8	113739.2	113412.6	115298.7	116039.2	117531.6	126928.5
4.1 Demand	27317.7	27317.7	44397.3	45530.1	46377.3	46815.1	47552.2	47476.4	53459.8
4.2 Time	68596.8	68596.8	67596.4	68209.1	67035.3	68483.6	68486.9	70055.2	73468.7
5 Cash in Hand and Balances with Reserve Bank	**16263.7**	**16263.7**	**11244.6**	**11086.3**	**11271.6**	**10776.7**	**12029.4**	**12049.8**	**13390.9**
5.1 Cash in Hand	960.0	960.0	777.4	744.8	833.1	854.2	1226.3	961.5	1052.1
5.2 Balance with Reserve Bank	15303.7	15303.7	10467.2	10341.5	10438.5	9922.5	10803.1	11088.4	12338.8
6 Balances with Other Banks in Current Account	**2088.1**	**2088.1**	**1204.8**	**1428.6**	**1100.0**	**1281.1**	**1095.8**	**1355.2**	**1656.3**
7 Investments in Government Securities	**77700.5**	**77700.5**	**75052.7**	**75044.6**	**76597.1**	**76364.1**	**75604.6**	**75941.0**	**77220.1**
8 Money at Call and Short Notice	**34355.3**	**34355.3**	**12239.3**	**15510.2**	**14526.0**	**16049.2**	**19365.0**	**18381.0**	**26531.1**
9 Bank Credit (10.1+11)	**135141.9**	**135141.9**	**170245.1**	**171448.7**	**170308.0**	**171858.1**	**171435.7**	**171861.3**	**174828.8**
10 Advances									
10.1 Loans, Cash-Credits and Overdrafts	**134936.8**	**134936.8**	**170045.3**	**171246.9**	**170138.6**	**171681.7**	**171259.2**	**171672.1**	**174590.4**
10.2 Due from Banks	142185.2	142185.2	112047.0	112520.9	114341.3	116430.1	117656.1	118507.5	124607.6
11 Bills Purchased and Discounted	205.1	205.1	199.8	201.7	169.4	176.5	176.5	189.2	238.4

Prices and Production

No. 18: Consumer Price Index (Base: 2012=100)

Group/Sub group	2024-25			Rural			Urban			Combined		
	Rural	Urban	Combined	May 24	Apr. 25	May 25 (P)	May 24	Apr. 25	May 25 (P)	May.24	Apr.25	May.25 (P)
	1	2	3	4	5	6	7	8	9	10	11	12
1 Food and beverages	**198.6**	**205.3**	**201.1**	**190.6**	**193.4**	**193.2**	**197.6**	**200.6**	**201.0**	**193.2**	**196.0**	**196.1**
1.1 Cereals and products	195.0	193.7	194.6	188.7	199.0	197.8	189.0	198.6	197.8	188.8	198.9	197.8
1.2 Meat and fish	222.3	231.9	225.7	226.5	222.6	225.6	236.3	231.4	235.2	229.9	225.7	229.0
1.3 Egg	192.8	197.5	194.6	184.9	181.0	185.1	189.1	186.6	191.8	186.5	183.2	187.7
1.4 Milk and products	186.3	187.0	186.6	184.1	188.4	189.3	184.3	189.3	191.1	184.2	188.7	190.0
1.5 Oils and fats	175.4	165.5	171.8	160.5	190.6	191.6	155.2	178.2	179.2	158.6	186.0	187.0
1.6 Fruits	188.3	194.2	191.0	180.4	209.6	204.5	187.4	213.2	210.0	183.7	211.3	207.1
1.7 Vegetables	222.1	269.6	238.2	190.7	164.7	164.0	233.2	200.5	202.2	205.1	176.8	177.0
1.8 Pulses and products	208.0	213.5	209.8	203.7	190.3	187.1	209.7	195.3	192.2	205.7	192.0	188.8
1.9 Sugar and confectionery	130.4	132.6	131.2	128.9	133.8	134.4	131.3	135.8	136.2	129.7	134.5	135.0
1.10 Spices	228.5	223.9	227.0	229.2	222.2	221.6	223.6	220.1	219.6	227.3	221.5	220.9
1.11 Non-alcoholic beverages	185.2	173.9	180.5	182.4	189.6	190.2	170.8	179.0	179.5	177.6	185.2	185.7
1.12 Prepared meals, snacks, sweets	199.4	209.7	204.2	196.6	203.6	204.0	205.5	215.4	215.9	200.7	209.1	209.5
2 Pan, tobacco and intoxicants	**207.3**	**212.6**	**208.7**	**205.5**	**209.6**	**210.4**	**211.5**	**214.3**	**216.7**	**207.1**	**210.9**	**212.1**
3 Clothing and footwear	**197.9**	**186.7**	**193.5**	**195.7**	**200.3**	**200.7**	**184.7**	**189.6**	**189.9**	**191.3**	**196.1**	**196.4**
3.1 Clothing	198.8	188.8	194.9	196.5	201.2	201.7	186.7	191.8	192.2	192.6	197.5	198.0
3.2 Footwear	192.7	174.7	185.2	191.1	194.5	194.8	173.0	177.1	177.4	183.6	187.3	187.6
4 Housing	--	**181.5**	**181.5**	--	--	--	**180.1**	**185.4**	**185.8**	**180.1**	**185.4**	**185.8**
5 Fuel and light	**181.2**	**169.7**	**176.9**	**180.3**	**183.3**	**184.8**	**169.3**	**173.3**	**174.9**	**176.1**	**179.5**	**181.0**
6 Miscellaneous	**189.3**	**180.7**	**185.1**	**185.9**	**194.8**	**195.6**	**177.3**	**185.6**	**186.0**	**181.7**	**190.3**	**190.9**
6.1 Household goods and services	185.7	177.1	181.6	183.9	187.6	187.7	174.8	179.8	178.2	179.6	183.9	183.2
6.2 Health	198.4	193.2	196.4	195.7	203.1	203.9	190.0	197.8	198.6	193.5	201.1	201.9
6.3 Transport and communication	175.5	164.8	169.9	171.8	178.3	178.7	161.5	167.1	167.4	166.4	172.4	172.8
6.4 Recreation and amusement	180.1	175.5	177.5	178.5	181.6	181.8	173.3	178.1	178.4	175.6	179.6	179.9
6.5 Education	190.8	186.2	188.1	186.9	194.1	194.2	182.4	189.5	190.2	184.3	191.4	191.9
6.6 Personal care and effects	204.3	206.2	205.1	198.6	222.2	225.4	200.6	224.8	227.5	199.4	223.3	226.3
General Index (All Groups)	**194.9**	**190.0**	**192.6**	**189.4**	**194.0**	**194.3**	**185.7**	**190.9**	**191.4**	**187.7**	**192.6**	**193.0**

Source: National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.
P: Provisional

No. 19: Other Consumer Price Indices

Item	Base Year	Linking Factor	2024-25	2024	2025	
				Apr.	Mar.	Apr.
	1	2	3	4	5	6
1 Consumer Price Index for Industrial Workers	2016	2.88	142.6	139.4	143.0	143.5
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89	1299	1263	1306	1307
3 Consumer Price Index for Rural Labourers	1986-87	-	1311	1275	1319	1320

Source: Labour Bureau, Ministry of Labour and Employment, Government of India.

No. 20: Monthly Average Price of Gold and Silver in Mumbai

Item	2024-25	2024	2025	
		Apr.	Mar.	Apr.
	1	2	3	4
1 Standard Gold (₹ per 10 grams)	75842	71353	86890	93091
2 Silver (₹ per kilogram)	89131	80778	97868	95309

Source: India Bullion & Jewellers Association Ltd., Mumbai for Gold and Silver prices in Mumbai.

No. 21: Wholesale Price Index

(Base: 2011-12 = 100)

Commodities	Weight	2024-25	2024	2025		
			May	Mar.	Apr. (P)	May (P)
	1	2	3	4	5	6
1 ALL COMMODITIES	**100.000**	**154.9**	**153.5**	**154.8**	**154.2**	**154.1**
1.1 PRIMARY ARTICLES	**22.618**	**192.5**	**188.1**	**185.5**	**184.4**	**184.3**
1.1.1 FOOD ARTICLES	**15.256**	**205.3**	**199.3**	**194.8**	**195.1**	**196.2**
1.1.1.1 Food Grains (Cereals+Pulses)	3.462	210.1	204.1	210.0	206.5	204.0
1.1.1.2 Fruits & Vegetables	3.475	241.4	220.8	197.4	200.3	202.7
1.1.1.3 Milk	4.440	185.8	184.0	187.2	186.4	188.9
1.1.1.4 Eggs, Meat & Fish	2.402	173.4	178.4	170.4	172.1	176.6
1.1.1.5 Condiments & Spices	0.529	232.7	236.9	200.8	204.7	200.8
1.1.1.6 Other Food Articles	0.948	213.6	207.7	224.0	227.9	224.9
1.1.2 NON-FOOD ARTICLES	**4.119**	**161.7**	**156.5**	**162.6**	**159.9**	**158.9**
1.1.2.1 Fibres	0.839	161.4	159.9	162.1	162.4	164.9
1.1.2.2 Oil Seeds	1.115	181.5	179.2	179.3	182.9	184.2
1.1.2.3 Other non-food Articles	1.960	138.7	131.4	141.7	139.5	137.8
1.1.2.4 Floriculture	0.204	277.4	260.7	274.6	219.2	198.5
1.1.3 MINERALS	**0.833**	**229.0**	**227.1**	**245.5**	**245.7**	**228.1**
1.1.3.1 Metallic Minerals	0.648	219.2	219.3	238.5	238.5	218.8
1.1.3.2 Other Minerals	0.185	263.4	254.5	270.1	270.7	260.5
1.1.4 CRUDE PETROLEUM & NATURAL GAS	**2.410**	**151.3**	**156.9**	**145.1**	**137.4**	**137.4**
1.2 FUEL & POWER	**13.152**	**150.0**	**150.1**	**152.1**	**148.1**	**146.7**
1.2.1 COAL	**2.138**	**135.6**	**135.8**	**135.6**	**135.9**	**137.0**
1.2.1.1 Coking Coal	0.647	143.4	143.4	143.4	143.5	146.4
1.2.1.2 Non-Coking Coal	1.401	125.8	125.8	125.8	126.2	126.6
1.2.1.3 Lignite	0.090	232.4	236.0	231.2	231.2	231.2
1.2.2 MINERAL OILS	**7.950**	**156.2**	**159.5**	**156.9**	**150.6**	**147.5**
1.2.3 ELECTRICITY	**3.064**	**144.1**	**135.7**	**151.3**	**150.4**	**151.6**
1.3 MANUFACTURED PRODUCTS	**64.231**	**142.6**	**142.0**	**144.6**	**144.9**	**144.9**
1.3.1 MANUFACTURE OF FOOD PRODUCTS	**9.122**	**172.0**	**164.5**	**180.1**	**179.6**	**178.4**
1.3.1.1 Processing and Preserving of meat	0.134	155.7	155.8	159.9	157.0	157.3
1.3.1.2 Processing and Preserving of fish, Crustaceans, Molluscs and products thereof	0.204	144.9	143.2	144.4	145.6	146.9
1.3.1.3 Processing and Preserving of fruit and Vegetables	0.138	132.6	131.8	134.0	137.2	136.0
1.3.1.4 Vegetable and Animal oils and Fats	2.643	168.5	147.6	191.4	190.2	186.7
1.3.1.5 Dairy products	1.165	180.8	179.4	183.5	183.9	183.5
1.3.1.6 Grain mill products	2.010	186.9	182.8	188.6	187.3	186.4
1.3.1.7 Starches and Starch products	0.110	167.0	162.9	160.7	159.8	157.6
1.3.1.8 Bakery products	0.215	170.5	165.7	176.0	176.3	175.9
1.3.1.9 Sugar, Molasses & honey	1.163	139.1	139.6	143.4	143.7	143.9
1.3.1.10 Cocoa, Chocolate and Sugar confectionery	0.175	160.6	149.9	174.5	174.5	176.4
1.3.1.11 Macaroni, Noodles, Couscous and Similar farinaceous products	0.026	156.7	147.0	171.5	162.4	158.7
1.3.1.12 Tea & Coffee products	0.371	190.7	193.9	191.7	189.4	190.2
1.3.1.13 Processed condiments & salt	0.163	192.6	192.3	189.9	189.7	189.5
1.3.1.14 Processed ready to eat food	0.024	152.7	149.1	155.4	156.4	156.5
1.3.1.15 Health supplements	0.225	185.1	179.2	186.5	188.8	187.2
1.3.1.16 Prepared animal feeds	0.356	204.1	204.8	195.3	197.1	198.8
1.3.2 MANUFACTURE OF BEVERAGES	**0.909**	**134.1**	**133.2**	**134.8**	**135.4**	**135.6**
1.3.2.1 Wines & spirits	0.408	136.0	134.0	137.6	138.3	138.8
1.3.2.2 Malt liquors and Malt	0.225	138.7	138.3	139.6	139.8	139.6
1.3.2.3 Soft drinks; Production of mineral waters and Other bottled waters	0.275	127.5	127.8	126.7	127.6	127.6
1.3.3 MANUFACTURE OF TOBACCO PRODUCTS	**0.514**	**177.8**	**174.3**	**181.9**	**181.0**	**182.4**
1.3.3.1 Tobacco products	0.514	177.8	174.3	181.9	181.0	182.4

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2024-25	2024	2025		
			May	Mar.	Apr.(P)	May(P)
	1	2	3	4	5	6
1.3.4 MANUFACTURE OF TEXTILES	**4.881**	**136.3**	**135.7**	**136.5**	**136.4**	**136.6**
1.3.4.1 Preparation and Spinning of textile fibres	2.582	121.4	122.0	121.0	120.9	120.5
1.3.4.2 Weaving & Finishing of textiles	1.509	158.3	156.5	159.1	158.9	160.3
1.3.4.3 Knitted and Crocheted fabrics	0.193	124.0	123.2	124.0	124.4	124.8
1.3.4.4 Made-up textile articles, Except apparel	0.299	160.4	159.2	161.9	161.3	161.5
1.3.4.5 Cordage, Rope, Twine and Netting	0.098	142.7	138.9	149.7	148.2	150.7
1.3.4.6 Other textiles	0.201	134.9	132.1	135.2	135.6	133.1
1.3.5 MANUFACTURE OF WEARING APPAREL	**0.814**	**153.4**	**152.0**	**154.5**	**154.1**	**155.0**
1.3.5.1 Manufacture of Wearing Apparel (woven), Except fur Apparel	0.593	150.9	150.1	152.4	152.1	153.2
1.3.5.2 Knitted and Crocheted apparel	0.221	160.1	157.2	160.1	159.6	159.7
1.3.6 MANUFACTURE OF LEATHER AND RELATED PRODUCTS	**0.535**	**125.3**	**124.0**	**125.4**	**126.6**	**127.0**
1.3.6.1 Tanning and Dressing of leather; Dressing and Dyeing of fur	0.142	106.1	104.2	104.0	106.6	110.9
1.3.6.2 Luggage, HandbAgs, Saddlery and Harness	0.075	142.5	141.0	142.9	142.6	141.0
1.3.6.3 Footwear	0.318	129.7	128.8	130.9	131.7	130.9
1.3.7 MANUFACTURE OF WOOD AND PRODUCTS OF WOOD AND CORK	**0.772**	**149.2**	**149.5**	**150.0**	**150.3**	**150.2**
1.3.7.1 Saw milling and Planing of wood	0.124	141.1	139.5	143.2	143.2	143.0
1.3.7.2 Veneer sheets; Manufacture of plywood, Laminboard, Particle board and Other panels and Boards	0.493	148.6	149.5	149.4	149.6	149.4
1.3.7.3 Builder's carpentry and Joinery	0.036	215.3	215.3	215.1	216.7	215.4
1.3.7.4 Wooden containers	0.119	140.6	140.3	140.0	140.3	141.3
1.3.8 MANUFACTURE OF PAPER AND PAPER PRODUCTS	**1.113**	**139.2**	**138.1**	**141.0**	**140.8**	**140.4**
1.3.8.1 Pulp, Paper and Paperboard	0.493	144.6	144.3	145.6	145.5	144.4
1.3.8.2 Corrugated paper and Paperboard and Containers of paper and Paperboard	0.314	147.3	144.4	150.9	151.3	151.2
1.3.8.3 Other articles of paper and Paperboard	0.306	122.4	121.6	123.5	122.2	122.8
1.3.9 PRINTING AND REPRODUCTION OF RECORDED MEDIA	**0.676**	**187.3**	**185.6**	**190.6**	**189.8**	**189.8**
1.3.9.1 Printing	0.676	187.3	185.6	190.6	189.8	189.8
1.3.10 MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS	**6.465**	**136.5**	**135.8**	**136.9**	**137.4**	**137.2**
1.3.10.1 Basic chemicals	1.433	138.6	137.5	141.5	142.4	142.4
1.3.10.2 Fertilizers and Nitrogen compounds	1.485	143.1	143.3	142.3	142.9	143.3
1.3.10.3 Plastic and Synthetic rubber in primary form	1.001	133.6	131.2	134.1	135.0	133.5
1.3.10.4 Pesticides and Other agrochemical products	0.454	128.8	127.8	130.0	130.2	130.2
1.3.10.5 Paints, Varnishes and Similar coatings, Printing ink and Mastics	0.491	139.5	140.4	138.2	138.5	137.5
1.3.10.6 Soap and Detergents, Cleaning and Polishing preparations, Perfumes and Toilet preparations	0.612	139.7	138.7	141.1	141.9	142.0
1.3.10.7 Other chemical products	0.692	135.4	135.0	133.4	133.9	133.9
1.3.10.8 Man-made fibres	0.296	104.9	104.9	104.3	102.4	101.3
1.3.11 MANUFACTURE OF PHARMACEUTICALS, MEDICINAL CHEMICAL AND BOTANICAL PRODUCTS	**1.993**	**144.3**	**144.0**	**144.8**	**144.9**	**145.5**
1.3.11.1 Pharmaceuticals, Medicinal chemical and Botanical products	1.993	144.3	144.0	144.8	144.9	145.5
1.3.12 MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS	**2.299**	**129.0**	**128.3**	**129.9**	**130.2**	**129.5**
1.3.12.1 Rubber Tyres and Tubes; Retreading and Rebuilding of Rubber Tyres	0.609	115.6	113.4	117.0	117.1	116.1
1.3.12.2 Other Rubber Products	0.272	112.1	109.3	113.5	113.7	113.6
1.3.12.3 Plastics products	1.418	138.1	138.3	138.6	139.0	138.2
1.3.13 MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS	**3.202**	**131.5**	**132.3**	**132.4**	**132.7**	**133.2**
1.3.13.1 Glass and Glass products	0.295	163.2	163.8	162.8	163.6	163.9
1.3.13.2 Refractory products	0.223	121.6	119.1	126.0	122.5	123.1
1.3.13.3 Clay Building Materials	0.121	124.4	120.2	133.5	130.5	133.5
1.3.13.4 Other Porcelain and Ceramic Products	0.222	124.6	124.8	124.7	124.9	125.9
1.3.13.5 Cement, Lime and Plaster	1.645	130.4	132.8	131.0	131.7	132.1

