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**BI-MONTHLY MONETARY POLICY STATEMENT
2024~25 (DECEMBER 4~6)**

Governor's Statement

Governor's Statement*

Shaktikanta Das

As we stand at the threshold of 2025, let me reflect upon the eventful journey of 2024. In line with the trend in the last few years, central banks were once again put to the ultimate test to stabilise their economies against continuous, colossal and complex shocks. Central banks are constantly adapting to the new global economic and financial landscape created by geopolitical conflicts, geoeconomic fragmentation, financial market volatility and continuing uncertainties, all of which are testing the resilience of the global economy. The last mile of disinflation is turning out to be prolonged and arduous, both for advanced and emerging market economies (EMEs). Maintaining macroeconomic and financial stability, and building buffers, continue to be the lodestar for the EMEs.

In India, notwithstanding the recent aberration in the growth and inflation trajectories, the economy continues its journey on a sustained and balanced path towards progress. Amidst the reshaping of the global economy, India is well-positioned to benefit from the emerging trends as it forges ahead on a transformative journey.

Decisions and Deliberations of the Monetary Policy Committee (MPC)

The Monetary Policy Committee (MPC) met on 4th, 5th and 6th December, 2024. After a detailed assessment of the evolving macroeconomic and financial developments and the outlook, it decided by a 4 to 2 majority to keep the policy repo rate unchanged at 6.50 per cent. Consequently, the standing deposit facility (SDF) rate remains at 6.25 per cent and the marginal standing facility (MSF) rate and the Bank Rate at 6.75 per cent. The MPC also decided unanimously to continue with the 'neutral' stance and to remain unambiguously focused on a durable alignment of inflation with the target, while supporting growth.

I shall now briefly set out the rationale for these decisions. The MPC took note of the recent slowdown in the growth momentum, which translates into a downward revision in the growth forecast for the current year. Going forward into the second half of this year and the next year, the MPC assessed the growth outlook to be resilient, but warranting close monitoring. Inflation, on the other hand, surged above the upper tolerance band of 6.0 per cent in October, driven by a sharp uptick in food inflation. Food inflation pressures are likely to linger in Q3 of this financial year and start easing only from Q4:2024-25, backed by seasonal correction in vegetables prices, kharif harvest arrivals, likely good *rabi* output and adequate cereal buffer stocks.

High inflation reduces the disposable income in the hands of consumers and dents private consumption, which negatively impacts the real Gross Domestic Product (GDP) growth. The increasing incidence of adverse weather events, heightened geo-political uncertainties and financial market volatility pose upside risks to inflation. The MPC believes that only with durable price stability can strong foundations be secured for high growth. The MPC remains committed to restoring the inflation growth balance in the overall interest of the economy. Accordingly, the MPC decided to keep the policy repo rate unchanged at 6.50 per cent in this meeting and continue with the neutral stance of monetary policy as it provides flexibility to monitor and assess the outlook on inflation and growth, and act appropriately.

Assessment of Growth and Inflation

Global Growth

The global economy has shown unusual resilience in 2024 despite several headwinds.¹ Inflation is

¹ The global composite purchasing managers' index (PMI) further improved to 52.4 and remained in the expansionary zone for the thirteenth consecutive month in November 2024. The global manufacturing PMI improved in November and returned to the neutral mark of 50.0. The global services sector continued to expand with the PMI remaining in the expansion zone for the twenty second consecutive month at 53.1 in November. The OECD, in its December 2024 outlook retained the GDP growth forecast for 2024 at 3.2 per cent. The IMF also retained the growth projection in its latest October 2024 World Economic Outlook (WEO) Report for 2024 at 3.2 per cent.

* Governor's Statement - December 6, 2024.

gradually moving towards target from its multi-decadal highs, prompting several central banks to embark on policy pivots.² Global trade remains resilient³ with increasing volumes confined within geopolitical blocs.⁴ Since the last MPC meeting, financial markets have remained edgy amidst rising US dollar and hardening bond yields, resulting in large capital outflows from emerging markets and volatility in equity markets. Going forward, the outlook is clouded by rising tendencies of protectionism which have the potential to undermine global growth and push inflation higher.

Domestic Growth

Growth in real GDP in Q2 at 5.4 per cent turned out to be much lower than anticipated.⁵ This decline in growth was led mainly by a substantial deceleration in industrial growth from 7.4 per cent in Q1 to 2.1 per cent in Q2 due to subdued performance of manufacturing companies,⁶ contraction in mining activity and lower electricity demand.⁷ The weakness in the manufacturing sector, however, was not broad-based but was limited to specific sectors such as petroleum products, iron and steel and cement.⁸

Going forward, high frequency indicators available so far suggest that the slowdown in domestic

economic activity bottomed out in Q2:2024-25, and has since recovered, aided by strong festive demand and pick up in rural activities. Agricultural growth is supported by healthy *kharif* crop production,⁹ higher reservoir levels¹⁰ and better *rabi* sowing.¹¹ Industrial activity is expected to normalise and recover from the lows of the previous quarter.¹² The end of the monsoon season and the expected pick up in government capital expenditure may provide some impetus to cement and iron and steel sectors. Mining and electricity are also expected to normalise post the monsoon-related disruptions. The purchasing managers' index (PMI) for manufacturing at 56.5 for November remained elevated. The supply chain pressures eased in October-November and fell below the historical average.¹³ The services sector continues to grow at a strong pace.¹⁴ PMI services remained steady at 58.4 in November, indicating continued expansion.¹⁵

On the demand side, rural demand¹⁶ is trending upwards while urban demand shows some moderation

⁹ As per the first advance estimates for 2024-25, *kharif* foodgrain production is estimated at a record 164.7 million tonnes, 5.7 per cent higher than the final estimates of 2023-24. Production of rice, a major *kharif* crop is estimated to be 5.9 per cent higher than previous year.

¹⁰ All-India water storage in 155 major reservoirs stands at 82 per cent of the total capacity as of November 28, 2024, as against 65 per cent a year ago and decadal average of 70 per cent.

¹¹ As on November 29, 2024, *rabi* crop sowing is higher by 4.1 per cent when compared to the same period last year. Wheat and pulses sowing are higher by 6.6 per cent and 3.6 per cent, respectively.

¹² As per the early results of Industrial Outlook Survey (IOS) of RBI, manufacturing firms assessed improvement in demand conditions in Q3:2024-25, and expect further improvement in Q4:2024-25 and H1:2025-26. Eight core industries output expanded by 3.1 per cent in October.

¹³ Index of supply chain pressures for India (ISPI) eased in October and November and remained below its historical average despite heightened geopolitical risks. Source: Reserve Bank of India

¹⁴ E-way bills increased by 16.9 per cent in October 2024. GST revenues at Rs. 1.82 lakh crore rose by 8.5 per cent and toll collections expanded by 11.9 per cent during November. Petroleum products consumption growth turned positive in October after contracting for two consecutive months. Aggregate bank credit and deposits registered growth of 12.4 per cent and 11.6 per cent, respectively, as on November 15, 2024.

¹⁵ India continues to record the highest PMI reading among major economies for both manufacturing and services since July 2022 and April 2023, respectively.

¹⁶ Retail two-wheeler sales expanded by 24.2 per cent in October-November 2024. The demand under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) declined by 7.5 per cent in October, reflecting improvement in farm sector employment. Rural areas are recording higher FMCG sales growth than the urban areas since Q4:2023-24.

on a high base.¹⁷ Government consumption is improving.¹⁸ Investment activity is also expected to improve.¹⁹ On the external front, merchandise exports expanded by 17.2 per cent in October 2024, while services exports continue to post upbeat growth (22.3 per cent in October).²⁰ Taking all these factors into consideration, real GDP growth for 2024-25 is now projected at 6.6 per cent, with Q3 at 6.8 per cent; and Q4 at 7.2 per cent. Real GDP growth for Q1:2025-26 is projected at 6.9 per cent; and Q2 at 7.3 per cent. The risks are evenly balanced.

Inflation

Inflation increased sharply in September and October 2024²¹ led by an unanticipated increase in food prices.²² Core inflation, though at subdued

levels, also registered a pick-up in October.²³ Fuel group remained in deflation for the 14th consecutive month in October.²⁴ In the near term, despite some softening, lingering food price pressures are likely to keep headline inflation elevated in Q3.

Going ahead, a good *rabi* season would be critical to the softening of the food inflation pressures. Early indications point to adequate soil moisture content and reservoir levels, conducive for *rabi* sowing. The estimates of a record *kharif* production should bring relief to the elevated prices of rice and *tur dal*.²⁵ Vegetable prices are also expected to see a seasonal winter correction. On the upside, the evolving trajectory of domestic edible oil prices, following the hike in import duties and rise in their global prices, need to be closely monitored.²⁶ Manufacturing and services firms surveyed by the Reserve Bank point to firming up of input costs and selling prices in Q4:2024-25.²⁷ Taking all these factors into consideration, CPI inflation for 2024-25 is projected at 4.8 per cent, with Q3 at 5.7 per cent; and Q4 at 4.5 per cent. CPI inflation for Q1:2025-26 is projected at 4.6 per cent; and Q2 at 4.0 per cent. The risks are evenly balanced.

¹⁷ Retail passenger vehicle sales increased by 11.2 per cent (y-o-y) in October-November on the back of festive demand. Domestic air passengers rose by 9.6 per cent in October 2024 and 13.6 per cent in November.

¹⁸ Central government revenue expenditure (net of interest payments and subsidies) grew by 7.2 per cent in Q2:2024-25 and 47.1 per cent in October 2024, after contracting by 1.5 per cent in Q1:2024-25.

¹⁹ As per the abridged half-yearly balance sheets of 1,689 listed companies, fixed assets of private manufacturing companies improved to Rs. 18.6 lakh crore (7.8 per cent y-o-y) as on end-September 2024 from Rs. 18.1 lakh crore (7.0 per cent y-o-y) as on end-March 2024. 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 74.7 per cent in Q2:2024-25 is above the long-term average of 73.8 per cent. Steel consumption rose by 9.0 per cent in October 2024, while cement production increased by 3.3 per cent. Imports of capital goods expanded by 4.1 per cent during October 2024.

²⁰ India's merchandise exports expanded by 17.2 per cent (y-o-y) to US\$ 39.2 billion, while imports rose by 3.6 per cent to US\$ 66.2 billion in October 2024. Services exports grew by 22.3 per cent and services imports expanded by 27.9 per cent in October 2024.

²¹ The CPI headline inflation increased from average 3.6 per cent during July-August to 5.5 per cent in September and further to 6.2 per cent in October 2024, which was the highest in more than a year, since September 2023.

²² The CPI food inflation surged to 8.4 per cent in September and firmed up further to 9.7 per cent in October 2024 from an average of 5.2 per cent in July-August. As a result, the contribution of food group (with a weight of 45.9 per cent in the CPI basket) to headline inflation increased from around 68 per cent during July-August to around 74 per cent in October. A sharp pick-up in price momentum across vegetables, and oils and fats in a scenario of rising inflation in cereals, meat and fish, and fruits led the upsurge in food inflation. The price momentum in oils and fats firmed up sharply to 3 per cent in September and further to 6 per cent in October. Alongside, the momentum in vegetables increased to 3.5 per cent in September and further 8.2 per cent in October.

²³ CPI Core inflation recorded the lowest inflation of 3.1 per cent in the current series during May-June before edging up to 3.5 per cent in September and further to 3.8 per cent in October 2024. The inflation in housing increased to 2.8 per cent in October after remaining steady at 2.7 per cent since June 2024, while the inflation in personal care and effects edged up to 9 per cent in September and further to 11 per cent in October from an average of 8.2 per cent during July-August 2024.

²⁴ Deflation in CPI fuel narrowed to (-)1.3 per cent in September from (-)5.3 per cent in August driven by a year-on-year increase in electricity prices and a slower pace of deflation in LPG prices. In October, the rate of deflation in CPI fuel deepened to (-)1.6 per cent, reflecting a sharper decline, on a y-o-y basis, in kerosene prices.

²⁵ As per the 1st advance estimates of *Kharif* production for 2024-25 released on November 5, 2024, rice production is expected to increase by 5.9 per cent, while *tur dal* production is expected to be higher by 2.5 per cent in 2024-25.

²⁶ The FAO food price index edged up by 2 per cent on m-o-m basis in October 2024, primarily due to increase in the prices of vegetable oils, sugar, dairy and cereals. The vegetable oil price index increased (on a m-o-m basis) by 7.3 per cent in October from September, the highest pick up in prices after March 2024.

²⁷ Also in November, the PMI for manufacturing firms registered the fastest rate of expansion in output prices in last eleven years. Alongside, the services firms also recorded a fastest rate of expansion in output prices in close to 12 years.

What do these Inflation and Growth Conditions mean for Monetary Policy?

The near-term inflation and growth outcomes in India have turned somewhat adverse since the October policy. The medium-term prognosis on inflation suggests further alignment with the target, while growth is expected to pick up its momentum. Persistent high inflation reduces the purchasing power of consumers and adversely affects both consumption and investment demand. The overall implication of these factors for growth is negative. Therefore, price stability is essential for sustained growth. On the other hand, a growth slowdown – if it lingers beyond a point – may need policy support.

The Reserve Bank's anti-inflationary monetary policy stance has been a crucial factor in bringing about a significant disinflation. Going forward, as food price shocks wane, headline inflation is likely to ease and realign with the target as per our projections. At present, it is necessary to draw on the flexibility provided by the neutral stance to wait for and monitor the incoming data for confirmation of the decline in inflation. The gains achieved so far in the broad direction of disinflation, notwithstanding the recent upticks, need to be preserved. At the same time, the growth trajectory and the evolving outlook also need to be monitored closely. At this critical juncture, prudence and practicality demand that we remain careful and sensitive to the dynamically evolving situation with all its complexities and ramifications. A status quo in monetary policy in this meeting of the MPC has thus become appropriate and essential.

Liquidity and Financial Market Conditions

System liquidity, as represented by the net position under the Liquidity Adjustment Facility (Net LAF), continued to remain in surplus during October-November²⁸ on account of higher government

²⁸ System liquidity, as measured by the net position under the liquidity adjustment facility (net LAF) was, on an average, in surplus of about ₹1.5 lakh crore during October-November as against ₹1.3 lakh crore during August-September 2024. In the last week of November, system liquidity was in deficit for a few days (November 26-28). As a result, banks' recourse to the marginal standing facility in October-November was lower at ₹4,794 crore than ₹6,944 crore during August-September 2024.

spending,²⁹ despite a significant increase in currency in circulation during the festive season and capital outflows.³⁰ Given these conditions, the Reserve Bank mainly conducted variable rate reverse repo (VRRR) operations to absorb surplus liquidity.³¹ To alleviate temporary liquidity tightness because of large GST outflows,³² however, fine-tuning variable rate repo (VRR) operations were conducted intermittently during October and November.³³ The two-way liquidity operations of the Reserve Bank ensured close alignment of the inter-bank overnight rate with the policy repo rate.³⁴ Transmission to the credit market has been satisfactory.³⁵

Even as liquidity in the banking system remains adequate, systemic liquidity may tighten in the coming months due to tax outflows, increase in currency in circulation and volatility in capital flows. To ease the potential liquidity stress, it has now been decided to reduce the cash reserve ratio (CRR) of all banks to 4.0 per cent of net demand and time liabilities (NDTL) in

²⁹ Average government cash balances held with the Reserve Bank declined from ₹2.9 lakh crore during August-September 2024 to ₹1.65 lakh crore during October-November. The Central Government availed ways and means advances (WMA) during November 14-17, 2024.

³⁰ Notes in circulation increased by ₹0.65 lakh crore during the period October-November.

³¹ During October-November, five main and 23 fine-tuning variable rate reverse repo (VRRR) auctions (1 to 4 days maturity) mopped up surplus liquidity cumulatively amounting to ₹11.7 lakh crore.

³² GST collection for October and November 2024 at ₹1.87 lakh crore and ₹1.82 lakh crore, respectively, were high.

³³ During October 25 to end-November, 5 fine-tuning variable rate repo (VRR) operations of 1-6 days maturity were conducted that cumulatively injected ₹1.25 lakh crore into the banking system.

³⁴ The weighted average call rate (WACR) averaged 6.51 per cent during October-November as against 6.53 per cent during August-September. Rates in the collateralised segment – the triparty and market repo – was, however, much softer at 6.38 per cent and 6.40 per cent, respectively. Across the term money market segments, the yields on 3-month treasury bills (T-bills), certificates of deposit (CDs), and commercial papers (CPs) issued by non-banking financial companies (NBFCs) eased. Average yields on T-bills, CDs and CPs moderated to 6.46 per cent, 7.18 per cent and 7.54 per cent, respectively, in October-November from 6.60 per cent, 7.26 per cent and 7.68 per cent, respectively, during August - September. The 10 year G-Sec yield remained stable in October and November, despite higher domestic inflation prints and hardening US yields.

³⁵ In response to the cumulative policy repo rate hike of 250 bps since May 2022, the weighted average lending rates (WALRs) on fresh and outstanding rupee loans of SCBs have increased by 203 bps and 118 bps, respectively, during May 2022 to October 2024, while the weighted average domestic term deposit rate (WADTDR) on fresh and outstanding deposits of SCBs increased by 241 bps and 193 bps, respectively, during the same period.

two equal tranches of 25 bps each with effect from the fortnight beginning December 14, 2024 and December 28, 2024. This will restore the CRR to 4.0 per cent of NDTL, which was prevailing before the commencement of the policy tightening cycle in April 2022. This reduction in the CRR is consistent with the neutral policy stance and would release primary liquidity of about ₹1.16 lakh crore to the banking system.

Going forward, the Reserve Bank will continue to be nimble and proactive in its liquidity management operations to ensure that money market interest rates evolve in an orderly manner and the productive requirements of the economy are met.

During 2024-25 (April-November), the Indian rupee (INR) depreciated by 1.3 per cent largely due to pressure from strengthening US Dollar and selling pressure by foreign portfolio investors in October and November. Nevertheless, both the depreciation of the INR and its volatility was less as compared to its EME peers, reflecting India's strong macroeconomic fundamentals and improvement in external sector outlook.³⁶

The Reserve Bank's exchange rate policy has remained consistent over the years, and it is market-determined. Its central tenet is to maintain orderliness and stability, without compromising market efficiency. Foreign exchange reserves are deployed judiciously to mitigate undue volatility, maintain market confidence, anchor expectations and preserve overall financial stability. These interventions focus on smoothening excessive and disruptive volatility rather than targeting any specific exchange rate level or band. At the same time, our efforts to deepen and modernise the foreign exchange market have yielded

³⁶ On a financial year basis (April-November), the Indian rupee (INR) registered lower depreciation (-1.3 per cent) against the US dollar as compared to higher depreciation of some of its emerging market peers like Vietnamese dong (-2.1 per cent), Philippine peso (-4.2 per cent), Turkish lira (-6.7 per cent), Russian ruble (-14.1 per cent), Brazilian real (-16.6 per cent), Argentine peso (-15.0 per cent) and Mexican peso (-19.0 per cent). During 2024-25 so far (April-November), the INR was the least volatile with coefficient of variation of 0.4 per cent amongst peer EME currencies, including - Chinese yuan, Vietnamese dong, Philippine peso, Indonesian rupiah, Chilean peso and Turkish lira.

significant results in terms of (i) widening access and participation; and (ii) ensuring efficient price discovery.

Our overall approach ensures that forex reserves act as shock absorbers, safeguarding the economy from external spillovers, while supporting competitive and orderly market conditions. The flexible or market determined exchange rate regime is not merely a tool for managing external shocks; it is an important element of our approach to macroeconomic and financial stability. By combining market discipline with prudent intervention, we have created a system that supports stability, resilience and growth.

Financial Stability

The financial parameters of banks and NBFCs continue to be strong.³⁷ The incoming data suggests that the gap between growth of credit and deposits of scheduled commercial banks (SCBs) has narrowed with deposits keeping pace with loan growth.³⁸

The Reserve Bank's supervision of the financial sector and its entities continues to be vigilant and proactive. Incipient signs of stress, if any, either at the systemic or entity levels, are monitored closely and proactive action is initiated. The effort is always to resolve the issues non disruptively. Continuous engagement is held over several months with the regulated entities. Only in extreme cases where sufficient corrective action is not visible, the Reserve Bank resorts to imposition of business restrictions as

³⁷ The gross non-performing assets (GNPA) ratio of SCBs improved further and was 2.54 per cent as at end-September 2024, the lowest since March 2011. The annualised slippage ratio, which measures new NPA accretions as a percentage of standard advances, was at 1.35 per cent as at end-September 2024, as against 1.70 per cent a year ago. SMA-2 ratio, a lead indicator of building of fresh stress in the banking book, was at 0.88 per cent in September 2024, similar to the previous year figure of 0.87 per cent. On the other hand, provision coverage ratio, capital to risk-weighted assets ratio, and liquidity coverage ratio were 76.79 per cent, 16.77 per cent, and 128.59 per cent, respectively in September 2024, much above the regulatory thresholds. The ratio of net NPAs to total equity was 3.57 per cent in September 2024, the lowest ever. The annualized return on assets (RoA), return on equity (RoE), and net interest margin (NIM) stood at 1.40 per cent, 14.58 per cent, and 3.52 per cent, respectively, in September 2024.

³⁸ The year-on-year (yoY) growth of outstanding credit and deposit were 12.4 per cent and 11.6 per cent, respectively as of November 15, 2024.

a last resort in the interest of consumers and financial stability.

To address the issues of unclaimed deposits, inoperative accounts and frozen accounts due to pendency of KYC updation, banks have been advised³⁹ to take necessary steps urgently to bring down the number of such accounts and make the process hassle free. Further, banks have been advised to segregate the accounts of beneficiaries of various Central/ State Government schemes through direct benefit transfer (DBT) and facilitate uninterrupted credit and utilisation of DBT amounts, without inconveniencing such vulnerable segments of customers. Progress made by individual banks in this regard will be monitored by the Reserve Bank.

External Sector

India's merchandise exports expanded at a 28-month high pace in October. Merchandise imports also increased for the seventh consecutive month.⁴⁰ Services exports sustained buoyancy and posted double-digit growth in Q2:2024-25 as well as in October 2024.⁴¹ The robust services exports, coupled with strong remittance receipts,⁴² are expected to keep the current account deficit (CAD) within sustainable levels during 2024-25.

On the external financing side, gross foreign direct investment (FDI) to India increased at a robust pace during the first half of the year. Net

³⁹ Please see circular on Inoperative Accounts / Unclaimed Deposits in banks issued by the Reserve Bank of India on December 2, 2024. <https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=12750&Mode=0>

⁴⁰ In October 2024, India's merchandise exports grew by 17.2 per cent on a y-o-y basis to US\$ 39.2 billion, whereas merchandise imports rose by 3.6 per cent to reach an all-time high of US\$ 66.2 billion, resulting in a widening of the merchandise trade deficit to US\$ 27.0 billion in October 2024.

⁴¹ As per provisional figures, India's services exports grew (y-o-y) by 12.2 per cent and 22.3 per cent during Q2:2024-25 and October 2024, respectively, while services imports rose by 12.5 per cent and 27.9 per cent and net services exports grew by 11.8 per cent and 17.2 per cent, respectively, during the same period.

⁴² India's inward remittances increased by 8.9 per cent (y-o-y) to US\$ 29.5 billion in Q1:2024-25. Remittances to India are forecasted to reach \$124 billion in 2024, up from US\$ 120 billion in 2023 and are expected to rise to US\$129 billion in 2025 (World Bank, June 2024).

FDI, however, moderated during this period due to higher repatriations and rising outward FDI.⁴³ Foreign portfolio investment (FPI) inflows to EMEs have generally declined in October 2024.⁴⁴ Net FPI inflows to India stood at US\$ 9.3 billion in 2024-25 so far (April-December 4), supported mainly by inflows in the debt segment. External commercial borrowings and non-resident deposits, on the other hand, witnessed higher net inflows compared to last year.⁴⁵ India's external sector remains resilient, as reflected in various key indicators where India has been consistently performing well.⁴⁶

In order to attract more capital inflows, it has been decided to increase the interest rate ceilings on FCNR(B) deposits. Accordingly, effective from today, banks are permitted to raise fresh FCNR(B) deposits of 1 year to less than 3 years maturity at rates not exceeding the ceiling of overnight Alternative Reference Rate (ARR) plus 400 bps as against 250 bps at present. Similarly, for deposits of 3 to 5 years maturity, the ceiling has been increased to overnight ARR plus 500 bps as against 350 bps at present. This relaxation will be available till March 31, 2025.

Additional Measures

I shall now announce certain additional measures.

⁴³ Gross foreign direct investment (FDI) inflows grew by 25.6 per cent to US\$ 42.1 billion in April-September 2024-25 from US\$ 33.5 billion during the same period a year ago. Net FDI inflows declined by 8.6 per cent to US\$ 3.6 billion in April-September 2024-25 from US\$ 3.9 billion a year ago.

⁴⁴ Net portfolio inflows into EMEs during October 2024 stood at US\$ 1.9 billion as compared with US\$ 33.9 billion and US\$ 56.4 billion in August and September 2024, respectively (Source: Institute of International Finance). While the debt segment recorded a net inflow of US\$ 27.4 billion in October 2024, there were net outflows from the equity segment to the tune of US\$ 25.5 billion during the month amidst escalating geopolitical tensions, elevated policy uncertainty and rebalancing of portfolios.

⁴⁵ Net inflows under external commercial borrowings to India increased to US\$ 9.2 billion during April-October 2024-25 as compared with US\$ 2.8 billion a year ago. Non-resident deposits recorded a net inflow of US\$ 10.2 billion in April-September 2024-25 than US\$ 5.4 billion in the same period last year.

⁴⁶ India's CAD/GDP ratio stood at 0.7 per cent in 2023-24 (2.0 per cent during 2022-23), and 1.1 per cent during Q1:2024-25 (1.0 per cent in Q1:2023-24). India's external debt to GDP ratio declined marginally to 18.8 per cent at end-June 2024 from 18.9 per cent at end-March 2024. The import cover of reserves stood at around 11 months as on November 22, 2024, while the net international investment position (IIP) remained unchanged at 10.3 per cent of GDP at end-June 2024.

Expanding the reach of FX-Retail Platform through Linkages with Bharat Connect

The FX-Retail platform, which was launched in 2019, is now proposed to be linked with the Bharat Connect platform of NPCI. This would enable users to transact on the FX-Retail platform through mobile apps of banks and non-bank payment system providers. This will expand the reach of FX-Retail platform, enhance user experience and promote fairness and transparency in pricing with adequate safeguards.

Introduction of the Secured Overnight Rupee Rate (SORR) – a Benchmark based on the Secured Money Markets.

With a view to further develop the interest rate derivatives market in India and improve the credibility of interest rate benchmarks, the Reserve Bank proposes to introduce a new benchmark - the Secured Overnight Rupee Rate (SORR) - based on all secured money market transactions – overnight market repo as well as TREPS.

'Connect 2 Regulate' – An Initiative for Open Regulation

As part of the Reserve Bank's consultative approach in framing regulations, a new programme, namely, 'Connect 2 Regulate' will be launched under the ongoing RBI@90 commemorative events. A dedicated section in the Reserve Bank's website will be made available for stakeholders to share their ideas and inputs on specific topics.

Introduction of Podcast Facility as an Additional Medium of Communication

Over the years, the Reserve Bank has expanded its communication toolkit and techniques to enhance transparency and better connect with the people. In continuance of this endeavour, the Reserve Bank proposes to add 'podcasts' to its communication toolkit for wider dissemination of information.

Collateral-free Agriculture Loan – Enhancement of Limit

The limit for collateral-free agriculture loans was last revised in 2019. Taking into account the rise in agricultural input costs and overall inflation, it has

been decided to increase the limit for collateral-free agriculture loans from ₹1.6 lakh to ₹2 lakh per borrower. This will further enhance credit availability for small and marginal farmers.

Pre-sanctioned Credit Lines through UPI – Extending the Scope to Small Finance Banks

Credit line on UPI was launched in September 2023 and was made available through Scheduled Commercial Banks (SCBs). It has now been decided to permit Small Finance Banks also to extend pre-sanctioned credit lines through the UPI. This will further deepen financial inclusion and enhance formal credit, particularly for 'new to credit' customers.

Framework for Responsible and Ethical Enablement of Artificial Intelligence (FREE-AI) in the Financial Sector – Setting up of a Committee

The financial sector landscape is witnessing rapid transformation, enabled by technologies such as AI, tokenisation, Cloud Computing, etc. In order to harness the benefits from these technologies, while addressing the associated risks such as algorithmic bias, explainability, data privacy, etc., a committee comprising of experts from diverse fields will be set up to recommend a Framework for Responsible and Ethical Enablement of AI (FREE-AI) in the financial sector.

AI Solutions to Identify Mule Bank Accounts – MuleHunter.AI™

As part of the Reserve Bank's continued efforts to prevent and mitigate digital frauds, an innovative AI / ML based model, namely, MuleHunter.AI™ has been developed by the Reserve Bank Innovation Hub (RBIH), Bengaluru. This will help the banks to deal with the issue of mule bank accounts expeditiously and reduce digital frauds.

Conclusion

Let me now conclude. The world today is characterised by intricate complexities and profound uncertainties. As a central bank, our job is that of an anchor of stability and confidence, which would ensure that the economy achieves sustained high growth.

Since the last policy, inflation has been on the upside, while there has been a moderation in growth. Accordingly, the MPC has adopted a prudent and cautious approach in this meeting to wait for better visibility on the growth and inflation outlook. At such a critical juncture, prudence, practicality and timing of decisions become even more critical. Our endeavour in the Reserve Bank has always been to implement timely and carefully calibrated measures to derive maximum impact. This will continue to be the guiding principle for all future actions also. As Mahatma Gandhi had said and I quote: "*There is nothing that cannot be attained by patience and equanimity*".⁴⁷

In the last few years, we have traversed one of the most difficult periods in the history of the Indian economy, and perhaps, in the global economy also. It was a period of relentless turbulence and jolts. As a country, we can derive satisfaction that the Indian economy has not just navigated this period of trials successfully but also emerged stronger. As we strive together towards making India a developed economy, I recall what I had said in my statement of February 8, 2023 wherein I had quoted Netaji Subhas Chandra Bose: ".....never lose your faith in the destiny of India".⁴⁸

Thank you. Namaskar.

⁴⁷ The Collected Works of Mahatma Gandhi, Volume 86.

⁴⁸ "India will be free"- Message of August 17, 1945 to Indians in East Asia - Selected Speeches of Subhas Chandra Bose, Publications Division, Ministry of Information and Broadcasting, Government of India.

BI-MONTHLY MONETARY POLICY STATEMENT

2024~25 (DECEMBER 4~6)

Resolution of the Monetary Policy Committee (MPC)
December 4 to 6, 2024

Monetary Policy Statement, 2024-25 Resolution of the Monetary Policy Committee (MPC)*

Monetary Policy Decisions

After assessing the current and evolving macroeconomic situation, the Monetary Policy Committee (MPC) at its meeting today (December 6, 2024) decided to:

- Keep the policy repo rate under the liquidity adjustment facility (LAF) unchanged at 6.50 per cent.

Consequently, the standing deposit facility (SDF) rate remains unchanged at 6.25 per cent and the marginal standing facility (MSF) rate and the Bank Rate at 6.75 per cent.

- The MPC also decided to continue with the neutral monetary policy stance and to remain unambiguously focused on a durable alignment of inflation with the target, while supporting growth.