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2024-25	2024	2025		
			May	Mar.	Apr.(P)	May(P)
	1	2	3	4	5	6
1.3.13.6 Articles of Concrete, Cement and Plaster	0.292	139.2	139.3	138.9	140.7	140.6
1.3.13.7 Cutting, Shaping and Finishing of Stone	0.234	134.4	131.2	136.8	137.3	137.8
1.3.13.8 Other Non-Metallic Mineral Products	0.169	95.2	97.2	92.9	94.2	94.2
1.3.14 MANUFACTURE OF BASIC METALS	**9.646**	**139.7**	**144.7**	**139.5**	**140.5**	**140.2**
1.3.14.1 Inputs into steel making	1.411	133.6	143.5	131.9	133.7	132.9
1.3.14.2 Metallic Iron	0.653	141.8	154.6	136.3	136.5	134.5
1.3.14.3 Mild Steel - Semi Finished Steel	1.274	117.9	122.0	118.3	118.7	118.7
1.3.14.4 Mild Steel -Long Products	1.081	140.4	144.5	140.0	140.8	138.6
1.3.14.5 Mild Steel - Flat products	1.144	134.2	140.7	130.3	134.3	135.4
1.3.14.6 Alloy steel other than Stainless Steel- Shapes	0.067	135.4	142.2	133.6	135.1	136.2
1.3.14.7 Stainless Steel - Semi Finished	0.924	131.1	140.5	130.9	132.8	137.4
1.3.14.8 Pipes & tubes	0.205	164.7	166.7	164.4	165.2	166.4
1.3.14.9 Non-ferrous metals incl. precious metals	1.693	157.4	157.4	161.8	160.8	160.1
1.3.14.10 Castings	0.925	144.9	144.1	146.2	146.4	143.1
1.3.14.11 Forgings of steel	0.271	172.2	173.1	174.2	174.3	176.6
1.3.15 MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT	**3.155**	**136.0**	**136.4**	**136.4**	**137.1**	**137.4**
1.3.15.1 Structural Metal Products	1.031	130.8	131.1	132.1	132.7	131.5
1.3.15.2 Tanks, Reservoirs and Containers of Metal	0.660	149.5	153.3	148.3	152.4	153.4
1.3.15.3 Steam generators, Except Central Heating Hot Water Boilers	0.145	109.8	108.0	110.8	110.8	110.6
1.3.15.4 Forging, Pressing, Stamping and Roll-Forming of Metal; Powder Metallurgy	0.383	138.0	133.9	138.8	135.9	135.8
1.3.15.5 Cutlery, Hand Tools and General Hardware	0.208	102.0	102.0	102.4	102.5	103.6
1.3.15.6 Other Fabricated Metal Products	0.728	144.9	145.5	145.2	145.2	147.2
1.3.16 MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS	**2.009**	**121.5**	**122.2**	**121.2**	**121.5**	**122.0**
1.3.16.1 Electronic Components	0.402	117.9	117.9	119.4	119.0	120.4
1.3.16.2 Computers and Peripheral Equipment	0.336	134.2	135.3	131.8	131.8	131.4
1.3.16.3 Communication Equipment	0.310	146.0	146.3	146.6	146.6	146.8
1.3.16.4 Consumer Electronics	0.641	101.1	103.3	99.4	100.4	100.9
1.3.16.5 Measuring, Testing, Navigating and Control equipment	0.181	119.9	119.8	121.9	121.9	121.9
1.3.16.6 Watches and Clocks	0.076	167.9	162.7	173.1	172.2	174.5
1.3.16.7 Irradiation, Electromedical and Electrotherapeutic equipment	0.055	114.4	113.5	110.6	111.3	111.7
1.3.16.8 Optical instruments and Photographic equipment	0.008	107.4	105.9	107.5	107.5	111.8
1.3.17 MANUFACTURE OF ELECTRICAL EQUIPMENT	**2.930**	**133.7**	**133.4**	**134.5**	**134.7**	**134.4**
1.3.17.1 Electric motors, Generators, Transformers and Electricity distribution and Control apparatus	1.298	132.3	131.7	133.9	133.6	132.8
1.3.17.2 Batteries and Accumulators	0.236	141.3	140.5	142.1	143.1	144.4
1.3.17.3 Fibre optic cables for data transmission or live transmission of images	0.133	118.6	119.6	113.3	113.7	114.8
1.3.17.4 Other electronic and Electric wires and Cables	0.428	154.4	154.6	157.3	157.8	158.0
1.3.17.5 Wiring devices, Electric lighting & display equipment	0.263	118.4	118.9	117.8	118.4	117.8
1.3.17.6 Domestic appliances	0.366	131.8	131.9	131.3	131.2	130.0
1.3.17.7 Other electrical equipment	0.206	123.4	122.4	123.5	125.0	125.3
1.3.18 MANUFACTURE OF MACHINERY AND EQUIPMENT	**4.789**	**130.8**	**130.7**	**131.7**	**131.9**	**131.8**
1.3.18.1 Engines and Turbines, Except aircraft, Vehicle and Two wheeler engines	0.638	132.8	132.3	132.7	134.1	134.3
1.3.18.2 Fluid power equipment	0.162	134.5	133.4	135.7	135.2	134.6
1.3.18.3 Other pumps, Compressors, Taps and Valves	0.552	118.5	117.9	118.9	118.9	119.5
1.3.18.4 Bearings, Gears, Gearing and Driving elements	0.340	128.5	128.2	131.7	130.5	128.9
1.3.18.5 Ovens, Furnaces and Furnace burners	0.008	86.6	85.2	86.9	87.1	88.1
1.3.18.6 Lifting and Handling equipment	0.285	130.0	129.8	130.6	130.6	131.1

No. 21: Wholesale Price Index (Concld.)

(Base: 2011-12 = 100)

Commodities	Weight	2024-25	2024	2025		
			May	Mar.	Apr.(P)	May(P)
	1	2	3	4	5	6
1.3.18.7 Office machinery and Equipment	0.006	130.2	130.2	130.2	130.2	130.2
1.3.18.8 Other general-purpose machinery	0.437	145.3	147.8	142.7	143.5	144.8
1.3.18.9 Agricultural and Forestry machinery	0.833	145.5	145.2	146.7	146.8	146.8
1.3.18.10 Metal-forming machinery and Machine tools	0.224	123.2	122.4	126.2	126.2	126.0
1.3.18.11 Machinery for mining, Quarrying and Construction	0.371	89.8	89.7	91.6	92.2	92.4
1.3.18.12 Machinery for food, Beverage and Tobacco processing	0.228	126.1	125.3	127.0	127.2	126.3
1.3.18.13 Machinery for textile, Apparel and Leather production	0.192	141.4	139.2	148.8	148.7	139.0
1.3.18.14 Other special-purpose machinery	0.468	144.9	146.1	144.7	144.5	145.8
1.3.18.15 Renewable electricity generating equipment	0.046	69.2	70.0	69.3	69.1	69.2
1.3.19 MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS	**4.969**	**129.9**	**129.8**	**130.3**	**130.5**	**130.5**
1.3.19.1 Motor vehicles	2.600	130.6	130.6	131.2	131.3	131.0
1.3.19.2 Parts and Accessories for motor vehicles	2.368	129.1	128.9	129.4	129.6	129.9
1.3.20 MANUFACTURE OF OTHER TRANSPORT EQUIPMENT	**1.648**	**145.2**	**143.9**	**148.4**	**149.6**	**149.6**
1.3.20.1 Building of ships and Floating structures	0.117	180.5	177.9	188.4	190.6	190.7
1.3.20.2 Railway locomotives and Rolling stock	0.110	108.9	108.3	109.5	109.5	109.7
1.3.20.3 Motor cycles	1.302	146.0	144.6	149.3	150.5	150.3
1.3.20.4 Bicycles and Invalid carriages	0.117	134.9	135.9	135.4	136.1	136.7
1.3.20.5 Other transport equipment	0.002	163.2	162.5	165.8	165.1	165.9
1.3.21 MANUFACTURE OF FURNITURE	**0.727**	**160.3**	**158.7**	**163.2**	**163.5**	**163.4**
1.3.21.1 Furniture	0.727	160.3	158.7	163.2	163.5	163.4
1.3.22 OTHER MANUFACTURING	**1.064**	**183.8**	**178.5**	**204.2**	**204.2**	**219.3**
1.3.22.1 Jewellery and Related articles	0.996	185.4	179.7	207.2	207.1	223.2
1.3.22.2 Musical instruments	0.001	201.9	211.6	201.4	201.4	202.1
1.3.22.3 Sports goods	0.012	164.9	160.1	168.1	170.4	171.0
1.3.22.4 Games and Toys	0.005	163.1	161.3	164.5	164.3	164.3
1.3.22.5 Medical and Dental instruments and Supplies	0.049	158.6	159.1	158.6	158.6	158.6
2 FOOD INDEX	**24.378**	**192.9**	**186.3**	**189.3**	**189.3**	**189.5**

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, Government of India.

No. 22: Index of Industrial Production (Base:2011-12=100)

Industry	Weight	2023-24	2024-25	March		April	
				2024	2025	2024	2025
	1	2	3	4	5	6	7
General Index	100.00	146.7	152.6	160.0	166.3	148.0	152.0
1 Sectoral Classification							
1.1 Mining	14.37	128.9	132.8	156.2	158.1	130.9	130.6
1.2 Manufacturing	77.63	144.7	150.6	156.2	162.4	144.6	149.5
1.3 Electricity	7.99	198.3	208.6	204.2	219.5	212.0	214.4
2 Use-Based Classification							
2.1 Primary Goods	34.05	147.7	153.5	163.1	169.5	152.2	151.6
2.2 Capital Goods	8.22	106.6	112.6	131.6	136.3	95.0	114.3
2.3 Intermediate Goods	17.22	157.3	164.0	169.2	175.6	157.8	164.2
2.4 Infrastructure/ Construction Goods	12.34	176.3	188.2	195.2	214.6	184.2	191.6
2.5 Consumer Durables	12.84	118.6	128.0	129.9	138.8	119.5	127.2
2.6 Consumer Non-Durables	15.33	153.7	151.4	155.2	149.0	150.9	148.4

Source : Central Statistics Office, Ministry of Statistics and Programme Implementation, Government of India.

Government Accounts and Treasury Bills

No. 23: Union Government Accounts at a Glance

(₹ Crore)

Item	2025-26			2024-25		
	Budget Estimates	April 2025		Provisional Accounts	Revised Estimates	Provisional Accounts as per cent to Revised Estimates
		Actuals	Percent to Budget Estimates			
	1	2	3	4	5	6
1 Revenue Receipts	**3420409**	**256829**	**7.5**	**3036429**	**3087960**	**98.3**
1.1 Tax Revenue (Net)	2837409	189669	6.7	2498885	2556960	97.7
1.2 Non-Tax Revenue	583000	67160	11.5	537544	531000	101.2
2 Non Debt Capital Receipt	**76000**	**22459**	**29.6**	**41818**	**59000**	**70.9**
2.1 Recovery of Loans	29000	1048	3.6	24616	26000	94.7
2.2 Other Receipts	47000	21411	45.6	17202	33000	52.1
3 Total Receipts (excluding borrowings) (1+2)	**3496409**	**279288**	**8.0**	**3078247**	**3146960**	**97.8**
4 Revenue Expenditure of which :	3944255	305830	7.8	3603510	3698058	97.4
4.1 Interest Payments	1276338	93460	7.3	1116343	1137940	98.1
5 Capital Expenditure	1121090	159790	14.3	1052007	1018429	103.3
6 Total Expenditure (4+5)	**5065345**	**465620**	**9.2**	**4655517**	**4716487**	**98.7**
7 Revenue Deficit (4-1)	**523846**	**49001**	**9.4**	**567081**	**610098**	**92.9**
8 Fiscal Deficit (6-3)	**1568936**	**186332**	**11.9**	**1577270**	**1569527**	**100.5**
9 Gross Primary Deficit (8-4.1)	**292598**	**92872**	**31.7**	**460927**	**431587**	**106.8**

Source: Controller General of Accounts (CGA), Ministry of Finance, Government of India and Union Budget 2025-26.

No. 24: Treasury Bills – Ownership Pattern

(₹ Crore)

Item	2024-25	2024	2025					
		Apr. 26	Mar. 21	Mar. 28	Apr. 04	Apr. 11	Apr. 18	Apr. 25
	1	2	3	4	5	6	7	8
1 91-day								
1.1 Banks	26554	8989	13884	26554	17184	14441	12637	13756
1.2 Primary Dealers	25258	22711	20137	25258	24563	25236	23228	23981
1.3 State Governments	40315	31670	53128	40315	40918	35918	24417	43217
1.4 Others	115688	114700	126479	115688	122754	122623	123435	118563
2 182-day								
2.1 Banks	44887	77964	43990	44887	40572	46806	46504	43713
2.2 Primary Dealers	62218	78906	52239	62218	64068	61865	62287	66918
2.3 State Governments	11078	7406	10928	11078	10340	10340	7632	8932
2.4 Others	104994	114134	103871	104994	105660	100629	99510	96669
3 364-day								
3.1 Banks	72304	91933	68305	72304	63863	69748	69847	67854
3.2 Primary Dealers	86939	160059	94604	86939	90745	87217	86096	85280
3.3 State Governments	37389	37488	37132	37389	37311	45060	45432	45879
3.4 Others	162757	164008	161091	162757	164393	159036	157057	156866
4 14-day Intermediate								
4.1 Banks								
4.2 Primary Dealers								
4.3 State Governments	273670	223837	326396	273670	140737	186371	199559	187551
4.4 Others	572	537	378	572	1319	551	461	1005
Total Treasury Bills (Excluding 14 day Intermediate T Bills) #	790381	909968	785787	790381	782369	778918	758082	771628

14D intermediate T-Bills are non-marketable unlike 91D, 182D and 364D T-Bills. These bills are 'intermediate' by nature as these are liquidated to replenish shortfall in the daily minimum cash balances of State Governments.
Note: Primary Dealers (PDs) include banks undertaking PD business.