These decisions are 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

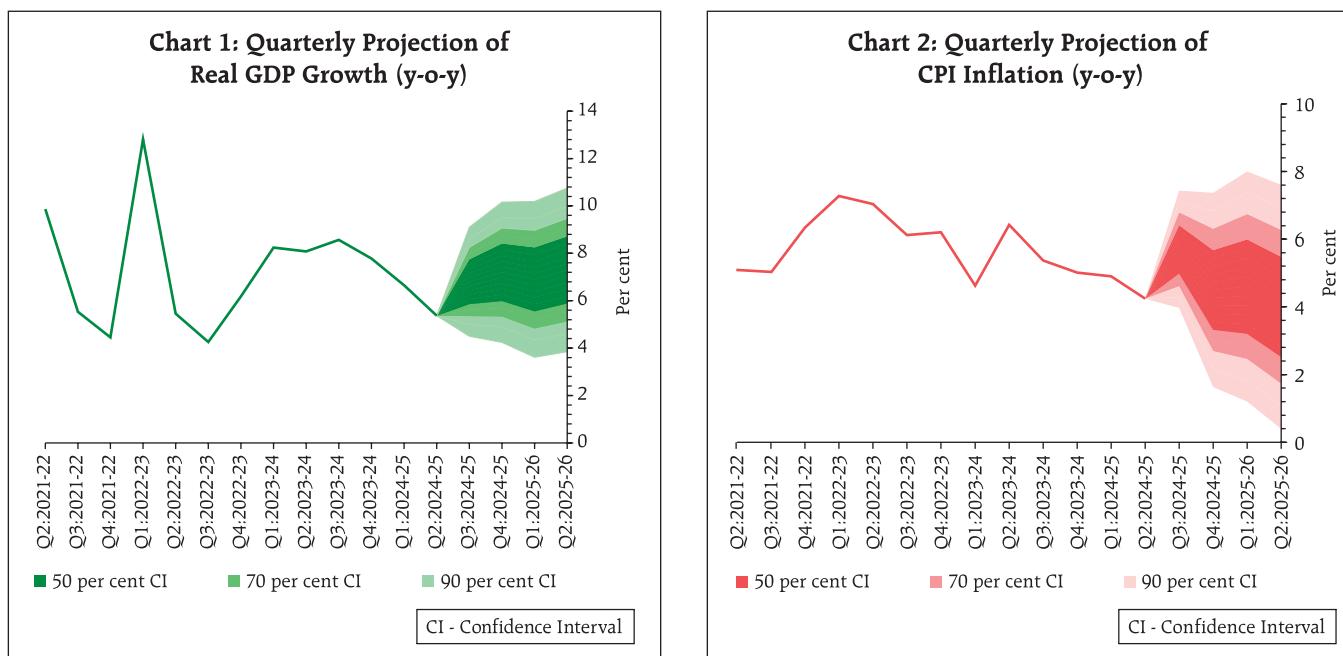
The global economy remains stable with growth holding up amidst waning inflation, albeit at a slow pace. Geopolitical risks and policy uncertainty, especially with respect to trade policies, have imparted heightened volatility to global financial markets.

On the domestic front, real gross domestic product (GDP) registered a lower than expected

growth of 5.4 per cent in Q2:2024-25 as private consumption and investment decelerated even while government spending recovered from a contraction in the previous quarter. On the supply side, the growth in gross value added (GVA) during Q2 was aided by resilient services and improving agriculture sector, but weakness in industrial activity – manufacturing, electricity and mining – tempered overall growth. Looking ahead, robust *kharif* foodgrain production and good *rabi* prospects, coupled with an expected pickup in industrial activity and sustained buoyancy in services augur well for private consumption. Investment activity is expected to pick up. Resilient world trade prospects should provide support to external demand and exports. Headwinds from geopolitical uncertainties, volatility in international commodity prices, and geo-economic fragmentation continue to pose risks to the outlook. Taking all these factors into consideration, real GDP growth for 2024-25 is projected at 6.6 per cent with Q3 at 6.8 per cent; and Q4 at 7.2 per cent. Real GDP growth for Q1:2025-26 is projected at 6.9 per cent; and Q2 at 7.3 per cent (Chart 1). The risks are evenly balanced.

Headline CPI inflation surged above the upper tolerance level to 6.2 per cent in October from 5.5 per cent in September and sub-4.0 per cent prints in July-August, propelled by a sharp pick-up in food inflation and an uptick in core (CPI excluding food and fuel) inflation. Going forward, food inflation is likely to soften in Q4 with seasonal easing of vegetables prices and *kharif* harvest arrivals; and good soil moisture conditions along with comfortable reservoir levels auguring well for *rabi* production. Adverse weather events and rise in international agricultural commodity prices, however, pose upside risks to food inflation. Even though energy prices have softened in the recent past, its sustenance needs to be monitored. Businesses expect pressures from input costs to remain elevated and growth in selling prices to accelerate from Q4.¹ Taking all these factors into consideration, CPI inflation for 2024-25

* Released on December 6, 2024.



is projected at 4.8 per cent with Q3 at 5.7 per cent; and Q4 at 4.5 per cent. CPI inflation for Q1:2025-26 is projected at 4.6 per cent; and Q2 at 4.0 per cent (Chart 2). The risks are evenly balanced.

Rationale for Monetary Policy Decisions

The MPC noted that the near-term inflation and growth outcomes in India have turned somewhat adverse since the October policy. Going forward, however, economic activity is set to improve along with rising business and consumer sentiments, as reflected in the Reserve Bank's surveys. The recent spike in inflation highlights the continuing risks of multiple and overlapping shocks to the inflation outlook and expectations. Heightened geo-political uncertainties and financial market volatility add further upside risks to inflation. High inflation reduces the purchasing power of both rural and urban consumers and may adversely impact private consumption. The MPC emphasises that strong foundations for high growth can be secured only with durable price stability. The MPC remains committed to restoring the balance between inflation and growth in the overall interest of the economy. Accordingly, the MPC decided to keep the policy

repo rate unchanged at 6.50 per cent in this meeting. The MPC also decided to continue with the neutral stance of monetary policy as it provides flexibility to monitor the progress and outlook on disinflation and growth and to act appropriately. The MPC remains unambiguously focused on a durable alignment of inflation with the target, while supporting growth.

Shri Saugata Bhattacharya, Dr. Rajiv Ranjan, Dr. Michael Debabrata Patra and Shri Shaktikanta Das voted to keep the policy repo rate unchanged at 6.50 per cent. Dr. Nagesh Kumar and Professor Ram Singh voted to reduce the policy repo rate by 25 basis points.

Dr. Nagesh Kumar, Shri Saugata Bhattacharya, Professor Ram Singh, Dr. Rajiv Ranjan, Dr. Michael Debabrata Patra and Shri Shaktikanta Das voted for continuing with the neutral stance of monetary policy and to remain unambiguously focused on a durable alignment of inflation with the target, while supporting growth.

The minutes of the MPC's meeting will be published on December 20, 2024.

The next meeting of the MPC is scheduled during February 5 to 7, 2025.

**BI-MONTHLY MONETARY POLICY STATEMENT
(DECEMBER 4-6) 2024~25**

Statement on Developmental and Regulatory Policies

Statement on Developmental and Regulatory Policies

This Statement sets out various developmental and regulatory policy measures relating to (i) Liquidity and Financial Markets; (ii) Regulation; (iii) Communication; (iv) Financial Inclusion; (v) Payment Systems; and (vi) Fintech.

I. Liquidity and Financial Markets

1. Reduction in Cash Reserve Ratio

It has been decided to reduce the cash reserve ratio (CRR) of all banks by 50 bps in two equal tranches of 25 bps each to 4.0 per cent of net demand and time liabilities (NDTL) with effect from the fortnight beginning December 14, 2024 and December 28, 2024, respectively. This will restore the CRR to 4 per cent of NDTL, which was prevailing before the commencement of the policy tightening cycle in April 2022. This reduction in the CRR would release primary liquidity of about ₹1.16 lakh crore to the banking system.

2. Interest Rates on FCNR(B) Deposits

At present, interest rates on Foreign Currency Non-Resident Bank [FCNR(B)] deposits are subject to ceilings of Overnight Alternative Reference Rate (ARR) for the respective currency/swap, plus 250 basis points for deposits of 1 year to less than 3 years maturity and overnight ARR plus 350 basis points for deposits of 3 years and above and up to 5 years maturity. In order to attract more capital inflows, it has been decided to increase the interest rate ceilings on FCNR(B) deposits. Accordingly, with effect from today (December 6, 2024), banks are permitted to raise fresh FCNR(B) deposits of 1 year to less than 3 years maturity at rates not exceeding ARR plus 400 bps and deposits with maturity between 3 to 5 years at rates not exceeding ARR plus 500 bps. This relaxation will be available till March 31, 2025.

3. Expanding reach of FX-Retail Platform through linkages with Bharat Connect

With the objective of bringing greater transparency and fairness in the pricing of foreign exchange for users, especially for individuals and the Micro, Small and Medium Enterprises, the Clearing Corporation of India Limited (CCIL) launched the FX-Retail platform in 2019. Presently, the FX-Retail platform is accessible through an internet-based application. To expand the reach of FX-Retail platform and enhance user experience, it is proposed to facilitate the linking of the FX-Retail platform with Bharat Connect (earlier known as Bharat Bill Payment System) operated by the NPCI Bharat Connect. The linkage will enable users to register and transact on the FX-Retail platform through the apps of banks (mobile applications, internet banking etc.) and non-bank payment system providers, which are integrated with Bharat Connect. In the first phase, it is proposed to implement a pilot facilitating purchase of US Dollar against the Rupee by individuals and sole proprietors. Going forward, the scope will be expanded to cover other FX transactions including sale of US Dollar against the Rupee and other categories of users. Users will continue to have the option to directly access the FX-Retail platform, as hitherto, and transact under the existing mechanism. Instructions to banks on the operational aspects of the pilot will be issued separately.

4. Introduction of the Secured Overnight Rupee Rate (SORR) – a benchmark based on the secured money markets.

The Reserve Bank had set up the Committee on the MIBOR Benchmark (*Chairperson: Shri Ramanathan Subramanian*) to review the Rupee interest rate benchmarks in the country, especially the usage of Mumbai Interbank Outright Rate (MIBOR), and to examine the need for transition

to new benchmarks. The Committee recommended several important measures to further develop the interest rate derivative market and improve the credibility of interest rate benchmarks. The Report of the Committee was published on RBI's website inviting comments from members of the public. The Reserve Bank has examined the recommendations of the Committee as well as the feedback received. In line with the recommendations and reflective of the current market dynamics, it is proposed to develop a benchmark based on the secured money markets (both basket repo and TREP) – the Secured Overnight Rupee Rate (SORR). Financial Benchmarks India Limited (FBIL) is being requested to take the proposal forward. The other recommendations of the Committee are under consideration.

II. Regulation

5. 'Connect 2 Regulate' – An Initiative for Open Regulation.

Reserve Bank has been consistently following a multi-pronged consultative process with stakeholders in framing its regulations. As a further pro-active step towards the same, the Reserve Bank proposes to launch a programme named 'Connect 2 Regulate' under the ongoing RBI@90 commemorative events. A dedicated section in the Reserve Bank's website will be made available for the programme. This shall provide an opportunity to the stakeholders to share their ideas and inputs in the form of case studies/concept notes, etc. on the topics announced by the Reserve Bank from time to time. A press release on the programme will be issued separately.

III. Communication

6. Introduction of Podcast facility as an additional medium of communication

The Reserve Bank of India has been deploying traditional as well as new age communication techniques as a key part of its toolkit to ensure transparency and greater impact of its decisions,

explain the rationale behind its decisions, and disseminate various awareness messages to a wider audience. The Reserve Bank has been expanding the scope of its public awareness activities including through social media over the last few years. In continuance of this endeavour, the Reserve Bank proposes to launch podcasts for wider dissemination of information that is of interest to the general public.

IV. Financial Inclusion

7. Collateral-free Agriculture Loan – Enhancement of Limit

At present, banks are required to extend collateral-free agriculture loans up to ₹1.6 lakh per borrower. This limit was enhanced from ₹1 lakh, set in the year 2010 to ₹1.6 lakh in the year 2019. Keeping in view the overall inflation and rise in agricultural input costs since then, it has been decided to raise the limit for collateral-free agriculture loans from ₹1.6 lakh to ₹2 lakh. This will enhance coverage of small and marginal farmers in the formal credit system. The circular to this effect will be issued shortly.

V. Payment Systems

8. Pre-sanctioned Credit Lines through UPI – Extending the scope to SFBs

In September 2023, the scope of Unified Payments Interface (UPI) was expanded by enabling pre-sanctioned credit lines to be linked through UPI and used as a funding account by Scheduled Commercial Banks excluding Payments Banks, Small Finance Banks (SFBs) and Regional Rural Banks.

Credit line on UPI has the potential to make available low-ticket, low-tenor products to 'new-to-credit' customers. SFBs leverage a high-tech, low-cost model to reach the last mile customer and can play an enabling role in expanding the reach of credit on UPI. It is, therefore, proposed to permit SFBs to extend pre-sanctioned credit lines through the UPI. Necessary guidelines will be issued shortly.

VI. Fintech

9. Framework for Responsible and Ethical Enablement of Artificial Intelligence (FREE-AI) in the Financial Sector – Setting up of a Committee

The financial sector landscape is witnessing paradigm shifts with the advent of frontier technologies. Technologies like Artificial Intelligence (AI)/ Machine Learning (ML), tokenisation, Cloud Computing hold transformative potential for the financial sector as they can handle enormous volumes of data, automate complex processes, enhance decision-making, and bring in unprecedented efficiencies. While the benefits are many, the attendant risks like algorithmic bias, explainability of decisions, data privacy, etc., are also high. To harness the benefits, it is critical to address the attendant risks early in the adoption cycle.

As a step in this direction, it is proposed to constitute a committee to develop a Framework for Responsible and Ethical Enablement of AI (FREE-AI) in the Financial Sector. The Committee will comprise of experts from diverse fields and shall recommend a robust, comprehensive, and adaptable AI framework for the financial sector. The details of the committee will be notified separately.

10. AI solutions to identify mule bank accounts - MuleHunter.AI™

The Reserve Bank has been taking various measures in coordination with banks and other stakeholders to prevent and mitigate digital frauds in the financial sector. These include RBI guidelines to regulated entities for strengthening cybersecurity, cyber fraud prevention and transaction monitoring. Use of money mule accounts is a common method adopted by fraudsters to channel proceeds of frauds. The Reserve Bank is currently running a hackathon on the theme "Zero Financial Frauds" which includes a specific problem statement on mule accounts, to encourage development of innovative solutions to contain the use of mule accounts. Another initiative in this direction is the AI / ML based model called MuleHunter.AI™, being piloted by Reserve Bank Innovation Hub (RBIH), a subsidiary of Reserve Bank. This model enables detection of mule bank accounts in an efficient manner. A pilot with two large public sector banks has yielded encouraging results. Banks are encouraged to collaborate with RBIH to further develop the MuleHunter.AI™ initiative to deal with the issue of mule bank accounts being used for committing financial frauds.

SPEECHES

Balancing Inflation and Growth: The Cardinal Principle of Monetary Policy
Shri Shaktikanta Das

New Frontiers in Economic Research
Michael Debabrata Patra

Communicating Monetary Policy
Michael Debabrata Patra

Strengthening the IBC Framework for Effective Resolution
Shri M. Rajeshwar Rao

Mitigating Climate Change Risks and Fostering a Robust Ecosystem for Sustainable Finance
Shri M. Rajeshwar Rao

RBI: Navigating 90 Years of Legacy, Regulation, and Aspiration
Shri M. Rajeshwar Rao

Catalysing Inclusive Growth: Strengthening Partnerships for Reaching the Last Mile
Shri Swaminathan J

Supervision amidst Emerging Risks
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Balancing Inflation and Growth: The Cardinal Principle of Monetary Policy*

Shri Shaktikanta Das

I am delighted to welcome you all to this 'High-Level Policy Conference of Central Banks from the Global South'. This conference has been organised as part of the commemoration of the 90th year of the Reserve Bank of India since its establishment in 1935. Since then, the Reserve Bank has established itself as a credible public institution in India. This landmark event provides a unique forum to deliberate on current policy challenges from the vantage point of the Global South. This event is also a part of various conferences and seminars which we have organised this year. These include three international conferences, this being the third one. The first international conference was on 'Digital Public Infrastructure and Emerging Technologies' held in Bangalore in August 2024. The second conference was held in New Delhi in the month of October 2024 on the theme 'Central banking at Crossroads'. The theme of today's conference is specifically dedicated to issues critical to the central banks of the global south. We are extremely happy that all of you from the global south and other parts of the world are here with us to participate in this conference. Depending on your feedback and interest, we propose to make this an annual event whereby we will assemble together central bankers from the global south with focus on sharing each other's experiences and dealing with the emerging challenges given the kind of uncertainties that we face.

Over the last few years, the world economy has gone through multiple crises: a global pandemic; supply chain disruptions and realignments;

geopolitical conflicts and wars; a global surge in inflation; geoeconomic fragmentations in trade, technology and capital flows; debt sustainability challenges; and visible impacts of climate change. Together, they have posed humongous challenges for all central banks, including those of us in the Global South.

This conference gives us an opportunity to learn from each other's experience and reflect upon our respective journeys over the past few years. In my address today, I propose to focus on three challenging areas of policymaking and implementation, which, I feel, contain useful lessons for the Global South. These are (i) balancing inflation and growth; (ii) monetary policy communication; and (iii) crisis management. In each of these areas, I shall first present the Indian perspective and then highlight certain issues relevant for the Global South.

Balancing Inflation and Growth

The FIT Framework

The period since the onset of the pandemic is an example of how the Reserve Bank of India could effectively maintain balance between price stability and growth within the space provided by the flexible inflation targeting (FIT) framework. The flexibility of this framework is embedded in the law itself, which defines the objective of monetary policy, namely, to maintain price stability while keeping in mind the objective of growth. Thus, while primacy is accorded to price stability, the law enjoins upon the Reserve Bank to pay due regard to growth considerations also. There is also a tolerance band around the target to accommodate supply shocks, forecast errors and measurement issues. Further, inflation target is spelt out in terms of average rather than on month-to-month basis. Failure is defined as breaching the target for three consecutive quarters. As monetary policy is forward-looking, the aim is to keep future inflation aligned to the target.

* Address by Shri Shaktikanta Das, Governor, Reserve Bank of India "High-Level Policy Conference of Central Banks from the Global South Building Synergies" Mumbai, November 21, 2024.

Monetary policy involves taking considered call with a degree of judgement in the best interest of the economy. How much weight is assigned to a particular objective - inflation or growth - depends on the assessment of risk it imposes on the balanced path of the economy. When the COVID-19 hit the Indian economy, it was crucial to support the economy to avoid greater damage, not only in the short-term but also in the long-term. We, therefore, used the flexibility embedded in the framework to focus on reviving growth as we looked through inflation spikes which were assessed to be transitory and driven by supply shocks. In hindsight, we were correct in our assessment since inflation receded, as supply chains normalised and the pandemic subsided. Incidentally, to set the record straight, the Reserve Bank had started the cycle of rate cuts one year before the pandemic as economic growth was slowing down while inflation remained aligned to the target.

We had not even come out of the shadows of the pandemic when the Russia-Ukraine war started and drastically affected the policy calculus. The war-induced price pressures in key commodities, especially energy, edible oil and food, together with domestic drivers such as weather disturbances pushed inflation higher than the upper threshold of our target. This presented a situation in which inflation became a much bigger concern, even as growth impulses were getting stronger. We responded to the need of the hour by changing the stance to withdrawal of accommodation, followed by frontloaded rate hikes. Therefore, whether it was the pandemic-induced growth slowdown or the war-induced surge in inflation, monetary policy responded appropriately to address both the objectives of inflation and growth. The overarching priority was to achieve a balance between inflation and growth. The timing of each and every policy measure, especially when there was a change of course, was also equally important. While taking these measures, we were very much mindful of the issues pertaining to financial stability. What

implications our policies would have on the aspect of the overall financial sector stability was also kept uppermost in our mind – i.e. the trade offs, complexity of challenges, which I think every central bank in the world and particularly, in the global south, is faced with while taking such decisions.

Role of Complementary Policies

The 2020–23 period was unique in view of the incidence of multiple and overlapping shocks to food and oil prices, which challenged the conduct of monetary policy. It was necessary to neutralise the impact of these shocks through effective coordination with fiscal policy. While monetary policy worked on anchoring inflation expectations and containing demand-pull pressures, effective supply management by the government alleviated supply chain pressures and moderated cost-push inflation. Thus, effective fiscal-monetary coordination was at the core of India's success in the face of a series of adverse shocks. From this perspective, macroeconomic stability becomes a shared responsibility of both monetary and fiscal authorities.

Major structural reforms undertaken in India in recent years, in particular the introduction of the FIT framework, implementation of the nation wide goods and services tax (GST) and enactment of the Insolvency and Bankruptcy Code (IBC) brought about a paradigm shift in the Indian economy and helped in raising the medium and long-term growth potential of India. Resilient growth has given us the space to focus on inflation to ensure its durable descent to the 4 per cent target. A stable inflation or price stability is in the best interest of the people and the economy. It acts as a bedrock for sustained growth, enhances the purchasing power of the people and provides stable environment for investment.

Relevant Issues for the Global South

(i) Importance of Growth and Price Stability

The Global South faces more difficult growth-inflation trade-offs. First, unlike advanced economies,

these countries have a lot of catching up to do to increase their per capita income and productivity. Therefore, growth is a fundamental necessity for these countries, but it cannot be and should not be at the cost of price stability. To achieve higher growth, countries in the Global South need to step up investment in physical and social infrastructure, leverage technology and innovations, and carry out institutional reforms. All these require congenial public policies, including monetary policy, to be growth supportive, while maintaining balance with inflation.

In fact, price stability is just as crucial as growth to enable economic agents to plan ahead, reduce uncertainty and inflation risk premium, encourage savings and investment, all of which provide a boost to the potential growth rate of the economy. Thus, in the long-run, price stability supports sustained high growth. Price stability is also important because high inflation is disproportionately burdensome on the poor.

(ii) Fiscal-Monetary Coordination in balancing Inflation and Growth – Why is it important for the Global South?

Another aspect of managing the balance between growth and supply driven inflation relates to the role of fiscal-monetary coordination. This is very important for countries of the Global South, which have a significant share of low-income population with large developmental needs. They are most vulnerable to supply shocks, needing fiscal support which puts further burden on the limited budgetary resources of these countries. In this context, the Indian experience in managing supply side inflation through effective fiscal monetary coordination could be a learning template for all of my fellow central bankers from the Global South.

Central Bank Communication

Over the last few decades, central bank communication has undergone a transformation – from being cryptic and obfuscating prior to the 1990s

to being eloquent and prescient in recent times. There has been greater realisation that monetary policy, in essence, is the art of managing expectations and its effectiveness is enhanced through active and more lucid communication.

At the Reserve Bank of India, we have actively used communication to anchor expectations. When conditions warranted, we combined rate and liquidity operations with appropriate forward guidance for greater effectiveness of our policies. For instance, we provided both state- and time-based forward guidance of continuing with the accommodative stance of monetary policy during the pandemic to support growth. In the tightening phase, which commenced in April-May 2022, the nature of communication was appropriately finetuned to ensure successful transmission of policy rate hikes. When we took a pause on the policy rate in April 2023 after having raised it by 250 basis points, it was important to anchor market expectations from running ahead or front running the central bank. It was, therefore, emphasised that it was a pause and not a pivot. This was to ensure that past rate actions were transmitted fully to the broader economy. The focus was on anchoring inflation expectations by emphasising our firm commitment to re-align inflation with the target. We also categorically said that it is not enough to be within the tolerance band and that our job is not finished until we reach the target of 4 per cent on a durable basis.

Communication – Why it is Important for the Global South?

In countries of the Global South, communication assumes greater significance and new dimensions. For the countries of the Global North, it was linked more to the exhaustion of conventional policy space once they reached the policy lower bound in the aftermath of the Global Financial Crisis (GFC). This led to the adoption of forward guidance as a powerful tool to guide the expectations of the public. For countries

of the Global South, the focus on central bank communication is a more recent phenomenon and has been associated with a variety of factors in line with their macroeconomic, socio-economic, institutional and developmental stages. Let me elaborate.

First, the role of communication has increased with the transition of the economies of the Global South towards establishing more independent central banks and the associated need for transparency in the interest of democratic accountability to the public. The adoption of inflation targeting by some of us since the turn of the century further necessitated effective and transparent communication to explain policy regime changes, institutional environment challenges and also to guide expectations.

Second, as central banks in these emerging market and developing economies gained greater independence in their sphere of operations, they realised the need for communication to adequately explain policy decisions, especially in the context of multiple objectives of growth and stability. Further, in periods after the GFC and the pandemic, monetary policy easing in advanced economies increased the exposure of the Global South to large swings in capital flows, exchange rates and commodity prices. This has further complicated the tasks of central banks to explain policy trade-offs amidst continuing volatility.

Third, there is growing recognition that effective communication obviates the need for large or frequent policy changes, or even any changes at all, if the inflation expectations are well anchored through appropriate communication. Of course, communication has to be backed by actual action as may be required from time to time.

Overall, effective communication in sync with the conduct, stance and goals of policy would contribute to fostering macro economic stability. Learning from each other's experience and building synergies in this important aspect of monetary policy can go a long

way in laying out the blueprint for 'Best Practices in Communication for the Global South'.

Perspectives in Crisis Management

I have briefly touched upon our tempestuous journey while navigating the crisis-ridden years. Let me now briefly summarise how the Reserve Bank's experience has been unique among central banks. When the COVID 19 pandemic struck, we reduced the policy repo rate, but not below our inflation target of 4 per cent which would have made real policy rates negative; thus, we were not ultra-accommodative. We took conventional and unconventional measures to address liquidity constraints created by COVID-19 related dislocations and lockdowns. These measures were not just aimed at enhancing the overall liquidity in the system, but ensuring its distribution across the needy sectors. These measures were not open-ended. In fact, most of them were time bound and announced with pre-set terminal dates. As a result, their unwinding did not cause market disruption. Further, the counterparties involved in our liquidity operations were only banks and All India Financial Institutions (AIFIs) regulated by the Reserve Bank with no dilution of collateral standards. The Reserve Bank of India's balance sheet was not diluted and I am happy to share that within three years or so of the commencement of the pandemic, the size of the Reserve Bank's balance sheet had again come back to where it was at the beginning of the pandemic. In other words, the liquidity infusion during the pandemic had been pulled back due to the fact that the liquidity measures were not open ended. They had terminal dates announced at the time of their announcement. In fact, if you recall, the COVID-19 pandemic hit most parts of the world in March 2020. We had actually started the process of infusing a bit of liquidity even before the pandemic in the month of February 2020. In January 2021, we slowly started unwinding various measures to drain out the excess liquidity in the system in terms of the revised liquidity management framework of February 2020.

If you recall, earlier in my address today, I had mentioned about the importance of timing of decisions. I would like to emphasise that not only the decisions have to be right but the decisions have to be timed well because, as I have pointed out elsewhere very recently, often central banks are accused of doing too little too late or too much too early. Therefore, timing is a crucial aspect of every decision making and a well-timed decision enhances its effectiveness. That is something which, as central bankers, is our responsibility. We should have a correct assessment or at least endeavour to have a correct assessment of the current situation and the expected situation or the outlook and suitably time our decisions.

We confined our asset purchase programme to government securities and solely through the secondary market, unlike some inflation targeting EME central banks that made emergency provisions to operate in the primary market to finance the government directly. It was a considered and prudent decision by the Reserve Bank and the Government of India to avoid monetisation of fiscal deficit, a practice which was discontinued by the Reserve Bank in the late 1990s. Also, the resolution frameworks for COVID-19 related stressed assets of banks and non-bank lenders were not open ended, but were subject to certain financial and operational parameters to be achieved as part of the loan restructuring process.

It may be observed that most of our pandemic time measures were nuanced, keeping in mind the price and financial stability challenges that may arise in future. Just as the liquidity measures we announced were not open ended, similarly, for the resolution frameworks for stressed loans, we had set certain operational and financial parameters to ensure that the resolutions were prudent and specific to the requirements of the borrowers.

During the tightening cycle in the aftermath of the war in Ukraine, our actions also stood out in contrast to many other central banks. First, the quantum of our

rate hikes was not as high as those of several advanced economies (AEs) where 75 bps became the new normal, as they had negative or near negative interest rates for quite sometime. Second, while changing the stance of monetary policy, our pitch was not as shrill as that of AEs. Our communication was nuanced and focused on building market confidence on the central banks' unambiguous commitment to align inflation with the 4 per cent target. Third, we refrained from giving any forward guidance on the terminal rate in the prevailing cycle, given that such guidance was inherently risky in an uncertain environment. Fourth, even while pausing on the policy rate, we continued with the restrictive stance till we achieved a balance between inflation and growth.

Summing up, in designing our response to both the pandemic and the inflation upsurge, we have not been tied down by conventional theory or any kind of dogma. We were nimble and flexible in our actions and policies. To quote an eminent economist "*Good policy requires combining the science of the economist with the art of the practitioner*".¹ In that sense, through our actions we have perhaps lived up to the maxim that says "*monetary policy is science but monetary policy making is an art.*" It is, however, for others to judge.

Conclusion

Let me now conclude. While the global economy has managed to hold its ground in the highly stormy weather of the last few years, clouds of uncertainties still loom on the horizon. Policymaking in this environment of heightened uncertainty is akin to driving a car through a foggy path ridden with speedbumps. These are conditions which will test the driver's patience and skill. Historical regularities are looking improbable, and policymakers are being put to test. When the history of our times is written, the experiences and learnings of the last few years will, in

¹ C. E. Walsh (2001): The Science (and Art) of Monetary Policy, Federal Reserve Bank of San Francisco (FRBSF) Economic Letter, May 4, 2001.

all probability, be a turning point in the evolution of central banking.

For the countries of the Global South, maintaining overall stability which includes sustained growth, price stability and financial stability continues to be a daunting challenge. Central banks need to work towards more robust, realistic and nimble policy

frameworks that use monetary, prudential, fiscal and structural policies synergistically to achieve the desired outcomes. I am confident this conference today and tomorrow will throw up important ideas and takeaways for charting out a future course for the Global South. I wish the conference all success.

Thank You. Namaskar!

*New Frontiers in Economic Research**

Michael Debabrata Patra

Governor Mr Ahmed Munawar, Maldives Monetary Authority (MMA), Dr Mahamood Shougee, Chancellor of the Maldives National University, Mr Ahmed Imad, Deputy Governor, MMA, other senior colleagues of the MMA, distinguished presenters and panelists and participants, ladies and gentlemen, good morning to all of you.

It is an honour for me to be invited to give the keynote address at this two-day Annual Research Conference of the MMA that is aptly themed: Advancing Economic Research: Policy and Innovation for a Sustainable Future. The impressive line-up of papers to be presented in the conference will shine light on to this topical theme. In my address today, I wish to focus on some new frontiers in economic research and their relevance for policy making globally, but with a focus on the Global South.

Economic inquiry is characterised as the spirit of exploration in a continual quest to understand the invisible hand that transforms livelihoods, shapes societies, and defines humanity's aspirations. In that sense, economists have always been cartographers of unyielding trade-offs and impossible trinities in their profession of studying mankind in the ordinary business of life, as Alfred Marshall famously defined economics. The lives of economists are complicated by the fact that underneath their feet, the ground is always shifting and reshaping economic constructs, information stocks and flows, and available tools. Today, we stand on the cusp of an era being redefined

* Keynote Address delivered by Michael Debabrata Patra, Deputy Governor, Reserve Bank of India (RBI) in the Maldives Monetary Authority (MMA) Research Conference on December 14, 2024 at Male, Maldives. Valuable comments received from Pallavi Chavan, Binod B Bhoi, Harendra Behera, Soumasree Tiwari, Ranjeeta Mishra, Sakshi Awasthy, Kausat Sarkar, Purna Banerjee, Nisha Mishra, Sandeep Kaur, and editorial help from Vineet Kumar Srivastava are gratefully acknowledged.

as much by the boundless possibilities of technology and innovation as the risks of climate change and deglobalisation. For the economics profession, therefore, as the Greek philosopher Heraclitus remarked, "*Change is the only constant.*"

Our research has to adapt not only to today's tectonic shifts but also to new frontiers to be traversed tomorrow. Against this backdrop and in the interest of time, I will focus on four emerging areas of research that, I believe, will redefine human behaviour and hence economic research.

I. Redefining Technology Shocks in Economic Models

The rapid spread of digitalisation has been transformative, reshaping the way we live and work, the interactions between economic agents, production processes and market structures. Digitalisation can be regarded as a long-term technology shock impacting economic growth, productivity, labour markets, older technologies and inflation. It is estimated that the global digital economy already accounts for more than 15 per cent of global GDP.¹ Generative artificial intelligence (Gen-AI) alone is projected to boost global GDP by \$7-10 trillion over the next three years.² To capture these evolving dynamics, empirical research methodologies must evolve to be able to understand and assess the underlying relationships and implications.

Despite the potential of digital technologies to drive productivity through efficiency, growth has consistently fallen short of expectations. This has given rise to antithetical scenarios of slow innovation diffusion.³ Recent studies have deepened the debate, highlighting the uncertainty around AI's impact on

¹ United Nations. (2023). Opening Session of Global Development Initiative Digital Cooperation Forum.

² JP Morgan. (2024). *Is Generative AI a Game Changer?*

³ Brynjolfsson, E., and McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. WW Norton & Company; Haldane, A. (2017). *Productivity Puzzles*. Speech at the London School of Economics; Summers, R. H. (2013). *Speech at the IMF 14th Annual Research Conference in Honor of Stanley Fisher*. International Monetary Fund, 8.

productivity and economic growth.⁴ This productivity puzzle could be pointing to research gaps in growth decomposition models as well as in the received wisdom in explaining sectoral productivity shifts and the distributional effects of technology shocks across regions and income groups.

Digitalisation's long-term impact on employment appears benign so far, but its disruptive effects on labour markets have drawn considerable attention.⁵ Population ageing may further accelerate adoption of digital technologies. With AI set to affect 40 per cent of global jobs, education, retraining and social safety nets will be crucial.⁶ Within central banks too, recruitment and retention of FinTech talent are becoming major challenges, with 64 per cent struggling to recruit and 68 per cent facing retention issues.⁷ The ambit of research need to expand to examine digitalisation-driven labour reallocation, job-matching efficiency, new vistas of job creation such as in data science, and digitalisation's role in boosting female workforce participation through remote-friendly jobs.

Digitalisation's impact on economic variables relevant to monetary policy requires close monitoring, particularly its effect on inflation due to differences between online and offline prices, potentially steepening the Phillips curve, and hence, warranting a reassessment of traditional inflation models.⁸ Research interest is being drawn to examining how financial innovations like digital payments, FinTech, central bank digital currencies (CBDCs) and AI can reshape monetary policy transmission and affect financial stability. Dynamic

⁴ Goldman Sachs. (2024). Gen AI: Too Much Spend, Too Little Benefit Report.

⁵ ECB. (2021). Digitalisation: Channels, Impacts and Implications for Monetary Policy in the Euro Area.

⁶ IMF. (2024). *Gen-AI: Artificial Intelligence and the Future of Work Report*.

⁷ 33 banks participated in the survey. Source: Central Banking Institute. (2024). Fintech Benchmarks 2024 - The Promise and Threat of AI.

⁸ Ari, M. A., Garcia-Macia, M. D., & Mishra, S. (2023). Has the Phillips Curve Become Steeper? IMF, WP/23/100.

methods and big data analytics like web-scraping, text mining, large language techniques and machine learning frameworks (e.g., tree-based models and neural networks)⁹ are becoming vital for macro-financial analysis and monetary policy tech.

II. Climate Change and Macroeconomic Stability

Climate change is manifesting itself at an alarming scale and pace globally. It is affecting growth and price stability through supply shocks such as food and energy shortages and through a decline in productive capacity. Recurrent climate-related shocks are leading to inflation volatility, unanchoring inflation expectations. Demand shocks also arise due to the loss of wealth of firms and households on account of frequent natural disasters, with attendant financial stability risks. Physical and transition risks can affect the balance sheets of financial institutions and banks, limiting the flow of credit to the real economy. In fact, transition risks can operate through multiple channels, exacerbating traditional risks in all categories, including credit, market, liquidity, operational and reputational risks for banks and financial institutions. Mitigation and green transition policies such as carbon pricing can also affect price stability, potentially precipitating large and long-lasting movements in relative prices and shifts in trend inflation. Depreciation pressures on currencies of countries frequently affected by climate disasters can also cause financial instability, higher import costs and negative terms of trade.

The range of policy options available to mitigate climate risks require dedicated research, especially in the context of the complex, non-linear ways in which climate, the real economy, financial systems and markets interact and affect each other. Improved

⁹ Tree-based methods are flexible machine learning algorithms that can tackle a wide range of tasks. Decision trees group individual data points by sequentially partitioning data into finer categories according to specific characteristics of interest. Neural networks' main building blocks are *artificial neurons*, which take multiple input values and transform them in a non-linear way to output a single number – like logistic regressions. Source: BIS. (2024). Artificial Intelligence in Central Banking.

inter-disciplinary macroeconomic modelling is becoming crucial for understanding directions of causality and feedbacks.

III. Globalisation and the Natural Rate of Interest

Monetary policy making has evolved in line with structural changes in the economy and the financial system. Inflation targeting (IT) – the longest surviving modern monetary policy framework - is no exception. This could be attributed to the 'rule-based' principle built into the framework alongside elements of "flexibility" that have evolved in practice. It has been argued while the application of a core set of "scientific principles" has expanded significantly in practice, there remains, and will likely always remain, elements of art in the conduct of monetary policy¹⁰.

One principle followed by central banks in setting policy rates is the natural rate of interest – popularly known as R-star. It is a theoretical benchmark for monetary policy, reflecting the real interest rate that supports the economy at full employment while keeping inflation low and stable. This concept of R-star or the natural rate dates back to 1898¹¹ and currently forms an integral element of modern macroeconomic frameworks. It is argued in a seminal work that "a central bank should seek to close the gaps between actual economic conditions and the economy's potential for output and employment (y-star and u-star, respectively) as well as the gap between the actual real interest rate and the natural rate (R-star), all at the same time to obtain an optimal outcome".¹² The problem is that R-star or any of the other stars in that formulation are fundamentally unobservable. Formal efforts to estimate the value of

R-star¹³ have been refined over the years in terms of estimation approaches as well as by accounting for structural changes and country-specific features.

It is widely believed that historically, R-star has declined, especially in advanced economies, due to factors like aging populations, lower productivity growth, and excess global savings. More recently, however, the view gaining ground is that post-pandemic dynamics – in particular, overlapping shocks - have reversed some of these trends. This is observed, for instance, in the real time measure of R-star released by the New York Fed on its website¹⁴. A better understanding of the reasons behind the post-pandemic reversal and this recent disconnect from history will be useful for monetary policy setting in an uncertain future.

Global economic conditions add complexity to an accurate assessment of R-star. Advanced economies face sluggish growth amidst changing labour market dynamics, stubborn services inflation, and fiscal policy uncertainties, all of which could be imparting upsides to R-star. Emerging and developing economies may be experiencing upward pressure on their R-stars due to stronger economic activity and investment as well as productivity differentials. They, however, face challenges from geo-economic fragmentation and geopolitical uncertainty as well as global supply chain disruptions and financial market volatility. Central banks across the globe are therefore, reassessing how these global factors could be driving shifts in R-star to ensure that monetary policy remains effective in an interconnected world.

IV. Consumption Patterns and their Economic Impact

The rapid progress in information and communication technology (ICT) is contributing significantly to shortening the 'space-time flow' of

¹⁰ Mishkin, Frederic S. (2007). Will Monetary Policy Become More of a Science? *NBER Working Paper 13566*, October.

¹¹ Wicksell, K. (1936). Interest and prices. Ludwig von Mises Institute.

¹² Woodford, M. (2003). Interest and Prices: Foundations of a Theory of Monetary Policy. Princeton University Press.

¹³ Laubach, T. and Williams, John C. (2003). Measuring the Natural Rate of Interest. *Review of Economics and Statistics*. November, Vol. 85, No. 4, pp. 1063-1070.

¹⁴ <https://www.newyorkfed.org/research/policy/rstar>

circulation of capital – allowing it to move faster and grow larger.¹⁵ The growing usage of digital financial platforms and tools is also shaping the behaviour of households in multifarious ways.

First, with the proliferation of digital products and social media platforms, there has been a marked shift from in-person shopping to online shopping. E-commerce is growing rapidly, with online sales accounting for a significant portion of retail sales in many countries. The pandemic gave a distinct push to online shopping, which has sustained its growth momentum even in the post-pandemic period. In 2023, e-commerce accounted for over 19 per cent of retail sales worldwide. Forecasts indicate that by 2027, the online segment will make up close to a quarter of total global retail sales.¹⁶ The global annual retail e-commerce sales growth is projected to reach 9 per cent in 2024 from 6 per cent in 2022.¹⁷ This rise of e-commerce has also led to a shift in favour of digital goods and services.¹⁸ To illustrate, the global number of users of video streaming services has increased from 0.6 billion in 2017 to 1.4 billion in 2024, with a similar uptrend seen for music streaming and digital news services.¹⁹

Secondly, the proliferation of digital consumption has also been accompanied by a shift in saving and investment decisions such as online brokerage accounts, robo-advisors, investment apps and the like, as they are easier, faster and more informed. Digitalisation has also influenced borrowing patterns of households, with greater and easier access to fintech companies for digital loans, and by reducing information asymmetries through a wide range

¹⁵ Digital financial system allows more and larger transactions to be completed in a shorter period. Paraná, Edemilson. 2018. *Digitalized Finance: Financial Capitalism and Informational Revolution*. Leiden and Boston: Brill.

¹⁶ eMarketer; Statista.

¹⁷ eMarketer; Statista.

¹⁸ International Monetary Fund (IMF).2020. World Economic Outlook: A Long and Difficult Ascent. October 2020.

¹⁹ Statista Market Insights.

of sources, including tax returns, electronic toll collection, and bill payments.²⁰

At the same time, these newer technologies pose challenges for monetary and regulatory policy formulation. First, the shift from traditional modes of savings can affect the transmission of monetary policy impulses to the real economy.²¹ Second, central banks need to be vigilant about the possibilities of debt escalation and risk build-up at the household level.²²

Third, there is evidence to suggest that the buy-now-pay-later and credit card-based spending can facilitate immediate consumption, especially for younger generations and lower their savings.²³ Fourth, there can be concerns of mis-selling of financial services to households due to poor digital financial literacy.²⁴

These shifts in consumer behaviour may require central banks and policymakers to transition from traditional macroeconomic models to agent-based modelling, integration of behavioural economics, nowcasting, policy simulations and advanced liquidity stress tests. They also need to equip themselves with cutting-edge computational tools like machine learning and big data analytics to examine the real-time, high-frequency data received from digital platforms.

V. Conclusion

As we journey towards new frontiers of economic research, I am reminded of the words of

²⁰ International Monetary Fund (IMF). 2020. Global Financial Stability Report. October.

²¹ Beck, T., Cecchetti, S. G., Grothe, M., Kemp, M., Pelizzon, L., & Serrano, A. S. 2022. Will video kill the radio star? Digitalisation and the future of banking. European Systemic Risk Board.

²² Pengpeng, Y., Korkmaz, A., Zhichao, A. and Haigang Z. 2022. The rise of digital finance: Financial inclusion or debt trap? *Finance Research Letters*. 47(Part A).

²³ Cornelli, G., Gambacorta, L. and Pancotta, L. 2023. Buy now, pay later: A cross country analysis. *BIS Quarterly Review*, December 4, 2023.

²⁴ Morgan, P., Huang, B. and Trinh, Long. 2019. The need to promote digital financial literacy for the digital age. Policy Brief under T20 Japan Task Force 7. March 31, 2019.

John Maynard Keynes: "*The difficulty lies not so much in developing new ideas as in escaping from old ones*".

Economic research is like exploring a dense forest: each new finding clears a path, but also reveals deeper mysteries. As we prepare, like the starship Enterprise, in the famous sci-fi television series Star Trek, to boldly go where no man has gone before, I am reminded of the words of T.S. Eliot: 'Only those who will risk going too far can possibly find out how

far one can go'. In recent years, economic research is increasingly being equipped with multi-disciplinary frameworks, forward-looking and computationally intensive analytical tools, and high dimensional data. So let us venture into the unknown with a commitment to redefine what is possible, to make the complex comprehensible, and to transform our understanding of the forces that shape human experience.

Thank you.

Communicating Monetary Policy*

Shri Michael Debabrata Patra

Monetary policy announcements are associated with frissons of animated speculation rippling through public discourse. Projections are revised, and the balance of risks are re-tilted. Shadow monetary policy committees take positions in print and in sound bytes. Curve fitting the central bank commences – is it behind the curve? – and accordingly, bird-like postures are conjured to characterise its angle of repose. Markets get poised to reprice, and financial institutions reassess interest margins. Depositors and businesses exert conflicting pulls on public opinion. Questions rent the air on the likelihood of rate movements, by how much, and on shifts in stance.

Underneath the multiple shocks buffeting the global economy, the conduct of monetary policy is undergoing a silent transformation worldwide. In the wake of the pandemic, several central banks have undertaken strategic reviews of their policy frameworks in tacit confirmation of this quiet revolution¹. These reviews have also shed light on the vexed issue of communicating monetary policy which is the theme of my address.

II. The Evolution of Monetary Policy Communication

The history of changes in monetary policy architecture and implementation is best captured in the story of the evolution of the communication

* Opening remarks by Michael Debabrata Patra, Deputy Governor, Reserve Bank of India at the "High-Level Policy Conference of Central Banks in the Global South" organised by the Reserve Bank of India as a part of commemoration of its 90th year on November 21, 2024 at Mumbai, India. Valuable comments received from Indranil Bhattacharya, Binod B Bhoi, G.V.Nadhanael, and Subhadhra Sankaran are gratefully acknowledged.

¹ Coined by Alan Blinder, former Vice Chairman of the Board of Governors of the US Federal Reserve and currently Gordon S. Rentschler Memorial Professor of Economics and Public Affairs at Princeton University, USA.

of monetary policy over the years. Until the early 1990s, secrecy was the byword in the conduct of monetary policy. Central banks used to be shrouded in mystery and they believed that they should be. The conventional wisdom was that monetary policy makers should say as little as possible and say it cryptically. The personal motto of Montagu Norman, the longest serving Governor of the Bank of England (1920-44) has been described pithily: "Never explain, never excuse"². Monetary policy was regarded as an esoteric art with access to it and its proper execution confined to the initiated elite. It was characterised by an inherent impossibility to articulate its insights in explicit and intelligible words and sentences³. In fact, after the Bank of England's rebirth twice in the past century – in 1992 as an inflation targeter, and in 1997 as an independent central bank – a member of its monetary policy committee (2003-06) remembered that inscrutable era when "the stated objective of the Bank of England's press officer was to keep the Bank out of the press and the press out of the Bank."⁴

This monetary mystique was dispelled in February 1994 when the US Federal Open Markets Committee (FOMC) first started announcing its decision on the target for the federal funds rate. Yet, it was not till August 1997 that the Fed publicly acknowledged that monetary policy is formulated in terms of a target for the federal funds rate and put a number to it. Even so, monetary policy communication was characterised by 'constructive ambiguity'⁵ or what has been described as 'mumbling with great incoherence'⁶. Alan Greenspan, then Chair and high priest of this

² B.S. Bernanke (2015). Federal Reserve Communications, Speech delivered at the Cato Institute 25th Annual Monetary Conference, Washington, D.C., November 14.

³ K. Brunner, (1981). The art of central banking, University of Rochester Center for Research in Government Policy and Business Working paper GPB 81-6.

⁴ F. Capie (2010), The Bank of England 1950s to 1979, Cambridge University Press.

⁵ G. E. Corrigan (1990). Testimony to Senate Banking, Housing and Urban Affairs Committee, May 02.

⁶ A. Greenspan (1987). Speaking to a Subcommittee of the US Congress, November-December 1987.

Fedspeak, turned the commitment to opacity into an art form. He perfected a style of speaking regularly while communicating little. On several occasions, he left his audience less informed than before he spoke. There was an underlying rationale to this opaqueness. Greenspan believed that a language of purposeful obfuscation is much better than not responding; or saying, "no comments"; or "I won't answer". The theoretical premise was that the behaviour of rational economic agents, who use all available information to anticipate the future, including the course of monetary policy, could only be influenced through policy surprises.

Paradoxically, it was Alan Greenspan who started the move towards greater transparency and openness in communicating monetary policy. By the early 2000s, he was explicitly managing expectations by stating that "the Fed would keep the Federal funds rate low for a considerable period". This trend was also reflecting broader societal changes. Considerations relating to democratic accountability took precedence over constructive ambiguity. As a public institution operating on delegated authority, the central bank must be fully accountable to the elected representatives of the people. In fact, transparency came to be regarded as an implied corollary of central bank independence. The great transformation came in the wake of the global financial crisis (GFC). With interest rates at the so-called zero lower bound and balance sheets bloated by unconventional ultra-accommodation, communication got elevated to the status of a monetary policy instrument. Forward guidance was actively used by central banks to go beyond the short-term money market rate and directly influence longer-term rates. Terms like 'low for longer' and 'to do what it takes' started populating the language of central banks. Explanation, Engagement and Education had become the three Es of communication⁷ when

the pandemic struck. The lessons of the GFC came in handy during the pandemic when central banks became the first line of defence in an environment of high uncertainty. People looked to central banks for support as well as the reassurance that they would do all they could to prevent loss of livelihood and restore stability in financial markets and institutions. Monetary policy communication performed the role of an anchor in an ocean of fear and vast unknowns.

When inflation checked in from the second half of 2021 and rose to levels not seen since the 1970s and early 1980s, central banks reacted albeit belatedly with large and consecutive interest rate increases. Suddenly, the lessons of the GFC were no longer relevant as terminal rates in this tightening phase could not be communicated in view of the stubbornness of the inflation episode. Testifying before the Senate Banking Committee, when Chairman Jerome Powell was charged with 'gambling with people's lives'; he responded: "will working people be better off if we just walk away from our jobs and inflation rebounds?"⁸ Furthermore, central bank authorities began to speak with increasing fervour and frequency on the need to remain steadfastly anti-inflationary until targets were sighted. Forward guidance stirred up bouts of turmoil in financial markets, and spillovers to emerging markets. In March 2023, financial stress felled banks in some jurisdictions, unwinding of carry trade was triggered in August 2024 and sell offs on recession fears routed markets worldwide in September 2024. Monetary policy communication entered a new phase of its evolution as it encountered lower signal-to-noise ratios and the 'cacophony problem' – too many disparate voices that confuse rather than enlighten the public.

Today, the story of monetary policy communication has come full circle. Following

⁷ A. Haldane, A. Macaulay, and M. McMahon, (2020): The 3 E's of central bank communication with the public, Staff Working Paper No. 847, Bank of England, January.

⁸ Testimony before a U.S. Senate Banking, Housing, and Urban Affairs Committee hearing on "The Semi-annual Monetary Policy Report to the Congress" at Capitol Hill in Washington DC on March 7, 2023.

its strategic review, the Governing Council of the European Central Bank "agreed to modernise its monetary policy communication...to make listening a regular feature of its communication"⁹. An important pillar of the US Fed's review of monetary policy strategies, tools and communication is that the 'Fed listens'¹⁰. It is noteworthy that the RBI has been in listening mode for more than a decade, but more on that later. It is now recognized that communication is a two-way street. It is not just about talking. It is also about listening in order to learn to steer the economy. The louder the central bank talks in these times, the more likely it is to hear its own echo¹¹.

This guided tour through the historical evolution of monetary policy communication yields valuable insights: (a) the principles underlying communication are not cast in stone – communication has to be alive to the state of the economy, the state of the business cycle and societal influences; (b) there are limits to transparency, and trade-offs exist between desirability and feasibility; (c) feedback mechanisms and performance reviews must be built into communication so that central banks listen to the public rather than only speak. In the rest of my address, I will explore how the RBI's monetary policy communication fares against these lessons.

III. How the RBI Communicates Monetary Policy

At the outset, it is fair to say that the RBI's monetary policy communication strategy is constantly evolving as it balances the diverse and strident demands of country-specific stakeholders with global best practices. Furthermore, there are layers in its communication strategy which are shaped and

⁹ ECB Strategy Review (2021). Clear, consistent and engaging: ECB monetary policy communication in a changing world. European Central Bank Occasional Paper Series No 274, December (Revised).

¹⁰ Board of Governors of the Federal Reserve System (2020). Fed Listens: Perspectives from the Public. Washington: Board of Governors, June.

¹¹ H.S. Shin (2017). Can central banks talk too much? Speech at the ECB conference on "Communications challenges for policy effectiveness, accountability and reputation" Frankfurt, November 14.

nuanced by when, what, who, how and how much to communicate.

Information on the objectives, policy framework, decision making, instruments and processes designed for the general public is updated and put out on the RBI's website, with links to key policy rates, statements, transcripts of press conferences and minutes of monetary policy committee meetings. Assessments based on a text-mining approach indicate that the degree of transparency has been progressively enhanced, especially after the adoption of the flexible inflation targeting (FIT) framework¹². Coincident survey-based information adjusted for biases such as backward-looking price assessment, overall sentiments about the economy and the impact of prices of salient items on overall perceptions shows that inflation expectations have also become anchored, and they do track realised inflation¹³. This suggests that monetary policy awareness among the lay public is increasing.

Since the adoption of FIT in 2016, the RBI's monetary policy communication practices have largely mirrored global best practices in terms of publishing the analysis of evolving economic conditions, including outlooks for growth and inflation and the associated risks, and explaining the rationales for policy decisions, both in policy statements and through press conferences, which is followed by the release of the MPC minutes one fortnight after the policy announcement. Unlike some advanced economy central banks, however, the RBI has generally refrained from providing explicit forward guidance on the policy rate, although it has provided both time- and state-contingent forward guidance during the COVID-19 pandemic. During the policy tightening cycle amidst heightened global

¹² Samanta, G.P., and Shweta Kumari (2021) Monetary Policy and Anchoring of Inflation Expectations. RBI Working Paper 03/2021.

¹³ Muduli, S., G.V. Nadhanaik and S. Pattanaik (2022). Assessing Inflation Expectations Adjusting for Households' Biases, RBI Bulletin, December.

uncertainty and overlapping shocks, the RBI was of the view that forward guidance itself could be a source of policy uncertainty undermining policy credibility. Accordingly, it refrained from forward guidance in the policy tightening cycle. Nonetheless, the RBI has emphasised on clarity in communication, while maintaining a balance between both high and low frequency communication of monetary policy.

In recent years, significant emphasis has also been placed on the complementary role of engagement and education in furthering central bank communication. Pre-policy consultations are held with various stakeholders – analysts; economists; academics; banks; industry bodies; and domain experts – followed by post-policy interactions with the media while reaching out to the general public. The article on the "State of the Economy" in the RBI Bulletin every month seeks to provide an updated synoptic view of the economy to the public. Speeches and interviews in various forums by Governor and Deputy Governors seek to sensitise, engage and educate the public about the policy decisions, their rationale and policy challenges. At the same time, central banking research has increasingly focussed on contemporary macroeconomic and policy issues. For instance, the theme-based Report on Currency and Finance (RCF) 2020-21, which dealt with the theme "Reviewing the Monetary Policy Framework" was released before the renewal of the inflation target for the second five-year term; the 2021-22 Report adopted "Revive and Reconstruct" as its theme in view of the devastating impact of the COVID-19 pandemic on the economy; the 2022-23 Report dealt with climate change issues and adopted "Towards a Greener Cleaner India" as its theme to enrich public policy discourse on the emerging subject; and the 2023-24 Report focused on India's digital revolution. On the educational front, the RBI has been conducting competitions for educational institutes, sponsoring short period internships for students and using various electronic

and social media platforms to educate people on the role and responsibilities of the RBI so as to build trust, and gain confidence of the public.

The RBI's communication strategy has been appreciated in recent years. For example, the Bank for International Settlements (BIS) in its 2018 Annual Report noted "...the Reserve Bank of India issues short and simplified press releases for an audience with limited financial literacy. Establishing links with the media, such as through background briefings, is another common tool." Moreover, empirical evidence suggests forward guidance likely played a key role in moderating uncertainty and supporting asset prices during the initial waves of the COVID-19 pandemic, underscoring an important role for monetary policy communication in guiding market expectations in India about the monetary policy stance, including the likely path of policy interest rates.¹⁴ For example, the RBI's decision on October 9, 2020 and the Governor's statement on forward guidance was specific about the duration of the RBI's accommodative stance, contributing to a decline in 10-year rates on the same day.

IV. Conclusion

While the utility of forward guidance at very low policy rates is unambiguously proven, its efficacy at higher rates is questionable. This is consistent with the asymmetric nature of the monetary policy cycle – the way down has a lower bound, but the way up is technically unconstrained by any upper bound. Under heightened uncertainty, discretion in forward guidance has increasingly gained legitimacy among major central banks. Empirical evidence in the Indian context suggests that forward guidance in a policy tightening cycle loses steam as the policy rate increases beyond a threshold.¹⁵

¹⁴ F. Ahmed, M. Binici and J. Turunen (2022): Monetary Policy Communication and Financial Markets in India, IMF Working Paper WP/22/209, October.

¹⁵ M. D. Patra, I. Bhattacharyya and J. John (2023), When Circumspection is the Better Part of Communication, RBI Bulletin, July 17.

Summing up, the optimal level of communication remains the gold standard for all central bankers – too much can create a "signal extraction problem" while too little can keep the markets guessing. As a former Fed Chairman succinctly noted "Monetary policy may be 98% talk and only 2% action but cost of sending the wrong message can be high.¹⁶ In this regard, both the monetary policy framework and its communication need to reflect the inherent uncertainty in policymaking. As noted earlier, forward guidance in a tightening cycle is constrained

but admitting this through communication may undo the intent of policy. In a similar vein, while monetary policy needs to manage inflation expectations, micromanaging them may be counterproductive.¹⁷ In terms of targeting the audience, central banks are still learning how best to communicate with the wider public. It is said that communication is the bridge between confusion and clarity. Central banks must engage in constantly refining and upgrading this "soft skill" to make it effective. As John Powell, the famous composer of film scores, said "Communication works best for those who work at it". Thank you!

¹⁶ B.S. Bernanke (2015). Inaugurating a new blog. The Brookings Institution, Economic Studies.

¹⁷ M. McMahon (2024). Lessons for Monetary Policy Communication: Communication, Getting Through and Expectation Formation. Presentation made at the Reserve Bank of Australia Annual Conference, October.

Strengthening the IBC Framework for Effective Resolution*

Shri M. Rajeshwar Rao

Good Morning Ladies and Gentlemen.

At the outset, I would like to thank Shri Ravi Mital, Chairperson, Insolvency and Bankruptcy Board of India for inviting me to this international conclave on the theme '*Insolvency Resolution: Evolution & Global Perspective*' being held in collaboration with INSOL India. A confluence in the thought processes of policy makers, practitioners and academicians would perhaps help to shape an objective assessment of the resolution & insolvency regime in the country. This should then enable us to chart out a future path for the resolution processes to make it more effective and efficient.

Today, let me begin by reflecting on the role of Insolvency and Bankruptcy Code (IBC) in cleaning up of banks' balance sheets and on the possible ways we could further leverage its potential for the key stakeholders from our perspective, *viz.* the financial creditors. The present insolvency and bankruptcy regime in India was the outcome of the suggestions made by the Bankruptcy Law Reforms Committee headed by Dr. T K Viswanathan. The Committee's recommendations for the new insolvency and bankruptcy resolution system were based on a few core principles namely (i) facilitating the assessment of viability of the enterprise at an early stage; (ii) enabling symmetry of information between creditors and debtors; (iii) ensuring a time-bound process to better preserve economic value; (iv) respecting the

rights of all creditors, with clarity on priority; and (v) ensuring finality of outcomes.

The outcome of the action on these recommendations was the Insolvency and Bankruptcy Code (IBC) of 2016. The code and its related ecosystem have continued to evolve since then, effectively advancing the principles mentioned above. However, its implementation being a function of the broader ecosystem in which it operates, the code has faced various criticisms in its relatively short existence, particularly regarding delays in meeting timelines and unsatisfactory recovery rates, partly due to the misaligned incentives amongst the stakeholders. While several amendments have been made to the IBC since its introduction to address some of these concerns, challenges persist.

Role of IBC in cleaning up of bank balance sheets

As you are aware, asset quality position of the banking system has shown a remarkable improvement over the past few years – specifically, the gross NPAs of the scheduled commercial banks have declined from the peak of 11.2% in March 2018 to 2.8% in March 2024¹. A good part of that reduction is attributable to resolution processes enabled under IBC. If an overall assessment of IBC is made, it shows a significant level of traction as a resolution mechanism. As of September 2024, 8,002 cases² have been admitted into the Corporate Insolvency Resolution Process (CIRP) and approximately 75% of these cases were closed through resolution, withdrawal, review, settlement, or liquidation. Of the closed cases, 56% were either resolved, settled, or withdrawn. In a positive trend, the ratio of resolutions to liquidations has risen from 21% in 2017-18 to 61% in 2023-24. In addition to facilitating resolution outcomes, the IBC has also been effectively used by both financial and operational creditors to encourage borrowers to repay

* Inaugural address delivered by Shri M. Rajeshwar Rao, Deputy Governor on December 7, 2024, at the International Conclave, jointly organised by the Insolvency and Bankruptcy Board of India (IBBI) and INSOL India, in New Delhi. Inputs provided by Vaibhav Chaturvedi, Khabeer Ahmed and Arun Kumar Pachamal are gratefully acknowledged.

¹ RBI Supervisory returns.

² Data referred to in this Speech in respect of various aspects of cases referred under IBC has been compiled from IBBI Quarterly Newsletters.

their debts. By March 2024, 28,818 cases involving an outstanding default amount of ₹10.22 lakh crore were withdrawn prior to admission.

In terms of the powers vested under newly inserted Section 35AA of the Banking Regulation Act, RBI had issued directions to banks in 2017 in respect of 41 entities, which accounted for more than 35% of the banking system NPAs at that point, for filing CIRP applications. So far, resolution plan has been approved in the case of 17 borrowers³, orders of liquidation have been issued in the case of 12 borrowers, settlement was reached by lenders with 2 borrowers; and in 4 cases the lenders have assigned their exposures to ARCs. The aggregate realisation for financial creditors from the 17 resolved cases has been around 50% of admitted claims and 190% of liquidation value.

Financial creditors are now actively leveraging the Code for resolution of stressed assets. As of September 2024, around 633 corporate debtors, where insolvency application was initiated by financial creditors, have been successfully resolved under IBC, yielding an average realization of 30.09% of admitted claims. Further, CIRP applications filed by financial creditors in 702 corporate debtor accounts have been either resolved through appeal/review/settlement or withdrawn under section 12A. Similarly, liquidation orders have been passed in respect of 1224 corporate debtors.

Moreover, the operationalisation of section 227 of the code in 2019 empowered Reserve Bank to leverage the IBC mechanism for resolution of Financial Service Providers (FSPs). Reserve Bank has used this avenue for initiating insolvency proceedings against four FSPs so far and all of them have been successfully resolved as on date. Evidentially, IBC seems to have played a significant role in cleaning up the bank balance sheets.

³ Data compiled by RBI from concerned banks.

Although the IBC has proven to be a valuable tool for creditors, its full potential has been realized only to a limited extent. Let me elaborate on some of the factors that have constrained its effectiveness to give a clearer understanding of why the IBC's potential has not been fully harnessed.

(i) Delay in initiation

Time and Timing are both crucial for the effectiveness of the resolution process. While delays within the IBC process have been widely discussed, an equally important issue is the delay in initiating the IBC process itself. The IBC grants all creditors the right to initiate the CIRP upon default. However, in practice, the average time taken by financial creditors from the date of default to the filing of the CIRP is often several months. A significant amount of value is lost during this period, which ultimately impacts the recovery outcome. In this context, the role of financial creditors is vital—they must take prompt action to prevent further value erosion.

While IBC has gained prominence of late, we need to realise that it is just one amongst the host of mechanisms available for creditors to resolve financial stress. There are other statutory mechanisms for enforcing security, as well as out-of-court workout options for resolution, each with its own role and limitations. From a regulatory perspective, the Reserve Bank remains neutral regarding the mechanisms chosen by lenders, as long as the actions are initiated in a timely manner so as to facilitate the prompt resolution of financial distress.

(ii) Efficacy of out of court workouts

The real success of a formal insolvency framework lies in its role as a deterrent than based on its actual use. It is out of court workout procedures that need to work as the primary instruments of resolution, albeit under the shadow of the formal insolvency framework. In the Indian context, the RBI's Prudential Framework on Resolution of

Stressed Assets provides a viable out of court workout mechanism. This Prudential Framework provides a broad principle-based regime for early recognition of stress and time-bound resolution by the lenders. However, the efficacy of this mechanism has been constrained on account of several factors, including issues with coordination among lenders. What is therefore required is a mechanism to bridge the principle-based resolution approach under out of court workout with that of the statutory umbrella of IBC so that a resolution initiated out of court can be transitioned and get implemented under IBC.