No. 25: Auctions of Treasury Bills

(Amount in ₹ Crore)

Date of Auction	Notified Amount	Bids Received			Bids Accepted			Total Issue (6+7)	Cut-off Price (₹)	Implicit Yield at Cut-off Price (per cent)
		Number	Total Face Value		Number	Total Face Value				
			Competitive	Non-Competitive		Competitive	Non-Competitive			
	1	2	3	4	5	6	7	8	9	10
91-day Treasury Bills										
2025-26										
Apr. 02	9000	94	22500	615	41	8989	615	9604	98.45	6.3017
Apr. 09	9000	106	27662	2042	38	8958	2042	11000	98.52	6.0300
Apr. 16	9000	91	21436	1915	48	8985	1915	10900	98.54	5.9354
Apr. 23	9000	94	28246	26227	43	8973	26227	35200	98.55	5.9048
Apr. 30	9000	75	21082	27123	32	8977	27123	36100	98.55	5.9036
182-day Treasury Bills										
2025-26										
Apr. 02	5000	83	28267	5	3	4995	5	5000	96.96	6.2930
Apr. 09	5000	89	23035	19	5	4981	19	5000	97.05	6.0984
Apr. 16	5000	95	19505	20	33	4980	20	5000	97.09	6.0198
Apr. 23	5000	88	18537	3814	28	4986	3814	8800	97.12	5.9514
Apr. 30	5000	82	19717	1723	18	4977	1723	6700	97.13	5.9258
364-day Treasury Bills										
2025-26										
Apr. 02	5000	97	36075	141	7	4994	141	5135	94.09	6.2973
Apr. 09	5000	124	42472	7773	6	4980	7773	12753	94.28	6.0880
Apr. 16	5000	102	23520	458	29	4989	458	5448	94.34	6.0154
Apr. 23	5000	106	24947	638	31	4968	638	5605	94.40	5.9500
Apr. 30	5000	92	23359	187	30	4978	187	5165	94.43	5.9146

Financial Markets

No. 26: Daily Call Money Rates

(Per cent per annum)

As on	Range of Rates	Weighted Average Rates
	Borrowings/ Lendings	Borrowings/ Lendings
	1	2
April 02 ,2025	5.15-6.35	6.19
April 03 ,2025	5.00-6.10	5.99
April 04 ,2025	5.00-6.40	6.08
April 05 ,2025	5.25-6.35	5.77
April 07 ,2025	5.10-6.35	6.16
April 08 ,2025	5.15-6.25	6.15
April 09 ,2025	5.00-6.10	5.91
April 11 ,2025	5.00-6.00	5.79
April 15 ,2025	5.00-5.95	5.84
April 16 ,2025	4.95-5.95	5.85
April 17 ,2025	4.95-5.95	5.85
April 19 ,2025	5.30-5.95	5.50
April 21 ,2025	4.95-6.05	5.86
April 22 ,2025	5.00-6.15	5.87
April 23 ,2025	5.00-6.05	5.91
April 24 ,2025	4.95-5.96	5.85
April 25 ,2025	4.95-5.95	5.86
April 28 ,2025	4.95-6.05	5.87
April 29 ,2025	4.95-6.10	5.90
April 30 ,2025	5.00-6.05	5.94
May 02 ,2025	4.95-6.00	5.86
May 03 ,2025	5.25-5.95	5.55
May 05 ,2025	4.95-6.16	5.89
May 06 ,2025	4.95-5.95	5.84
May 07 ,2025	4.90-5.95	5.83
May 08 ,2025	4.90-5.90	5.82
May 09 ,2025	4.90-6.00	5.84
May 13 ,2025	4.90-5.90	5.83
May 14 ,2025	4.90-5.90	5.84
May 15 ,2025	4.90-5.90	5.83

Note: Includes Notice Money.

No. 27: Certificates of Deposit

Item	2024	2025				2025		
	Apr. 19	Mar. 7	Mar. 21	Apr. 4	Apr. 18	May. 2	May. 16	May. 30
	1	2	3	4	5	6	7	8
1 Amount Outstanding (₹ Crore)	372841.80	511207.89	532971.66	522896.64	518759.57	512999.59	511818.07	513762.66
1.1 Issued during the fortnight (₹ Crore)	16991.88	70936.37	117053.02	32045.52	7213.32	9185.58	48202.31	38388.15
2 Rate of Interest (per cent)	6.95-7.83	7.02-8.02	6.98-8.05	6.45-8.05	6.43-7.37	6.35-7.22	6.21-7.24	6.01-7.37

No. 28: Commercial Paper

Item	2024	2025				2025	
	Apr. 30	Mar. 15	Mar. 31	Apr. 15	Apr. 30	May 15	May 31
	1	2	3	4	5	6	7
1 Amount Outstanding (₹ Crore)	411533.60	457051.30	442892.70	521558.10	545586.95	541591.10	553874.25
1.1 Reported during the fortnight (₹ Crore)	60407.45	107624.20	77133.85	91006.40	72418.90	48973.55	81053.80
2 Rate of Interest (per cent)	6.89-12.59	6.67-11.78	7.00-14.46	6.31-11.65	6.26-13.00	6.44-10.14	5.97-12.23

No. 29: Average Daily Turnover in Select Financial Markets

(₹ Crore)

Item	2024-25	2024	2025					
		Apr. 26	Mar. 21	Mar. 28	Apr. 4	Apr. 11	Apr. 18	Apr. 25
	1	2	3	4	5	6	7	8
1 Call Money	18990	18120	30499	27595	17640	26502	23766	28038
2 Notice Money	2506	655	442	4915	7789	431	9941	181
3 Term Money	941	969	1271	1167	1818	1151	1233	1900
4 Triparty Repo	692068	628164	644998	818746	653565	679080	827215	706111
5 Market Repo	578912	570483	579795	671533	389018	528545	810602	626465
6 Repo in Corporate Bond	5212	3178	8851	6386	5897	6319	6241	6915
7 Forex (US $ million)	131877	120418	149709	183528	159811	155293	150795	136963
8 Govt. of India Dated Securities	56065	73593	115324	58942	164906	240487	169877	201467
9 State Govt. Securities	3971	4343	14316	7083	6292	11254	9104	11158
10 Treasury Bills								
10.1 91-Day	2514	4848	9185	7631	14363	5321	6693	5042
10.2 182-Day	2218	6214	3835	1689	7887	7970	4092	3911
10.3 364-Day	1854	4593	3974	3012	7320	9779	6627	4433
10.4 Cash Management Bills		0	0	0	0	0	0	0
11 Total Govt. Securities (8+9+10)	66622	93592	146635	78357	200768	274810	196393	226012
11.1 RBI	1715	16	10497	9793	6901	5032	427	12079

No. 30: New Capital Issues by Non-Government Public Limited Companies

(Amount in ₹ Crore)

Security & Type of Issue	2024-25		2024-25 (Apr.)		2025-26 (Apr.) *		Apr. 2024		Apr. 2025 *	
	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount
	1	2	3	4	5	6	7	8	9	10
1 Equity Shares	**464**	**210190**	**35**	**25371**	**14**	**435**	**35**	**25371**	**14**	**435**
1.1 Public	322	190478	27	23727	8	255	27	23727	8	255
1.2 Rights	142	19712	8	1643	6	180	8	1643	6	180
2 Public Issue of Bonds/ Debentures	**43**	**8149**	**4**	**687**	**5**	**777**	**4**	**687**	**5**	**777**
3 Total (1+2)	**507**	**218339**	**39**	**26057**	**19**	**1212**	**39**	**26057**	**19**	**1212**
3.1 Public	365	198627	31	24414	13	1032	31	24414	13	1032
3.2 Rights	142	19712	8	1643	6	180	8	1643	6	180

Notes : 1. Since April 2020, monthly data on equity issues is compiled on the basis of their listing date.
2. Figures in the columns might not add up to the total due to rounding off numbers.
3. The table covers only public and rights issuances of equity and debt. It does not include data on private placement of debt, qualified institutional placements and preferential allotments.
Source : Securities and Exchange Board of India.
* : Data is Provisional

External Sector

No. 31: Foreign Trade

Item	Unit	2024-25	2024		2025			
			Apr.	Dec.	Jan.	Feb.	Mar.	Apr.
		1	2	3	4	5	6	7
1 Exports	₹ Crore	3701070	294453	321275	313532	320532	363598	329794
	US $ Million	437416	35304	37803	36345	36820	41968	38488
1.1 Oil	₹ Crore	534917	58761	40022	29943	49785	42467	63097
	US $ Million	63341	7045	4709	3471	5719	4902	7374
1.2 Non-oil	₹ Crore	3166153	235693	281253	283588	270747	321131	266697
	US $ Million	374075	28258	33094	32874	31101	37066	31113
2 Imports	₹ Crore	6089909	454463	496989	512680	443663	550211	555392
	US $ Million	720241	54488	58479	59430	50964	63507	64912
2.1 Oil	₹ Crore	1570226	137565	115543	115941	103528	164684	177245
	US $ Million	185779	16493	13595	13440	11892	19008	20716
2.2 Non-oil	₹ Crore	4519683	316898	381447	396739	340135	385527	378147
	US $ Million	534462	37995	44883	45990	39071	44499	44196
3 Trade Balance	₹ Crore	-2388839	-160010	-175714	-199148	-123131	-186613	-225598
	US $ Million	-282825	-19184	-20676	-23085	-14144	-21539	-26424
3.1 Oil	₹ Crore	-1035309	-78804	-75521	-85998	-53743	-122217	-114148
	US $ Million	-122438	-9448	-8886	-9969	-6173	-14107	-13341
3.2 Non-oil	₹ Crore	-1353530	-81205	-100193	-113150	-69388	-64395	-111450
	US $ Million	-160387	-9736	-11789	-13117	-7971	-7433	-13083

Note: Data in the table are provisional.
Source: Directorate General of Commercial Intelligence and Statistics.

No. 32: Foreign Exchange Reserves

Item	Unit	2024	2025					
		Jun. 07	Apr. 25	May. 02	May. 09	May. 16	May. 23	May. 30
		1	2	3	4	5	6	7
1 Total Reserves	**₹ Crore**	**5468448**	**5879208**	**5797792**	**5897173**	**5865523**	**5902926**	**5916602**
	US $ Million	**655817**	**688129**	**686064**	**690617**	**685729**	**692721**	**691485**
1.1 Foreign Currency Assets	₹ Crore	4805700	4960996	4911665	4964245	4975264	4994767	4998795
	US $ Million	576337	580663	581177	581373	581652	586167	584215
1.2 Gold	₹ Crore	475139	720785	691478	737220	694701	712210	721351
	US $ Million	56982	84365	81820	86337	81217	83582	84305
	Volume (Metric Tonnes)	834.23	879.58	879.58	879.58	879.58	879.58	879.58
1.3 SDRs	SDRs Million	13699	13706	13706	13706	13707	13707	13707
	₹ Crore	151432	158817	156841	158246	158155	158241	158885
	US $ Million	18161	18589	18558	18532	18490	18571	18569
1.4 Reserve Tranche Position in IMF	₹ Crore	36177	38610	37807	37462	37404	37708	37571
	US $ Million	4336	4512	4509	4374	4371	4401	4395

* Difference, if any, is due to rounding off.
Note: Exclude investment in foreign currency denominated bonds issued by IIFC (UK), SDRs transferred by Government of India to RBI, foreign currency received under SAARC and ACU currency swap arrangements and RBI's contribution to funding of Nexus Global Payments. Foreign currency assets in US dollar take into account appreciation/depreciation of non- US currencies (such as Euro, Sterling, Yen and Australian Dollar) held in reserves. Foreign exchange holdings are converted into rupees at rupee-US dollar RBI holding rates.

No. 33: Non-Resident Deposits

(US $ Million)

Scheme	Outstanding				Flows	
	2024-25	2024	2025		2024-25	2025-26
		Apr.	Mar.	Apr. (P)	Apr.	Apr.(P)
	1	2	3	4	5	6
1 NRI Deposits	**164677**	**153009**	**164677**	**165432**	**1078**	**751**
1.1 FCNR(B)	32809	26216	32809	33081	483	272
1.2 NR(E)RA	100733	99229	100733	101112	564	376
1.3 NRO	31135	27564	31135	31239	31	103

P: Provisional.

No. 34: Foreign Investment Inflows

(US $ Million)

Item	2024-25	2024-25	2025-26 (P)	2024 (P)	2025 (P)	
		Apr.	Apr.	Apr.	Mar.	Apr.
	1	2	3	4	5	6
1.1 Net Foreign Direct Investment (1.1.1-1.1.2)	**2291**	**1917**	**3945**	**1917**	**-438**	**3945**
1.1.1 Direct Investment to India (1.1.1.1-1.1.1.2)	**29554**	**3105**	**7135**	**3105**	**3322**	**7135**
1.1.1.1 Gross Inflows/Gross Investments	**81043**	**7162**	**8803**	**7162**	**5938**	**8803**
1.1.1.1.1 Equity	50993	4984	6634	4984	3240	6634
1.1.1.1.1.1 Government (SIA/FIPB)	2208	11	297	11	307	297
1.1.1.1.1.2 RBI	34686	4732	4696	4732	2440	4696
1.1.1.1.1.3 Acquisition of shares	13124	166	1566	166	405	1566
1.1.1.1.1.4 Equity capital of unincorporated bodies	976	75	75	75	88	75
1.1.1.1.2 Reinvested earnings	23545	1801	1801	1801	2130	1801
1.1.1.1.3 Other capital	6505	377	368	377	567	368
1.1.1.2 Repatriation/Disinvestment	**51489**	**4057**	**1668**	**4057**	**2616**	**1668**
1.1.1.2.1 Equity	49529	3891	1513	3891	2525	1513
1.1.1.2.2 Other capital	1960	166	155	166	90	155
1.1.2 Foreign Direct Investment by India (1.1.2.1+1.1.2.2+1.1.2.3-1.1.2.4)	**27262**	**1188**	**3190**	**1188**	**3760**	**3190**
1.1.2.1 Equity capital	16043	653	1812	653	2290	1812
1.1.2.2 Reinvested Earnings	6555	546	546	546	546	546
1.1.2.3 Other Capital	8238	371	949	371	1233	949
1.1.2.4 Repatriation/Disinvestment	3575	382	118	382	309	118
1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3-1.2.4)	**2667**	**-2683**	**-3097**	**-2683**	**3877**	**-3097**
1.2.1 GDRs/ADRs	-	-	-	-	-	-
1.2.2 FIIs	2429	-2699	-2440	-2699	3827	-2440
1.2.3 Offshore funds and others	-	-	-	-	-	-
1.2.4 Portfolio investment by India	-238	-16	658	-16	-50	658
1 Foreign Investment Inflows	**4959**	**-766**	**847**	**-766**	**3439**	**847**

P: Provisional

No. 35: Outward Remittances under the Liberalised Remittance Scheme (LRS) for Resident Individuals

(US $ Million)

Item	2024-25	2024	2025		
		Apr.	Feb.	Mar.	Apr.
	1	2	3	4	5
1 Outward Remittances under the LRS	**29563.12**	**2285.77**	**1964.21**	**2547.57**	**2481.41**
1.1 Deposit	705.26	72.67	51.62	173.17	94.15
1.2 Purchase of immovable property	322.82	23.19	28.76	45.10	44.69
1.3 Investment in equity/debt	1698.94	98.94	173.84	306.39	203.44
1.4 Gift	2938.69	311.16	190.82	299.59	290.89
1.5 Donations	11.81	1.70	0.59	2.20	1.57
1.6 Travel	16964.57	1144.31	1090.61	1125.55	1270.44
1.7 Maintenance of close relatives	3722.03	391.69	234.99	421.47	397.97
1.8 Medical Treatment	81.19	10.38	3.43	3.57	5.08
1.9 Studies Abroad	2918.91	208.02	182.17	160.03	163.56
1.10 Others	198.90	23.70	7.38	10.51	9.61

No. 36: Indices of Nominal Effective Exchange Rate (NEER) and Real Effective Exchange Rate (REER) of the Indian Rupee

Item	2023-24	2024-25	2024	2025	
			May	Apr	May
	1	2	3	4	5
40-Currency Basket (Base: 2015-16=100)					
1 Trade-Weighted					
1.1 NEER	90.75	91.05	91.96	89.71	89.14
1.2 REER	103.71	105.28	104.40	100.78	101.08
2 Export-Weighted					
2.1 NEER	93.13	93.53	94.24	92.39	91.98
2.2 REER	101.22	102.35	101.40	97.85	98.32
6-Currency Basket (Trade-weighted)					
1 Base : 2015-16 =100					
1.1 NEER	83.62	82.39	83.60	80.36	80.29
1.2 REER	101.66	102.74	102.11	99.12	99.25
2 Base : 2022-23 =100					
2.1 NEER	97.31	95.89	97.29	93.52	93.44
2.2 REER	99.86	100.92	100.31	97.37	97.50

Note: Data for 2023-24 and 2024-25 so far is provisional.

No. 37: External Commercial Borrowings (ECBs) – Registrations

(Amount in US $ Million)

Item	2024-25	2024	2025	
		Apr.	Mar.	Apr.
	1	2	3	4
1 Automatic Route				
1.1 Number	1328	100	142	119
1.2 Amount	47800	3891	8346	1907
2 Approval Route				
2.1 Number	51	1	17	3
2.2 Amount	13384	394	2697	1010
3 Total (1+2)				
3.1 Number	1379	101	159	122
3.2 Amount	61184	4285	11043	2917
4 Weighted Average Maturity (in years)	5.05	5.00	4.50	4.20
5 Interest Rate (per cent)				
5.1 Weighted Average Margin over alternative reference rate (ARR) for Floating Rate Loans@	1.48	1.32	1.39	1.41
5.2 Interest rate range for Fixed Rate Loans	0.00-11.67	0.00-10.50	0.00-10.63	0.00-10.25
Borrower Category				
I. Corporate Manufacturing	13900	410	2273	817
II. Corporate-Infrastructure	15462	1814	3507	48
a.) Transport	614	43	0	0
b.) Energy	6900	380	1828	0
c.) Water and Sanitation	28	0	0	0
d.) Communication	13	0	0	0
e.) Social and Commercial Infrastructure	184	46	2	45
f.) Exploration,Mining and Refinery	5356	550	1675	0
g.) Other Sub-Sectors	2367	795	2	3
III. Corporate Service-Sector	3226	18	522	337
IV. Other Entities	1026	0	0	8
a.) units in SEZ	26	0	0	8
b.) SIDBI	0	0	0	0
c.) Exim Bank	1000	0	0	0
V. Banks	0	0	0	0
VI. Financial Institution (Other than NBFC)	0	0	0	0
VII. NBFCs	26318	1875	4718	1530
a). NBFC- IFC/AFC	12389	411	1567	1159
b). NBFC-MFI	459	28	100	0
c). NBFC-Others	13470	1436	3051	371
VIII. Non-Government Organization (NGO)	0	0	0	0
IX. Micro Finance Institution (MFI)	0	0	0	0
X. Others	1252	168	23	177

Note: Based on applications for ECB/Foreign Currency Convertible Bonds (FCCBs) which have been allotted loan registration number during the period.
@ With effect from July 01, 2023, the benchmark rate is changed to Alternative Reference Rate (ARR).

No. 38: India's Overall Balance of Payments

(US$ Million)

Item	Oct-Dec 2023			Oct-Dec 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance Of Payments (1+2+3)	**452267**	**446269**	**5998**	**544591**	**582251**	**-37660**
1 Current Account (1.1+ 1.2)	**236020**	**246451**	**-10431**	**261653**	**273133**	**-11480**
1.1 Merchandise	**106626**	**178267**	**-71641**	**109817**	**188970**	**-79153**
1.2 Invisibles (1.2.1+1.2.2+1.2.3)	**129394**	**68184**	**61210**	**151837**	**84164**	**67673**
1.2.1 Services	87785	42778	45007	103487	52277	51210
1.2.1.1 Travel	9850	7487	2363	10068	8371	1698
1.2.1.2 Transportation	6950	6457	493	8278	8847	-569
1.2.1.3 Insurance	811	856	-46	870	894	-24
1.2.1.4 G.n.i.e.	182	280	-98	167	307	-139
1.2.1.5 Miscellaneous	69993	27699	42294	84104	33859	50245
1.2.1.5.1 Software Services	41041	4774	36267	47619	6561	41057
1.2.1.5.2 Business Services	22647	14067	8581	29603	18252	11352
1.2.1.5.3 Financial Services	2491	956	1535	2086	741	1346
1.2.1.5.4 Communication Services	701	397	303	580	616	-37
1.2.2 Transfers	31539	2237	29302	36081	2898	33182
1.2.2.1 Official	94	230	-135	89	334	-244
1.2.2.2 Private	31445	2007	29438	35992	2565	33427
1.2.3 Income	10069	23168	-13099	12268	28988	-16720
1.2.3.1 Investment Income	8058	22292	-14233	10088	27943	-17854
1.2.3.2 Compensation of Employees	2010	876	1134	2180	1046	1135
2 Capital Account (2.1+2.2+2.3+2.4+2.5)	**216247**	**198955**	**17291**	**282367**	**309118**	**-26751**
2.1 Foreign Investment (2.1.1+2.1.2)	**144352**	**128388**	**15964**	**192195**	**206344**	**-14148**
2.1.1 Foreign Direct Investment	18875	14923	3952	20783	23560	-2776
2.1.1.1 In India	18309	9947	8362	19870	16218	3653
2.1.1.1.1 Equity	11912	8773	3140	11135	15637	-4501
2.1.1.1.2 Reinvested Earnings	5155		5155	6131		6131
2.1.1.1.3 Other Capital	1242	1175	67	2604	581	2024
2.1.1.2 Abroad	566	4976	-4410	913	7342	-6429
2.1.1.2.1 Equity	566	2355	-1789	913	3211	-2297
2.1.1.2.2 Reinvested Earnings	0	1446	-1446	0	1639	-1639
2.1.1.2.3 Other Capital	0	1174	-1174	0	2493	-2493
2.1.2 Portfolio Investment	125477	113465	12012	171412	182784	-11372
2.1.2.1 In India	124485	112814	11671	170667	182102	-11435
2.1.2.1.1 FIIs	124485	112814	11671	170667	182102	-11435
2.1.2.1.1.1 Equity	108785	102117	6668	144811	156671	-11860
2.1.2.1.1.2 Debt	15701	10697	5003	25856	25431	425
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	991	651	341	745	682	63
2.2 Loans (2.2.1+2.2.2+2.2.3)	**25440**	**28191**	**-2751**	**42894**	**33992**	**8901**
2.2.1 External Assistance	4605	1401	3204	2955	2289	666
2.2.1.1 By India	9	48	-40	6	26	-20
2.2.1.2 To India	4596	1353	3244	2949	2263	686
2.2.2 Commercial Borrowings	6600	11067	-4466	20838	16462	4375
2.2.2.1 By India	2712	4503	-1791	9621	9593	28
2.2.2.2 To India	3888	6564	-2676	11217	6869	4348
2.2.3 Short Term to India	14235	15723	-1489	19101	15241	3860
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	12535	15723	-3188	14260	15241	-980
2.2.3.2 Suppliers' Credit up to 180 days	1700	0	1700	4840	0	4840
2.3 Banking Capital (2.3.1+2.3.2)	**40849**	**24492**	**16358**	**39538**	**49311**	**-9774**
2.3.1 Commercial Banks	40654	24492	16162	39530	49306	-9776
2.3.1.1 Assets	16550	5276	11274	11853	25923	-14070
2.3.1.2 Liabilities	24103	19215	4888	27677	23383	4294
2.3.1.2.1 Non-Resident Deposits	22381	18461	3921	25912	22771	3141
2.3.2 Others	196	0	196	8	5	2
2.4 Rupee Debt Service		**2**	**-2**		**0**	**0**
2.5 Other Capital	**5606**	**17884**	**-12278**	**7740**	**19471**	**-11730**
3 Errors & Omissions	**0**	**862**	**-862**	**571**	**0**	**571**
4 Monetary Movements (4.1+ 4.2)	**0**	**5998**	**-5998**	**37660**	**0**	**37660**
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)		5998	-5998	37660		37660

Note: P: Preliminary.

No. 39: India's Overall Balance of Payments

(₹ Crore)

Item	Oct-Dec 2023			Oct-Dec 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance Of Payments (1+2+3)	**3766056**	**3716109**	**49947**	**4599615**	**4917695**	**-318081**
1 Current Account (1.1+ 1.2)	**1965353**	**2052216**	**-86862**	**2209923**	**2306886**	**-96963**
1.1 Merchandise	**887883**	**1484446**	**-596562**	**927511**	**1596038**	**-668527**
1.2 Invisibles (1.2.1+1.2.2+1.2.3)	**1077470**	**567770**	**509700**	**1282412**	**710849**	**571564**
1.2.1 Services	730995	356218	374778	874055	441534	432521
1.2.1.1 Travel	82022	62341	19681	85035	70697	14338
1.2.1.2 Transportation	57875	53767	4108	69915	74723	-4807
1.2.1.3 Insurance	6749	7130	-381	7347	7553	-206
1.2.1.4 G.n.i.e.	1512	2328	-816	1413	2590	-1177
1.2.1.5 Miscellaneous	582837	230650	352187	710344	285971	424373
1.2.1.5.1 Software Services	341751	39756	301995	402186	55417	346769
1.2.1.5.2 Business Services	188585	117135	71450	250030	154153	95877
1.2.1.5.3 Financial Services	20739	7958	12781	17623	6256	11367
1.2.1.5.4 Communication Services	5834	3309	2524	4896	5207	-310
1.2.2 Transfers	262631	18628	244002	304738	24479	280259
1.2.2.1 Official	785	1913	-1127	753	2817	-2064
1.2.2.2 Private	261845	16716	245130	303985	21662	282323
1.2.3 Income	83844	192924	-109080	103619	244836	-141216
1.2.3.1 Investment Income	67103	185626	-118523	85206	236005	-150799
1.2.3.2 Compensation of Employees	16741	7298	9443	18413	8831	9582
2 Capital Account (2.1+2.2+2.3+2.4+2.5)	**1800703**	**1656716**	**143987**	**2384871**	**2610809**	**-225938**
2.1 Foreign Investment (2.1.1+2.1.2)	**1202027**	**1069092**	**132935**	**1623281**	**1742779**	**-119498**
2.1.1 Foreign Direct Investment	157173	124264	32909	175537	198987	-23449
2.1.1.1 In India	152460	82832	69628	167826	136974	30852
2.1.1.1.1 Equity	99194	73050	26144	94049	132068	-38019
2.1.1.1.2 Reinvested Earnings	42926	0	42926	51780	0	51780
2.1.1.1.3 Other Capital	10340	9783	557	21996	4905	17091
2.1.1.2 Abroad	4713	41432	-36718	7712	62013	-54301
2.1.1.2.1 Equity	4713	19610	-14897	7712	27116	-19405
2.1.1.2.2 Reinvested Earnings	0	12044	-12044	0	13842	-13842
2.1.1.2.3 Other Capital	0	9777	-9777	0	21055	-21055
2.1.2 Portfolio Investment	1044854	944828	100026	1447744	1543792	-96048
2.1.2.1 In India	1036599	939411	97188	1441453	1538030	-96577
2.1.2.1.1 FIIs	1036599	939411	97188	1441453	1538030	-96577
2.1.2.1.1.1 Equity	905860	850336	55523	1223076	1323243	-100167
2.1.2.1.1.2 Debt	130739	89075	41664	218376	214787	3590
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	8255	5417	2838	6291	5762	529
2.2 Loans (2.2.1+2.2.2+2.2.3)	**211839**	**234747**	**-22908**	**362279**	**287097**	**75181**
2.2.1 External Assistance	38345	11667	26679	24961	19334	5626
2.2.1.1 By India	72	404	-331	52	217	-166
2.2.1.2 To India	38273	11263	27010	24909	19117	5792
2.2.2 Commercial Borrowings	54961	92153	-37192	175994	139042	36953
2.2.2.1 By India	22583	37494	-14911	81258	81026	232
2.2.2.2 To India	32378	54659	-22281	94736	58016	36720
2.2.3 Short Term to India	118532	130928	-12396	161324	128721	32602
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	104379	130928	-26549	120442	128721	-8280
2.2.3.2 Suppliers' Credit up to 180 days	14154	0	14154	40882	0	40882
2.3 Banking Capital (2.3.1+2.3.2)	**340156**	**203943**	**136212**	**333936**	**416483**	**-82547**
2.3.1 Commercial Banks	338525	203943	134582	333872	416438	-82566
2.3.1.1 Assets	137815	43936	93879	100112	218949	-118837
2.3.1.2 Liabilities	200710	160008	40702	233760	197489	36271
2.3.1.2.1 Non-Resident Deposits	186372	153723	32648	218851	192322	26530
2.3.2 Others	1630	0	1630	64	45	19
2.4 Rupee Debt Service	**0**	**13**	**-13**	**0**	**0**	**0**
2.5 Other Capital	**46682**	**148921**	**-102239**	**65376**	**164450**	**-99074**
3 Errors & Omissions	**0**	**7177**	**-7177**	**4820**	**0**	**4820**
4 Monetary Movements (4.1+ 4.2)	**0**	**49947**	**-49947**	**318081**	**0**	**318081**
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	49947	-49947	318081	0	318081

Note: P: Preliminary.

No. 40: Standard Presentation of BoP in India as per BPM6

(US$ Million)

Item	Oct-Dec 2023			Oct-Dec 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**236013**	**246429**	**-10416**	**261647**	**273103**	**-11457**
1.A Goods and Services (1.A.a+1.A.b)	**194412**	**221046**	**-26634**	**213304**	**241247**	**-27943**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**106626**	**178267**	**-71641**	**109817**	**188970**	**-79153**
1.A.a.1 General merchandise on a BOP basis	106094	164567	-58473	109391	169503	-60112
1.A.a.2 Net exports of goods under merchanting	532	0	532	426	0	426
1.A.a.3 Nonmonetary gold	0	13701	-13701	0	19467	-19467
1.A.b Services (1.A.b.1 to 1.A.b.13)	**87785**	**42778**	**45007**	**103487**	**52277**	**51210**
1.A.b.1 Manufacturing services on physical inputs owned by others	330	20	310	244	31	213
1.A.b.2 Maintenance and repair services n.i.e.	49	297	-248	82	305	-223
1.A.b.3 Transport	6950	6457	493	8278	8847	-569
1.A.b.4 Travel	9850	7487	2363	10068	8371	1698
1.A.b.5 Construction	1097	624	473	1047	834	213
1.A.b.6 Insurance and pension services	811	856	-46	870	894	-24
1.A.b.7 Financial services	2491	956	1535	2086	741	1346
1.A.b.8 Charges for the use of intellectual property n.i.e.	434	4633	-4199	621	4573	-3952
1.A.b.9 Telecommunications, computer, and information services	41837	5400	36437	48296	7416	40880
1.A.b.10 Other business services	22647	14067	8581	29603	18252	11352
1.A.b.11 Personal, cultural, and recreational services	1006	1464	-459	1148	1242	-95
1.A.b.12 Government goods and services n.i.e.	182	280	-98	167	307	-139
1.A.b.13 Others n.i.e.	103	239	-136	977	465	513
1.B Primary Income (1.B.1 to 1.B.3)	**10069**	**23168**	**-13099**	**12268**	**28988**	**-16720**
1.B.1 Compensation of employees	2010	876	1134	2180	1046	1135
1.B.2 Investment income	6557	21972	-15415	8021	27150	-19128
1.B.2.1 Direct investment	2104	13735	-11631	2558	17331	-14772
1.B.2.2 Portfolio investment	51	1911	-1860	95	2596	-2502
1.B.2.3 Other investment	557	6102	-5545	690	7019	-6329
1.B.2.4 Reserve assets	3845	224	3621	4678	204	4474
1.B.3 Other primary income	1501	320	1181	2067	793	1274
1.C Secondary Income (1.C.1+1.C.2)	**31532**	**2215**	**29317**	**36074**	**2868**	**33206**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	31445	2007	29438	35992	2565	33427
1.C.1.1 Personal transfers (Current transfers between resident and/non-resident households)	30589	1430	29160	35063	1871	33192
1.C.1.2 Other current transfers	856	578	278	928	694	234
1.C.2 General government	87	208	-120	83	303	-221
2 Capital Account (2.1+2.2)	**191**	**280**	**-89**	**185**	**322**	**-137**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	36	86	-50	16	151	-135
2.2 Capital transfers	155	194	-38	169	171	-2
3 Financial Account (3.1 to 3.5)	**216063**	**204696**	**11367**	**319849**	**308826**	**11023**
3.1 Direct Investment (3.1A+3.1B)	**18875**	**14923**	**3952**	**20783**	**23560**	**-2776**
3.1.A Direct Investment in India	18309	9947	8362	19870	16218	3653
3.1.A.1 Equity and investment fund shares	17067	8773	8295	17266	15637	1629
3.1.A.1.1 Equity other than reinvestment of earnings	11912	8773	3140	11135	15637	-4501
3.1.A.1.2 Reinvestment of earnings	5155	0	5155	6131		6131
3.1.A.2 Debt instruments	1242	1175	67	2604	581	2024
3.1.A.2.1 Direct investor in direct investment enterprises	1242	1175	67	2604	581	2024
3.1.B Direct Investment by India	566	4976	-4410	913	7342	-6429
3.1.B.1 Equity and investment fund shares	566	3801	-3235	913	4849	-3936
3.1.B.1.1 Equity other than reinvestment of earnings	566	2355	-1789	913	3211	-2297
3.1.B.1.2 Reinvestment of earnings	0	1446	-1446		1639	-1639
3.1.B.2 Debt instruments	0	1174	-1174	0	2493	-2493
3.1.B.2.1 Direct investor in direct investment enterprises	0	1174	-1174		2493	-2493
3.2 Portfolio Investment	**125477**	**113465**	**12012**	**171412**	**182784**	**-11372**
3.2.A Portfolio Investment in India	124485	112814	11671	170667	182102	-11435
3.2.1 Equity and investment fund shares	108785	102117	6668	144811	156671	-11860
3.2.2 Debt securities	15701	10697	5003	25856	25431	425
3.2.B Portfolio Investment by India	991	651	341	745	682	63
3.3 Financial derivatives (other than reserves) and employee stock options	**5776**	**7904**	**-2128**	**6569**	**12105**	**-5536**
3.4 Other investment	**65936**	**62407**	**3529**	**83424**	**90377**	**-6953**
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	22577	18461	4117	25919	22776	3143
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	196	0	196	8	5	2
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	22381	18461	3921	25912	22771	3141
3.4.2.3 General government	0	0	0			0
3.4.2.4 Other sectors	0	0	0			0
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	29477	18499	10979	37411	45287	-7876
3.4.3.A Loans to India	26757	13948	12809	27784	35668	-7883
3.4.3.B Loans by India	2721	4551	-1830	9627	9619	8
3.4.4 Insurance, pension, and standardized guarantee schemes	37	158	-121	52	59	-7
3.4.5 Trade credit and advances	14235	15723	-1489	19101	15241	3860
3.4.6 Other accounts receivable/payable - other	-390	9566	-9957	941	7015	-6074
3.4.7 Special drawing rights	0	0	0			0
3.5 Reserve assets	**0**	**5998**	**-5998**	**37660**	**0**	**37660**
3.5.1 Monetary gold	0	0	0			0
3.5.2 Special drawing rights n.a.	0	0	0			0
3.5.3 Reserve position in the IMF n.a.	0	0	0			0
3.5.4 Other reserve assets (Foreign Currency Assets)	0	5998	-5998	37660	0	37660
4 Total assets/liabilities	**216063**	**204696**	**11367**	**319849**	**308826**	**11023**
4.1 Equity and investment fund shares	133222	123403	9819	170356	190003	-19647
4.2 Debt instruments	83231	65728	17503	110891	111808	-916
4.3 Other financial assets and liabilities	-390	15565	-15955	38601	7015	31586
5 Net errors and omissions	**0**	**862**	**-862**	**571**	**0**	**571**

Note: P: Preliminary.