Recognising this requirement, the Pre-Pack Insolvency Resolution Process (PPIRP/pre-pack) was introduced in 2021, aimed at resolution of micro, small and medium sector enterprises (MSMEs), as an alternative to a regular CIRP. The Pre-pack was envisaged to be a panacea for MSMEs as it had all the ingredients to make a successful resolution recipe: debtor in possession, cost-effective, quicker resolution timelines and base resolution plan prepared by the MSME itself. Under the pre-pack arrangement, the MSMEs and creditors have to reach a prior agreement to resolve, before formally entering into pre-pack insolvency process. Despite all the advantages, only ten applications have been admitted under PPIRP so far, out of which one was withdrawn, and resolution plans have been approved in five cases.

The IBBI had established an Expert Committee, which submitted its report in May 2023 on the Creditor-led Resolution Approach under the Insolvency and Bankruptcy Code, 2016. The report suggests converting the current fast-track process under the IBC into a 'creditor-led' and 'out-of-court' insolvency resolution process, similar to the PPIRP, but with key modifications to address challenges observed in the adoption of PPIRP. A suitable framework could be adopted in this regard that would be aligned with the intended objectives without undermining the essence of the IBC.

(iii) Role of Committee of Creditors (CoC)

The IBC assigns a central role to the Committee of Creditors (CoC) in the CIRP. However, this is an area where significant improvements are needed. There have been instances where the CoC's performance has been found lacking in several aspects. These include disproportionate prioritization of individual creditors' interests over the collective interest of the group; disagreements among CoC members on approving a resolution plan due to concerns over undervaluation or perceived lack of viability; disagreements on the distribution of proceeds even when a resolution plan is agreed upon; non-participation in CoC meetings and lack of effective engagement, coordination, or information exchange among members. Instances have been noted regarding insufficient skill sets in areas like corporate finance, legislation, and industry knowledge; and, lastly, the nomination of financial creditors to the CoC are entrusted with responsibilities that far exceed their actual authority.

It is in the larger interest of the creditors that the issues relating to the conduct of the CoC are addressed by the members themselves without waiting for regulatory prescriptions or fiats. However, it is a fact that when incentives are not perfectly aligned, deviations from best practices become the norm. Therefore, we need an enforceable code of conduct for the CoC. Obviously, it would not be possible for the sectoral regulators to enforce this given the diverse set of financial creditors. Ideally, the IBBI, which is the designated regulator under the IBC, should have the powers to enforce norms around the conduct of all stakeholders under the IBC process.

(iv) Role of the Resolution Professional

Another key stakeholder under the IBC ecosystem is the Resolution Professional (RP) whose expertise and proficiency materially impacts the outcome of the resolution process. The resolution professional should have thorough knowledge of the industry, the

business environment, laws in force and should also be adept at financial analysis and management of distressed firms. The aspect of management is very critical here as the RP takes control of the distressed corporate debtor and virtually discharges the duty of the MD/CEO, based on the advice of the CoC. Any shortcomings in the selection and in the action of the RP would be a significant impediment in the process. The code implicitly and explicitly casts lot of operational responsibilities on the RP ranging from collation of claims to finding prospective resolution applicants to providing material inputs to CoC for finalising the resolution plan. However, in many instances, the RP do not enjoy the cooperation of other stakeholders, which impairs the ability of the RP to discharge its duties satisfactorily. It is heartening to note that that IBBI has taken steps to facilitate the training of RPs through the continuing professional education (CPE) programs, trainings, workshops, webinars, and seminars. These steps together with better enforcement of conduct related regulations would go a long way in addressing these issues.

(v) Incentivising resolution professionals

Regulations can set the boundaries for an activity but cannot cover every detail. While regulations have helped create an ecosystem for Resolution Professionals (RPs), their compensation should be determined by the market based on commercial considerations. RPs step in after all attempts to resolve the issue by the debtor and creditors fail, and they take on the important task of managing the debtor's affairs. Managing a corporate debtor under insolvency proceedings requires specialized skills. The market should develop compensation structures for RPs that are tied to the outcomes of the resolution process. This would address the principal-agent issue and align the RP's goals with the CoC, maximizing value for both parties. It would also attract experienced professionals, benefiting the system as a whole.

Way Forward

It has been nearly eight years since the introduction of the code and several large cases have been successfully resolved under the code. Quality data is being generated, out of the insolvency process, which could be used in future as inputs for credit underwriting as well as valuation.

The IBC eco-system would not be complete if it cannot provide a feedback loop to the real economy through a review of experience in resolution or liquidation. A detailed study of enterprises placed under the insolvency process can provide valuable insights if we compile data from such cases. Currently such data is not compiled systematically and is disaggregated, mostly concentrated with individuals based on their experience and exposure. If this data is collected and institutionalised through a structured process, it can give us valuable insights and precedents on how to proceed in complex cases. Such data therefore needs to be gathered in a structured manner so that it can be disseminated for the benefit of all stakeholders involved.

Leveraging Data...

There are few key areas that could be explored further to improve the overall resolution ecosystem. First, a better understanding of the reasons behind defaults—whether this is on account of the general economic environment, specific industry challenges, or professional mismanagement. This perspective can help to tailor appropriate solutions. Second, addressing the delay resulting from lack of cooperation by some corporate debtors in the insolvency process, such as delay in submitting information, withholding valuable details, using litigation to stall progress, or creating indirect obstacles to discourage potential resolution applicants, is crucial. Finally, examining valuation, including insights on how collateral types affect realization versus valuation, the impact of time

on recovery, and the relationship between resolution timelines and valuation outcomes, could provide us with information which can help us to improve the process. Perhaps better valuation at the time of appraisal is the key. Often the disparity in valuation between the appraisal and the resolution stages is indicative of over exuberance in valuation and possible lack of appropriate due diligence.

...and Technology

With the rise of technology, the payment ecosystem has undergone significant transformation. Fintech service providers are using technology to gain insights into consumer behaviour through the vast payment data generated. Some progress has been made in using technology for loan underwriting, particularly for small borrowers and MSMEs, through cash flow-based models. The next step should be for banks and other stakeholders to use technology to help resolve issues with stressed borrowers. The technology should focus on several key areas like predicting defaults before they happen based on the borrower's data, enabling early corrective action; analysing both structured and unstructured data to identify related party or preferential transactions, saving resources for lenders and resolution professionals; automating routine tasks in post-disbursement credit monitoring, freeing up time for lenders to focus on more complex issues; and reading legal documents and contracts to provide valuable insights for the CoC and resolution applicants when valuing the corporate debtor. As technology and its application evolves on these fronts, there could be significant reduction in effort involved as well as costs associated with the resolution.

Conclusion

I would like to close my remarks with few parting thoughts! It is possible that bankruptcy or liquidation proceedings may be the only way for the company to revive and start afresh. We should, however, look to restructuring and revival of units as the first option and enable it in a quick and time bound manner. There are valuable assets vesting within an enterprise that we as a nation can ill afford to run doing even though as creditors the liquidation process appears as the safer and risk free option. For this it may be necessary to create an ecosystem that encourages revival of the enterprises. While IBC 2016 remains a landmark legislation, that has fundamentally altered the landscape of corporate practices in the country, the onus is on us to ensure that collectively, we harness the potential of the code to create a thriving ecosystem which enables value preservation.

In our journey to improve the resolution frameworks, let us not only look at the perceived obstacles or the roadblocks but also look back at the path we have traversed so far and the learning's along the way. We need to think of measures which can make the code an effective option for unlocking economic value of an enterprise even as we ensure strict enforcement of the provisions of the code in case of recalcitrant or unscrupulous borrowers. The last decade has been a journey of learning, improvements, and growth for all of us who are stakeholders in this process as Regulators, financial institutions or as borrowers. This Conclave should bring out fresh insights as to how to unlock the potential of the Code which will serve to strengthen the financial system, so that it plays its role in fostering a robust growth for our nation.

Thank you and Namaskar.

*Mitigating Climate Change Risks and Fostering a Robust Ecosystem for Sustainable Finance**

Shri M. Rajeshwar Rao

Distinguished Guests, Ladies, and Gentlemen,
Good Morning.

Let me, at the outset, thank the organisers for inviting me here to share my thoughts on climate change, one of the most critical issues we face, not just as individuals, but as the collective global community.

As per the latest report from the Copernicus Climate Change Service's¹, the year 2024 will be the warmest year in the ERA5 reanalysis dataset, going back to 1940. This was also estimated to be the second-warmest October globally, after October 2023 with the average temperatures 1.65°C above the pre-industrial level while also marking it the 15th month in a 16-month period where average temperatures were above the 1.5°C threshold set by the Paris Agreement. Thus, the writing on the wall seems to tell us that unless we collectively take strong action, a grim future lies ahead. The recent tragic events, be it in Valencia, Spain, Wayanad, Kerala, or back-to-back hurricanes in USA, are stark reminders of the perils of climate change that the world at large is exposed to. It impacts our day-to-day lives in one form or other be it through heavy rainfall, flash floods, cyclones, droughts, melting of glaciers, loss of biodiversity, etc., and that too with increased frequency and severity. There can be no doubt therefore that climate change

is going to be a major risk for the financial system, economy, and society at large with risks of severe catastrophic events putting at stake our very survival.

The financial system not only needs to brace up and equip itself to the present and future impacts arising from climate change, but should also play a catalytic role by overcoming the consequent challenges that arise. The biggest challenge faced by us and the Emerging Markets and Developing Economies is lack of adequate financing for development of sustainable technologies and requisite infrastructure to mitigate and adapt to climate change and build a robust sustainable financial system. India looks to be particularly vulnerable to climate change given its geographic location. It is estimated that by the year 2100, climate change could lead to an annual GDP loss of 3% to 10%².

Climate change risks and its impact on the financial system

There are essentially two types of risks emanating from climate change that we need to address: physical, and transition risks. An important consideration in this regard is also adaptation and related risks and measures. Let me delve a little bit into detail.

Physical risks stem from both gradual and sudden climate impacts, such as natural disasters, affecting real assets and financial instruments. These risks cause direct damage to assets, leading to loan losses and collateral damage, as well as indirect costs, including business disruptions, capital replacement, and supply chain issues. These risks can affect trade, fiscal policy, monetary policy, and financial stability, requiring ongoing assessment. Estimating loan losses from physical risks is difficult due to lack of historical data on such losses, as financial institutions have not tracked them. Even the available data is of limited use due to the changing frequency, intensity, and location of physical events making projections based on past

* Keynote address delivered by Shri M. Rajeshwar Rao, Deputy Governor on November 29, 2024, at the International Conference, organised by the Institute of South Asian Studies (ISAS) at the National University of Singapore (NUS), in New Delhi. Inputs provided by Sunil Nair and Saket Kumar are gratefully acknowledged.

¹ The year 2024 set to end up as the warmest on record | Copernicus (<https://climate.copernicus.eu/year-2024-set-end-warmest-record>).

² Report on Currency and Finance, RBI (2023).

data a bit risky. Such data on loan losses is important for financial institutions as they impact credit risk, including the probability of default and loss given default.

Transition risks arise from efforts to mitigate climate change. It arises from the need for transition by the firms and economies as they strive to achieve their net zero targets, which can be disruptive. It could be a result of adaptation to low carbon technologies, as well as change in consumer behaviour, investor preferences about investments to specific sectors. It can also be a fall out of climate related regulations such as carbon pricing and taxes, transparency requirements, products, and service regulations. Thus, the transition risk emerges because of a disconnect arising from the expectations of various economic factors and could lead to rapid economic adjustment costs in a broad range of sectors. It creates uncertainty for firms and investors, which may further lead to financial risks, with its resultant impact on financial stability.

While transitioning is crucial, we cannot overlook the immediate impact of climate events which means that we also need to look at adaptation measures which currently appears to be a missing link as far as climate strategies are concerned. Adaptation involves responding to climate event impacts, which steadily deteriorate the environmental conditions essential for daily living, such as access to water, energy, air quality, and tolerable working temperatures. These conditions can be disrupted by short-term shocks like storms, floods, and wildfires, which have abrupt and devastating effects. We need to look at strategies that minimize loss and damage and adaptation financing is likely to be critical for building economic resilience and fostering sustainable development.

Climate related risks may also lead to macroeconomic impact on households, companies, and sovereigns affecting consumption, production, and investment patterns. Given their exposures to firms whether in the form of credit or investments,

as well as their own operations, these risks impact the financial institutions through traditional risks categories of credit, market, liquidity, and operational risks. These losses may get amplified through interconnectedness among the financial sector players, between the financial and non-financial sectors, as well as within the non-financial sector. The inter-linkages between physical risk and transition risk may also act as a particular source for non-linear risk impacting financial stability. These risks may also get magnified through cross border trade and production interdependencies³.

Regulatory response and challenges

While there is some debate on whether or not climate change is part of a mandate for a Central Bank, the fact that it has a bearing on both price and financial stability means that there is a need for a regulatory response on risks arising from climate change. The impact on the financial system and economy arising from climate change is dependent on the extent of their exposures to these risks and mitigation measures that are in place. The dilemma and challenge faced by the regulators is to not only put in place an enabling ecosystem from prudential perspective but also act as an enabler and facilitator for orderly and sustainable development of the financial system and economy. Given the significant inter-sectoral dependencies, the mitigation of climate change risks not only requires individual sectoral response from regulators, but also inter-regulatory co-ordination.

The Reserve Bank of India has been proactive in its resolve to assess and mitigate the climate change risks that may impact the financial system. Over the last few years, we have taken several incremental measures in this direction. It started with the setting up a dedicated group within the Bank to assess climate change risks and foster a robust ecosystem

³ For instance the proposed Carbon Border Adjustment Mechanism (CBAM) of European Union.

for sustainable finance. This was followed by release of survey on climate risk and sustainable finance covering 34 scheduled commercial banks⁴, Discussion Paper on Climate Risk and Sustainable Finance⁵, followed by release of framework on green deposits⁶. Reserve Bank has been actively engaging with various stakeholders in the financial sector for integration of climate change risks in traditional risk management framework; climate scenario analysis to identify vulnerabilities in their balance sheets; taking steps to ensure adequate flow of credit for mitigation purposes and addressing gaps in capabilities for measuring and managing climate-related financial risks.

One of the measures for setting the expectations and nudging climate change risk mitigation actions within the ecosystem is by prescribing climate disclosure standards. Global standard setting bodies such as International Sustainability Standards Board (ISSB) has been a pioneer in this area and most jurisdictions including India have been making attempts to calibrate their respective disclosures with its prescriptions keeping in view the essentiality of their common but differentiated responsibilities. Reserve Bank had issued a draft disclosure framework for climate related financial risks⁷ for public consultation. Based on the feedback received, the final guidelines are likely to be released shortly. The intent of the disclosure framework is to prepare the regulated entities to identify and build competencies to mitigate climate change risks and not to restrict lending to any particular sector or industry.

Though we may have a broad understanding, we are yet to reach the stage where we can comprehensively assess the risks arising from climate change. The

major challenge for a true assessment of climate change risks is availability of required data⁸. Climate data is characterised by lack of uniform methodology, fragmentation in accessibility, lack of uniformity in publication of data and difference in metrics, units, and formats. There is lack of actual historical loan loss data related to climate risks, hazard data encompassing historical and future forecasts of occurrences of climate events, and sectoral benchmarks for transition to net zero. Currently there is no set practice among financial institutions of labelling loan assets which have gone bad basis any climate risk event. This limits the availability of realistic loan loss data for integration of climate related risks into traditional risk management models to estimate probability of default. It also inhibits the financial institutions from carrying out various simulations and scenario analysis exercises to arrive at realistic future loss estimations. Consequentially, various approximation methods/ data sets are being used at this point to arrive at loan loss data and measure expected future losses.

When we consider physical risk and particularly the hazard data, there is a need for India specific data that can be based on globally accepted range of scenarios. Having said that, the scenarios provided by NGFS and Intergovernmental Panel for Climate Change (IPCC) serve as good starting point to derive India specific results. In the case of transition risks, there is a gap in terms of availability of sectoral transition benchmarks that can be used by financial institutions to gauge the relative transition risks of the firms. Absence of a definitive taxonomy at the national level is also a constraint to determine which sectors need to transition along with an indicative road map for the same. Further, the measurements of Scope 1, 2, and 3 emissions also remain a work in progress.

⁴ Reserve Bank of India - Reports (<https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=1215>).

⁵ <https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/CLIMATERISK46CEE62999A4424BB731066765009961.PDF>

⁶ Reserve Bank of India - Notifications (<https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=12487&Mode=0>).

⁷ https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=57408

⁸ The Network for Greening for the Financial System (NGFS)'s Final report on bridging data gaps highlights availability (e.g., coverage, granularity, accessibility), reliability (e.g., quality, auditability, transparency) and comparability, as issues in climate-related data.

The Scope 3 emissions essentially pertain to upstream and downstream emissions in value-chain for a firm. It should be endeavour of each of the players in the value-chain to take care of their respective Scope 1 and Scope 2 emissions, so that issue relating to Scope 3 is automatically taken care of. It is from this perspective that climate risk related disclosures become very important and hence need for the financial system to capture respective Scope 1 and Scope 2 emissions. This will not only motivate firms towards assessment of their own climate change related risks but prepare the system at large to ward off any systemic issues going forward.

The Reserve Bank of India intends to address the gaps in climate data availability with the creation of the data repository namely, the Reserve Bank – Climate Risk Information System (RB-CRIS), which was announced by the Governor on October 09, 2024⁹. It is envisaged to consist of two parts. The first, a web-based directory, listing various data sources, (meteorological, geospatial, etc.) which will be publicly accessible on the RBI website. Second, a data portal comprising of datasets (processed data in standardised formats). The access to this data portal will be made available to the regulated entities in a phased manner.

Issues and challenges with Sustainable Finance

Here let me flag a challenge in augmenting the scope of sustainable finance. The world and India in specific require considerable amount of funding to achieve the respective net zero targets. Climate change was a topic of heated debate, particularly about availability of adequate climate related finance, at the recently concluded Conference of Parties (COP) 29 in Baku, Azerbaijan, which highlighted two issues, first climate related finance still gets negotiated at international fora and second EMDEs priorities are

still not aligned with the developed nations. Though the agreement proposed to triple the climate finance for EMDEs from the previous goal of USD 100 billion to USD 300 billion annually by 2035, it fell short of EMDEs expectations. India had committed to the COP26, its Panchamrit goals (Nationally Determined Contributions (NDCs)). It is estimated that the funding requirement to achieve these targets ranges around USD 160 billion per year¹⁰.

There are manifold challenges both at national and international levels for the effective flow of sustainable finance. First and foremost is inherent riskiness of the green or sustainable projects/ proposals. At the forefront of climate risk mitigation is going to be the availability of green and sustainable substitutes which requires considerable technological development. Given the fact that, green or sustainable projects are based on relatively newer technologies which are yet to stabilise and are mainstreamed, assessment of financial and techno-economic viability of these projects becomes that much more challenging. This leads to an inherent increased credit risk as compared to traditional projects.

Moreover, when it comes to sustainable finance, in a country such as ours, apart from mitigation, flow of resources for adaptation is equally important. Bankable projects invariably find credit, however there are issues with partially bankable and non-bankable projects, which generally gets associated with adaptation. Several issues in the form of data, knowledge and capacity gaps, technical, and institutional constraints limit the proper identification and development of adaptation projects which limits the access to both international as well as private finance. There is, thus an urgent need to develop an ecosystem to mainstream adaptation finance and to rise above the typical corporate social responsibility linked funding and public investments.

⁹ Reserve Bank of India - Press Releases (https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=58852).

¹⁰ <https://www.iea.org/commentaries/india-s-clean-energy-transition-is-rapidly-underway-benefiting-the-entire-world>

The Government has also been at the forefront in fostering sustainable and climate finance be it Green Hydrogen Mission, National Solar Mission, PM-KUSUM, PM-Suryaghar Yojana, Sovereign Green Bonds, Long-Term low Emission Development Strategy (LT-LEDS) etc. There is a need to further augment these efforts by forging public-private partnerships and look at blended finance options, including the role of Development Financial Institutions (DFIs). Efforts are needed to address commercial viability of projects and related market failures, along-with transparency, integrity, and disclosures. There is a need to collectively think as to how sustainable projects involving new and evolving technologies can be derisked without subjecting the financial system to any spill-over risks. There is also a need for more intense focus on promoting Research & Development in the area of sustainable technologies.

A related area that comes up for discussion at various fora is the non-availability of bankable projects in area of green and sustainable finance. In this context, firstly there is a need to differentiate between the corporate projects and projects related to SMEs/ MSMEs. A sustainable project could range from installation of a renewal power project to something like installation of a solar light on the rooftop of households/ firms. India is witnessing fast paced technological transformation with more and more youngsters setting up start-ups by taking the entrepreneurial route to problem solving. In this context, it is important to showcase such technological innovations which have stood the test of time and contributed towards sustainable development. We may need to consider creation of a green and sustainable asset repository which will showcase the use cases of such technologies for the financial institutions.

Given the quantum of funding required for sustainable finance, besides, other sectoral domestic investment requirements, there is a pressing need to leverage available international climate finance

funds for climate mitigation and adaptation projects. There are two critical elements which can act as great enablers in this process – one is transparency and the other capacity building. Transparency, by means of disclosures, and adequate capacity building will enable both the donors and recipients to assess the involved risks and accordingly tailor the funding requirements. A graded approach needs to be followed for transparency and disclosures, which should be in consonance with the national circumstances. Capacity building needs to be looked at with special focus on increasing technical expertise. We need to build institutional capabilities to foster product innovation and provide technical evaluation support with respect to sustainable finance. These institutional capabilities can then be leveraged by financial institutions and the government machinery to augment credit flow to related sectors and act as a bridge with international funding organisations, DFIs, and MDBs for funding related to sustainable finance.

Conclusion

Climate change risks have started to impact the financial system and are envisaged to pose systemic risks in the coming future. The climate-specific vulnerabilities' interplay with real economy and financial sector vulnerabilities can lead to financial stability risks. In this context, it is essential to build capabilities to ensure correct assessment of these risks and put in place suitable adaptation and mitigation measures. Transparency and capacity building are going to be the key differentiators and we need to collectively move in this direction. We have a huge responsibility ahead of us and I am hopeful that together we will be able to provide a definitive roadmap for sustainable growth and environment for the future generations.

Thank you.

*RBI: Navigating 90 Years of Legacy, Regulation, and Aspiration**

Shri M. Rajeshwar Rao

Governors and senior dignitaries from Central Banks, eminent participants, Ladies and Gentlemen,

I am delighted to be amidst you all at the High-level conference on "Building synergies", organised on this historic occasion as we celebrate the 90th year of our establishment. The conference is a part of our endeavour to develop a meaningful dialogue and foster cooperation on the issues confronting the Central banks of the global south. It gives me an opportunity to share my thoughts with you today, on paths traversed so far and some of the challenges we are likely to face as Regulators going forward.

This year also marks 75 years of our journey as the formal regulator and supervisor of the banking system which flowed from the enactment of the Banking Regulation Act in 1949. Looking back, the formalisation of regulatory powers was a sequel to the large-scale failures of the commercial banks in the mid-1930s and early 1940s and the actions required at that point to safeguard the banking system. The regulatory approach has thus been conditioned and shaped in part by the historical events, deeply intertwined with the Indian growth story.

Traversing the past¹

As you may be aware, RBI is one of the very few institutions in India which came into existence before independence and has straddled both the pre-and-post independence era. The key assignments of the

RBI in its formative years were to regulate the issue of currency, maintain reserves to secure monetary stability, and to operate the credit and currency system to country's advantage.

Even as the RBI was involved in meeting its specified obligations of currency and reserve management, the period of 1930s and 40s witnessed a large number of bank failures in absence of any concrete regulatory jurisdiction or authority. As per broad estimates, more than 570 banks in India failed during 1940s². In this milieu, the Indian parliament enacted Banking Regulation Act ('BR Act'), 1949 to render regulatory and supervisory powers to RBI over the banks. The legal architecture of RBI Act coupled with BR Act provided a solid statutory foundation to the Indian financial system. It also empowered RBI to license the banks and consequently control unwanted mushrooming of institutions in the banking space. Therefore, enactment of BR Act can be considered as one of the most important milestones in the history of Indian financial system.

During the 1950s the regulatory focus continued on consolidation of the banks, while the decade of 1960s bolstered the efforts of institution building, especially in financial sector. For example, legislative amendments were enacted in 1960 to empower RBI for consolidating the banking space, which led to reconstruction and consolidation of over 200 banks in next couple of decades³, and the episodes of frequent bank failures became events of history. Widening the scope of regulatory jurisdiction, RBI was further empowered to regulate deposit taking activities of non-bank entities and operation of cooperatives banking system during this phase. Building upon this momentum, the next few decades following the nationalisation of major scheduled commercial banks in 1969 (and later in 1980) focused on improving the public access to finance and financial institution in

* Opening remarks delivered by Shri M. Rajeshwar Rao, Deputy Governor on November 22, 2024, at the "High-Level Policy Conference of Central Banks in the Global South" organised by the Reserve Bank of India as a part of commemoration of its 90th year at Mumbai, India. Inputs provided by Khabeer Ahmed and Saurabh Pratap Singh are gratefully acknowledged.

¹ Inputs from RBI History- Chronology of Events.

² Chapter 12: Crisis, Consolidation, and Growth, RBI History, Volume-II (1951-67).

³ RBI History- Chronology of Events: 1960 to 1971.

India with launch of lead bank scheme, development of norms for priority sector lending, expansion of branch networks, formation of regional rural banks, among others.

In the same progressive spirit, the decade of 1990s brought forth various reforms which laid the foundation of the modern resilient financial sector as we see today. Following the Liberalisation reforms in 1991, two major developments happened in the industry. First, detailed guidelines were issued in 1993 opening up the banking space to the private sector so as to improve efficiency in delivery and pricing of financial services. And second, a critical legislative measure was introduced in 1997 empowering RBI to regulate NBFCs and prescribe various prudential standards for them. These two measures gave space to the financial sector to get prepared for the ensuing challenges and opportunities of 21st century.

The last decade has seen growth of differentiated banking in India with several unique categories of institutions such as Small Finance Banks and Payment Banks emerging on the horizon. Growth of banking system, along with very vibrant non-banking financial space and cooperative banking has bolstered the financial intermediation in the economy. Just to offer some perspective about their scale, the assets of scheduled commercial banks and NBFCs have reached at about ₹280 trillion and ₹50 trillion respectively as on March 31, 2024, and the outstanding credit facilitated by these institutions is roughly ₹205 trillion⁵.

This extensive network of financial institutions has also helped in improvement of the quality of financial inclusion in our country, which is reflected by continuous rise in the financial inclusion index measuring access, usage, and quality of financial services. Another revolution that has happened is in the digital space. Today, the digital payment infrastructure facilitates over 160 billion transactions in a year for a value of over ₹2400 trillion (FY 2023-

⁴ Supervisory returns, RBI CIMS; Food and Non-food credit of Scheduled Commercial Banks.

24). Retail digital transactions account for over ₹720 trillion of value, out of which transactions amounting to approximately ₹265 trillion are being facilitated through indigenous UPI and IMPS alone. These data points give us a glimpse of journey we have travelled from relatively modest beginnings to a world leader of sort, especially in digitalisation.

RBI has actively pursued regulatory policy measures which seek calibration of major policy norms with international standards, while adapting it to the country's requirements. The latter is illustrated by the mix of principle-based / activity-based regulations framed for urban cooperative banks where the regulatory norms are based on the tier-wise categorisation of the cooperative banks; a scale based regulatory framework has been put in place for the NBFCs to categorise them as per their scale of operation and potential for interconnectedness; and norms for the MFI sector.

As a part of our policy framework, we have been following a 'twin-peak approach' towards regulation, assigning importance to both prudential and conduct related issues. From a prudential perspective, banks are required to have robust risk management processes supported by comprehensive credit underwriting practices. The institutions will have to be compliant to standards especially such as capital adequacy, credit quality and liquidity to ensure prudence in their growth.

The challenges associated with conduct related aspects are equally sensitive. When the system grows more complex, the financial products and services also evolve suitably. Therefore, the regulated entities need to manage a *tricky quadrant of expectations* which means enabling rapid digitalization; enhancing need for strong cybersecurity; ensuring strong KYC norms; and importantly maintaining excellence in customer service.

In this regard, RBI has recently taken some regulatory measures to improve governance and address conduct related issues of our regulated entities. Guidelines related to fair lending practices,

guidelines on governance issues relating to the banks such as composition and functioning of board, succession planning, and remuneration have been prescribed to strengthen the governance frameworks. Transparency in lending and lending charges are also being encouraged by mandating disclosure of all necessary fee and charges to empower the borrowers in taking informed decision.

As we retrospect, we observe that the regulatory developments and policy measures initiated in the past have led to development of a robust, resilient, and strong financial system in India which has weathered several crises. But the goals we have for our nation require us to take a quantum leap in the scale and size of the financial institutions. This will also possibly expose the entities and its users to increased amount of risk. In view of this, robust *governance and effective risk management* are going to be the dual anchors that will keep our financial institutions afloat and help them grow sustainably. From a macro-perspective, our national aspiration to become a developed economy by year 2047 still requires a stronger foundation of financial institutions in a complex and rapidly evolving financial landscape. Besides banks, the existing entities would require easier access to robust capital markets to fund their growing asset books, as along with access to deep financial markets that would enable them to hedge the associated risks on their balance sheets. Further, there will be entry of new players, products, and services (e.g. private credit) to meet the growing credit needs. Therefore, an enabling regulatory system would have to be put in place to meet these challenges and to safeguard financial stability without hindering the process of innovation.

Envisioning the Future

The growth and resilience exhibited by the financial sector in India in the recent past creates a lot of expectations from us to continue this momentum so as to meet our developmental aspirations. This expectation can only be fulfilled when we have necessary ability to anticipate the emerging challenges even while maintaining agility as a regulator to

respond to them. In this context let me flag three such emerging risks which are relevant not only for India but for entire world, particularly the global south.

- (i) *Risks from extreme climate events and climate change:* Not very long ago, the discussion regarding climate related risk was more of an intellectual discourse. But things have changed! The extreme weather conditions, longer spells of summer, and uneven monsoon have led policy makers rethink their stance. Today, every international forum discusses the climate risks- both physical and transitional- in detail and deliberate upon possible solutions. Adaptation risks are also being flagged. As a policy maker, it is still a challenge to quantify the climate related risks and its impact of the real economy and the financial sector. The demand for resources to fund the real sector entities to manage physical, transition and adaptation risks can mean new institutions, newer categories of resources and new business models amongst existing institutions. These will be a new challenge for the regulators.
- (ii) *Risks from emerging technologies:* The biggest disruptive change that has occurred in the world is usage of technology. This has definitely made our life easier in unprecedented ways, but it has also led to growth of an entire ecosystem which thrives upon this massive outreach. Advent of new processes backed by block-chain, and AI/ML, new products like tokenized assets, and new entities like BigTechs/FinTechs have compelled policymakers to remain on their toes. We do not want to stifle such progressive practices, but we must provide suitable guardrails to ensure systemic stability. The quest to find the balance between innovation and prudence is thus going to be a challenge.
- (iii) *Resilience in Non-Banking sector:* Given the growing importance, size and scale of NBFCs

in Indian financial system, we have been trying to harmonise regulatory approach for them to avoid any potential arbitrage. However, the non-banking space in India involves a lot many diverse entities than just the NBFCs. And, given the complexity in the financial system, the interconnectedness among all such entities will become more profound. This warrants closer coordination among the financial sector regulators to ensure financial stability.

Conclusion

There are not many central banks in the world which have a mandate as broad based as that

of RBI. We are a full-service central bank with a mandate spreading across functional areas such as monetary policy, currency management, regulation & supervision, payment system, financial inclusion, management of forex reserves, etc. I can say this with full confidence that despite this humongous responsibility, the nine illustrious decades of RBI's existence and 75 years of our experience as a regulator and supervisor have built a foundation of a strong financial sector which could support the country in fulfilling its developmental aspirations.

Let me now conclude by thanking the organising team for this privilege to share my views, and to all of you for your patient hearing.

Catalysing Inclusive Growth: Strengthening Partnerships for Reaching the Last Mile*

Shri Swaminathan J.