No. 41: Standard Presentation of BoP in India as per BPM6

(₹ Crore)

Item	Oct-Dec 2023			Oct-Dec 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**1965295**	**2052031**	**-86736**	**2209867**	**2306632**	**-96765**
1.A Goods and Services (1.A.a+1.A.b)	**1618879**	**1840663**	**-221785**	**1801566**	**2037572**	**-236006**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**887883**	**1484446**	**-596562**	**927511**	**1596038**	**-668527**
1.A.a.1 General merchandise on a BOP basis	883452	1370357	-486905	923914	1431621	-507707
1.A.a.2 Net exports of goods under merchanting	4432	0	4432	3597	0	3597
1.A.a.3 Nonmonetary gold	0	114089	-114089	0	164417	-164417
1.A.b Services (1.A.b.1 to 1.A.b.13)	**730995**	**356218**	**374778**	**874055**	**441534**	**432521**
1.A.b.1 Manufacturing services on physical inputs owned by others	2746	163	2583	2061	262	1798
1.A.b.2 Maintenance and repair services n.i.e.	407	2474	-2067	689	2574	-1886
1.A.b.3 Transport	57875	53767	4108	69915	74723	-4807
1.A.b.4 Travel	82022	62341	19681	85035	70697	14338
1.A.b.5 Construction	9139	5196	3942	8843	7044	1799
1.A.b.6 Insurance and pension services	6749	7130	-381	7347	7553	-206
1.A.b.7 Financial services	20739	7958	12781	17623	6256	11367
1.A.b.8 Charges for the use of intellectual property n.i.e.	3611	38576	-34965	5245	38627	-33383
1.A.b.9 Telecommunications, computer, and information services	348376	44964	303412	407907	62636	345271
1.A.b.10 Other business services	188585	117135	71450	250030	154153	95877
1.A.b.11 Personal, cultural, and recreational services	8373	12194	-3820	9693	10492	-799
1.A.b.12 Government goods and services n.i.e.	1512	2328	-816	1413	2590	-1177
1.A.b.13 Others n.i.e.	861	1991	-1130	8255	3926	4329
1.B Primary Income (1.B.1 to 1.B.3)	**83844**	**192924**	**-109080**	**103619**	**244836**	**-141216**
1.B.1 Compensation of employees	16741	7298	9443	18413	8831	9582
1.B.2 Investment income	54604	182963	-128359	67749	229307	-161558
1.B.2.1 Direct investment	17522	114371	-96848	21607	146374	-124767
1.B.2.2 Portfolio investment	425	15915	-15490	800	21930	-21130
1.B.2.3 Other investment	4636	50812	-46176	5827	59279	-53452
1.B.2.4 Reserve assets	32021	1866	30155	39515	1724	37791
1.B.3 Other primary income	12499	2663	9836	17457	6698	10760
1.C Secondary Income (1.C.1+1.C.2)	**262572**	**18444**	**244128**	**304682**	**24225**	**280457**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	261845	16716	245130	303985	21662	282323
1.C.1.1 Personal transfers (Current transfers between resident and/non-resident households)	254718	11904	242814	296144	15800	280343
1.C.1.2 Other current transfers	7127	4811	2316	7842	5862	1980
1.C.2 General government	727	1728	-1001	697	2563	-1866
2 Capital Account (2.1+2.2)	**1590**	**2328**	**-739**	**1564**	**2720**	**-1156**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	296	715	-419	136	1275	-1139
2.2 Capital transfers	1293	1613	-320	1428	1445	-17
3 Financial Account (3.1 to 3.5)	**1799172**	**1704519**	**94652**	**2701444**	**2608343**	**93101**
3.1 Direct Investment (3.1A+3.1B)	**157173**	**124264**	**32909**	**175537**	**198987**	**-23449**
3.1.A Direct Investment in India	152460	82832	69628	167826	136974	30852
3.1.A.1 Equity and investment fund shares	142120	73050	69070	145829	132068	13761
3.1.A.1.1 Equity other than reinvestment of earnings	99194	73050	26144	94049	132068	-38019
3.1.A.1.2 Reinvestment of earnings	42926	0	42926	51780	0	51780
3.1.A.2 Debt instruments	10340	9783	557	21996	4905	17091
3.1.A.2.1 Direct investor in direct investment enterprises	10340	9783	557	21996	4905	17091
3.1.B Direct Investment by India	4713	41432	-36718	7712	62013	-54301
3.1.B.1 Equity and investment fund shares	4713	31654	-26941	7712	40958	-33246
3.1.B.1.1 Equity other than reinvestment of earnings	4713	19610	-14897	7712	27116	-19405
3.1.B.1.2 Reinvestment of earnings	0	12044	-12044	0	13842	-13842
3.1.B.2 Debt instruments	0	9777	-9777	0	21055	-21055
3.1.B.2.1 Direct investor in direct investment enterprises	0	9777	-9777	0	21055	-21055
3.2 Portfolio Investment	**1044854**	**944828**	**100026**	**1447744**	**1543792**	**-96048**
3.2.A Portfolio Investment in India	1036599	939411	97188	1441453	1538030	-96577
3.2.1 Equity and investment fund shares	905860	850336	55523	1223076	1323243	-100167
3.2.2 Debt securities	130739	89075	41664	218376	214787	3590
3.2.B Portfolio Investment by India	8255	5417	2838	6291	5762	529
3.3 Financial derivatives (other than reserves) and employee stock options	**48093**	**65814**	**-17720**	**55483**	**102239**	**-46756**
3.4 Other investment	**549051**	**519667**	**29385**	**704599**	**763325**	**-58727**
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	188002	153723	34279	218915	192367	26549
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	1630	0	1630	64	45	19
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	186372	153723	32648	218851	192322	26530
3.4.2.3 General government	0	0	0	0	0	0
3.4.2.4 Other sectors	0	0	0	0	0	0
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	245460	154040	91420	315976	382492	-66517
3.4.3.A Loans to India	222804	116142	106662	234666	301249	-66583
3.4.3.B Loans by India	22656	37898	-15242	81310	81243	67
3.4.4 Insurance, pension, and standardized guarantee schemes	306	1315	-1009	437	497	-59
3.4.5 Trade credit and advances	118532	130928	-12396	161324	128721	32602
3.4.6 Other accounts receivable/payable - other	-3249	79661	-82910	7947	59249	-51302
3.4.7 Special drawing rights	0	0	0	0	0	0
3.5 Reserve assets	**0**	**49947**	**-49947**	**318081**	**0**	**318081**
3.5.1 Monetary gold	0	0	0	0	0	0
3.5.2 Special drawing rights n.a.	0	0	0	0	0	0
3.5.3 Reserve position in the IMF n.a.	0	0	0	0	0	0
3.5.4 Other reserve assets (Foreign Currency Assets)	0	49947	-49947	318081	0	318081
4 Total assets/liabilities	**1799172**	**1704519**	**94652**	**2701444**	**2608343**	**93101**
4.1 Equity and investment fund shares	1109347	1027586	81762	1438829	1604767	-165939
4.2 Debt instruments	693073	547325	145748	936587	944327	-7740
4.3 Other financial assets and liabilities	-3249	129608	-132857	326028	59249	266779
5 Net errors and omissions	**0**	**7177**	**-7177**	**4820**	**0**	**4820**

Note: P: Preliminary.

No. 42: India's International Investment Position

(US$ Million)

Item	As on Financial Year/Quarter End							
	2023-24		2023		2024			
			Dec.		Sep.		Dec.	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	1	2	3	4	5	6	7	8
1. Direct investment Abroad/in India	242271	542950	236506	536935	253846	555666	260275	547588
1.1 Equity Capital*	153343	511142	149394	505572	161794	523146	165730	513545
1.2 Other Capital	88927	31808	87112	31363	92053	32520	94545	34043
2. Portfolio investment	12469	276739	11744	268727	12503	293843	12173	276024
2.1 Equity	10942	162061	9523	161206	11241	170934	9356	155573
2.2 Debt	1527	114678	2220	107521	1262	122909	2817	120451
3. Other investment	132654	575284	128316	561466	146714	622795	170554	619611
3.1 Trade credit	33450	123723	31689	123290	32953	130938	33280	135136
3.2 Loan	17547	221894	18510	214954	22147	239779	22523	240977
3.3 Currency and Deposits	53519	154787	44339	149326	56105	164076	68630	165713
3.4 Other Assets/Liabilities	28138	74880	33777	73895	35510	88002	46121	77784
4. Reserves	646419		622452		705782		635701	
5. Total Assets/ Liabilities	1033812	1394973	999018	1367128	1118845	1472304	1078704	1443223
6. Net IIP (Assets - Liabilities)	-361161		-368110		-353459		-364519	

Note: * Equity capital includes share of investment funds and reinvested earnings.

Payment and Settlement Systems

No.43: Payment System Indicators

PART I - Payment System Indicators - Payment & Settlement System Statistics

System	Volume (Lakh)				Value (₹ Crore)			
	FY 2024-25	2024	2025		FY 2024-25	2024	2025	
		Apr.	Mar.	Apr.		Apr.	Mar.	Apr.
	1	-2	-1	0	5	2	3	4
A. Settlement Systems								
Financial Market Infrastructures (FMIs)								
1 CCIL Operated Systems (1.1 to 1.3)	47.40	3.53	4.36	5.07	296218030	22115118	27936158	29399814
1.1 Govt. Securities Clearing (1.1.1 to 1.1.3)	17.87	1.25	1.33	1.89	185733719	14132535	15356048	16657576
1.1.1 Outright	10.56	0.68	0.76	1.30	16056018	1023439	1297378	2017823
1.1.2 Repo	4.72	0.38	0.36	0.38	77286611	6510577	6589738	7078422
1.1.3 Tri-party Repo	2.58	0.19	0.21	0.20	92391091	6598519	7468932	7561331
1.2 Forex Clearing	28.06	2.17	2.94	3.07	100639565	7343662	11758724	11992139
1.3 Rupee Derivatives @	1.46	0.11	0.09	0.11	9844746	638922	821387	750099
B. Payment Systems								
I Financial Market Infrastructures (FMIs)	-	-	-	-	-	-	-	-
1 Credit Transfers - RTGS (1.1 to 1.2)	3024.55	235.59	307.03	262.41	201387682	14433296	21401969	16895789
1.1 Customer Transactions	3010.32	234.46	305.71	261.16	181153129	12800746	19394683	15060026
1.2 Interbank Transactions	14.23	1.12	1.32	1.24	20234553	1632550	2007287	1835763
II Retail								
2 Credit Transfers - Retail (2.1 to 2.6)	2061014.91	149083.29	202008.61	194925.94	79781976	5845989	8242601	7126205
2.1 AePS (Fund Transfers) @	3.64	0.29	0.31	0.30	190	19	16	16
2.2 APBS $	32964.43	2535.32	3506.60	2610.51	554034	36959	66841	57566
2.3 IMPS	56249.68	5503.65	4616.39	4492.53	7139110	592279	667813	621666
2.4 NACH Cr $	16938.86	964.06	1861.26	1200.84	1670223	121718	176401	154683
2.5 NEFT	96198.05	7040.03	9008.97	7687.52	44361464	3130549	4854308	3897348
2.6 UPI @	1858660.25	133039.94	183015.08	178934.24	26056955	1964465	2477222	2394926
2.6.1 of which USSD @	17.24	1.52	1.26	1.22	185	18	14	13
3 Debit Transfers and Direct Debits (3.1 to 3.3)	21659.95	1644.10	1891.35	1869.90	2208583	159006	211047	198565
3.1 BHIM Aadhaar Pay @	230.08	20.50	19.59	17.39	6907	563	611	601
3.2 NACH Dr $	19762.28	1494.37	1724.79	1709.27	2199327	158223	210246	197780
3.3 NETC (linked to bank account) @	1667.59	129.23	146.97	143.24	2349	220	191	184
4 Card Payments (4.1 to 4.2)	63861.15	4960.12	5789.52	5673.64	2605110	200409	240549	222351
4.1 Credit Cards (4.1.1 to 4.1.2)	47740.76	3441.51	4586.50	4502.70	2109197	156498	201494	184237
4.1.1 PoS based $	24571.10	1843.36	2302.66	2281.41	795022	61982	71473	67899
4.1.2 Others $	23169.66	1598.15	2283.84	2221.29	1314175	94516	130021	116338
4.2 Debit Cards (4.2.1 to 4.2.1)	16120.39	1518.61	1203.02	1170.93	495914	43911	39055	38113
4.2.1 PoS based $	11980.33	1126.31	895.82	875.30	332556	30022	25818	26187
4.2.2 Others $	4140.06	392.30	307.20	295.63	163358	13889	13237	11926
5 Prepaid Payment Instruments (5.1 to 5.2)	70254.08	5288.79	6783.69	6768.43	216751	14964	21465	21254
5.1 Wallets	52898.40	3993.29	5061.17	5157.38	154066	10507	16077	15896
5.2 Cards (5.2.1 to 5.2.2)	17355.68	1295.49	1722.52	1611.04	62686	4457	5388	5358
5.2.1 PoS based $	8240.14	695.13	648.24	649.25	11512	962	1016	1093
5.2.2 Others $	9115.54	600.37	1074.28	961.79	51174	3495	4372	4265
6 Paper-based Instruments (6.1 to 6.2)	6095.38	525.73	531.76	494.77	7113350	667829	659873	645079
6.1 CTS (NPCI Managed)	6095.38	525.73	531.76	494.77	7113350	667829	659873	645079
6.2 Others	0.00	–	–	–	–	–	–	–
Total - Retail Payments (2+3+4+5+6)	2222885.46	161502.02	217004.93	209732.67	91925771	6888198	9375535	8213454
Total Payments (1+2+3+4+5+6)	2225910.01	161737.61	217311.96	209995.08	293313453	21321494	30777505	25109243
Total Digital Payments (1+2+3+4+5)	2219814.63	161211.88	216780.20	209500.31	286200103	20653665	30117631	24464164

PART II - Payment Modes and Channels

System	Volume (Lakh)				Value (₹ Crore)			
	FY 2024-25	2024	2025		FY 2024-25	2024	2025	
		Apr.	Mar.	Apr.		Apr.	Mar.	Apr.
	1	2	3	4	5	6	7	8
A. Other Payment Channels								
1 Mobile Payments (mobile app based) (1.1 to 1.2)	1756976.91	127302.31	171174.23	165744.58	39206221	2962262	3769671	3498574
1.1 Intra-bank $	110801.96	8373.78	9863.76	9301.40	7207439	552044	670272	617100
1.2 Inter-bank $	1646174.95	118928.53	161310.47	156443.19	31998782	2410218	3099400	2881474
2 Internet Payments (Netbanking / Internet Browser Based) @ (2.1 to 2.2)	47478.09	3796.75	4096.24	3642.69	131858133	9637480	13992340	11585683
2.1 Intra-bank @	13056.37	966.25	1009.09	837.78	69086996	5089149	7319249	6047105
2.2 Inter-bank @	34421.72	2830.50	3087.15	2804.91	62771136	4548332	6673091	5538579
B. ATMs								
3 Cash Withdrawal at ATMs $ (3.1 to 3.3)	60308.11	5240.40	4983.78	4602.65	3063077	265905	263892	244747
3.1 Using Credit Cards $	97.25	9.07	7.43	6.86	5084	458	410	373
3.2 Using Debit Cards $	59965.70	5207.60	4957.22	4578.06	3046987	264457	262540	243494
3.3 Using Pre-paid Cards $	245.16	23.73	19.13	17.73	11005	990	942	881
4 Cash Withdrawal at PoS $ (4.1 to 4.2)	3.58	0.52	0.22	0.17	37	5	2	2
4.1 Using Debit Cards $	3.33	0.50	0.19	0.15	35	5	2	1
4.2 Using Pre-paid Cards $	0.25	0.02	0.03	0.02	3	0	0	0
5 Cash Withrawal at Micro ATMs @	11640.55	919.05	1102.31	928.36	296622	24502	29561	25662
5.1 AePS @	11640.55	919.05	1102.31	928.36	296622	24502	29561	25662

PART III - Payment Infrastructures (Lakh)

System	As on March 2025	2024	2025	
		Apr.	Mar.	Apr.
	1	2	3	4
Payment System Infrastructures				
1 Number of Cards (1.1 to 1.2)	11006.97	10534.85	11006.97	11064.20
1.1 Credit Cards	1098.85	1025.40	1098.85	1104.36
1.2 Debit Cards	9908.12	9509.45	9908.12	9959.84
2 Number of PPIs @ (2.1 to 2.2)	13396.53	14716.82	13396.53	13444.93
2.1 Wallets @	8673.62	11294.83	8673.62	8719.54
2.2 Cards @	4722.91	3421.99	4722.91	4725.39
3 Number of ATMs (3.1 to 3.2)	2.56	2.57	2.56	2.55
3.1 Bank owned ATMs $	2.20	2.23	2.20	2.19
3.2 White Label ATMs $	0.36	0.35	0.36	0.36
4 Number of Micro ATMs @	14.82	17.44	14.82	14.74
5 Number of PoS Terminals	110.98	88.39	110.98	112.91
6 Bharat QR @	67.18	60.73	67.18	66.84
7 UPI QR *	6579.30	5597.20	6579.30	6624.75

@: New inclusion w.e.f. November 2019
#: Data reported by Co-operative Banks, LABs and RRBs included with effect from December 2021.
$: Inclusion separately initiated from November 2019 - would have been part of other items hitherto.
*: New inclusion w.e.f. September 2020; Includes only static UPI QR Code
Notes : 1. Data is provisional.
2. ECS (Debit and Credit) has been merged with NACH with effect from January 31, 2020.
3. The data from November 2019 onwards for card payments (Debit/Credit cards) and Prepaid Payment Instruments (PPIs) may not be comparable with earlier months/ periods, as more granular data is being published along with revision in data definitions.
4. Only domestic financial transactions are considered. The new format captures e-commerce transactions; transactions using FASTags, digital bill payments and card-to-card transfer through ATMs, etc.. Also, failed transactions, chargebacks, reversals, expired cards/ wallets, are excluded.