Regional Director for Mumbai Regional Office, Shri Suman Ray; Regional Director for Nagpur Regional Office, Shri Sachin Shende; Chief General Manager, National Bank for Agriculture and Rural Development, Ms. Rashmi Darad; General Manager, Bank of Maharashtra and Convenor, SLBC Maharashtra, Shri R D Deshmukh; senior executives from banks, Lead District Managers (LDMs), Lead District Officers (LDOs) and my colleagues from Reserve Bank of India, present here.

Good morning, it is my proud privilege today to be addressing this Conference for Lead District Managers of Maharashtra.

Being here near Nagpur and that, too, for a Conference of the LDMs, it would be amiss of me if I am not reminded of Shri Baba Amte, whose Ashram is within a few kilometres. As you all would be aware he was one of the proponents of rural economy-driven growth. There is this one part of a quote attributed to him, which says, *"A balanced economic system is one which provides sufficiency for all and superfluity for some..."*

When you parse the quote, you will realise that the LDMs are facilitating the sufficiency of the rural economy. And balancing the economy by facilitating sufficiency for the rural economy rings as much true today as it must have been when it was said. When you look at the results of the Economic Survey, 2023-24, it is observed that Indian agriculture sector provides livelihood support to about 42.3 per cent of

the population and has a share of 18.2 per cent in the country's GDP at current prices.¹

So, with the rural economy thriving, the role of Lead Banks assumes a renewed emphasis. In fact, the aspirational goals that RBI has set for RBI@100² in a Multi-Year Time Frame, reiterates its focus on '*Accessibility, Availability and Quality of financial services to all sections of the society*'.

It is this underlying principle that had conceptualised the Lead Bank Scheme (LBS) in 1969. The Lead Bank is expected to assume a leadership role for coordinating the efforts of the credit institutions and the Government. And within this leadership role, the role of LDMs cannot be overstated.

As key pillars of the LBS framework, you hold the responsibility of extending banking services and credit to underserved regions, facilitating economic advancement, the results of which can be personally fulfilling. Having served as the Convenor of the SLBC in Telangana, I can attest to the deep satisfaction derived from the tangible impact created through LBS fora.

Over the years, the roles and responsibilities of the LDMs have evolved. But the underpinnings of these myriad objectives remain the same. Today I would like to highlight certain expectations that we have from the functioning of the LDMs. For easy recallability, I have attempted to give a different spin to the acronym – LDM – and identified three attributes *viz., (L)iaison, (D)esigning and Development, and (M)onitoring and Motivating*. I will now elaborate upon these.

Liaison

The function of liaison is entrenched into the very inception of the Lead Bank Scheme. India's post-independence journey toward inclusive development has been shaped by numerous initiatives aimed at reducing poverty and enhancing living standards. Expanding access to essential services like education,

* Keynote Address by Shri Swaminathan J., Deputy Governor, Reserve Bank of India at the Conference for Lead District Managers of Maharashtra held in Tadoba, Chandrapur, Maharashtra on November 30, 2024.

¹ Economic Survey 2023-24 presented in the Parliament on July 22, 2024.

² Governor's Statement: June 7, 2024.

healthcare, and sanitation, coupled with creating productive employment opportunities, has been central to these efforts. A key focus has been ensuring that the benefits of economic growth reach all segments of society, especially the marginalized groups. At its core, the LBS framework facilitates coordinated efforts among banks, financial institutions, and the government machinery, resulting in improved banking access and enhanced credit flow to vital sectors.

The machinery of LBS starting at the borrower level goes right up to the State. And the duty of LDMs in acting as a nodal body, ensures that mile-to-mile connectivity. Thus, she may have to co-ordinate at the grassroot level to gather information of unbanked centres, identify the bottlenecks or gaps requiring credit flow, by actively working with the District Development Managers of NABARD and RBI's Lead District Officers. Towards this, it is necessary to have a self-driving system in place wherein the various meetings, right from the District Consultative Committees to the SLBC are conducted effectively and in a timely manner. Thus, a significant attribute of the role of LDMs is effective liaisoning on the ground.

Design and Development

The aspect of Design and Development starts with the Credit Plans. Credit planning should adopt a bottom-up approach to convey the needs of the centres and then designing a plan best suited to address those. It is also important to understand that, while the targets should strive to be aspirational in ideas, they should be realistic enough to translate into execution and reflect the local credit needs.

Moreover, in this age of abundance of data and analytical models, a data-based empirical approach to designing of credit plan is essential. Such techniques provide the ease with which targeted strategies can be developed for intervention. Having said that, the primary step of data collection should be through field surveys and not be substituted by just an academic understanding. The field surveys also enable to

identify those areas which are more in need of credit flow and have a better capability of servicing the loans. This should be the premise on which you formulate bankable schemes.

Statistics show that about half of the Self-Help Groups (SHGs) are yet to be linked to formal credit, and a large proportion of small and marginal farmers still lack access to bank financing. Another class of potential borrowers which has remained underserved are the MSMEs and within that, those led by women. Therefore, when we adopt an empirical approach coupled with your on-ground experience for designing of a credit plan, the credit requirements of such segments can be effectively addressed through suitable Potential Linked Credit Plans as well as in block and district-level credit strategies. The idea is to base your plans on a holistic assessment of the district. The ultimate objective is to bring about measurable outcomes through systematic designing of credit plans.

Monitoring and Motivating

The 'M' of the 'LDM' attributes reflect monitoring and motivating. In fact, the monitoring part is entrenched in the stipulated duties of the LDMs. Being a liaison between the government departments and the blocks, the very important link of communicating the success of the ground-level implementation of the ACPs and the various programmes rests on an effective monitoring mechanism. This will also help in identifying the problems or bottlenecks in the flow of credit, which can then suitably be factored in while designing the credit plans for targeted interventions.

You have an entire machinery of monitoring mechanisms starting from district level up to the State Government, SLBC or SLCC. The efficacy of monitoring by each level depends upon the quality of review that you employ and then communicate through the right channel. In my working, I always insist upon 'closing the loop'. Probably you, too, can develop a similar suitable system wherein your monitoring leads

through necessary communication and to eventual closure of the problem at the appropriate level.

I now come to the motivating part of the attributes. I mean 'motivating' in a very specific sense. LDMs need to lay special emphasis on furthering financial literacy. Taking the baton ahead, you may also create awareness and direct or motivate towards greater adoption of digital financial inclusion. Financial literacy is a cornerstone of holistic inclusion, empowering individuals to make informed decisions.

Members of public should be made aware of various financial products available to them, be it social security products such as insurance and pension schemes, which will cover the risks, or category specific loan products which will enable them to undertake productive economic activities. A special focus needs to be given to Digital Financial Literacy for improving public confidence in undertaking digital transactions.

In Maharashtra alone, there are 118 Centres for Financial Literacy (CFLs) and 61 Financial Literacy Centres (FLCs) spreading awareness of financial products at the grassroots level. LDMs must play a crucial role in ensuring that FLCs perform their functions effectively, supporting CFLs, participating in CFL camps, and facilitating the linkage of financial services while overseeing the proper conduct of these camps.

Harnessing technology not only expands our reach but also makes banking more accessible, efficient, and cost-effective. RBI's recent push for digital public infrastructure, including the Unified Payments Interface (UPI) and the pilot Public Tech Platform for Frictionless Credit (PTPFC), now renamed the Unified Lending Interface (ULI), is in line with improving digital financial inclusion, which aims to simplify and broaden access to credit, especially in rural regions.

You may also be aware that, under 'Expanding and Deepening of Digital Payments Ecosystem Programme (EDDPE)', SLBCs have taken a lead role in the objective of making every district in the country

digitally enabled, which has steered the expansion of digital payments. I am happy to note that, as on date, 410 districts are digitally enabled across the country and 13 states, and six Union Territories have achieved 100 per cent coverage of districts under this initiative. I hope to see the state of Maharashtra also in this list soon. For this, I request all the stakeholders including LDMs for effective co-ordination for successful execution of the programme.

Another facet which I want to point out is the issue of sustainable financing. We all have been hearing about the effect of climate change and how the financial entities are gearing up to address the risks arising out of it. A key point in the discussion revolving climate change is sustainable financing. In the present milieu, we need to encourage financing that supports sustainable and climate-resilient practices, to mitigate climate risks and protect vital livelihoods. The avenue to bring about these changes are more amplified in the agriculture and rural infrastructure. You, working at the ground level, have the platform to motivate the change required to drive the country towards a green economy.

Conclusion

The theme of the conference is '*Catalysing Inclusive Growth: Strengthening Partnerships for Reaching the Last Mile*'. The LDMs, given their role, act as the most potent catalysts for effecting a seamless programme for driving economic progress at various levels – block, district, and state.

Over the decades, LBS has evolved in alignment with India's developmental priorities. At its core, the LBS framework facilitates coordinated efforts among banks, financial institutions, and the government machinery, resulting in improved banking access and enhanced credit flow to vital sectors. To this effect, we have already defined in detail the role of LDMs. The 'LDM' attributes that I have highlighted today are an attempt to better understand and implement these roles and responsibilities.

We are here in the Tadoba sanctuary today. If I may draw an analogy, the intent behind the LBS is also to create a sort of economic sanctuary wherein resources are directed towards the underserved and marginalised and to protect the vulnerable ones. And if I extend the analogy, the LDMs are the equivalent of the wildlife rangers.

I am sure you have found this conference useful, and I encourage you to utilise this forum fruitfully to air your concerns and gather as many thoughts for the continued progress of your districts and the State of Maharashtra and thereby the country. I wish the very best in all your endeavours and thank the Regional Directors for this opportunity.

Thank you.

*Supervision amidst Emerging Risks**

Shri Swaminathan J.

Esteemed delegates from across the world, respected Governor, Deputy Governors and all my colleagues from the Reserve Bank of India, ladies and gentlemen. A very good afternoon to you all.

It is indeed my honour to deliver the opening remarks before such a distinguished panel comprising Dr. John Mushayavanhu, Governor, Reserve Bank of Zimbabwe; Mr. S. S. Mundra, former Deputy Governor, RBI; Mr. Jay Surti, Division Chief, Financial Supervision and Regulation Division, Monetary and Capital Markets Department, IMF; Mr. Krishna Sastry Pendyala, Partner, Cyber Security, E&Y and the moderator for the panel, Mr. M. Nagaraju, Secretary, Department of Financial Services, Government of India.

The supervision of banks and financial institutions, as we understand it today, is a relatively recent development—dating back around fifty years¹. However, the concept of overseeing banks is embedded in the very foundations of central banking. From the early days, central banks have fulfilled their role as the lender of last resort, ensuring that financial institutions remained solvent and protected against systemic crises. Indeed, supervision has been the keystone² that has supported the integrity and stability of the financial system, by protecting depositors' interests, and thereby fostering trust in the banking sector.

As the world rapidly evolves, so does the nature of risks confronting the financial sector.

* Opening remarks by Shri Swaminathan J. Deputy Governor, Reserve Bank of India at the High-level Policy Conference of Central Banks from the Global South held in Mumbai on November 22, 2024.

¹ Masciandaro, D and M Quintyn (2013) "The evolution of financial supervision: The continuing search for the Holy Grail". SUERF 50th Anniversary Volume Chapters: 263-318.

² A keystone is the wedge-shaped piece at the crown of an arch that locks the other pieces in place.

Technological advancements have brought incredible efficiencies but also significant vulnerabilities, such as cybersecurity threats and risks stemming from third-party dependencies.

Climate change, once considered a distant concern, now poses immediate and material risks to institutions and economies alike. Added to this are the complexities of geopolitical uncertainties, volatile markets, and shifting macroeconomic trends. Thus, the task of supervision has become more dynamic and critical than ever before.

Supervision, therefore, needs to evolve with the times and can no longer be just about enforcing compliance. Instead, it needs to anticipate risks, respond swiftly to both foreseeable and unforeseen risks and foster resilience in the financial system.

Let me take a moment to clarify what resilience means. While stability ensures that the financial system can withstand shocks without losing its capacity to function, resilience goes a step further. Resilience indicates that in addition to weathering the storm, the financial system is able to adapt to the newer realities and thrive in it³ so that it remains a pillar of trust and stability.

To build financial resilience, supervision must be proactive, continuous, forward-looking, and risk focused. An effective banking supervision system requires⁴ the supervisor to maintain a continuous, forward-looking assessment of the risk profiles of individual banks, aligned with their systemic significance. Supervisors must be able to identify, evaluate, and address risks both within individual institutions and across the entire banking system.

³ Mary Dowell-Jones & Ross Buckley, Reconceiving Resilience: A New Guiding Principle for Financial Regulation?, 37 Nw. J. Int'l L. & Bus. 1 (2017). <http://scholarlycommons.law.northwestern.edu/njlb/vol37/iss1/1>

⁴ Principle 8: *Supervisory Approach of the Basel Core Principles* states An effective system of banking supervision requires the supervisor to develop and maintain a forward-looking assessment of the risk profile of individual banks, proportionate to their systemic importance; identify, assess and address risks emanating from banks and the banking system as a whole; have a framework in place for early intervention; and have plans in place, in partnership with other relevant authorities, to take action to resolve banks in an orderly manner if they become non-viable.

This also includes having a well-defined framework for early intervention and clear contingency plans to ensure that non-viable banks can be resolved in an orderly and efficient manner. For that, supervisors must possess the resolve to act swiftly and decisively when necessary.

In recent years, we have worked to reposition the RBI's supervisory framework to better align with this objective. Our supervisory initiatives aim to identify risks and vulnerabilities early, establishing a structured framework for early intervention to mitigate these risks. We have shifted our focus from merely addressing the symptoms of vulnerabilities to identifying and addressing their root causes, while also harmonizing supervisory rigour across various segments of the financial system.

We have designed and implemented a Calibrated Supervisory Approach, which provides the flexibility and scalability needed to focus more effectively on high-risk institutions and practices. At the heart of this approach is a proactive off-site surveillance mechanism that enables us to detect emerging risks and assess vulnerabilities across the supervised entities, ensuring timely action to mitigate or manage these risks before they escalate.

To further strengthen our supervisory capacity, we are also investing in initiatives such as the College of Supervisors, which seeks to enhance the skills and expertise of our supervisory staff. In addition to building capacity, we are increasingly focusing our efforts on improving the risk and compliance culture within supervised entities, ensuring that these institutions not only meet regulatory requirements but also foster a proactive, robust approach to managing risk and compliance at all levels.

While we, as supervisors, strive to perform our duties to the best of our abilities, it may be

worthwhile to recall what Charles Goodhart aptly said⁵, "...the conduct of supervision is a thankless task, one that is all too likely to tarnish the reputation of the supervisor. The best a supervisor can hope for is that nothing untoward happens. Supervisors are only noticed when their actions anger the regulated entities, whether through restrictive or intrusive measures, or when they are criticized after a failure, such as a financial institution collapse or customer harm. Despite the discussion around the need for allowing some degree of freedom for institutions to fail, supervisors inevitably face negative press when such events occur, regardless of the circumstances."

Be that as it may, to conclude, while the task of supervision may be challenging but it is also essential for ensuring the stability and resilience of the financial system. As supervisors, it is through our vigilance, proactive measures, and continued evolution of supervisory frameworks that we can create a financial environment where institutions not only survive but continue to thrive in the face of emerging risks.

As part of our vision for the next decade, RBI@100, the Reserve Bank of India aims to further engage with the central banks of the Global South. We are dedicated to establishing a global model of risk-focused supervision, one that emphasizes strong risk discovery and compliance culture, and builds a "through-the-cycle" risk assessment framework. Additionally, we are working towards creating a robust data analytics ecosystem to support our supervisory functions, ensuring that our approach remains forward-looking and agile in a rapidly changing world.

With these thoughts, I look forward to an engaging and insightful panel discussion that will explore the evolving role of supervision in the face of emerging risks.

Thank you!

⁵ Goodhart, C.A.E. (2000). The Organisational Structure of Banking Supervision. FSI Occasional Papers, Financial Stability Institute, No. 1, November. pp. 20–21. Available at: <https://www.bis.org/fsi/fsipapers01.pdf>.

MSMEs - Bridging the Credit Gap through Improving Confidence in Lending*

Shri Swaminathan J.

Shri Suresh Kumar Singhal, President FTCCI, Shri R Ravi Kumar, Senior Vice President FTCCI, Shri K K Maheshwari, Vice President, FTCCI, Mr. Meela Jayadev, Convenor, FTCCI CEO Forum, Chief Executive Officers gathered here today, ladies and gentlemen. A very good evening to you all.

I am delighted to speak to you today on a topic that has always been close to my heart—the critical role of MSMEs and the importance of building confidence in lending to this vital sector. Over the years, I have had the opportunity to work closely with MSME units, witnessing both their potential and their struggles. In the early days of my career, as a young officer posted in the bustling Peenya Industrial Area, I saw firsthand the energy and resilience that defined MSMEs, as well as the unique challenges they faced. Later, mid-career, my experience deepened while working in the Mid Corporates Group of SBI, where I further understood how access to timely and adequate credit could transform these businesses. These experiences have made me keenly aware of the importance of bridging the credit gap for MSMEs—a task that demands not only innovative solutions but also a firm commitment to fostering confidence among lenders and borrowers alike.

As you are all aware, the MSME sector plays a vital role in our economy, driving entrepreneurship and creating substantial employment opportunities. These enterprises serve as essential support units for larger industries and contribute significantly to the secondary and tertiary sectors. With approximately

6.3 crore units,¹ MSMEs contribute nearly a third of India's nominal GDP and account for over 40 per cent of the country's exports.² More importantly, they play a crucial role in employment, generating over 22 crore jobs³ and holding immense potential to harness India's demographic dividend. Thus, the MSME sector not only powers economic growth but also uplifts the poor, providing livelihoods and fostering inclusive development across the nation.

Despite the critical role of the MSME sector in the Indian economy, a common grouse that we hear from this segment is that they find it difficult to secure timely and adequate formal credit. This challenge may be on account of factors such as information asymmetry on their financials and business viability, and also on account of limited formalization even today within the MSME sector. Many MSMEs lack comprehensive financial records or credit scores, and in some cases, they may not have sufficient collateral to support the scale of financing they require. These issues result in a substantial gap between the credit needs of these units and the available supply—creating what is known as the credit gap. Five years ago, the Report of the Expert Committee on MSME (Chair: U.K. Sinha) constituted by RBI estimated this credit gap to be between ₹20 and ₹25 lakh crore, underscoring the pressing need to address the financial barriers that continue to constrain this vital sector.

RBI Initiatives

On its part, the Reserve Bank of India (RBI) has consistently prioritised the inclusion of MSMEs in the formal financial system through a range of

¹ Ministry of Micro, Small and Medium Enterprises. (2023). Annual report 2023-24. Retrieved from <https://msme.gov.in/sites/default/files/FINALMSMEANNUALREPORT2023-24ENGLISH.pdf> (p. 23).

² Ministry of Micro, Small and Medium Enterprises. (2024, July 22). Contribution of MSMEs to the GDP [Press release]. Press Information Bureau. Retrieved from <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2035073>

³ 3 Udyam Registration Portal (Data as on November 12, 2024) <https://udyamregistration.gov.in/Government-India/Ministry-MSME-registration.htm>

* (Speech by Shri Swaminathan J. Deputy Governor, Reserve Bank of India at the CEO Forum of the Federation of Telangana Chambers of Commerce and Industry held in Hyderabad on November 16, 2024)

targeted measures. One of the key initiatives is the Priority Sector Lending (PSL) guidelines, mandating a sub-target of 7.5 per cent of banks' adjusted net bank credit for micro enterprises, while all loans to MSMEs qualify under PSL. RBI has also promoted collateral-free lending by requiring banks not to insist on collateral for loans up to ₹10 lakh for micro and small enterprises (MSEs) and encouraging financial institutions to lend under the CGTMSE scheme which carries zero risk weight for the guaranteed portion of loans.

To address the issue of delayed payment to MSMEs, RBI has introduced several innovations. The Trade Receivables Discounting System (TReDS) facilitates MSMEs' trade receivable financing through electronic platforms. The Account Aggregator (AA) framework and inclusion of GSTN in the AA ecosystem streamline financial data access for MSME lending. More recently, the Unified Lending Interface (ULI), launched as a pilot program in August 2023, allows MSMEs to access tailored, frictionless credit using digital data.

Additionally, RBI has implemented a revival and rehabilitation framework for MSME loans up to ₹25 crore, providing an on-the-tap structured mechanism for stress resolution. In line with its commitment to capacity building, RBI also runs the NAMCABS⁴ program, which familiarises bankers with the specific credit needs of the MSME sector, helping to improve their understanding and support for MSME financing.

These efforts, alongside government schemes like MUDRA and CGTMSE, have significantly improved formal credit to the MSME sector. As of March 31, 2024, credit outstanding by scheduled commercial banks to MSMEs stood at ₹27.25 lakh crore, reflecting the growing integration of MSMEs into the formal financial ecosystem. It is heartening

to note that the outstanding bank credit to MSMEs have registered an annual growth of 12.39 and 20.58 percent, respectively, in the last two financial years.

What can MSMEs do?

While regulatory policies and government schemes have played a crucial role in creating an enabling environment for MSMEs, it is equally important for MSMEs to take proactive steps to build trust and enhance their visibility with lenders. In this context, I have four key suggestions that MSMEs may like to consider for better access to finance as well as improving their financial health.

Embrace formalisation

Firstly, MSMEs should prioritise formalisation. Many MSMEs operate informally, making it challenging for lenders to assess their creditworthiness due to information asymmetry, particularly regarding their financial performance. By registering on the Udyam Portal and filing GST returns, MSMEs can enhance the transparency over their level of business activity and financials. This will enhance their credibility and may qualify them for priority sector lending and government schemes, by reinforcing their trustworthiness in the eyes of financial institutions.

Continuing with embracing formalisation, MSMEs should maintain comprehensive and accurate financial records which is essential for seeking credibility with lenders. MSMEs should adopt proper accounting practices, ensuring their financial records, such as income statements, balance sheets, and cash flow statements are accurate and reliable. Having financial statements prepared by certified professionals and audited by qualified auditors shall further bolster their credibility.

Along with formalization, adopting digital payment systems like UPI and online banking creates a digital footprint of financial transactions, making it easier for lenders to assess financials of the firm.

⁴ National Mission for Capacity Building of Bankers

Digital payments also improve cash flow management, offering MSMEs greater control over their finances and helping them maintain a clear financial record.

Credit Discipline

Secondly, MSMEs should strive for greater credit discipline which starts with careful selection of the appropriate credit product suited to their requirements and cash flows. MSMEs should familiarise themselves with different credit products such as term loans, working capital loans, overdrafts, and invoice discounting to match them with their borrowing needs. It is vital to tailor borrowing to business cycles and avoid over-leveraging. Comparing terms across lenders and negotiating for better interest rates and repayment options can result in more favourable credit terms. Further, building and maintaining a good credit score is fundamental for accessing formal financing. MSMEs should ensure timely repayment of loans and bills, which reflects positively on their credit history.

It is also important to use the bank funds for the purposes for which it was borrowed. Sometimes, however, it is noticed that working capital funds are diverted for other purposes. A few have been found to be not investing their equity fully or diverting funds borrowed from banks to purposes outside of their businesses. Many a times, unplanned and improperly funded capacity or market expansions have become a major source of stress, impacting the credit history and thereby the credibility with their banks. All of these are eminently avoidable, doing business ethically and prudently helps overcome such short-sighted actions.

Capacity Building

Thirdly, MSMEs must invest in capacity building to strengthen their operational and financial management skills. Financial literacy programs help entrepreneurs understand credit appraisal processes, banking norms and government support measures,

making them more confident borrowers. Skill development workshops on topics like compliance, bookkeeping, and market trends equip them to better manage their businesses and finances.

MSMEs can leverage the ecosystem for capacity building and financing. Engaging with industry bodies and trade associations provides MSMEs with mentorship, funding opportunities, and market linkages. Collaborating with incubators and accelerators can offer access to training, networking, and funding. Additionally, fintech solutions that use alternative credit scoring based on sales patterns or supplier feedback can help MSMEs secure funding more effectively.

Fourthly, MSMEs should prioritise the use of TReDS which provides a platform to access working capital by discounting invoices raised to larger buyers. Pursuing buyers to also onboard onto TReDS ensures smoother transaction processing and timely payments. By integrating TReDS into their operations, MSMEs can unlock liquidity, improve cash flows and build stronger trust with lenders.

I understand that there are a few bankers also present amongst us today. While the RBI engages with the banking community separately, particularly under the Standing Advisory Committee on MSMEs, I would like to take this opportunity to reinforce the importance of improving financing for MSMEs. Bridging the credit gap is not merely about supporting the growth of individual MSMEs; it is about empowering a sector that forms the backbone of a resilient and dynamic economy. With improved access to finance, MSMEs will be better positioned to drive innovation, create jobs, and uplift communities across the country. This is a critical step towards building a more inclusive and sustainable future for India. Therefore, I would urge bankers to work collaboratively with MSMEs to build trust, enhance credit discipline, and ensure that they are equipped with the financial tools needed to succeed.

In conclusion, the development of the MSME sector requires the collective effort of all stakeholders—government, regulatory bodies, the financial sector, trade associations, and even larger corporates. Despite its pivotal role in driving economic growth, the sector faces numerous challenges, including delayed payments, infrastructure constraints, limited access to formal finance, low technology adoption, and a shortage of skilled labour. The RBI has taken significant steps to address these issues, promoting financial inclusion, easing access to credit, and advocating for digitalization. While the RBI and the government have established a robust

policy framework, including priority sector lending, collateral-free loans, digital platforms like TReDS, and capacity-building initiatives, it is equally important for MSMEs to make the most of these opportunities. Going forward, sustained collaboration among all stakeholders will be crucial to ensuring the continued growth and resilience of this vital sector.

With that, I would like to express my sincere gratitude to the Federation of Telangana Chambers of Commerce and Industry for inviting me to Hyderabad to speak on such an important topic. I compliment the Federation for such a well-coordinated event.

Thank you.

*The Board's Role in Navigating Transformation**

Shri Swaminathan J.

Respected Governor, Reserve Bank of India, Deputy Governor Shri M Rajeshwar Rao, Chairmen, MD CEOs, Whole time directors and distinguished members of the Board of Private Sector Banks, colleagues from RBI, ladies, and gentlemen. A very good morning to all of you.

It is indeed an honour to speak before you today. Conferences such as these provide an invaluable platform for supervisors and banks to understand each other's perspectives.

We are navigating a new reality that is redefining the dynamics of the industry. The banking industry has witnessed several technology transformations in the past, however, the current transformation is unprecedented in its pace and scale, driven by advanced technologies like artificial intelligence and cloud computing. Unlike past shifts, which focused on digitizing existing processes and operational efficiency, today's transformation places the customer experience at the centre—offering instant, personalized services, not just at the branches, but through mobile apps and digital platforms.

This transformation, while promising and most welcome, brings significant risks for banks. Increased digital transactions expose banks to greater liquidity risks and cybersecurity threats, while the integration of new technologies heightens operational risks. Growing reliance on third-party providers adds dependency risks, and expanding customer data collection demands stricter data privacy controls. Further, these rapid technological advancements

require frequent updates coupled with the need for specialized talent. At the same time, customers' expectations have grown; they demand seamless service with minimal downtime. Moreover, today's customers are increasingly financially savvy, often willing to take some risk and experiment alternate avenues of investment as opposed to confining themselves to traditional bank deposits.

This is where the role of the Board of Directors becomes essential. Your leadership and governance are central to navigating these changes. In my speech today, I would like to discuss what it means to be part of a sound, transformative Board—one that can harness change effectively, address risks strategically, and reinforce resilience across the organization. Today I would like to touch upon seven aspects which I feel the Boards should keep in mind.

Fostering Innovation

In today's world, it is essential for banks to be innovative, and that goes beyond merely adopting new technologies. As Board members, your role is to foster a culture that actively encourages innovation that is aligned with the bank's long-term goals. As members of the Board you can guide the bank to innovate responsibly, ensuring that progress is steady, sustainable and compliant with relevant regulations. For this, the Board needs to ensure that the necessary infrastructure, skills, and risk management frameworks are in place to support these innovations. While at times management may present an optimistic view, it is the Board's duty to critically evaluate and question the narrative provided so that it has a clear, accurate understanding of the organization's true position and risks.

Business Model Risk Assessment

An effective business model is fundamental to a bank's resilience and sustainable growth. There's no single "golden rule" for what a successful model should look like; each bank must tailor its approach

* Special Address by Shri Swaminathan J. Deputy Governor, Reserve Bank of India at the Conference of Directors of Private Sector Banks in Mumbai on November 18, 2024.

based on its specific risk appetite, market position, and strategic goals. While assessing the business model, it is essential to keep an eye on potential concentration risks. Banks often gravitate toward particular sectors, segments, or products that appear profitable or "safe" in the short term. However, over-reliance on any one area can lead to imbalanced exposures, making the bank vulnerable if conditions within that sector or product category suddenly change.

To ensure a sound business model and avoid excessive concentration, Boards might consider a few questions like – *Is our current model aligned with the bank's long-term strategy, and does it adequately consider our risk appetite? Are we getting heavily concentrated in specific sectors, segments, or products, and if so, what mitigation measures/guardrails are in place? Are we following industry trends that might not align with our unique strengths and risk tolerance? What strategies can we employ to ensure a balanced and diversified approach without diluting our core expertise area?*

The Board's oversight should focus on fostering a business model that balances growth with resilience, preparing for both the highs and lows of the economic cycle. In an ever-evolving market, adaptability is crucial, and by keeping this consideration front and center, Boards can guide their banks toward sustainable, long-term success.

Heart of Governance: Risk Management and Data Integrity

Now, I would like to delve into an area where effective governance is absolutely essential which is risk management. In today's complex world, risks are no longer limited to just credit or market risks. As Board members, your ability to make informed decisions depends heavily on having access to accurate, timely, and comprehensive data. One of the common issues we see is that of Boards operating with outdated or incomplete data. Imagine trying to assess a critical situation with only part of the picture—it's

risky and can lead to poor decision-making. So, what is the solution?

Boards should champion data integrity initiatives, ensuring that robust data systems are in place that provide a holistic view of risks across the bank. Real-time data can allow you to detect potential issues early, track trends in non-performing assets, or identify early warning signs in market or liquidity conditions. When it comes to risk, timely data isn't just a nice-to-have—it's an essential part of keeping your bank resilient.

Additionally, banks should think of stress testing as a tool that goes beyond regulatory requirements. These tests should be tailored to address a broad spectrum of risks, including operational, cyber, and liquidity risks. Regular, well-designed stress tests allow your bank to not only respond to but also anticipate potential crises.

Customer Centricity

This brings me to another important aspect - Customer centricity. We have spoken on this in detail in the past as well. Even at the cost of repeating, I would urge all of you to focus on customer service aspects of your bank, because this is one area that will attract substantial supervisory focus in the coming months and years.

High standards of customer service are not just expectations; they are obligations you owe to those who trust you with their money. Boards must ensure that the banks' service delivery embodies empathy and fairness, particularly toward vulnerable groups like senior citizens who often encounter hurdles in accessing banking services.

It is concerning that in many cases, customer grievance mechanisms, including the Internal Ombudsman structure, are treated more as a formality than as a robust, effective resource. The Internal Ombudsman mechanism should be more

than words on paper; it should operate with the spirit and diligence necessary to resolve issues impartially and promptly.

Boards should work towards building customer-centric banks where every individual, regardless of age, income, or background, feels valued and respected. Customer-centric governance should be evident in every policy, process, and service touchpoint. More so when it comes to treating your customers fairly and in a transparent manner. As I have said before, this is an area where we are significantly focussing to enhance the customers' trust in the system and will not hesitate to act in case a supervisory intervention is considered necessary.

Talent retention and upgradation

As many of you know, the attrition rates¹ in the private sector banking industry have been significantly high. In FY24, the average attrition rate in the private sector bank group was around 25 per cent, with certain banks experiencing even higher levels over the past three years. Post our interactions on this matter last year with select entities, we do see an improvement but it is still a long way to go. The attrition numbers are not merely statistics; they are indicators of deeper challenges in the bank's approach to employee engagement and retention. If banks lose talented employees, especially at the junior and frontline levels, you are not just losing people—you are losing experience, customer relationships, and operational continuity. This may have a significant impact in the customer ownership and result in less than satisfactory experience at the frontline counters.

Therefore, reducing attrition is not just an HR function; it is a strategic imperative. As directors, I would urge you to explore and support initiatives that emphasize career development, mentorship programs, competitive benefits, and a supportive

workplace culture that makes employees feel valued. By prioritizing employee stability, Boards are setting the foundation for long-term growth and building a bank that attracts and retains talent, and nurtures it for future leadership roles.

Cybersecurity and Resilience in the Digital Age

Now, I would like to draw your attention to one of the biggest concerns of the digital era—cybersecurity. As we know, each digital channel, partnership, or customer-facing app introduces potential vulnerabilities. A robust IT and cybersecurity infrastructure is therefore fundamental to a bank's resilience. Cyber risks don't wait, so preparedness and real-time response capabilities are essential. Regular audits and simulated exercises can help assess vulnerabilities and improve resilience.

Operational resilience goes beyond just cyber risks. Think about your third-party dependencies and cloud-based services, too. A single vendor failure could disrupt critical functions. Each third-party partnership is an extension of your bank's operations, and each relationship carries its own set of risks. As Board members, you should demand transparency and due diligence to ensure that every vendor, especially ones that handle critical customer data, meet rigorous standards of security and reliability.

KYC, a matter of operational concern

Before I close, I would also like to touch upon an area that has now emerged as a major source of complaints. While Reserve Bank has comprehensively updated the [Master Directions on KYC](#) in full alignment with FATF and PMLA requirements, the way in which the guidelines are being implemented seems to be resulting in a number of accounts getting frozen, denying the customers access to their funds. Our root cause analysis indicates a set of issues, including high pendency at bank level in periodical updation of KYC details of the customers; lack of a proactive approach in assisting and obtaining the required

¹ RBI Internal Study on Attrition Rates in Private Sector Banks

customer documents; inadequate staff deployment in such critical functions resulting in overcrowding or denial of service at branches; directing the customers to approach their 'home branch' for availing such services rather than being empathetic to customer needs by attending to them at a branch of their convenience; and failure to update the details in the system even after the customers have provided the required documents. It has also come to our notice that in certain cases the accounts that are meant to receive Direct Benefit Transfers from the Government have also been made inoperative or frozen, contrary to regulatory guidelines in the matter.

In such matters, it is essential for Boards to establish policies and require management to adopt standard operating procedures that are not only compliant with regulatory guidelines but also practical for effective implementation. I urge Board members, particularly the chair of the Customer Service Committee, to ensure that KYC guidelines are followed with both precision and empathy. The Reserve Bank will not hesitate to take regulatory or supervisory actions against entities that fail to address these concerns in a timely and considerate manner.

Closing Thoughts: Building a Resilient Future

While traditional governance responsibilities such as financial oversight and risk management will continue to remain top priorities, going ahead, Boards need to embrace technology, drive digital transformations, adopt customer centricity, and ensure ethical leadership. To ensure this, Boards are expected to possess a broad skill set, ranging from technological literacy to risk management expertise and a deep understanding of governance and stakeholder relations. By possessing the right mix of knowledge and governance expertise, Boards will be able to guide banks towards long-term success in this rapidly evolving financial landscape.

The future strength of our banking sector rests on the governance practices we put in place today. A resilient bank is one that can anticipate change, manage risks, withstand crises and continuously adapt. Your role on the Board allows you to be a transformative force, shaping not only your bank's success but the trust it builds with its customers.

Thank You!

ARTICLES

State of the Economy

Government Finances 2024-25: A Half-Yearly Review

Daily Reserves Maintenance Behaviour of Banks

Real Effective Exchange Rate and its Implications for India's Trade Balance

*State of the Economy**

The global economy continues to exhibit resilience with steady growth and moderating inflation. High frequency indicators (HFIs) for the third quarter of 2024-25 indicate that the Indian economy is recovering from the slowdown in momentum witnessed in Q2, driven by strong festival activity and a sustained upswing in rural demand. The prospects for agriculture and hence rural consumption are looking up with brisk expansion of rabi sowing. Headline CPI inflation moderated to 5.5 per cent in November 2024 on the back of easing food prices.

Introduction

The global economy continues to exhibit resilience with steady growth and moderating inflation. In the Organization for Economic Co-operation and Development (OECD)'s assessment¹, the positive growth momentum in global trade is sustained by rising container and international passenger volumes as well as the global tech cycle. Supply chains are performing well in spite of shipping congestion in key Asian hubs due to rerouting away from the Red Sea. Air freight volumes are rising, benefiting from e-commerce and shipping delays.

Commodity prices have been driven down during much of 2024, reflecting a confluence of factors. In energy markets, crude prices have been softening since October 2024 as global oil consumption fell with the declining energy intensity of global GDP. Supply is also diversifying, with the market share of non-OPEC plus gradually increasing. OPEC plus itself is poised to shed spare capacity. In metal markets, the late

September rally in response to the Chinese stimulus has been losing strength since. Gold prices surged on geopolitical tensions, only to be outshone by the unrelenting US dollar. In agricultural commodity markets, prices for many staple crops have trended lower due to good harvests, barring some which were hit by weather- and disease-related shocks and trade restrictions. In 2025, agricultural commodity prices may fall by 4 per cent.

Yet, food price inflation remains high in low- and middle-income countries, with worsening food insecurity in 16 hunger hotspots covering 22 countries and territories, according to the early warning issued for the period November 2024 to May 2025 by the Food and Agriculture Organisation (FAO) and the World Food Programme (WFP). Conflict and armed violence remain the primary drivers of hunger in these hotspots, followed by weather extremes, economic disparities and high debt levels. The world remains far from achieving the goal of zero hunger by 2030. The World Bank's overall commodity price index is projected to retreat by 5 per cent in 2025,² mainly due to improving supply conditions and moderating global growth.

Even as financial conditions continue to ease, global financial markets are emitting mixed signals. Stocks got back to winning ways trading Trump – S&P 500 and the Dow Jones notched records by end November – but witnessed a pullback following the release of Federal Markets Open Committee (FOMC)'s summary of economic projections, which pointed to fewer than earlier anticipated rate cuts in 2025. Bond yields have also risen on the prospect of larger fiscal imbalances and an anticipated slowdown in the pace of monetary easing. From late November, the spread on US high-yield bonds over treasuries of comparable maturity fell below the spread on fixed-rate residential mortgages for the first time to near record lows, reflecting the euphoric mood of junk bond markets

* This article has been prepared by Michael Debabrata Patra, G. V. Nadhanael, Shreya Kansal, Durga G, Harshita Keshan, Yamini Jhamb, Harendra Behera, K M Neelima, Shesadri Banerjee, Amit Kumar, Jessica Maria Anthony, Love Kumar Shandilya, Ragini, Siddharth Arya, Amrita Basu, Aayushi Khandelwal, Sritama Ray, Shivam, Shubham Agnihotri, Mayank Shankar Dayal Rai, Lal Bahadur Singh, Sai Dheeraj Vayugundla Chenchu, Satyam Kumar, Avnish Kumar, Khushi Sinha, Yuvraj Kashyap, Nikhil Prakash Kose, Akshara Awasthi, Asish Thomas George, Samir Ranjan Behera, Vineet Kumar Srivastava, and Rekha Misra. Views expressed in this article are those of the authors and do not represent the views of the Reserve Bank of India.

¹ OECD, Economic Outlook, December 2024.

² Commodity price projections by World bank.

following the US elections. The search for yield is apparently turning into a rush. Emerging market high-yielding sovereign dollar debt has surged, even as emerging market stocks are trading lower relative to US equities as portfolio flows stampede for the US. On the other hand, China's long-term bond yields grapple with Japanification as they have fallen below Japanese yields, with wider implications for financial stability. The US dollar has also been hardening, with the break above 108 for the DXY on December 19 following the FOMC statement. Correspondingly, persisting downward pressures on all other currencies are beating them down to new lows as they struggle to price in the mercantilist rhetoric emanating from the incoming US administration.

As close to half of the world's population got down to choosing their leaders and governments, the still resilient global economy also appears to be on the precipice of protectionism that will realign everything from economic activity, trade, immigration to geopolitics and accentuate the divergences in post-pandemic recovery path of per capita incomes across countries. According to the International Monetary Fund (IMF), the world economy could contract by the size of the combined French and German economies, a loss to world GDP of close to 7 per cent, if there is a broad-based trade war between the world's major economies.³ Electric vehicles have already emerged as the object of tensions. There could be broader spillovers in the form of engineered devaluations of currencies, national self-interest in reshoring supply chains and critical materials, tariff-struck countries moving their companies overseas, and fractures in the world of finance. With global public debt 'high, rising and risky',⁴ a fiscal squeeze may well undermine global growth prospects in 2025, starting with the advanced world. In response, households and businesses are opting to pay down private debt, according to the IMF's

global debt database. Inflation made landfall of sorts in 2024 and will continue to do so in 2025 without grim predictions of deep recessions materialising. According to the OECD⁴, consumer confidence is more sensitive to food and energy price inflation than other items, as combined food and energy price inflation has outstripped growth in nominal household disposable income since the onset of the pandemic. Labour market conditions are easing but interest rates remain elevated despite a cutting cycle having commenced in a large part of the global economy. Perhaps 2025 will see them fully re-normalise, but at what level they will settle is the question. Natural rates of interest or stars appear to have risen in several geographies, mirroring the heightened overall policy uncertainty.

COP29 ended with a new climate finance target – the New Collective Quantified Goal (NCQG) – of US\$ 300 billion a year to fund climate action projects in developing countries by 2035. It fell woefully short, less than a quarter of the developing countries' demand for US\$ 1.3 trillion. India called it out as an 'optical illusion'. With heat supercharging destructive weather around the globe, only a fraction of the costs incurred by poorer countries to adapt to climate change and shifting to clean energy will be covered. They will have to maximise the impact of this short-shrifted finance deal to de-risk investments through mechanisms like guarantees and affordable currency hedging facilities to maximise private capital participation. New measures could also include operationalising carbon markets, debt-for-nature swaps and multilateral financial support. In fact, countries took a major step forward on international carbon trading at COP29 that provides for country-to-country trading, UN-monitored carbon market and non-market mechanisms, referred to as Article 6. It will allow industrialised countries to buy carbon-cutting offsets from developing countries, thereby unlocking finance. Concerns exist, however, about the possibility of greenwashing of emission reduction

³ IMF first DMD Gita Gopinath to BBC, October 24, 2024.

⁴ IMF Blog, Persistent Fall in Private Borrowing Brings Global Debt Down, December 2, 2024.

and absence of time limits for rectifying deficiencies in disclosures.

A long-term sustainable resourcing strategy is also needed for the Fund for Responding to Loss and Damage which aims to provide restitution for the damage from climate change impacts. Cumulative commitments to the Fund are about 0.25 per cent of what is needed. Developing countries must also engage in housekeeping by creating enabling environments for investors through sectoral policies that mitigate risks, appropriate taxonomies and climate-related disclosures. Furthermore, there are new and scaled-up technology solutions to mitigate climate change without which finance alone can only lead to sub-optimal solutions. The conversation must, therefore, broaden to innovations in climateTech – when a new scalable technology emerges, it changes the value chain of entire industries and progressively reduces the cost of adoption. The most visible example is the global adoption of photovoltaic cells and EVs.

The transition to renewable energy is central to mitigating the effects of climate change. International investment in renewable energy has nearly tripled since the adoption of the Paris agreement in 2015. Developing countries have, however, received only a fifth of global clean energy investments. Nevertheless, the share of renewable energy in global electricity production is rising, with India at the forefront. While natural energy sources are abundant, they are not evenly distributed worldwide. This highlights the importance of cross-border trade in renewable energy. The transmission of renewable power across borders can help address supply-demand mismatches. Storage solutions can contribute to security of energy supply along with better grid utilisation and new trade opportunities through meeting nations' decarbonisation commitments. Trading in renewable energy will also reduce the overall cost of the global energy transition. Multilateral agencies such as the World Trade Organisation and the World Meteorological Organisation have a crucial role to play.

For India, the November releases of estimates of real gross domestic product (GDP) / gross value added (GVA) for the second quarter of 2024-25 and headline consumer price inflation have confirmed apprehensions in the November issue of the State of the Economy, reprising the dilemma of a slowing growth-high inflation conundrum. As presciently pointed out, from the expenditure side, the major factor contributing to the decline in the growth rate of the economy is fixed capital formation. From the production side, the main concern is manufacturing.⁵ Undermining both is inflation. The erosion of purchasing power due to repeated inflation shocks and persisting price pressures is starkly reflected in weakening sales growth of listed non-financial non-government corporations. Their outlook on demand conditions also remains subdued as no let-up in the incidence of price shocks seems to be in sight; they will increasingly be inclined to pass on input costs to selling prices. Consequently, there is no robust capacity creation by investing in fixed assets. Instead, corporations are churning and utilising existing capacity to meet the inflation-dented consumer demand. The result is lacklustre private investment. The slowdown in consumer demand seems to be associated with slower corporate wage growth. Another headwind that is emerging is the slowing rate of nominal GDP, which could hinder fiscal spending, including on capex, to achieve budgetary deficit and debt targets. As we pointed out in November, if inflation is allowed to run unchecked, it can undermine the prospects of the real economy, especially industry and exports.

The time to act is now to excoriate inflation and revive investment strongly, especially as the usual winter easing of food price is setting in and the prospects of private consumption and exports accelerating are getting brighter. The prospects for agriculture and hence rural consumption are certainly looking up, with a large part of the *kharif* harvest

⁵ Rangarajan. C. and D K Srivastava, Implications of Q2 growth dip.

likely to show up in the estimates of GDP for the third quarter and brisk expansion of *rabi* sowing ahead of the warmer than normal winter predicted by the India Meteorological Department (IMD). An increasing number of states are opening up and facilitating trade of agricultural commodities on the eNAM platform. The spurt in inter-mandi and inter-state trading on the platform is enabling better price discovery for farmers. Services activity remains resilient; hotels, in particular, are seeing month-on-month (m-o-m) recovery and as foreign tourists arrive, they expect a full recovery this financial year.

On the consumption front, FMCG companies attributing the muted demand to urban sluggishness on concerns about food inflation believe that the slowdown has bottomed out and stabilising as it awaits an upward spiral. Hence, they are looking to boost partnerships with quick commerce platforms to revive their biggest distribution channel, namely general trade, in combination with support in the form of low inventory and better servicing. Meanwhile, they are also flagging fund raising by quick commerce companies for deep discounting and predatory pricing. Overall, Indian consumers are increasingly preferring quick commerce platforms for daily essentials but continue to opt for in-store shopping for high value purchases. Black Friday, imported from the US spanning November 29 - December 1, gained popularity this year, with premium brands taking centre-stage in promoting sales.

Positives for consumption are also reflected in reports highlighting a pick-up in new hiring, likely being driven by sectors such as logistics, EVs and EV infrastructure, agriculture and agrochemicals, and e-commerce.⁶ A geographical shift in the job market appears to be underway. Cities like Coimbatore and Gurgaon are becoming job hubs, representing a decentralisation of employment opportunities beyond

⁶ Teamlease Employment Outlook Report H2 FY25.

the metros. Contractual staffing or temporary hiring is witnessing significant growth, including among IT professionals.⁷ The gig economy is expected to add 90 million jobs in 2024.⁸ Global capability centres are rapidly creating high-skill jobs in technology and research and development. The Semiconductor Mission seeks to add 80,000 jobs by 2025 through an investment of ₹1.25 lakh crore.

Domestic financial markets shrugged off the backwash effects of US elections in late November and early December, although a surge in the US dollar and persisting inflation led to hardening of US bond yields. Domestic equities registered best single-day jump in more than five months on November 22. Markets, however, pared part of the gains subsequently as heightened global monetary policy uncertainty and relentless hardening of US dollar impacted sentiments across EMEs. The India volatility index (VIX) had remained range-bound, but markets will need earnings growth for longer-term support. The majority of initial public offerings (IPOs) registered modest listing returns in November amid a decline in market sentiment. However, primary market activity regained momentum in December. Fundraising via the qualified institutional placement route crossed ₹1 trillion in calendar 2024 so far, the highest in its history. Venture capital funding rose 44 per cent to US\$ 9.2 billion in the first ten months of 2024.⁹ In the credit market, the microfinance sector saw asset quality deterioration with rising slippages in the September quarter. On the other hand, provisioning by public sector banks (PSBs) moderated for the same quarter. Private banks posted an increase in provisioning but a better performance than PSBs on the income front. Overall, higher non-interest income and improved recoveries boosted net profits. Easing rates on certificates of deposits (CDs)

⁷ "When temporary hiring becomes an increasingly permanent fixture in Indian Companies", Mint.

⁸ Forum for Progressive Gig Workers, Shaping the Future of Work: Empowering India's Gig Economy, Business Standard.

⁹ GlobalData Deals Database.

issued by large banks is also lowering the cost of funds raised by smaller peers. The Indian rupee has remained under pressure from the strong US dollar and foreign portfolio investors (FPIs) remaining net sellers, although they have returned to both debt and equities in December.

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. An assessment of domestic macroeconomic conditions is set out in Section III. Section IV encapsulates financial conditions in India, while the last Section sets out concluding remarks.

II. Global Setting

In its December 2024 Economic Outlook, the Organization for Economic Co-operation and Development (OECD) maintained its global growth forecast at 3.2 per cent for 2024 and revised the 2025 projection up by 10 basis points (bps) to 3.3 per cent, reflecting improvements in advanced economies (AEs) like the US, the UK and emerging market economies (EMEs) such as China and India (Table II.1). Inflation is expected to moderate in G20 economies from 5.4 per cent in 2024 to 3.5 per cent in 2025 and further to 2.9 per cent in 2026. This could open up the space for monetary policy normalisation, although geopolitical risks, trade policy uncertainty, pent up fiscal and currency pressures amidst financial vulnerabilities continue to pose downside risks.

Our model-based nowcast of global GDP point towards a moderation in global growth momentum in Q4:2024 (Chart II.1).

The global supply chain pressures index (GSCPI) remained stable for the second consecutive month in November 2024, below its historical average (Chart II.2a). Geopolitical risks stay elevated due to ongoing tensions in the Middle East, *albeit* with some moderation in November 2024 (Chart II.2b). After showing some easing during September and October,

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

Country	2024		2025		(Per cent)
	December 2024	September 2024	December 2024	September 2024	
 World	3.2	3.2	3.3	3.2	
Advanced Economies					
 US	2.8	2.6	2.4	1.6	
 UK	0.9	1.1	1.7	1.2	
 Euro area	0.8	0.7	1.3	1.3	
 Japan	-0.3	-0.1	1.5	1.4	
Emerging Market Economies					
 Brazil	3.2	2.9	2.3	2.6	
 India [#]	6.8	6.7	6.9	6.8	
 China	4.9	4.9	4.7	4.5	
 South Africa	1.0	1.0	1.5	1.4	

Note: #: India's data is on a fiscal year basis.

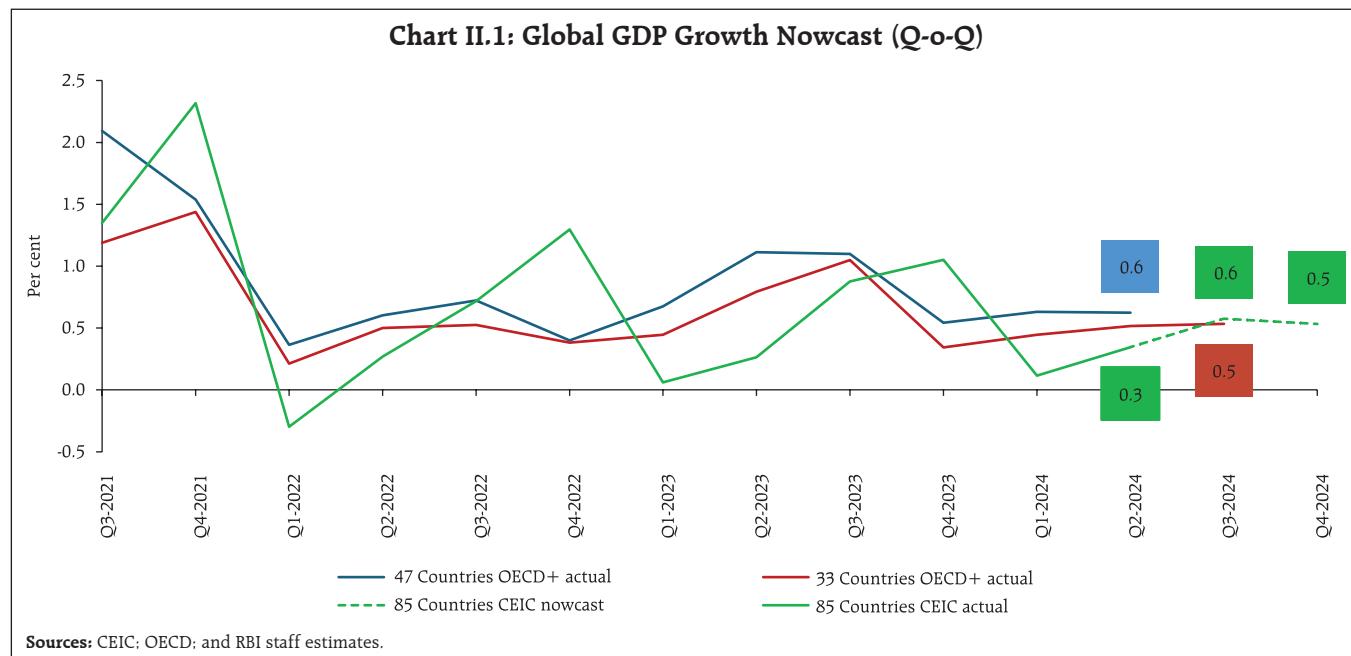
Source: OECD.

shipping costs has started increasing from November (Chart II.2c).

Consumer confidence improved in the US and the UK, but worsened in the Euro area¹⁰ in December 2024 (Chart II.3a). High frequency data on AEs and EMEs indicated easing of financial conditions in November (Chart II.3b).

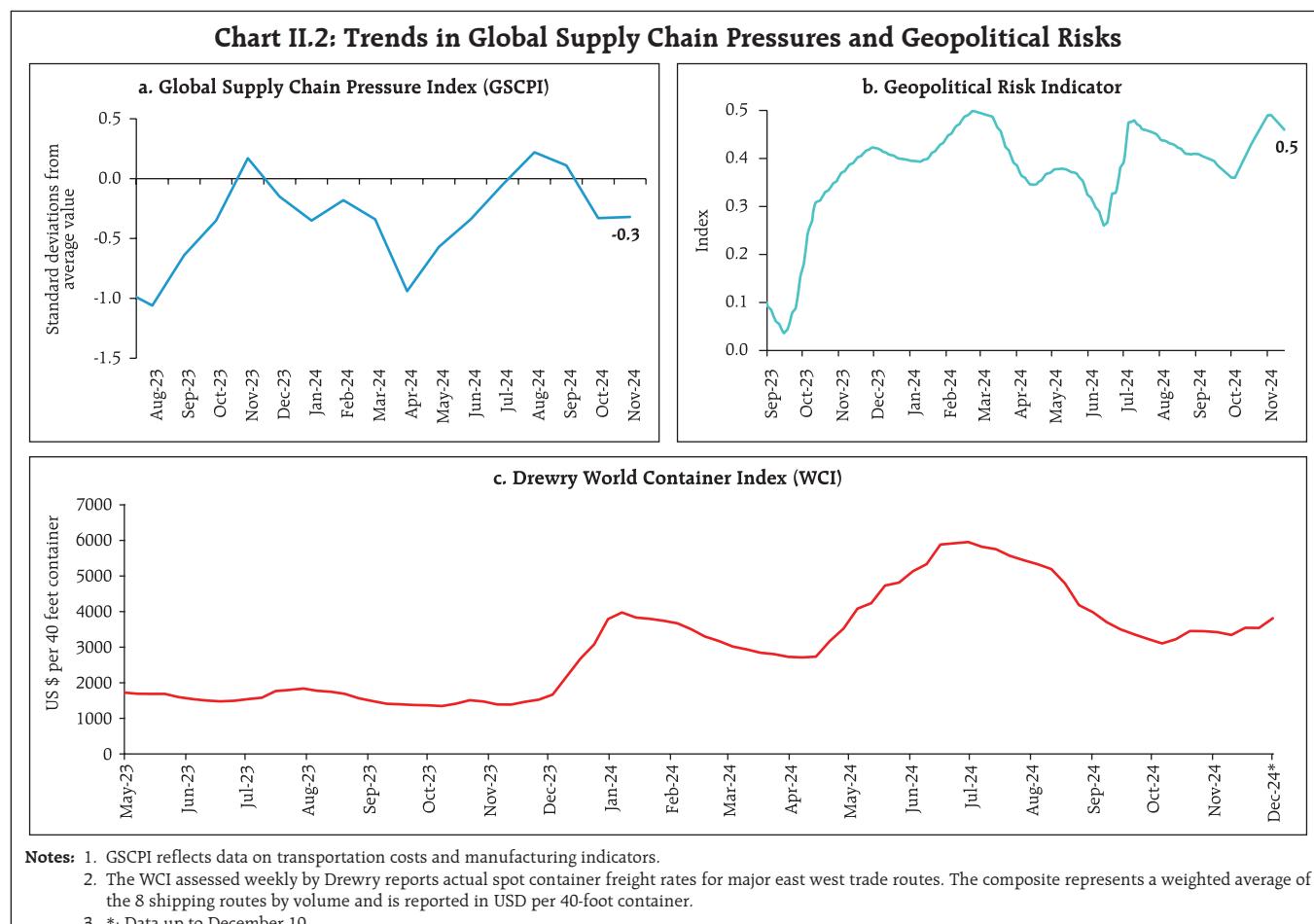
The global composite purchasing managers' index (PMI) rose to a three-month high in November, recording growth for the thirteenth consecutive month. The acceleration was largely driven by the services sector, which remained in the expansion zone for the twenty-second consecutive month in

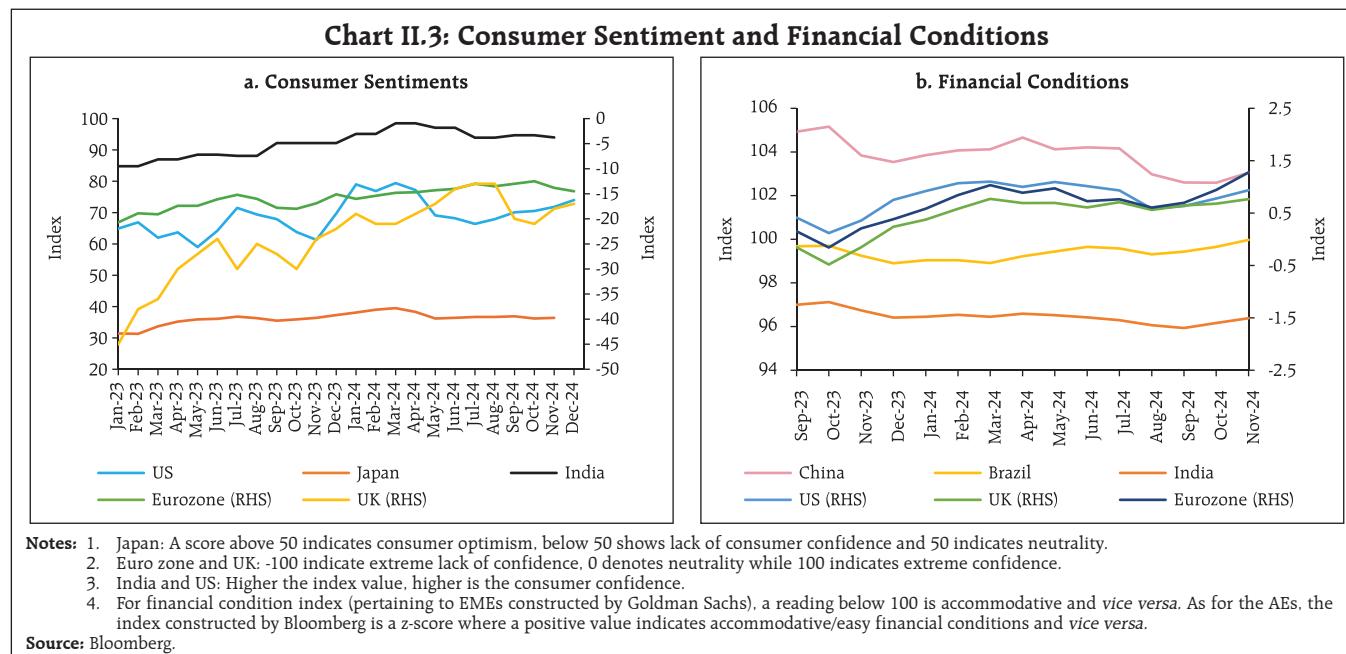
¹⁰ Flash estimate for December 2024 Euro area CCI by Directorate General for Economic and Financial Affairs (DG ECFIN), European Commission Services.



November. In particular, consumer services activity expanded further, compensating for the comparatively

lacklustre performance of manufacturing. The global manufacturing PMI increased sequentially to the





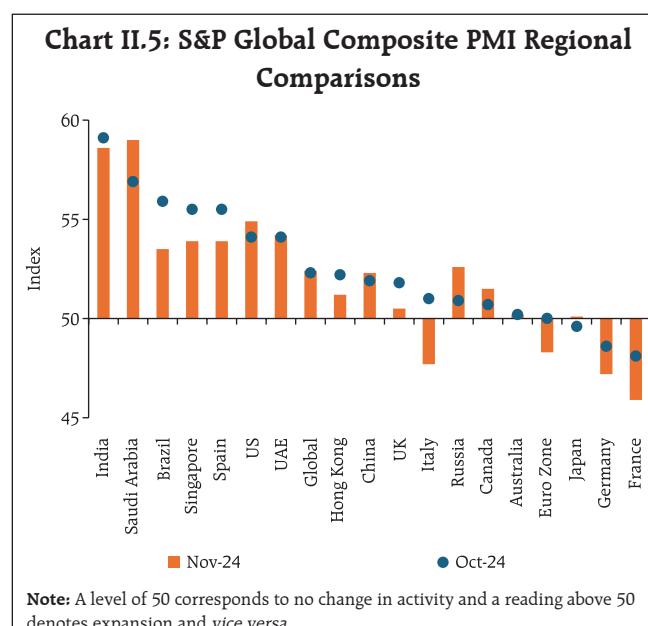
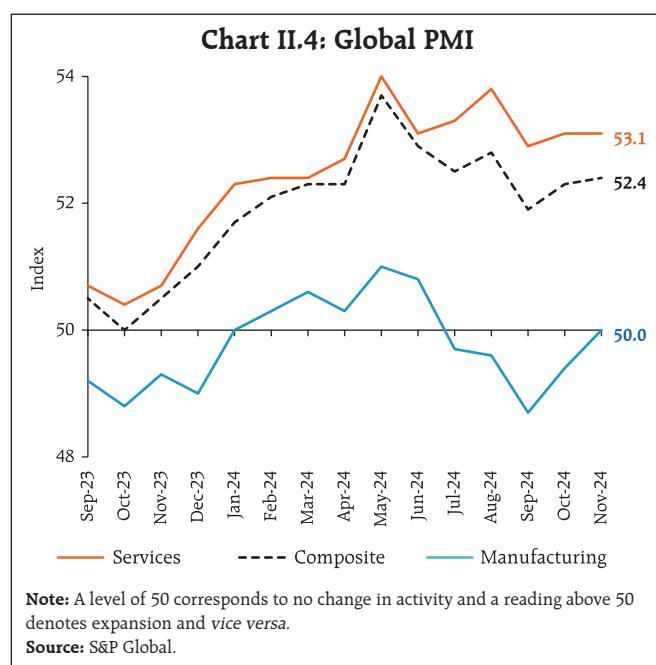
neutral mark of 50 in November after four months of contraction (Chart II.4).