Part I-A. Settlement systems
1.1.3: Tri- party Repo under the securities segment has been operationalised from November 05, 2018.
Part I-B. Payments systems
4.1.2: 'Others' includes e-commerce transactions and digital bill payments through ATMs, etc.
4.2.2: 'Others' includes e-commerce transactions, card to card transfers and digital bill payments through ATMs, etc.
5: Available from December 2010.
5.1: includes purchase of goods and services and fund transfer through wallets.
5.2.2: includes usage of PPI Cards for online transactions and other transactions.
6.1: Pertain to three grids – Mumbai, New Delhi and Chennai.
6.2: 'Others' comprises of Non-MICR transactions which pertains to clearing houses managed by 21 banks.
Part II-A. Other payment channels
1: Mobile Payments –
o Include transactions done through mobile apps of banks and UPI apps.
o The data from July 2017 includes only individual payments and corporate payments initiated, processed, and authorised using mobile device. Other corporate payments which are not initiated, processed, and authorised using mobile device are excluded.
2: Internet Payments – includes only e-commerce transactions through 'netbanking' and any financial transaction using internet banking website of the bank.
Part II-B. ATMs
3.3 and 4.2: only relates to transactions using bank issued PPIs.
Part III. Payment systems infrastructure
3: Includes ATMs deployed by Scheduled Commercial Banks (SCBs) and White Label ATM Operators (WLAOs). WLAs are included from April 2014 onwards.

Occasional Series

No. 44: Small Savings

(₹ Crore)

Scheme		2023-24	2024		2025	
			Feb.	Dec.	Jan.	Feb.
		1	2	3	4	5
1 Small Savings	**Receipts**	**232460**	**14570**	**11133**	**12581**	**11379**
	Outstanding	**1865029**	**1819758**	**1982465**	**1994553**	**2005585**
1.1 Total Deposits	**Receipts**	**161344**	**10025**	**8734**	**9178**	**8077**
	Outstanding	**1298795**	**1268920**	**1395484**	**1404661**	**1412738**
1.1.1 Post Office Saving Bank Deposits	Receipts	17229	1520	1090	2702	814
	Outstanding	191692	218498	201999	204701	205515
1.1.2 Sukanya Samriddhi Yojna	Receipts	35174	2233	2244	2347	2282
	Outstanding	157611	109222	177007	179354	181636
1.1.3 National Saving Scheme, 1987	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.1.4 National Saving Scheme, 1992	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.1.5 Monthly Income Scheme	Receipts	26696	1927	827	1279	1045
	Outstanding	269007	267205	282142	283421	284466
1.1.6 Senior Citizen Scheme 2004	Receipts	38167	2153	1531	1922	1952
	Outstanding	175472	173476	194605	196527	198479
1.1.7 Post Office Time Deposits	Receipts	25341	2632	2125	2853	2108
	Outstanding	305776	303000	330912	333764	335872
1.1.7.1 1 year Time Deposits	Outstanding	140423	138552	159174	161578	163358
1.1.7.2 2 year Time Deposits	Outstanding	11967	11730	14299	14476	14637
1.1.7.3 3 year Time Deposits	Outstanding	8932	8782	10308	10487	10645
1.1.7.4 5 year Time Deposits	Outstanding	144454	143936	147131	147223	147232
1.1.8 Post Office Recurring Deposits	Receipts	18713	-420	1025	-1831	-25
	Outstanding	197134	195727	207269	205438	205413
1.1.9 Post Office Cumulative Time Deposits	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.1.10 Other Deposits	Receipts	8	-20	-108	-95	-100
	Outstanding	1754	1444	1195	1100	1000
1.1.11 PM Care for children	Receipts	16	0	0	1	1
	Outstanding	349	348	355	356	357
1.2 Saving Certificates	**Receipts**	**56069**	**3940**	**2226**	**3019**	**2858**
	Outstanding	**418021**	**414597**	**438074**	**440601**	**443112**
1.2.1 National Savings Certificate VIII issue	Receipts	16853	1446	430	796	762
	Outstanding	183905	180181	192621	193417	194179
1.2.2 Indira Vikas Patras	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.2.3 Kisan Vikas Patras	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.2.4 Kisan Vikas Patras - 2014	Receipts	20939	1428	1113	1376	1247
	Outstanding	220560	219498	228707	230083	231330
1.2.5 National Saving Certificate VI issue	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.2.6 National Saving Certificate VII issue	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.2.7 M.S. Certificates	Receipts	18277	1066	683	847	849
	Outstanding	18277	17235	25303	26150	26999
1.2.8 Other Certificates	Outstanding	-4721	-2317	-8557	-9049	-9396
1.3 Public Provident Fund	**Receipts**	**15047**	**605**	**173**	**384**	**444**
	Outstanding	**148213**	**136241**	**148907**	**149291**	**149735**

Note : Data on receipts from April 2017 are net receipts, i.e., gross receipt minus gross payment.
Source: Accountant General, Post and Telegraphs.

No. 45 : Ownership Pattern of Central and State Governments Securities

(Per cent)

Central Government Dated Securities					
Category	2024				2025
	Mar.	Jun.	Sep.	Dec.	Mar.
	1	2	3	4	5
(A) Total (in ₹ Crore)	**10740389**	**10946860**	**11271589**	**11422728**	**11642652**
1 Commercial Banks	37.66	37.52	37.55	37.98	36.18
2 Co-operative Banks	1.47	1.42	1.35	1.36	1.29
3 Non-Bank PDs	0.66	0.70	0.77	0.65	0.76
4 Insurance Companies	25.98	26.11	25.95	26.14	25.81
5 Mutual Funds	2.90	2.87	3.14	3.11	2.68
6 Provident Funds	4.47	4.41	4.25	4.25	4.24
7 Pension Funds	4.52	4.74	4.86	5.05	4.91
8 Financial Institutions	0.55	0.57	0.63	0.64	0.71
9 Corporates	1.35	1.44	1.60	1.45	1.49
10 Foreign Portfolio Investors	2.34	2.34	2.80	2.81	3.12
11 RBI	12.31	11.92	11.16	10.55	12.78
12 Others	5.79	5.97	5.92	6.01	6.01
12.1 State Governments	2.04	2.13	2.19	2.21	2.25

State Governments Securities					
Category	2024				2025
	Mar.	Jun.	Sep.	Dec.	Mar.
	1	2	3	4	5
(B) Total (in ₹ Crore)	**5646219**	**5727482**	**5909490**	**6055711**	**6399564**
1 Commercial Banks	34.14	33.85	34.39	35.11	35.40
2 Co-operative Banks	3.39	3.38	3.29	3.22	3.08
3 Non-Bank PDs	0.60	0.59	0.60	0.53	0.61
4 Insurance Companies	26.14	25.85	25.56	25.16	24.07
5 Mutual Funds	2.09	2.08	1.93	1.89	1.93
6 Provident Funds	22.35	22.94	23.02	22.90	23.60
7 Pension Funds	4.76	4.87	4.87	4.82	5.07
8 Financial Institutions	1.59	1.58	1.57	1.58	1.48
9 Corporates	2.02	2.03	1.95	1.97	2.05
10 Foreign Portfolio Investors	0.07	0.05	0.04	0.03	0.05
11 RBI	0.63	0.62	0.60	0.58	0.55
12 Others	2.20	2.17	2.18	2.19	2.10
12.1 State Governments	0.25	0.26	0.26	0.26	0.25

Treasury Bills					
Category	2024				2025
	Mar.	Jun.	Sep.	Dec.	Mar.
	1	2	3	4	5
(C) Total (in ₹ Crore)	**871662**	**858193**	**747242**	**760045**	**790381**
1 Commercial Banks	58.53	47.79	44.74	40.45	46.58
2 Co-operative Banks	1.67	1.49	1.58	1.22	2.17
3 Non-Bank PDs	1.66	2.69	2.28	1.41	2.09
4 Insurance Companies	5.06	5.78	5.26	4.73	4.23
5 Mutual Funds	11.89	14.50	15.06	15.41	16.15
6 Provident Funds	0.15	0.60	0.26	0.04	0.20
7 Pension Funds	0.01	0.00	0.00	0.00	0.02
8 Financial Institutions	7.16	6.56	6.36	6.77	7.73
9 Corporates	4.50	4.79	4.66	4.56	4.50
10 Foreign Portfolio Investors	0.01	0.20	0.15	0.12	0.09
11 RBI	0.00	0.00	0.00	0.00	0.00
12 Others	9.36	15.59	19.65	25.29	16.23
12.1 State Governments	5.88	11.55	14.95	20.11	11.23

Notes: (1) The table format is revised since monthly Bulletin for the month of June 2023.
(2) Central Government Dated Securities include special securities and Sovereign Gold Bonds.
(3) State Government Securities include special bonds issued under Ujwal DISCOM Assurance Yojana (UDAY).
(4) Bank PDs are clubbed under Commercial Banks.
(5) The category 'Others' comprises State Governments, DICGC, PSUs, Trusts, Foreign Central Banks, HUF/ Individuals etc.
(6) Data since September 2023 includes the impact of the merger of a non-bank with a bank.

No. 46: Combined Receipts and Disbursements of the Central and State Governments

(₹ Crore)

Item	2019-20	2020-21	2021-22	2022-23	2023-24 RE	2024-25 BE
	1	2	3	4	5	6
1 Total Disbursements	**5410887**	**6353359**	**7098451**	**7880522**	**9110725**	**9800798**
1.1 Developmental	3074492	3823423	4189146	4701611	5514584	5862996
1.1.1 Revenue	2446605	3150221	3255207	3574503	3965270	4195108
1.1.2 Capital	588233	550358	861777	1042159	1453849	1526993
1.1.3 Loans	39654	122844	72163	84949	95464	140895
1.2 Non-Developmental	2253027	2442941	2810388	3069896	3467270	3800321
1.2.1 Revenue	2109629	2271637	2602750	2895864	3266628	3537378
1.2.1.1 Interest Payments	955801	1060602	1226672	1377807	1562660	1711972
1.2.2 Capital	141457	169155	175519	171131	196073	259346
1.2.3 Loans	1941	2148	32119	2902	4569	3597
1.3 Others	83368	86995	98916	109015	128871	137481
2 Total Receipts	**5734166**	**6397162**	**7156342**	**7855370**	**9054999**	**9650488**
2.1 Revenue Receipts	3851563	3688030	4823821	5447913	6379349	7209647
2.1.1 Tax Receipts	3231582	3193390	4160414	4809044	5456913	6142276
2.1.1.1 Taxes on commodities and services	2012578	2076013	2626553	2865550	3248450	3631569
2.1.1.2 Taxes on Income and Property	1216203	1114805	1530636	1939550	2204462	2506181
2.1.1.3 Taxes of Union Territories (Without Legislature)	2800	2572	3225	3943	4001	4526
2.1.2 Non-Tax Receipts	619981	494640	663407	638870	922436	1067371
2.1.2.1 Interest Receipts	31137	33448	35250	42975	49552	57273
2.2 Non-debt Capital Receipts	110094	64994	44077	62716	86733	118239
2.2.1 Recovery of Loans & Advances	59515	16951	27665	15970	55895	45125
2.2.2 Disinvestment proceeds	50578	48044	16412	46746	30839	73114
3 Gross Fiscal Deficit [1 - (2.1 + 2.2)]	**1449230**	**2600335**	**2230553**	**2369892**	**2644642**	**2472912**
3A Sources of Financing: Institution-wise						
3A.1 Domestic Financing	1440548	2530155	2194406	2332768	2619811	2456959
3A.1.1 Net Bank Credit to Government	571872	890012	627255	687904	346483	...
3A.1.1.1 Net RBI Credit to Government	190241	107493	350911	529	-257913	...
3A.1.2 Non-Bank Credit to Government	868676	1640143	1567151	1644864	2273328	...
3A.2 External Financing	8682	70180	36147	37124	24832	15952
3B Sources of Financing: Instrument-wise						
3B.1 Domestic Financing	1440548	2530155	2194406	2332768	2619811	2456959
3B.1.1 Market Borrowings (net)	971378	1696012	1213169	1651076	1962969	1983757
3B.1.2 Small Savings (net)	209232	458801	526693	358764	434151	447511
3B.1.3 State Provident Funds (net)	38280	41273	28100	13880	21386	19857
3B.1.4 Reserve Funds	10411	4545	42153	68803	52385	-33653
3B.1.5 Deposits and Advances	-14227	25682	42203	51989	35819	-10138
3B.1.6 Cash Balances	-323279	-43802	-57891	25152	55726	150310
3B.1.7 Others	548753	347643	399980	163104	57374	-100684
3B.2 External Financing	8682	70180	36147	37124	24832	15952
4 Total Disbursements as per cent of GDP	*26.9*	*32.0*	*30.1*	*29.2*	*30.8*	*30.0*
5 Total Receipts as per cent of GDP	*28.5*	*32.2*	*30.3*	*29.1*	*30.7*	*29.6*
6 Revenue Receipts as per cent of GDP	*19.2*	*18.6*	*20.4*	*20.2*	*21.6*	*22.1*
7 Tax Receipts as per cent of GDP	*16.1*	*16.1*	*17.6*	*17.8*	*18.5*	*18.8*
8 Gross Fiscal Deficit as per cent of GDP	*7.2*	*13.1*	*9.5*	*8.8*	*9.0*	*7.6*

… : Not available; RE: Revised Estimates; BE: Budget Estimates

Source : Budget Documents of Central and State Governments.

Notes: GDP data is based on 2011-12 base. GDP for 2024-25 is from Union Budget 2024-25.
Data pertains to all States and Union Territories.
1 & 2: Data are net of repayments of the Central Government (including repayments to the NSSF) and State Governments.
1.3: Represents compensation and assignments by States to local bodies and Panchayati Raj institutions.
2: Data are net of variation in cash balances of the Central and State Governments and includes borrowing receipts of the Central and State Governments.
3A.1.1: Data as per RBI records.
3B.1.1: Borrowings through dated securities.
3B.1.2: Represent net investment in Central and State Governments' special securities by the National Small Savings Fund (NSSF).
This data may vary from previous publications due to adjustments across components with availability of new data.
3B.1.6: Include Ways and Means Advances by the Centre to the State Governments.
3B.1.7: Include Treasury Bills, loans from financial institutions, insurance and pension funds, remittances, cash balance investment account.

No. 47: Financial Accommodation Availed by State Governments under various Facilities

(₹ Crore)

Sr. No	State/Union Territory	During April-2025					
		Special Drawing Facility (SDF)		Ways and Means Advances (WMA)		Overdraft (OD)	
		Average amount availed	Number of days availed	Average amount availed	Number of days availed	Average amount availed	Number of days availed
	1	2	3	4	5	6	7
1	Andhra Pradesh	4421.65	30	1230.88	11	2683.97	3
2	Arunachal Pradesh	-	-	-	-	-	-
3	Assam	618.47	16	-	-	-	-
4	Bihar	-	-	-	-	-	-
5	Chhattisgarh	-	-	-	-	-	-
6	Goa	-	-	-	-	-	-
7	Gujarat	-	-	-	-	-	-
8	Haryana	159.83	1	-	-	-	-
9	Himachal Pradesh	-	-	694.25	29	383.18	18
10	Jammu & Kashmir UT	17.78	16	1231.09	15	529.29	12
11	Jharkhand	883.91	10	-	-	-	-
12	Karnataka	-	-	-	-	-	-
13	Kerala	1285.75	27	708.91	17	-	-
14	Madhya Pradesh	-	-	-	-	-	-
15	Maharashtra	10183.89	21	-	-	-	-
16	Manipur	76.44	24	73.91	11	-	-
17	Meghalaya	658.41	30	246.23	11	308.13	10
18	Mizoram	-	-	-	-	-	-
19	Nagaland	136.56	17	-	-	-	-
20	Odisha	-	-	-	-	-	-
21	Puducherry	-	-	-	-	-	-
22	Punjab	4682.69	30	1109.63	26	625.67	12
23	Rajasthan	3030.42	28	1006.65	10	-	-
24	Tamil Nadu	-	-	-	-	-	-
25	Telangana	4881.13	30	1489.30	25	2693.24	9
26	Tripura	-	-	-	-	-	-
27	Uttar Pradesh	-	-	-	-	-	-
28	Uttarakhand	1060.37	30	-	-	-	-
29	West Bengal	-	-	-	-	-	-

Notes: 1. SDF is availed by State Governments against the collateral of Consolidated Sinking Fund (CSF), Guarantee Redemption Fund (GRF) & Auction Treasury Bills (ATBs) balances and other investments in government securities.
2. WMA is advance by Reserve Bank of India to State Governments for meeting temporary cash mismatches.
3. OD is advanced to State Governments beyond their WMA limits.
4. Average amount availed is the total accommodation (SDF/WMA/OD) availed divided by number of days for which accommodation was extended during the month.
5. - : Nil.

Source: Reserve Bank of India.