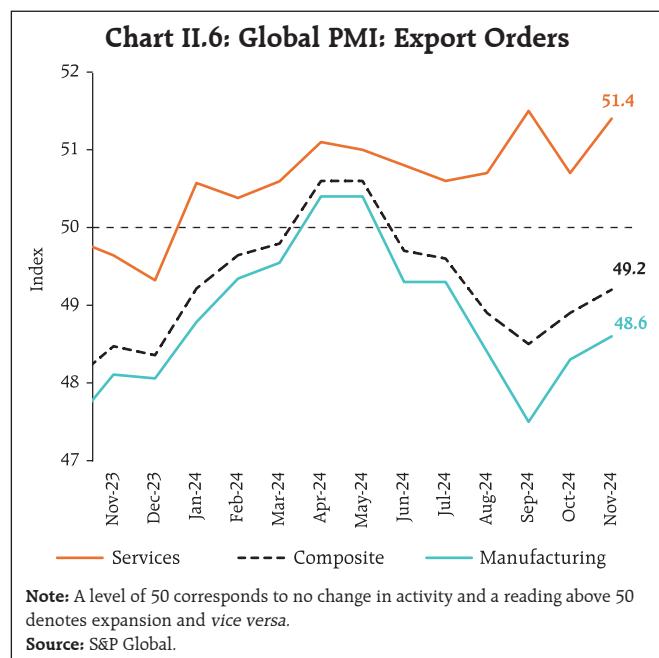
Across regions, emerging economies led by India continued to exhibit robust expansion whereas AEs such as Germany and France recorded contraction (Chart II.5).

The composite PMI for export orders remained in contractionary zone since June 2024 as weak

manufacturing exports continued to offset the growth in the services orders. In November, however, export orders in both manufacturing and services sectors recorded sequential increase (Chart II.6).

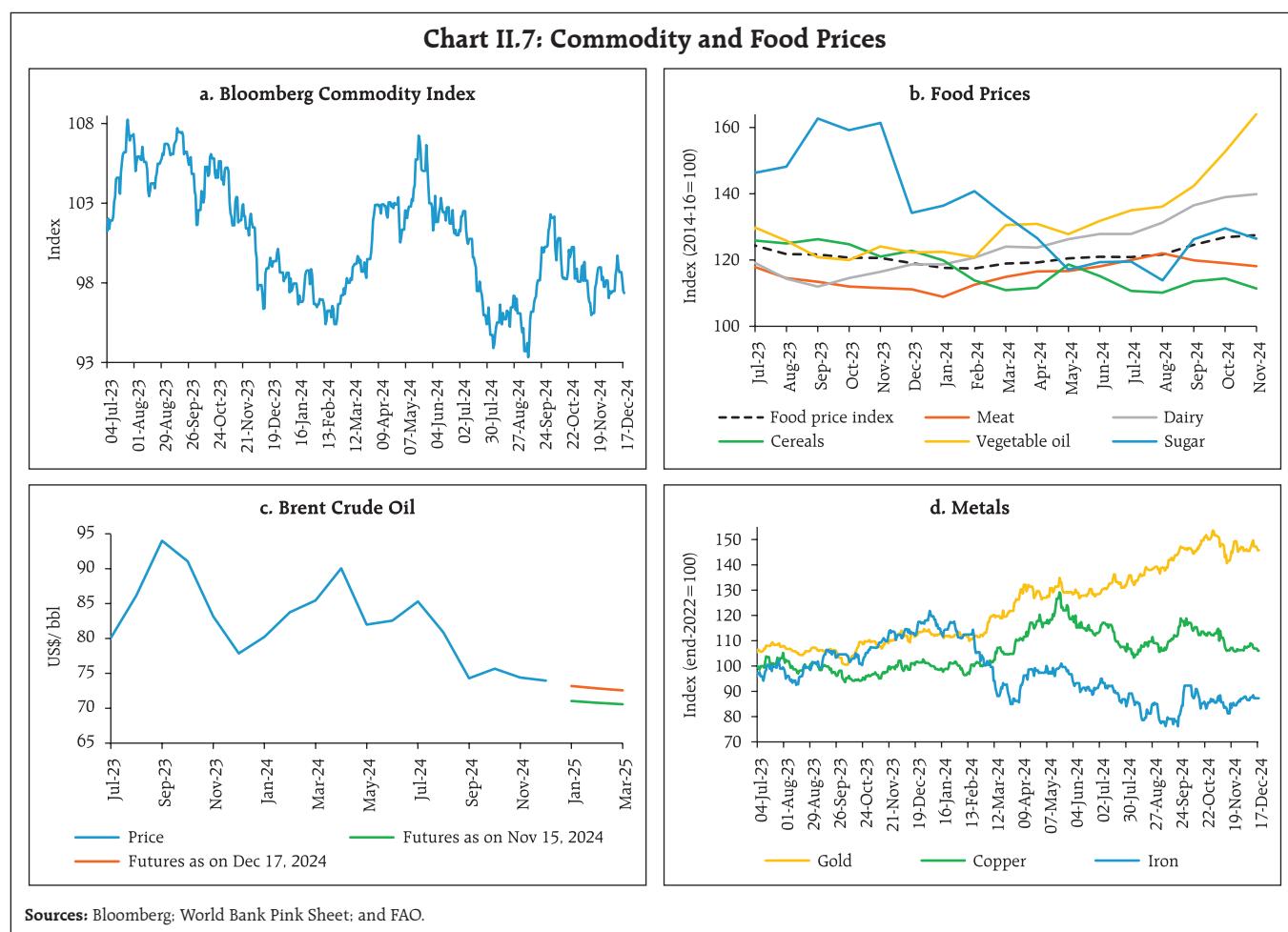
Global commodity prices recorded divergent movements in November as gains in energy and agricultural commodity prices were offset by the decline in metal prices. The Bloomberg commodity





index remained volatile in November, with a decline in the first fortnight offset by an increase during

the second (Chart II.7a). The Food and Agriculture Organization's (FAO) food price index edged up by 0.5 per cent (m-o-m) in November, primarily driven by increase in the prices of vegetable oil (7.5 per cent) and dairy, partially offset by decreases in the prices of cereals, sugar and meat (Chart II.7b). Gopolitical developments have kept oil prices volatile in November, with the ceasefire in Middle East exerting downward pressure while the risk of sanctions on Iran lent support. Overall, brent crude oil prices increased by 1.3 per cent (m-o-m) in November amidst speculation of OPEC *plus* continuing with its supply cuts into the first quarter of 2025 (Chart II.7c). Metal prices declined in November as the outlook remained uncertain for China, the world's largest consumer of base metals. Gold prices declined in the first half of November as a stronger US dollar increased opportunity cost for investors and partial de-escalation of tensions in



the Middle East reduced safe haven demand. Prices, however, recovered in the latter half of November and early December tracking expectations of policy easing by the US Fed (Chart II.7d).

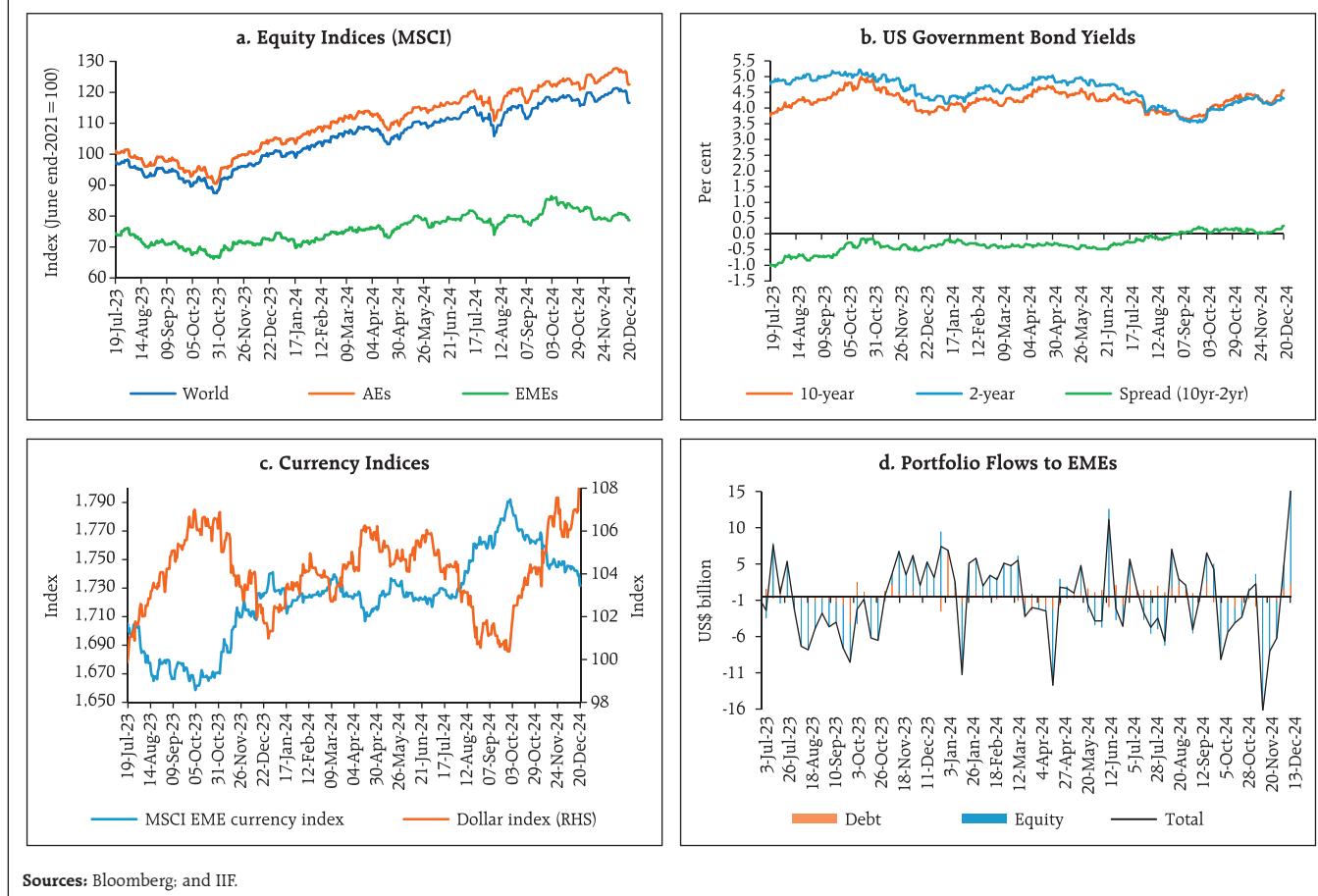
Headline inflation continues to hover close to targets but remains above them for some major economies, amidst persistent services sector inflation. In the US, consumer price index (CPI) inflation increased to 2.7 per cent (y-o-y) in November from 2.6 per cent in October. Inflation, in terms of the personal consumption expenditure (PCE) deflator also increased to 2.4 per cent in November from 2.3 per cent in October. Headline inflation edged up in the Euro area to 2.2 per cent in November from 2.0 per cent in October and in the UK to 2.6 per cent in November from 2.3 per cent in October. Inflation in Japan (CPI excluding fresh food) increased to 2.9

per cent in November (Chart II.8a). Among EMEs, inflation increased in Brazil, Russia and South Africa, but softened in China in November (Chart II.8b). Core and services inflation remained higher than the headline in most AEs (Chart II.8c and 8d).

The Morgan Stanley Capital International (MSCI) world index recorded a 3.6 per cent (m-o-m) increase in November as equity markets in AEs, particularly in the US, recorded robust upswings, tracking expectations of tax cuts as well as incoming data which pointed to resilient economic activity (Chart II.9a). The MSCI Emerging Markets Index, however, declined by 3.7 per cent in November, as speculations over tariff increases gained traction. In December so far, MSCI world recorded declines after central banks in AEs signalled greater caution in their rate cuts going forward with the slowing down of the pace of

Chart II.8: Inflation - AEs and EMEs



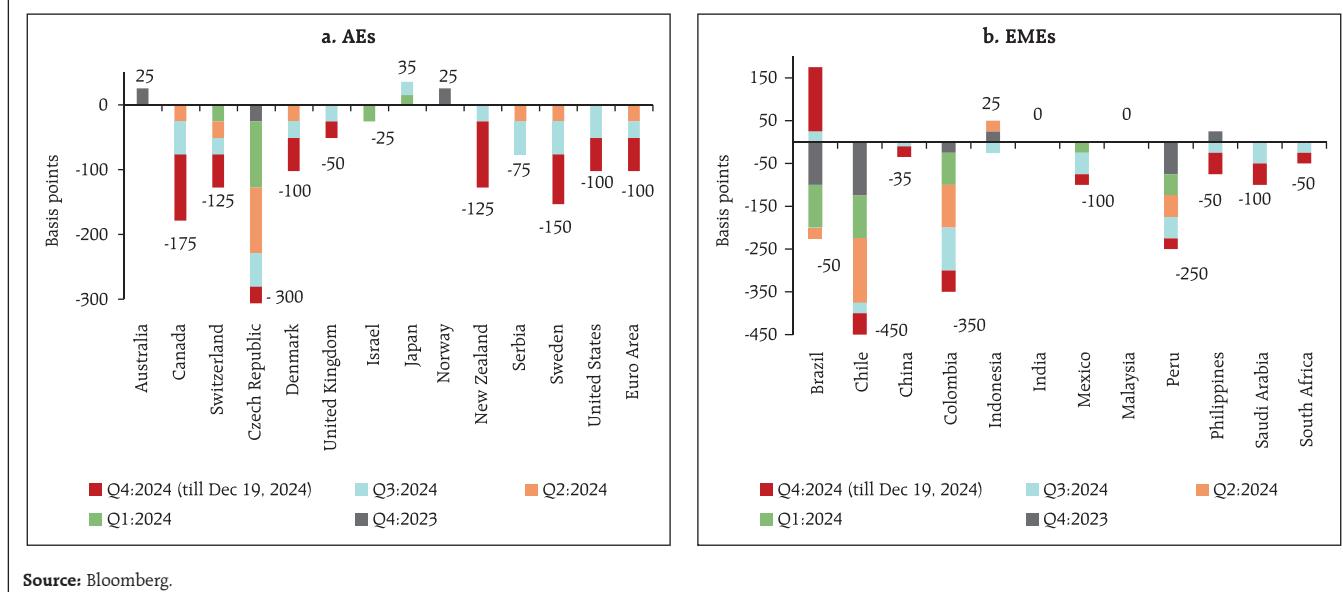
Chart II.9: Global Financial Markets

Sources: Bloomberg; and IIE.

disinflation. The US government securities yields for both 10-year and 2-year bonds softened by 12 bps and 2 bps, respectively, in November (Chart II.9b). Yields, however, hardened in December and the US 10-year treasury yield reached the highest level since May 2024, along with a steepening of the yield curve, as summary of economic projections of the FOMC indicated a slower than anticipated pace of interest rate reductions in 2025. The US dollar strengthened by 1.7 per cent (m-o-m) in November over resilient US GDP data and US election results. This upsurge continued in December as Fed's dot plot underscored through their median projection, a stronger than expected US economy with higher than previously anticipated inflation and policy rates by end of 2025. Concomitantly, the MSCI currency index for EMEs decreased by around 1 per cent in November and

December each, mainly due to capital outflows in the equity segment (Chart II.9c and II.9d).

Among AE central banks, the US Federal Reserve decided to lower the target range for the federal funds rate by 25 bps to 4.25-4.50 per cent on December 18, 2024 and indicated that the extent and timing of further adjustments to the target range for the federal funds rate will be based on a careful assessment of the incoming data, the evolving outlook, and the balance of risks. ECB cut their policy rate in December by 25 bps and Canada and Switzerland reduced their benchmark rates by 50 bps each whereas the UK, Japan and Australia kept their policy rates unchanged (Chart II.10a). South Korea and Czech Republic had lowered their policy rate by 25 bps in November. Among EME central banks, South Africa reduced its policy rates by 25 bps in November and Chile lowered its benchmark

Chart II.10: Changes in Policy Rates

Source: Bloomberg.

rate by 25 bps in December. Brazil, on the other hand, hiked its rate by 100 bps in its latest meeting (Chart II.10b).

III. Domestic Developments

High frequency indicators (HFIs) for the third quarter of 2024-25 indicate that the Indian economy is recovering from a moderation in momentum witnessed in Q2, driven by strong festival activity and a sustained upswing in rural demand. Consumer confidence was boosted by higher optimism for the year ahead, breaking out of the sequential moderation in the current assessment of conditions (Chart III.1a). Supply chain pressures remained below historical average levels, with further easing in November (Chart III.1b). Based on the economic activity index¹¹, which indicates a pick-up in momentum in November on a seasonally adjusted basis, GDP growth nowcast for Q3:2024-25 is placed at 6.8 per cent (Chart III.1c and 1d).

As per the projections based on the in-house Dynamic Stochastic General Equilibrium (DSGE), real

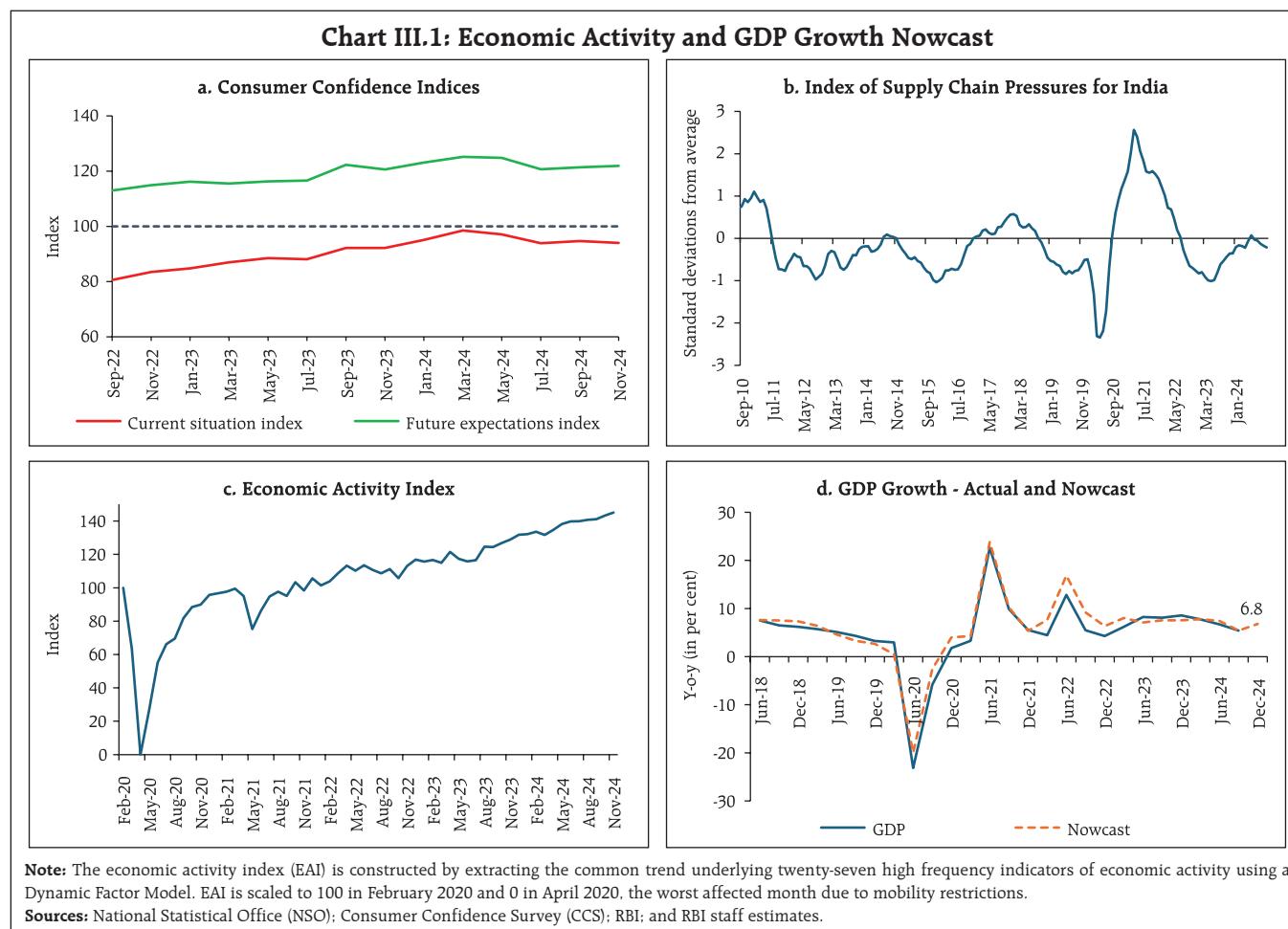
GDP growth is likely to recover to 6.8 per cent and 6.5 per cent in Q3 and Q4 of 2024-25, respectively. Growth for 2025-26 is projected at 6.7 per cent while headline CPI inflation is projected to average 3.8 per cent in 2025-26 (Table III.1 and Chart III.2).

Aggregate Demand

Real GDP growth moderated to a seven-quarter low of 5.4 per cent in Q2:2024-25 as against 8.1 per cent in Q2:2023-24 and 6.7 per cent in Q1:2024-25. The sequential moderation was on account of a deceleration in the domestic drivers; private consumption and fixed investment. Government final consumption expenditure, however, recovered and net exports contributed positively to growth in Q2:2024-25 (Chart III.3).

Private final consumption expenditure (PFCE), the major component of aggregate demand, grew by 6.0 per cent (y-o-y) in Q2:2024-25, higher than 2.6 per cent recorded a year ago. Subsequent HFIs suggest that rural demand conditions have continued to tread upwards, while urban demand exhibited signs of recovering. Gross fixed capital formation (GFCF) registered a growth of 5.4 per cent in Q2:2024-25 lower than 11.6 per cent in Q2:2023-24 (7.5 per

¹¹ The index extracts the dynamic common factor underlying 27 monthly indicators representing industry, services, global and miscellaneous activities.



cent in Q1:2024-25). This moderation was also evident in coincident indicators of capital formation, including steel consumption, cement production, and production and imports of capital goods. The growth in government final consumption expenditure (GFCE)

recovered to 4.4 per cent in Q2:2024-25 following a contraction in the preceding quarter. On the external front, while exports grew modestly by 2.8 per cent in Q2:2024-25, imports contracted by 2.9 per cent. With export growth exceeding that of imports, net exports contributed positively by 1.5 percentage points to GDP growth in Q2:2024-25.

High frequency indicators suggest that aggregate demand continued to expand in October/November 2024. E-way bills increased by 16.3 per cent (y-o-y) in volume terms in November (Chart III.4a). Toll collections recorded double digit growth in November 2024, both in value and volume terms (Chart III.4b).

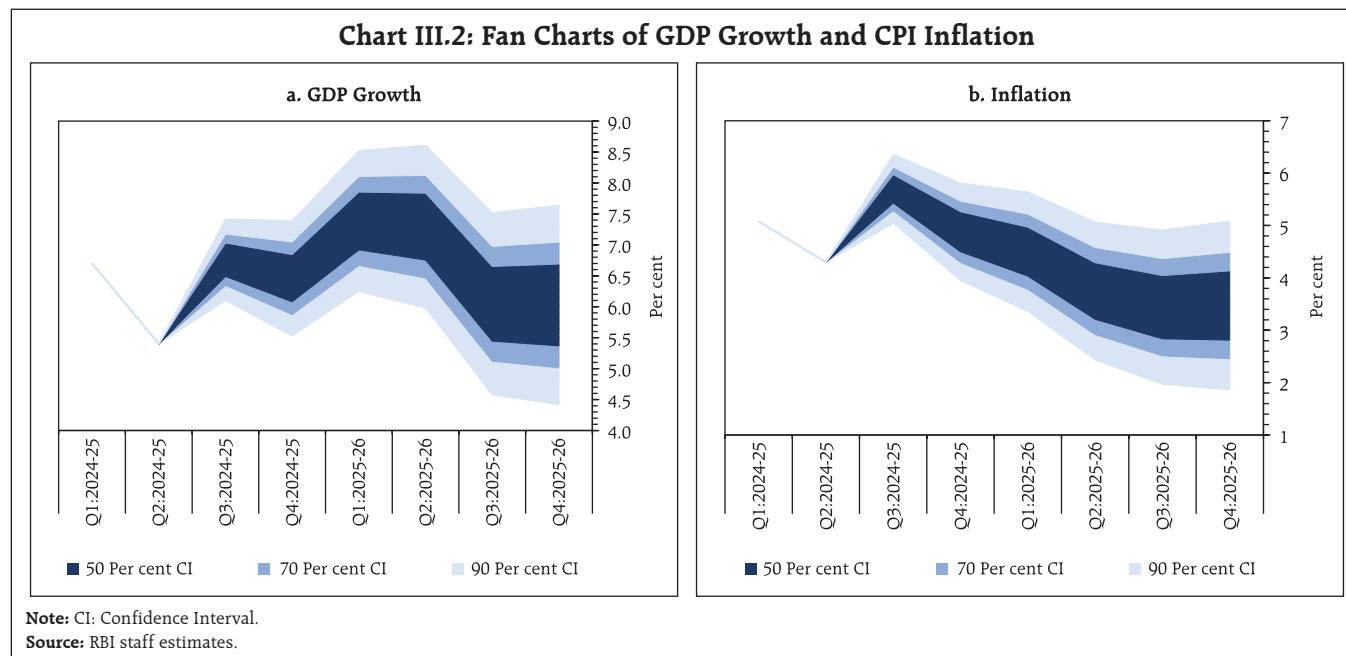
Automobile sales contracted marginally on a y-o-y basis for the first time in 16 months, driven by the

Table III.1: Baseline Projections

(y-o-y in per cent)

Periods	GDP Growth	CPI Inflation
Q3: 2024-25	6.8	5.7
Q4: 2024-25	6.5	4.9
Q1: 2025-26	7.4	4.5
Q2: 2025-26	7.3	3.7
Q3: 2025-26	6.0	3.4
Q4: 2025-26	6.0	3.5
FY 2025-26	6.7	3.8

Source: RBI staff estimates.



impact of a high base a year ago (26.5 per cent y-o-y growth in November 2023) [Chart III.5a]. Scooter sales expanded y-o-y, while the sales of other two-wheelers, three-wheelers and tractors recorded a marginal contraction (Chart III.5b). Vehicle registrations continued to grow in double digits (y-o-y) in November 2024 with a m-o-m pick up in

registration of non-transport vehicles (Chart III.5c). India's fuel consumption surged in November 2024, driven by farm harvesting, increasing rural activity and robust air travel (Chart III.5d).

On the renewable energy front, India has made significant progress in recent years led by the addition of installed capacity of solar, wind and

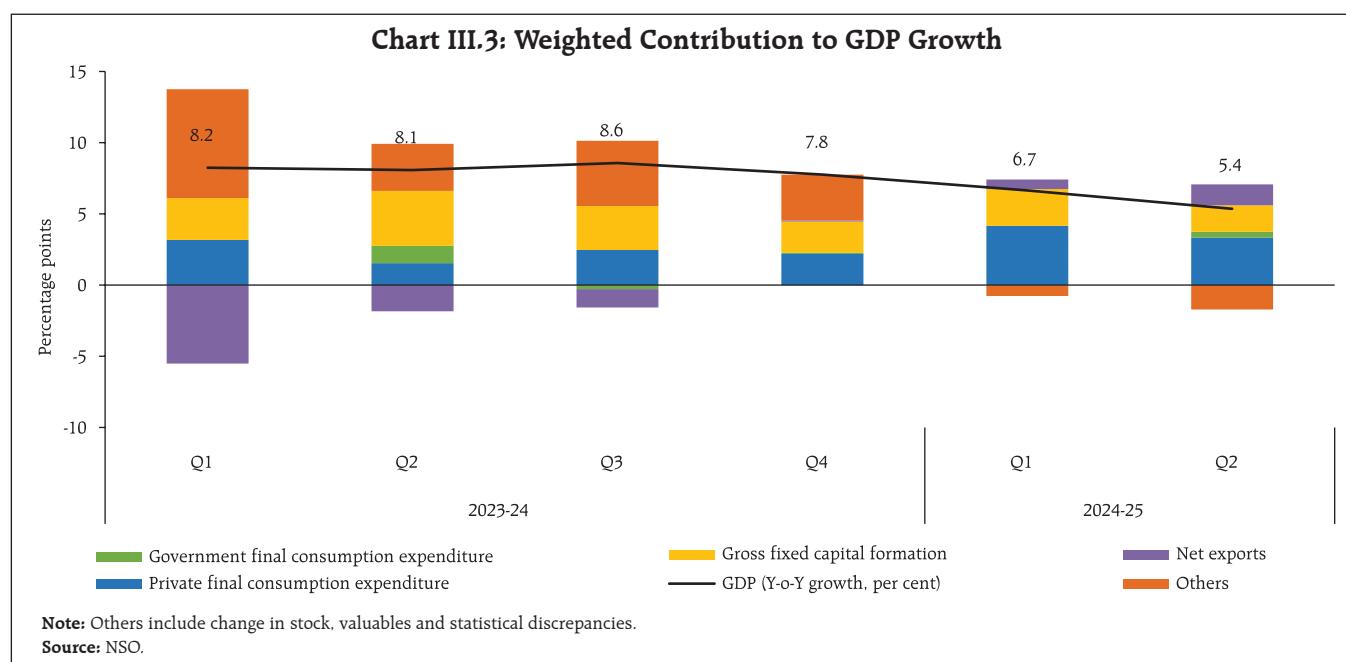
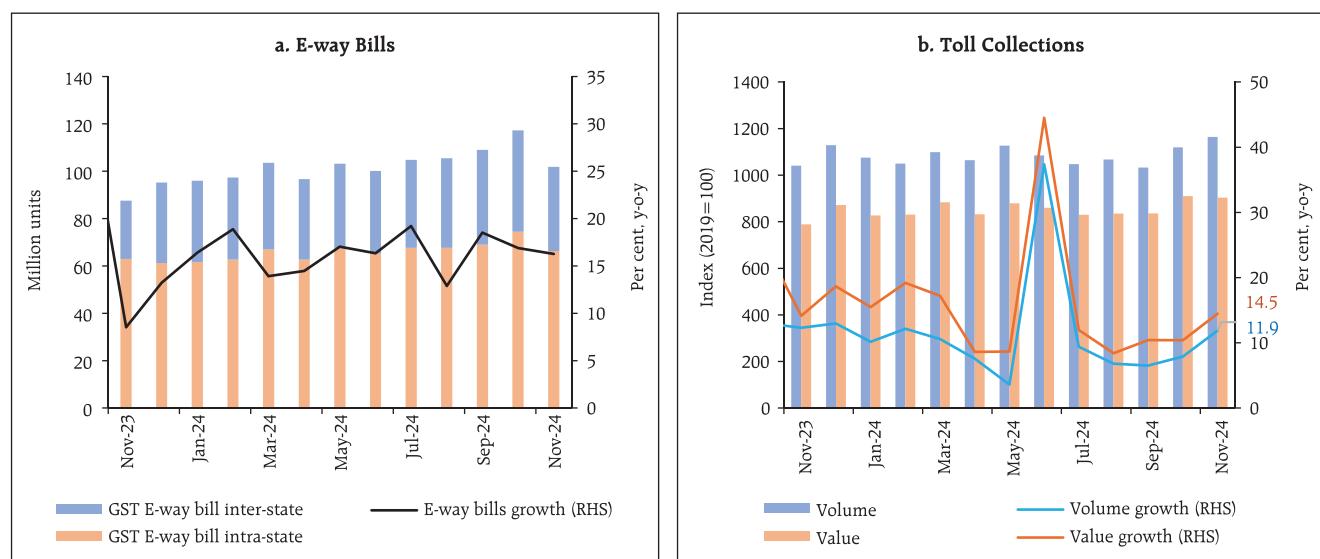
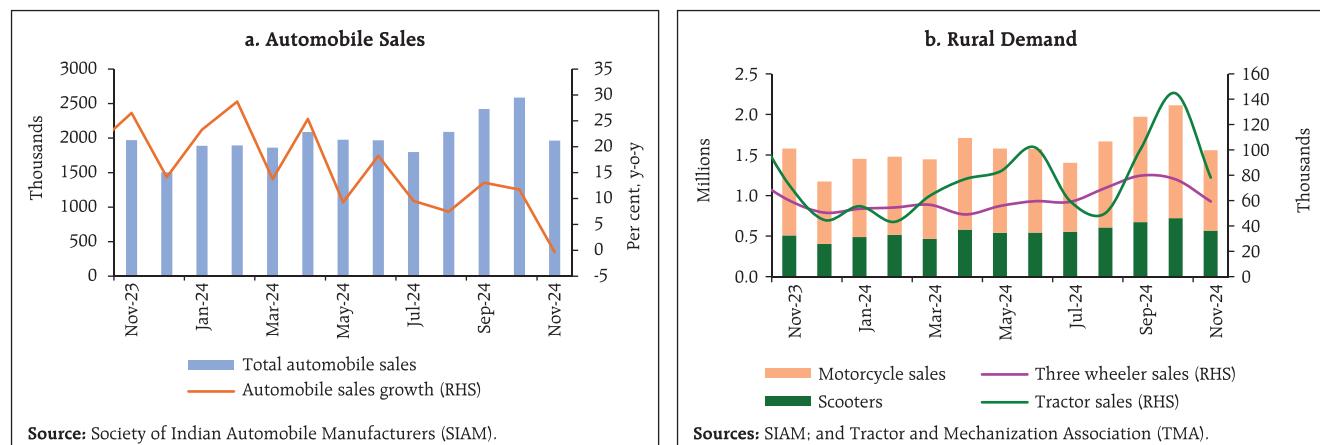


Chart III.4: E-way Bills and Toll Collections

Sources: GSTN; and RBI.