No. 48: Investments by State Governments

(₹ Crore)

Sr. No	State/Union Territory	As on end of April 2025			
		Consolidated Sinking Fund (CSF)	Guarantee Redemption Fund (GRF)	Government Securities	Auction Treasury Bills (ATBs)
	1	2	3	4	5
1	Andhra Pradesh	11771	1160	0	0
2	Arunachal Pradesh	2799	7	0	1800
3	Assam	7506	92	0	0
4	Bihar	12683	-	0	15500
5	Chhattisgarh	8364	973	0	5495
6	Goa	1096	465	0	0
7	Gujarat	15525	678	0	2500
8	Haryana	2654	1735	0	0
9	Himachal Pradesh	-	-	0	0
10	Jammu & Kashmir UT	37	36	0	0
11	Jharkhand	2444	-	0	780
12	Karnataka	20601	762	0	50177
13	Kerala	3278	-	0	0
14	Madhya Pradesh	-	1296	0	1500
15	Maharashtra	72941	2187	0	0
16	Manipur	70	143	0	0
17	Meghalaya	1295	110	0	0
18	Mizoram	513	81	0	0
19	Nagaland	1924	47	0	0
20	Odisha	18582	2081	0	4258
21	Puducherry	590	-	0	1650
22	Punjab	9285	0	0	0
23	Rajasthan	1822	-	0	7750
24	Tamil Nadu	3494	-	0	2137
25	Telangana	8032	1761	0	0
26	Tripura	1339	30	0	0
27	Uttarakhand	5392	262	0	0
28	Uttar Pradesh	12825	1590	0	0
29	West Bengal	14052	1051	0	3000
	Total	**240916**	**16548**	**0**	**96546**

Notes: 1. CSF and GRF are reserve funds maintained by some State Governments with the Reserve Bank of India.
2. ATBs include investment by State Governments in Treasury bills of 91 days, 182 days and 364 days in the primary market.
3. - : Not Applicable (not a member of the scheme).

No. 49: Market Borrowings of State Governments

(₹ Crore)

Sr. No.	State	2023-24		2024-25		2024-25				2025-26		Total amount raised, so far in 2025-26	
						February		March		April			
		Gross Amount Raised	Net Amount Raised	Gross Amount Raised	Net Amount Raised	Gross Amount Raised	Net Amount Raised	Gross Amount Raised	Net Amount Raised	Gross Amount Raised	Net Amount Raised	Gross	Net
	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Andhra Pradesh	68400	55330	78205	57123	6820	5820	8148	7148	5750	4750	5750	4750
2	Arunachal Pradesh	902	672	1010	704	-	-	215	135	-	-130	-	-130
3	Assam	18500	16000	19000	13850	3650	2650	3300	1800	900	-50	900	-50
4	Bihar	47612	29910	47546	30890	7546	6946	-	-478	-	-	-	-
5	Chhattisgarh	32000	26213	24500	16913	4000	2000	14000	12613	1970	1970	1970	1970
6	Goa	2550	1560	1050	250	-	-	-	-	-	-150	-	-150
7	Gujarat	30500	11947	38200	16280	9700	5580	8000	5000	-	-2560	-	-2560
8	Haryana	47500	28364	49500	31710	4500	2750	12000	5690	2000	2000	2000	2000
9	Himachal Pradesh	8072	5856	7359	4725	-	-384	659	659	2200	1550	2200	1550
10	Jammu & Kashmir UT	16337	13904	13170	11416	200	200	300	86	1000	1000	1000	1000
11	Jharkhand	1000	-2505	3500	-2005	-	-	3500	1445	-	-	-	-
12	Karnataka	81000	63003	92025	71525	13000	10000	20000	19000	-	-	-	-
13	Kerala	42438	26638	53666	37966	4920	3920	12744	11744	2000	-	2000	-
14	Madhya Pradesh	38500	26264	63400	47206	6000	5000	22400	15306	-	-	-	-
15	Maharashtra	110000	79738	123000	90917	14000	9617	24000	24000	13500	13500	13500	13500
16	Manipur	1426	1076	1500	1037	250	147	250	250	-	-200	-	-200
17	Meghalaya	1364	912	1882	997	-	-125	-	-73	350	250	350	250
18	Mizoram	901	641	1169	939	119	119	120	120	-	-	-	-
19	Nagaland	2551	2016	1550	950	-	-100	1000	850	-	-	-	-
20	Odisha	0	-4658	20780	17780	7000	7000	11780	10780	-	-	-	-
21	Puducherry	1100	475	1600	880	400	400	300	280	-	-	-	-
22	Punjab	42386	29517	40828	32466	2000	1250	1998	540	5800	4200	5800	4200
23	Rajasthan	73624	49718	75185	49479	6000	4326	11620	5670	5500	3500	5500	3500
24	Sikkim	1916	1701	1951	1621	488	388	463	363	-	-	-	-
25	Tamil Nadu	113001	75970	123625	89894	13000	9500	22600	20219	4000	1000	4000	1000
26	Telangana	49618	39385	56209	42199	3000	2000	6500	3608	4400	3400	4400	3400
27	Tripura	0	-550	0	-150	-	-	-	-150	500	500	500	500
28	Uttar Pradesh	97650	85335	45000	23185	9000	5000	10000	7472	3000	-1000	3000	-1000
29	Uttarakhand	6300	3800	10400	8000	2000	2000	4000	3250	1000	1000	1000	1000
30	West Bengal	69910	48910	76500	54600	5000	2500	25000	23700	-	-1000	-	-1000
	Grand Total	1007058	717140	1073310	753345	122593	88504	224897	181026	53870	33530	53870	33530

- : Nil.

Note: The State of J&K has ceased to exist constitutionally from October 31, 2019 and the liabilities of the State continue to remain as liabilities of the new UT of Jammu and Kashmir.

Source: Reserve Bank of India.

No. 50 (a): Flow of Financial Assets and Liabilities of Households - Instrument-wise

(Amount in ₹ Crore)

Item	2021-22				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	**3,42,813**	**3,30,490**	**4,85,203**	**5,54,816**	**17,13,322**
Per cent of GDP	***6.6***	***5.9***	***7.7***	***8.5***	***7.3***
I. Financial Assets	**3,63,395**	**5,25,419**	**8,16,484**	**9,07,366**	**26,12,664**
Per cent of GDP	***7.0***	***9.3***	***13.0***	***13.9***	***11.1***
of which:					
1.Total Deposits (a)+(b)	**(81,064)**	**2,04,486**	**4,28,035**	**2,83,634**	**8,35,091**
(a) Bank Deposits	**(1,06,429)**	**1,97,105**	**4,22,393**	**2,70,025**	**7,83,094**
i. Commercial Banks	(1,07,941)	1,95,442	4,18,267	2,62,326	7,68,094
ii. Co-operative Banks	1,512	1,663	4,126	7,699	15,000
(b) Non-Bank Deposits	**25,365**	**7,380**	**5,642**	**13,610**	**51,997**
of which:					
Other Financial Institutions (i+ii)	**17,555**	**(435)**	**(2,178)**	**5,770**	**20,712**
i. Non-Banking Financial Companies	5,578	(1,371)	73	4,021	8,302
ii. Housing Finance Companies	11,977	936	(2,252)	1,748	12,410
2. Life Insurance Funds	**1,15,539**	**1,28,277**	**1,04,076**	**1,38,998**	**4,86,889**
3. Provident and Pension Funds (including PPF)	**1,24,971**	**1,12,810**	**95,493**	**2,18,719**	**5,51,993**
4. Currency	**1,28,660**	**(68,631)**	**62,793**	**1,46,845**	**2,69,667**
5. Investments	**24,884**	**82,260**	**69,715**	**50,926**	**2,27,785**
of which:					
(a) Mutual Funds	14,573	63,151	37,912	44,964	1,60,600
(b) Equity	4,502	13,218	27,808	3,084	48,613
6. Small Savings (excluding PPF)	**50,405**	**66,218**	**56,372**	**68,243**	**2,41,238**
II. Financial Liabilities	**20,583**	**1,94,929**	**3,31,281**	**3,52,550**	**8,99,343**
Per cent of GDP	***0.4***	***3.5***	***5.3***	***5.4***	***3.8***
Loans (Borrowings) from					
1. Financial Corporations (a+b)	**20,479**	**1,94,825**	**3,31,178**	**3,52,446**	**8,98,928**
(a) Banking Sector	**21,428**	**1,38,720**	**2,67,955**	**2,74,181**	**7,02,284**
of which:					
i. Commercial Banks	26,979	1,40,269	2,65,271	3,37,010	7,69,529
(b) Other Financial Institutions	**(949)**	**56,105**	**63,223**	**78,266**	**1,96,644**
i. Non-Banking Financial Companies	(8,708)	30,151	32,177	40,003	93,623
ii. Housing Finance Companies	7,132	24,404	29,495	37,436	98,467
iii. Insurance Corporations	627	1,550	1,551	827	4,554
2. Non-Financial Corporations (Private Corporate Business)	**34**	**34**	**34**	**34**	**135**
3. General Government	**70**	**70**	**70**	**70**	**279**

No. 50 (a): Flow of Financial Assets and Liabilities of Households - Instrument-wise (Contd.)

(Amount in ₹ Crore)

Item	2022-23				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	**2,89,980**	**2,99,395**	**2,96,132**	**4,54,240**	**13,39,748**
Per cent of GDP	***4.5***	***4.6***	***4.3***	***6.4***	***5.0***
I. Financial Assets	**5,79,958**	**6,34,471**	**7,50,245**	**9,71,526**	**29,36,200**
Per cent of GDP	***8.9***	***9.8***	***10.9***	***13.6***	***10.9***
of which:					
1.Total Deposits (a)+(b)	**1,85,429**	**3,17,361**	**2,80,233**	**3,25,853**	**11,08,876**
(a) Bank Deposits	**1,63,172**	**2,99,533**	**2,56,400**	**3,07,867**	**10,26,971**
i. Commercial Banks	1,58,613	3,00,565	2,48,460	2,84,968	9,92,606
ii. Co-operative Banks	4,559	(1,032)	7,940	22,899	34,365
(b) Non-Bank Deposits	**22,257**	**17,829**	**23,833**	**17,986**	**81,905**
of which:					
Other Financial Institutions (i+ii)	**6,505**	**2,077**	**8,082**	**2,234**	**18,897**
i. Non-Banking Financial Companies	4,231	3,267	3,247	3,946	14,690
ii. Housing Finance Companies	2,274	(1,191)	4,835	(1,712)	4,207
2. Life Insurance Funds	**73,298**	**1,51,677**	**1,67,522**	**1,56,613**	**5,49,109**
3. Provident and Pension Funds (including PPF)	**1,48,915**	**1,20,367**	**1,38,584**	**2,18,709**	**6,26,575**
4. Currency	**66,439**	**(54,579)**	**76,760**	**1,48,990**	**2,37,610**
5. Investments	**51,503**	**48,530**	**49,779**	**64,151**	**2,13,962**
of which:					
(a) Mutual Funds	35,443	44,484	40,206	58,955	1,79,088
(b) Equity	13,561	1,378	6,434	1,665	23,038
6. Small Savings (excluding PPF)	**54,375**	**51,115**	**37,368**	**57,211**	**2,00,068**
II. Financial Liabilities	**2,89,978**	**3,35,076**	**4,54,113**	**5,17,285**	**15,96,452**
Per cent of GDP	***4.5***	***5.2***	***6.6***	***7.3***	***5.9***
Loans (Borrowings) from					
1. Financial Corporations (a+b)	**2,89,781**	**3,34,880**	**4,53,917**	**5,17,089**	**15,95,667**
(a) Banking Sector	**2,34,235**	**2,63,450**	**3,70,783**	**3,83,845**	**12,52,313**
of which:					
i. Commercial Banks	2,30,284	2,61,265	3,68,305	3,31,293	11,91,146
(b) Other Financial Institutions	**55,546**	**71,429**	**83,134**	**1,33,244**	**3,43,354**
i. Non-Banking Financial Companies	30,532	36,650	55,792	94,565	2,17,539
ii. Housing Finance Companies	22,337	33,031	24,903	36,746	1,17,017
iii. Insurance Corporations	2,678	1,748	2,439	1,933	8,798
2. Non-Financial Corporations (Private Corporate Business)	**34**	**34**	**34**	**34**	**135**
3. General Government	**163**	**163**	**163**	**163**	**650**

No. 50 (a): Flow of Financial Assets and Liabilities of Households - Instrument-wise (Concld.)

(Amount in ₹ Crore)

Item	2023-24				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	**3,53,093**	**2,89,675**	**2,98,111**	**6,11,366**	**15,52,245**
Per cent of GDP	***5.0***	***4.1***	***3.9***	***7.8***	***5.3***
I. Financial Assets	**6,74,763**	**8,15,842**	**8,08,779**	**11,32,130**	**34,31,514**
Per cent of GDP	***9.6***	***11.5***	***10.7***	***14.5***	***11.6***
of which:					
1.Total Deposits (a)+(b)	**2,68,925**	**4,12,388**	**2,99,372**	**4,10,559**	**13,91,244**
(a) Bank Deposits	**2,55,249**	**5,06,208**	**2,79,872**	**3,94,573**	**14,35,902**
i. Commercial Banks	2,46,079	5,06,700	2,82,537	3,87,313	14,22,629
ii. Co-operative Banks	9,170	(492)	(2,665)	7,260	13,273
(b) Non-Bank Deposits	**13,676**	**(93,820)**	**19,499**	**15,986**	**(44,658)**
of which:					
Other Financial Institutions (i+ii)	**(485)**	**(1,07,982)**	**5,338**	**1,825**	**(1,01,305)**
i. Non-Banking Financial Companies	6,119	4,782	4,896	1,943	17,740
ii. Housing Finance Companies	(6,605)	(1,12,764)	442	(118)	(1,19,045)
2. Life Insurance Funds	**1,58,358**	**1,41,413**	**1,61,192**	**1,30,036**	**5,90,999**
3. Provident and Pension Funds (including PPF)	**1,63,508**	**1,48,178**	**1,53,255**	**2,53,719**	**7,18,661**
4. Currency	**(48,636)**	**(36,701)**	**56,719**	**1,46,644**	**1,18,026**
5. Investments	**41,409**	**73,060**	**79,633**	**1,08,732**	**3,02,834**
of which:					
(a) Mutual Funds	32,086	55,769	60,135	90,973	2,38,962
(b) Equity	3,757	7,146	9,941	8,236	29,080
6. Small Savings (excluding PPF)	**91,198**	**77,504**	**58,607**	**82,441**	**3,09,751**
II. Financial Liabilities	**3,21,670**	**5,26,167**	**5,10,667**	**5,20,764**	**18,79,269**
Per cent of GDP	***4.6***	***7.4***	***6.7***	***6.7***	***6.4***
Loans (Borrowings) from					
1. Financial Corporations (a+b)	**3,21,520**	**5,26,016**	**5,10,516**	**5,20,613**	**18,78,666**
(a) Banking Sector	**2,13,606**	**8,68,874**	**4,02,647**	**3,92,330**	**18,77,458**
of which:					
i. Commercial Banks	2,08,027	8,75,654	3,89,898	3,82,558	18,56,136
(b) Other Financial Institutions	**1,07,914**	**(3,42,858)**	**1,07,869**	**1,28,283**	**1,208**
i. Non-Banking Financial Companies	81,449	59,684	85,032	1,00,836	3,27,001
ii. Housing Finance Companies	23,784	(4,04,294)	21,233	25,853	(3,33,424)
iii. Insurance Corporations	2,681	1,753	1,604	1,594	7,631
2. Non-Financial Corporations (Private Corporate Business)	**34**	**35**	**35**	**35**	**138**
3. General Government	**116**	**116**	**116**	**116**	**465**

Notes : 1. Net Financial Savings of households refer to the net financial assets, which are measured as difference of financial asset and liabilities flows.
2. Preliminary estimates for 2023-24 and revised estimates for 2021-22 and 2022-23.
3. The preliminary estimates for 2023-24 will undergo revision with the release of first revised estimates of national income, consumption expenditure, savings, and capital formation, 2023-24 by the National Statistical Office (NSO).
4. Non-bank deposits apart from other financial institutions, comprises state power utilities, co-operative non credit societies etc.
5. Figures in the columns may not add up to the total due to rounding off.

No. 50 (b): Stocks of Financial Assets and Liabilities of Households- Select Indicators

(Amount in ₹ Crore)

Item	Jun-2021	Sep-2021	Dec-2021	Mar-2022
Financial Assets (a+b+c+d+e+f+g+h)	**2,33,27,377**	**2,39,99,280**	**2,47,08,474**	**2,54,40,650**
Per cent of GDP	**110.4**	**108.9**	**108.2**	**107.8**
(a) Bank Deposits (i+ii)	**1,07,90,832**	**1,09,87,937**	**1,14,10,330**	**1,16,80,355**
i. Commercial Banks	99,53,044	1,01,48,486	1,05,66,753	1,08,29,079
ii. Co-operative Banks	8,37,788	8,39,451	8,43,577	8,51,276
(b) Non-Bank Deposits				
of which:				
Other Financial Institutions	**2,06,509**	**2,06,074**	**2,03,896**	**2,09,665**
i. Non-Banking Financial Companies	67,840	66,469	66,542	70,564
ii. Housing Finance Companies	1,38,669	1,39,605	1,37,353	1,39,102
(c) Life Insurance Funds	**49,29,725**	**51,42,279**	**52,13,527**	**53,57,350**
(d) Currency	**27,42,897**	**26,74,266**	**27,37,059**	**28,83,904**
(e) Mutual funds	**18,55,000**	**20,64,364**	**21,26,112**	**21,52,141**
(f) Public Provident Fund (PPF)	**7,57,398**	**7,62,264**	**7,67,287**	**8,34,148**
(g) Pension Funds	**6,16,517**	**6,67,379**	**6,99,173**	**7,36,592**
(h) Small Savings (excluding PPF)	**14,28,499**	**14,94,717**	**15,51,089**	**15,86,496**
Financial Liabilities (a+b)	**77,43,630**	**79,38,456**	**82,69,633**	**86,22,079**
Per cent of GDP	**36.6**	**36.0**	**36.2**	**36.5**
Loans/Borrowings				
(a) Banking Sector	**61,80,377**	**63,19,097**	**65,87,052**	**68,61,233**
of which:				
i. Commercial Banks	56,47,239	57,87,508	60,52,779	63,89,789
ii. Co-operative Banks	5,31,728	5,30,164	5,32,833	4,69,989
(b) Other Financial Institutions	**15,63,253**	**16,19,358**	**16,82,581**	**17,60,847**
of which:				
i. Non-Banking Financial Companies	7,36,312	7,66,463	7,98,641	8,38,643
ii. Housing Finance Companies	7,21,510	7,45,914	7,75,408	8,12,845
iii. Insurance Corporations	1,05,431	1,06,981	1,08,532	1,09,359

No. 50 (b): Stocks of Financial Assets and Liabilities of Households- Select Indicators (Contd.)

(Amount in ₹ Crore)

Item	Jun-2022	Sep-2022	Dec-2022	Mar-2023
Financial Assets (a+b+c+d+e+f+g+h)	**2,56,21,348**	**2,64,23,992**	**2,71,87,716**	**2,78,44,981**
Per cent of GDP	**102.8**	**102.6**	**103.2**	**103.3**
(a) Bank Deposits (i+ii)	**1,18,43,527**	**1,21,43,060**	**1,23,99,459**	**1,27,07,326**
i. Commercial Banks	1,09,87,692	1,12,88,257	1,15,36,717	1,18,21,685
ii. Co-operative Banks	8,55,835	8,54,803	8,62,742	8,85,641
(b) Non-Bank Deposits				
of which:				
Other Financial Institutions	**2,16,170**	**2,18,247**	**2,26,328**	**2,28,562**
i. Non-Banking Financial Companies	74,794	78,061	81,308	85,254
ii. Housing Finance Companies	1,41,376	1,40,185	1,45,020	1,43,308
(c) Life Insurance Funds	**53,25,967**	**55,59,682**	**57,86,593**	**57,95,431**
(d) Currency	**29,50,343**	**28,95,764**	**29,72,524**	**31,21,514**
(e) Mutual funds	**20,48,097**	**22,60,210**	**23,55,316**	**23,67,793**
(f) Public Provident Fund (PPF)	**8,51,913**	**8,58,591**	**8,64,731**	**9,39,449**
(g) Pension Funds	**7,44,459**	**7,96,454**	**8,53,412**	**8,98,343**
(h) Small Savings (excluding PPF)	**16,40,871**	**16,91,985**	**17,29,353**	**17,86,563**
Financial Liabilities (a+b)	**89,11,861**	**92,46,741**	**97,00,657**	**1,02,17,746**
Per cent of GDP	**35.8**	**35.9**	**36.8**	**37.9**
Loans/Borrowings				
(a) Banking Sector	**70,95,468**	**73,58,918**	**77,29,701**	**81,13,546**
of which:				
i. Commercial Banks	66,20,073	68,81,338	72,49,643	75,80,936
ii. Co-operative Banks	4,73,897	4,76,025	4,78,487	5,30,915
(b) Other Financial Institutions	**18,16,393**	**18,87,823**	**19,70,956**	**21,04,201**
of which:				
i. Non-Banking Financial Companies	8,69,175	9,05,825	9,61,617	10,56,182
ii. Housing Finance Companies	8,35,181	8,68,213	8,93,116	9,29,862
iii. Insurance Corporations	1,12,037	1,13,785	1,16,223	1,18,157

No. 50 (b): Stocks of Financial Assets and Liabilities of Households- Select Indicators (Concld.)

(Amount in ₹ Crore)

Item	Jun-2023	Sep-2023	Dec-2023	Mar-2024
Financial Assets (a+b+c+d+e+f+g+h)	**2,87,56,851**	**2,96,44,299**	**3,07,47,010**	**3,19,86,847**
Per cent of GDP	**104.6**	**105.4**	**106.6**	**108.3**
(a) Bank Deposits (i+ii)	**1,29,62,575**	**1,34,68,783**	**1,37,48,656**	**1,41,43,228**
i. Commercial Banks	1,20,67,764	1,25,74,464	1,28,57,001	1,32,44,314
ii. Co-operative Banks	8,94,811	8,94,319	8,91,655	8,98,914
(b) Non-Bank Deposits				
of which:				
Other Financial Institutions	**2,28,077**	**1,20,095**	**1,25,432**	**1,27,257**
i. Non-Banking Financial Companies	91,373	96,156	1,01,051	1,02,994
ii. Housing Finance Companies	1,36,703	23,939	24,381	24,263
(c) Life Insurance Funds	**60,64,437**	**62,55,801**	**65,53,726**	**67,69,272**
(d) Currency	**30,72,878**	**30,36,177**	**30,92,896**	**32,39,540**
(e) Mutual funds	**26,26,046**	**28,29,859**	**31,56,299**	**33,87,208**
(f) Public Provident Fund (PPF)	**9,55,061**	**9,60,344**	**9,64,852**	**10,51,376**
(g) Pension Funds	**9,70,016**	**10,17,975**	**10,91,276**	**11,72,651**
(h) Small Savings (excluding PPF)	**18,77,761**	**19,55,265**	**20,13,873**	**20,96,314**
Financial Liabilities (a+b)	**1,05,39,266**	**1,10,65,282**	**1,15,75,799**	**1,20,96,412**
Per cent of GDP	**38.3**	**39.3**	**40.2**	**41.0**
Loans/Borrowings				
(a) Banking Sector	**83,27,152**	**91,96,026**	**95,98,673**	**99,91,003**
of which:				
i. Commercial Banks	77,88,962	86,64,616	90,54,514	94,37,072
ii. Co-operative Banks	5,36,409	5,29,528	5,42,241	5,51,852
(b) Other Financial Institutions	**22,12,114**	**18,69,256**	**19,77,126**	**21,05,409**
of which:				
i. Non-Banking Financial Companies	11,37,631	11,97,315	12,82,347	13,83,183
ii. Housing Finance Companies	9,53,646	5,49,352	5,70,585	5,96,438
iii. Insurance Corporations	1,20,837	1,22,590	1,24,194	1,25,788

Notes : 1. Data as ratios to GDP have been calculated based on the Provisional Estimates of National Income 2023-24, released by NSO on May 31, 2024.
2. Pension funds comprises funds with the National Pension Scheme.
3. Outstanding deposits with Small Savings are sourced from the Controller General of Accounts, Government of India.
4. Non-bank deposits apart from other financial institutions, comprises state power utilities, co-operative non credit societies etc. Data for outstanding deposits are available only for other financial institutions.
5. Figures in the columns may not add up to the total due to rounding off.

Explanatory Notes to the Current Statistics

Table No. 1

1.2& 6: Annual data are average of months.
3.5 & 3.7: Relate to ratios of increments over financial year so far.
4.1 to 4.4, 4.8,4.9 &5: Relate to the last friday of the month/financial year.
4.5, 4.6 & 4.7: Relate to five major banks on the last Friday of the month/financial year.
4.10 to 4.12: Relate to the last auction day of the month/financial year.
4.13: Relate to last day of the month/ financial year
7.1&7.2: Relate to Foreign trade in US Dollar.

Table No. 2

2.1.2: Include paid-up capital, reserve fund and Long-Term Operations Funds.
2.2.2: Include cash, fixed deposits and short-term securities/bonds, e.g., issued by IIFC (UK).

Table No. 4

Maturity-wise position of outstanding forward contracts is available at http://nsdp.rbi.org.in under ''Reserves Template''.

Table No. 5

Special refinance facility to Others, *i.e.* to the EXIM Bank, is closed since March 31, 2013.

Table No. 6

For scheduled banks, March-end data pertain to the last reporting Friday.
2.2: Exclude balances held in IMF Account No.1, RBI employees' provident fund, pension fund, gratuity and superannuation fund.

Table Nos. 7 & 11

3.1 in Table 7 and 2.4 in Table 11: Include foreign currency denominated bonds issued by IIFC (UK).

Table No. 8

NM_2 and NM_3 do not include FCNR (B) deposits.
2.4: Consist of paid-up capital and reserves.
2.5: includes other demand and time liabilities of the banking system.

Table No. 9

Financial institutions comprise EXIM Bank, SIDBI, NABARD and NHB.
L_1 and L_2 are compiled monthly and L_3 quarterly.
Wherever data are not available, the last available data have been repeated.

Table No. 13

Data against column Nos. (1), (2) & (3) are Final and for column Nos. (4) & (5) data are Provisional.

Table No. 14

Data in column Nos. (4) & (8) are Provisional.

Table No. 17

2.1.1: Exclude reserve fund maintained by co-operative societies with State Co-operative Banks

2.1.2: Exclude borrowings from RBI, SBI, IDBI, NABARD, notified banks and State Governments.

4: Include borrowings from IDBI and NABARD.

Table No. 24

Primary Dealers (PDs) include banks undertaking PD business.

Table No. 30

Exclude private placement and offer for sale.

1: Exclude bonus shares.

2: Include cumulative convertible preference shares and equi-preference shares.

Table No. 32

Exclude investment in foreign currency denominated bonds issued by IIFC (UK), SDRs transferred by Government of India to RBI and foreign currency received under SAARC and ACU currency swap arrangements. Foreign currency assets in US dollar take into account appreciation/depreciation of non-US currencies (such as Euro, Sterling, Yen and Australian Dollar) held in reserves. Foreign exchange holdings are converted into rupees at rupee-US dollar RBI holding rates.

Table No. 34

1.1.1.1.2 & 1.1.1.1.1.4: Estimates.

1.1.1.2: Estimates for latest months.

'Other capital' pertains to debt transactions between parent and subsidiaries/branches of FDI enterprises.

Data may not tally with the BoP data due to lag in reporting.

Table No. 35

1.10: Include items such as subscription to journals, maintenance of investment abroad, student loan repayments and credit card payments.

Table No. 36

Increase in indices indicates appreciation of rupee and *vice versa*. For 6-Currency index, base year 2022-23 is a moving one, which gets updated every year. REER figures are based on Consumer Price Index (combined). The details on methodology used for compilation of NEER/REER indices are available in December 2005, April 2014 and January 2021 issues of the RBI Bulletin.

Table No. 37

Based on applications for ECB/Foreign Currency Convertible Bonds (FCCBs) which have been allotted loan registration number during the period.

Table Nos. 38, 39, 40 & 41

Explanatory notes on these tables are available in December issue of RBI Bulletin, 2012.

Table No. 43

Part I-A. Settlement systems

1.1.3: Tri- party Repo under the securities segment has been operationalised from November 05, 2018.

Part I-B. Payments systems

4.1.2: 'Others' includes e-commerce transactions and digital bill payments through ATMs, *etc.*

4.2.2: 'Others' includes e-commerce transactions, card to card transfers and digital bill payments through ATMs, *etc.*

5: Available from December 2010.

5.1: includes purchase of goods and services and fund transfer through wallets.

5.2.2: includes usage of PPI Cards for online transactions and other transactions.

6.1: Pertain to three grids – Mumbai, New Delhi and Chennai.

6.2: 'Others' comprises of Non-MICR transactions which pertains to clearing houses managed by 21 banks.

Part II-A. Other payment channels

1: Mobile Payments –
- Include transactions done through mobile apps of banks and UPI apps.
- The data from July 2017 includes only individual payments and corporate payments initiated, processed, and authorised using mobile device. Other corporate payments which are not initiated, processed, and authorised using mobile device are excluded.

2: Internet Payments – includes only e-commerce transactions through 'netbanking' and any financial transaction using internet banking website of the bank.

Part II-B. ATMs

3.3 and 4.2: only relates to transactions using bank issued PPIs.

Part III. Payment systems infrastructure

3: Includes ATMs deployed by Scheduled Commercial Banks (SCBs) and White Label ATM Operators (WLAOs). WLAs are included from April 2014 onwards.

Table No. 45

(-) represents nil or negligible

The table format is revised since monthly Bulletin for the month of June 2023.

Central Government Dated Securities include special securities and Sovereign Gold Bonds.

State Government Securities include special bonds issued under Ujwal DISCOM Assurance Yojana (UDAY).

Bank PDs are clubbed under Commercial Banks.

The category 'Others' comprises State Governments, DICGC, PSUs, Trusts, Foreign Central Banks, HUF/ Individuals *etc.*

Data since September 2023 includes the impact of the merger of a non-bank with a bank.

Table No. 46

GDP data is based on 2011-12 base. GDP for 2023-24 is from Union Budget 2023-24.

Data pertains to all States and Union Territories.

1 & 2: Data are net of repayments of the Central Government (including repayments to the NSSF) and State Governments.

1.3: Represents compensation and assignments by States to local bodies and Panchayati Raj institutions.

2: Data are net of variation in cash balances of the Central and State Governments and includes borrowing receipts of the Central and State Governments.

3A.1.1: Data as per RBI records.

3B.1.1: Borrowings through dated securities.

3B.1.2: Represent net investment in Central and State Governments' special securities by the National Small Savings Fund (NSSF).

This data may vary from previous publications due to adjustments across components with availability of new data.

3B.1.6: Include Ways and Means Advances by the Centre to the State Governments.

3B.1.7: Include Treasury Bills, loans from financial institutions, insurance and pension funds, remittances, cash balance investment account.

Table No. 47

SDF is availed by State Governments against the collateral of Consolidated Sinking Fund (CSF), Guarantee Redemption Fund (GRF) & Auction Treasury Bills (ATBs) balances and other investments in government securities.

WMA is advance by Reserve Bank of India to State Governments for meeting temporary cash mismatches.

OD is advanced to State Governments beyond their WMA limits.

Average amount Availed is the total accommodation (SDF/WMA/OD) availed divided by number of days for which accommodation was extended during the month.

- : Nil.

Table No. 48

CSF and GRF are reserve funds maintained by some State Governments with the Reserve Bank of India.

ATBs include Treasury bills of 91 days, 182 days and 364 days invested by State Governments in the primary market.

--: Not Applicable (not a member of the scheme).

The concepts and methodologies for Current Statistics are available in Comprehensive Guide for Current Statistics of the RBI Monthly Bulletin **(https://rbi.org.in/Scripts/PublicationsView.aspx?id=17618)**

Time series data of 'Current Statistics' is available at https://data.rbi.org.in.

Detailed explanatory notes are available in the relevant press releases issued by RBI and other publications/releases of the Bank such as **Handbook of Statistics on the Indian Economy**.

Recent Publications of the Reserve Bank of India

Name of Publication	Price	
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1. Reserve Bank of India Bulletin 2025	₹350 per copy ₹250 per copy (concessional rate*) ₹4,000 (one year subscription) ₹3,000 (one year concessional rate*)	US$ 15 per copy US$ 150 (one-year subscription) (inclusive of air mail courier charges)
2. Handbook of Statistics on the Indian States 2023-24	₹550 (Normal) ₹600 (inclusive of postage)	US$ 24 (inclusive of air mail courier charges)
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4. State Finances - A Study of Budgets of 2024-25	₹600 per copy (over the counter) ₹650 per copy (inclusive of postal charges)	US$ 24 per copy (inclusive of air mail courier charges)
5. Report on Currency and Finance 2023-24	₹575 per copy (over the counter) ₹625 per copy (inclusive of postal charges)	US$ 22 per copy (inclusive of air mail courier charges)
6. Reserve Bank of India Occasional Papers Vol. 45, No. 1, 2024	₹200 per copy (over the counter) ₹250 per copy (inclusive of postal charges)	US$ 18 per copy (inclusive of air mail courier charges)
7. Finances of Panchayati Raj Institutions	₹300 per copy (over the counter) ₹350 per copy (inclusive of postal charges)	US$ 16 per copy (inclusive of air mail courier charges)
8. Report on Trend and Progress of Banking in India 2023-24	Issued as Supplement to RBI Bulletin January, 2025	
9. Annual Report 2024-25	Issued as Supplement to RBI Bulletin June, 2025	
10. Financial Stability Report, December 2024	Issued as Supplement to RBI Bulletin January, 2025	
11. Monetary Policy Report - April 2025	Included in RBI Bulletin April 2025	
12. Report on Municipal Finances - November 2024	₹300 per copy (over the counter) ₹350 per copy (inclusive of postal charges)	US$ 16 per copy (inclusive of air mail courier charges)
13. Banking Glossary (English-Hindi)	₹100 per copy (over the counter) ₹150 per copy (inclusive of postal charges)	

Notes

1. Many of the above publications are available at the RBI website (www.rbi.org.in).
2. Time Series data are available at the Database on Indian Economy (https://data.rbi.org.in).
3. The Reserve Bank of India History 1935-2008 (5 Volumes) are available at leading book stores in India.

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