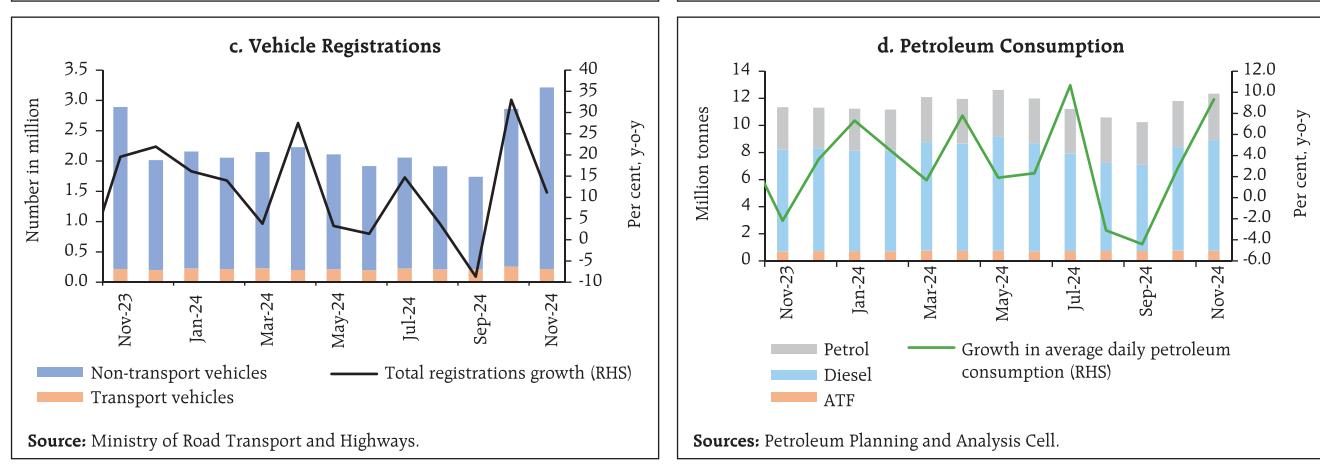
hydro (Chart III.6). Substantial progress has been made under the PM Surya Ghar Muft Bijli Yojana

(PMSGMBY) with 6.3 lakh installations completed within 9 months of launch of PMSGMBY in February

Chart III.5: Automobile Sector Indicators

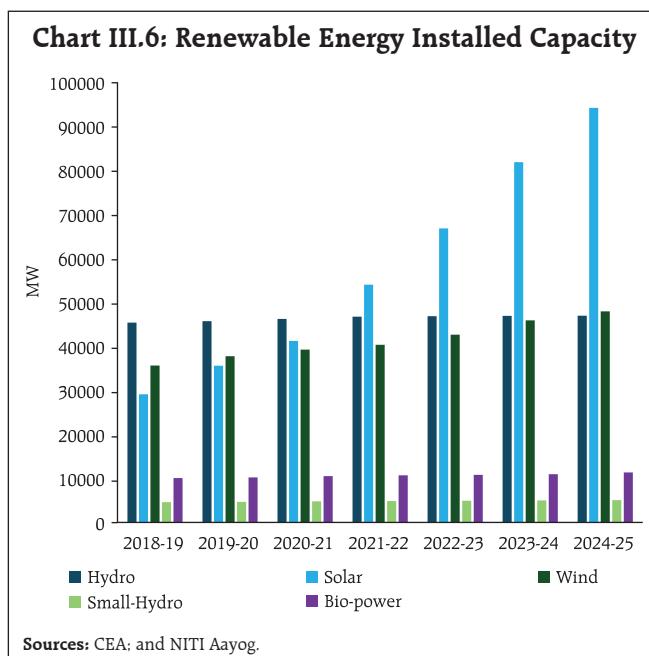
Source: Society of Indian Automobile Manufacturers (SIAM).

Sources: SIAM; and Tractor and Mechanization Association (TMA).



Source: Ministry of Road Transport and Highways.

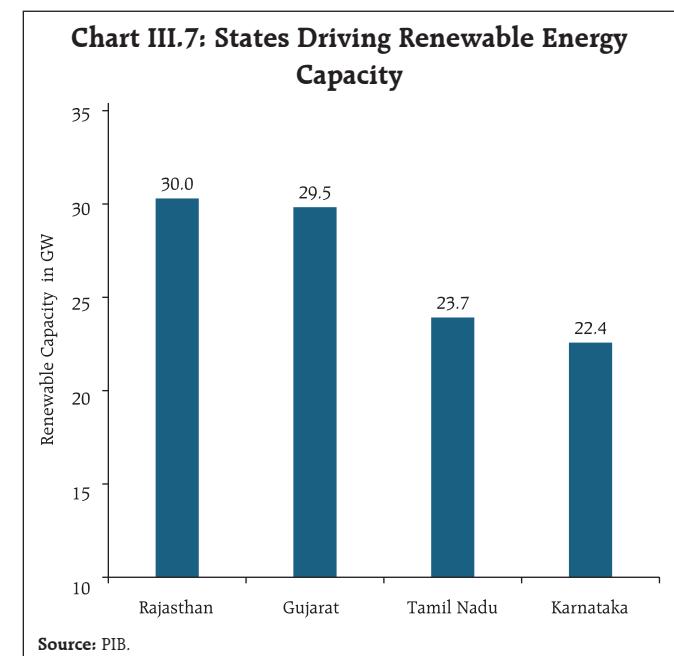
Sources: Petroleum Planning and Analysis Cell.



2024.¹² By November 2024, over ₹3,100 crore was also disbursed to more than four lakh consumers as subsidy under the scheme. Installations under the scheme are expected to exceed 10 lakhs by March 2025 paving the way for a sustainable future in rooftop solar energy.

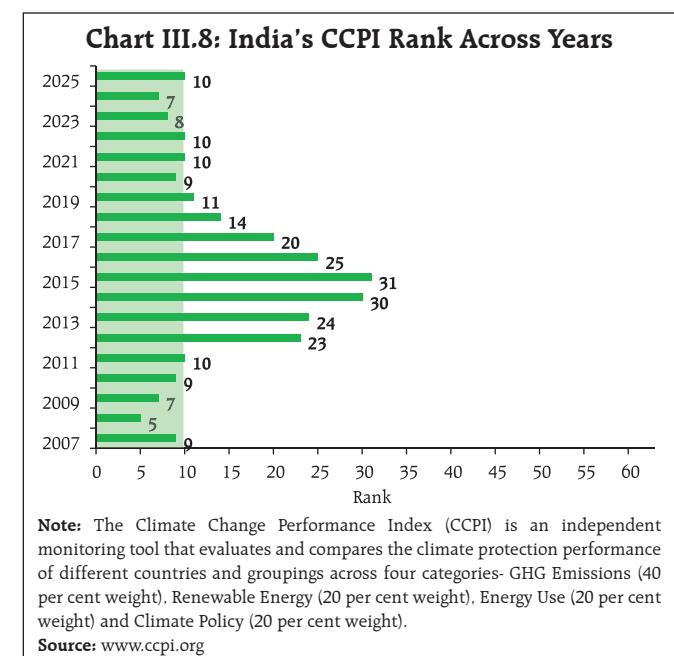
In November 2024, India's renewable energy capacity reached 205.5 GW and total non-fossil energy capacity stood at 213.7 GW, accounting for more than 46 per cent of the country's total installed capacity. State-wise, Rajasthan, Gujarat, Tamil Nadu and Karnataka together contributed to around 50 per cent of total renewable capacity in the country (Chart III.7).

India ranked 10th globally¹³ and second among G-20 nations in climate action, as per the Climate Change Performance Index (CCPI) 2025, released on November 20, 2024. India continued to be among the top 10 performers since 2020 driven mainly by impressive performances in the areas on climate



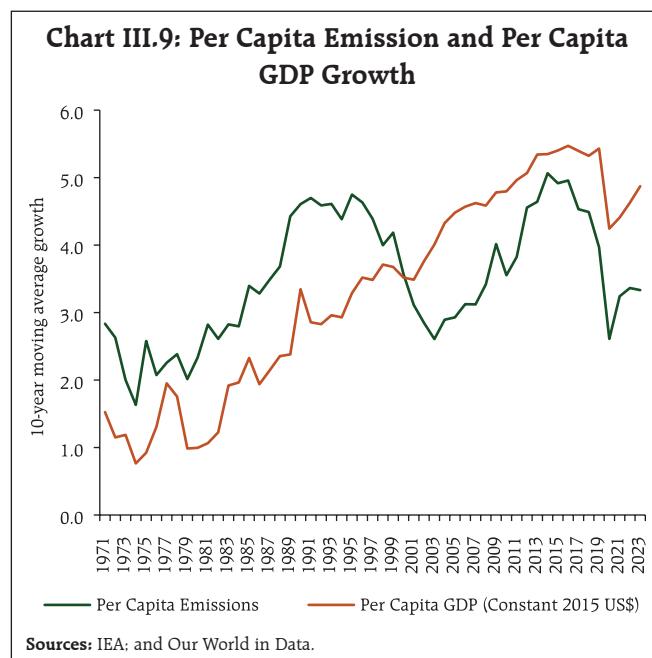
policy, GHG emissions, and energy use components (Chart III.8).

CCPI 2025 also highlighted that India has maintained low GHG emissions per capita and in recent decades, the growth in per capita emissions has been lower than the growth in per capita GDP (Chart III.9).



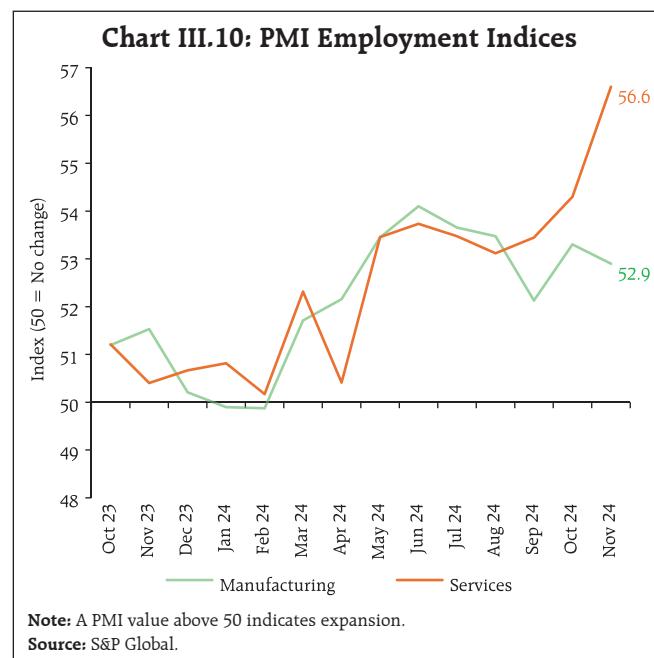
¹² <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2080833>

¹³ The index reveals that no country performed well enough in all categories to achieve an overall very high rating, thus the index continues to leave the top 3 positions vacant making India 7th best performer.

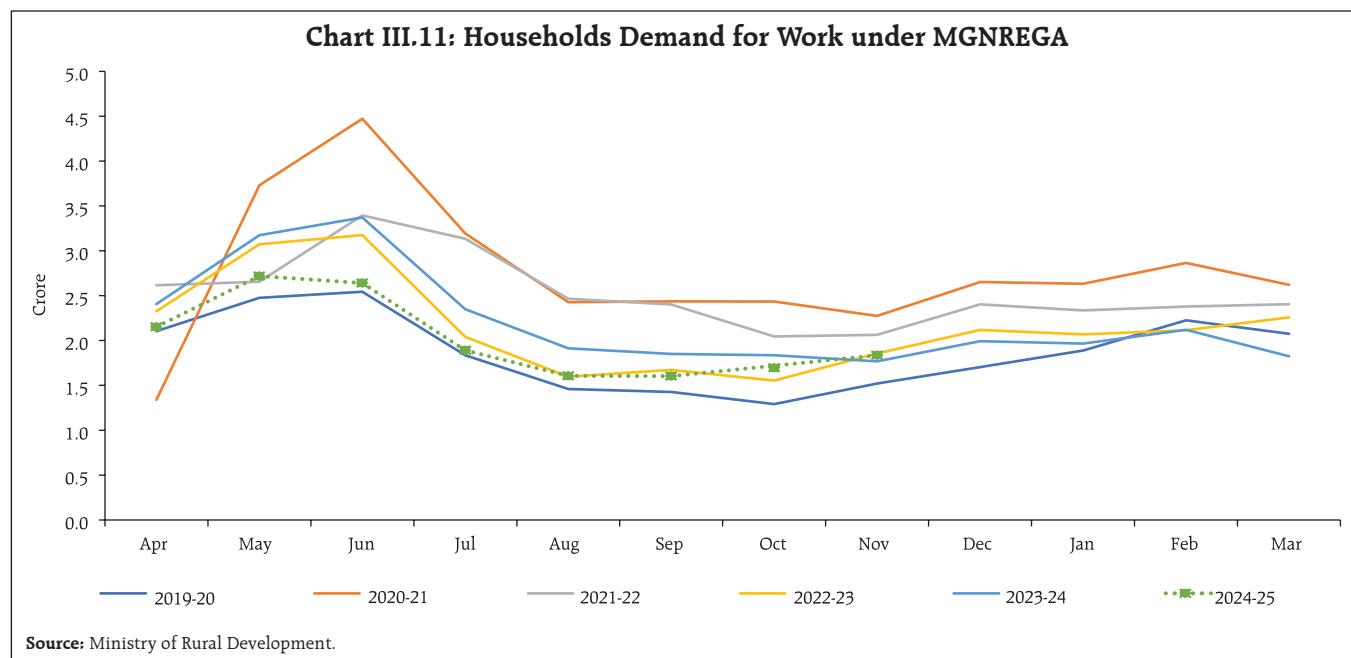


Employment in the organised manufacturing sector witnessed an expansion for the ninth consecutive month as per the PMI. The rate of job creation in the services sector expanded at the fastest pace since the survey's inception¹⁴ (Chart III.10).

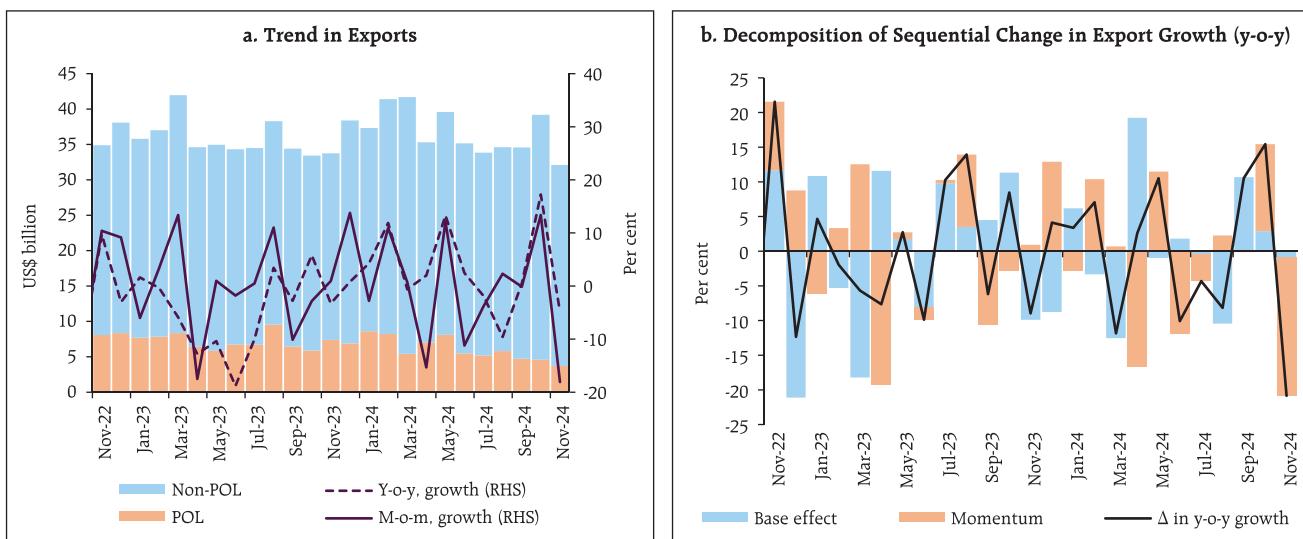
The demand for work under the Mahatma Gandhi National Rural Employment Guarantee Act



(MGNREGA) rose by 8.2 per cent m-o-m and 3.9 per cent y-o-y in November 2024 as a significant part of *rabi* sowing was completed. The total number of households demanding work under MGNREGA during the current year so far (Apr-Nov) in most months remained lower in comparison to post-pandemic years (Chart III.11).



¹⁴ The survey began in 2005.

Chart III.12: India's Merchandise Exports

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

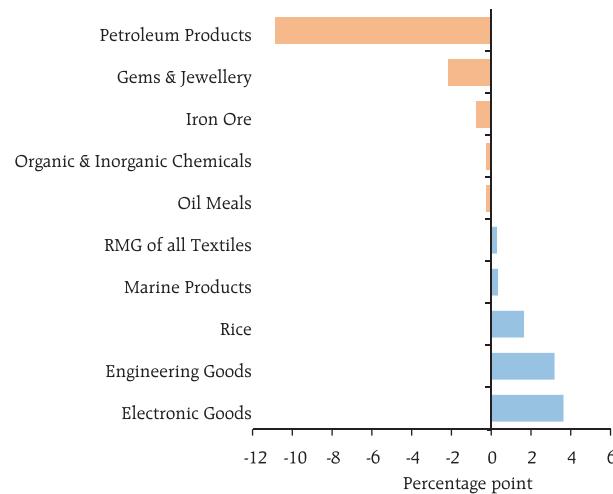
India's merchandise exports at US\$ 32.1 billion contracted by 4.8 per cent (y-o-y) in November 2024, driven by both a negative momentum and an unfavourable base effect (Chart III.12).

Exports of 9 out of 30 major commodities (accounting for 38 per cent of export basket) contracted on y-o-y basis in November. Petroleum products, gems and jewellery, iron ore, organic and inorganic chemicals, and oil meals contributed negatively to export growth in the month, while electronic goods, engineering goods, rice, marine products, and ready-made garments (RMG) of all textiles were the top drivers of export growth (Chart III.13). During April-November 2024, India's merchandise exports expanded by 2.2 per cent to US\$ 284.3 billion, primarily led by engineering goods, electronic goods, drugs and pharmaceuticals, organic and inorganic chemicals, and RMG of all textiles, while petroleum products, gems and jewellery, iron ore, ceramic products and glassware, and other cereals dragged exports down.

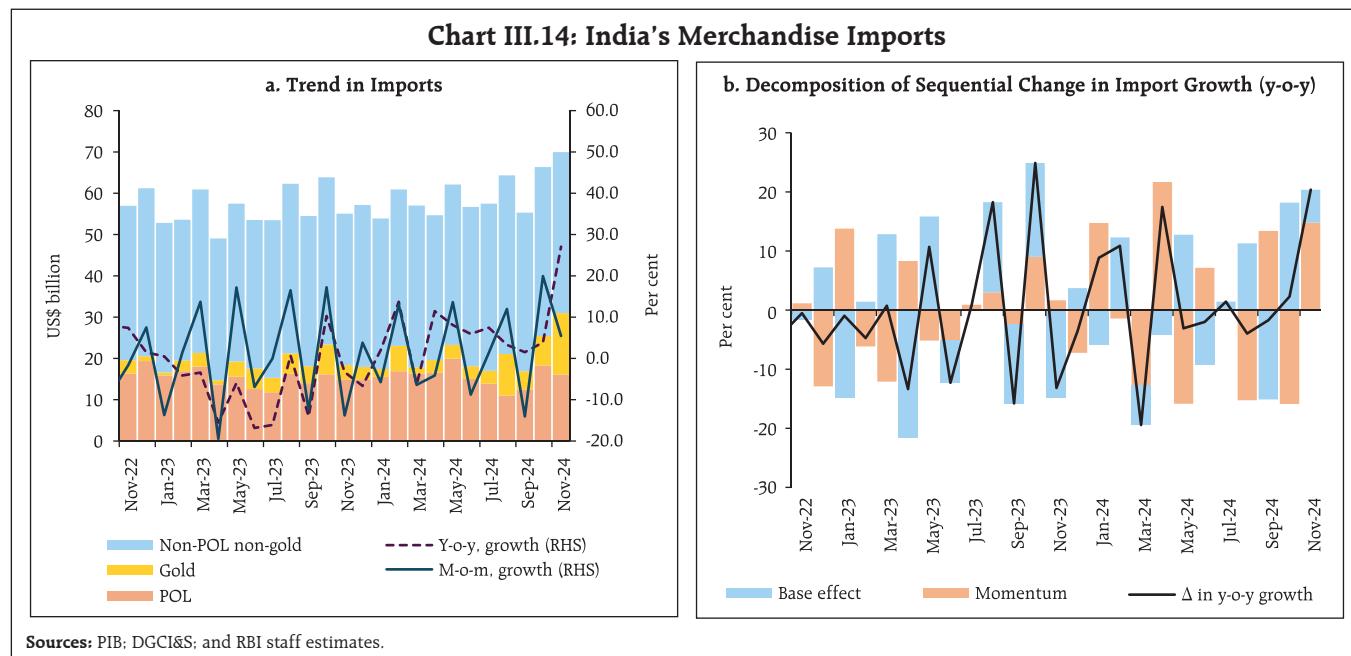
Exports to 9 out of 20 major destinations contracted in November. During April-November

2024, exports to 12 out of 20 major destinations witnessed an expansion, with the US, the UAE and the Netherlands being the top three export destinations.

Merchandise imports expanded for the eighth consecutive month in November and reached an all-time high of US\$ 70.0 billion, with a growth of 27.0 per cent (y-o-y), on account of a positive momentum, reinforced by base effect (Chart III.14). Out of 30

**Chart III.13: India's Merchandise Exports – Relative Contribution
(November 2024 over November 2023)**

Sources: PIB; and RBI staff estimates.



major commodities, 23 commodities (accounting for 76.0 per cent of import basket) registered an expansion on a y-o-y basis.

Gold, POL, electronic goods, vegetable oil, and machinery contributed positively, while coal, coke and briquettes, iron and steel, transport equipment, leather and its products, and pearl, precious and

semi-precious stones contributed negatively to import growth (Chart III.15). During April-November 2024, India's merchandise imports at US\$ 486.7 billion increased by 8.4 per cent (y-o-y), led by gold, POL, electronic goods, non-ferrous metals, and machinery, while coal, coke and briquettes, pearls, precious and semi-precious stones, chemical material and products, fertilisers, and dyeing, tanning and colouring materials contributed negatively.

Imports from 13 out of 20 major source countries expanded in November and during April-November 2024. Imports from major source countries, *viz.*, China, the UAE, and Russia, witnessed robust growth.

The merchandise trade deficit widened to an all-time high of US\$ 37.8 billion in November 2024. Oil deficit rose to US\$ 12.4 billion in November from US\$ 7.5 billion a year ago. The share of oil deficit in trade deficit, however, fell to 32.8 per cent in November from 35.4 per cent a year ago. Non-oil deficit widened to US\$ 25.4 billion in November from US\$ 13.8 billion a year ago (Chart III.16).

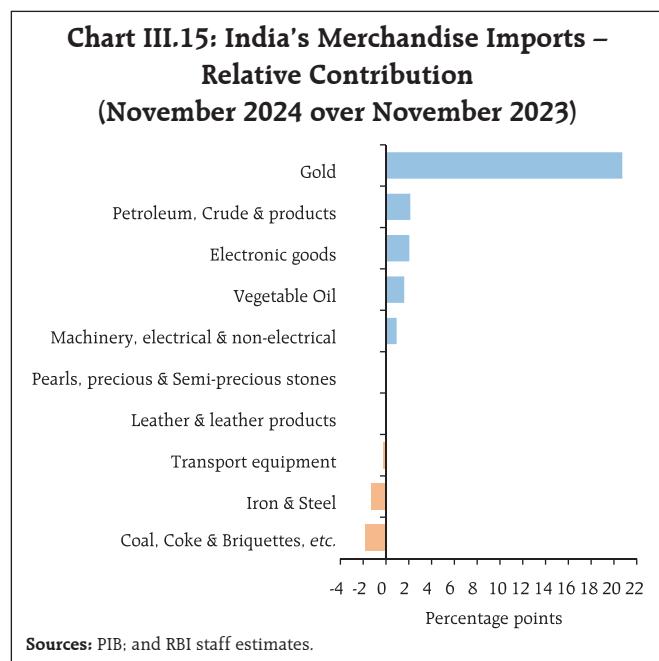
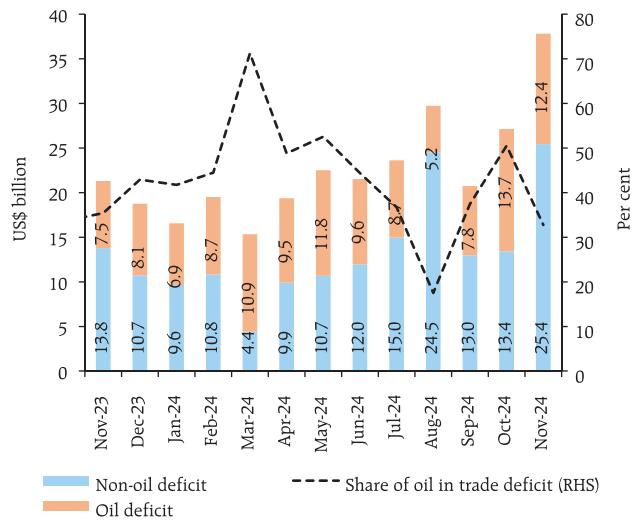
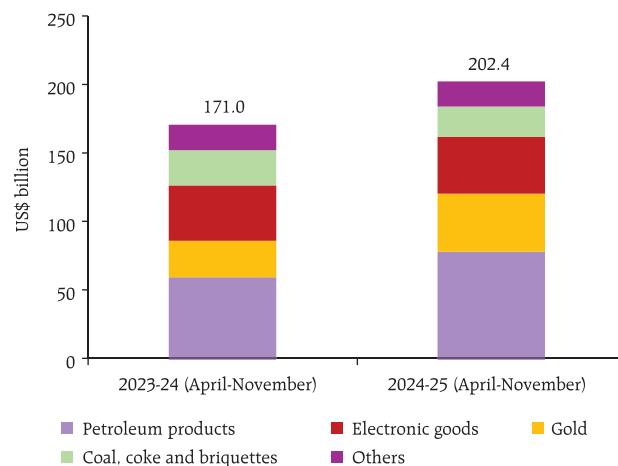


Chart III.16: Decomposition of India's Merchandise Trade Deficit



Sources: PIB; and DGCI&S.

Chart III.17: Commodity-wise Merchandise Trade Deficit



Note: Coal, coke and briquettes exports in November 2024 are assumed to be at the same level as in October 2024.

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

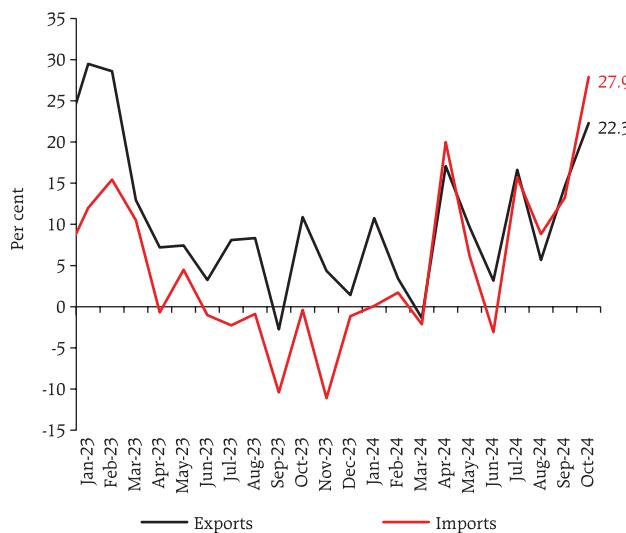
During April-November 2024, India's merchandise trade deficit widened to US\$ 202.4 billion from US\$ 171.0 billion a year ago. Petroleum products were the largest source of the deficit, followed by gold (Chart III.17).

During October 2024, services exports at US\$ 34.3 billion witnessed a robust growth of 22.3 per cent (y-o-y) while services imports rose by 27.9 per cent (y-o-y) to US\$ 17.2 billion (Chart III.18). Net services export earnings increased by 17.2 per cent (y-o-y) to an all-time high of US\$ 17.1 billion during the month.

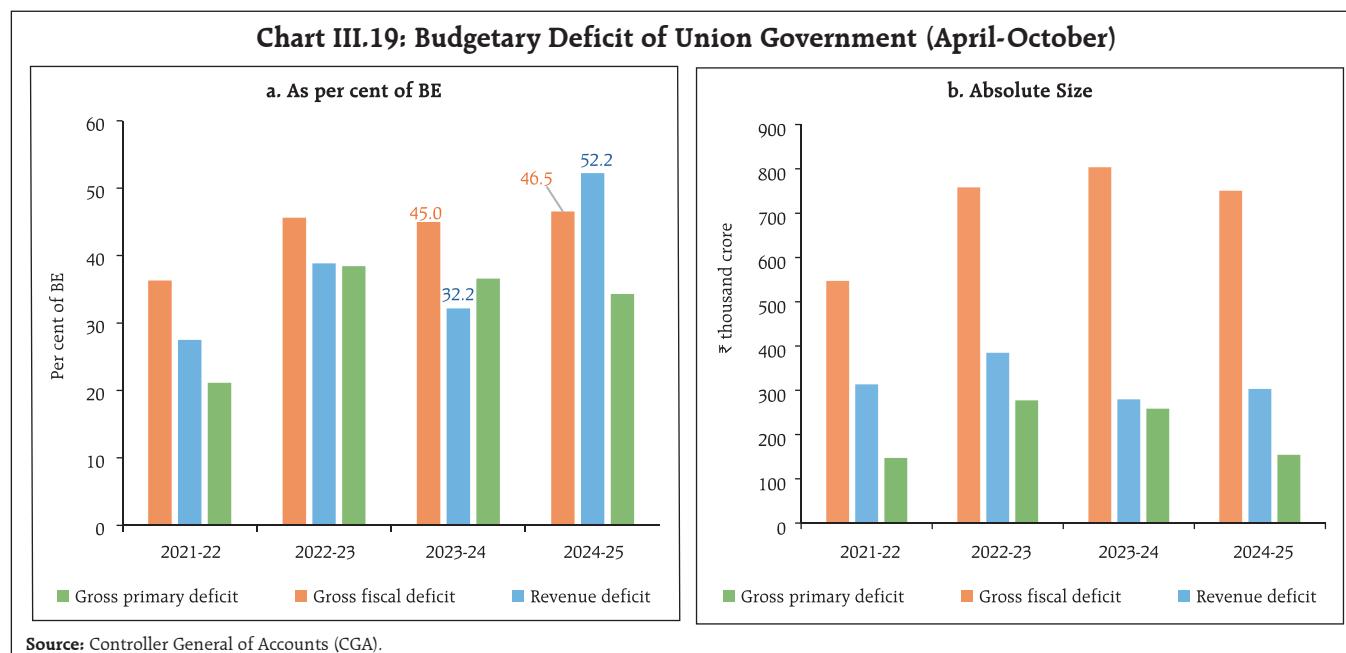
The gross fiscal deficit (GFD) and the revenue deficit (RD) of the Union Government [as per cent of budget estimate (BE)] witnessed an increase in April-October 2024 in comparison with the corresponding period of the previous year (Chart III.19). The increase in the budgetary deficits were primarily driven by revenue expenditure, which grew by 8.7 per cent as against 6.5 per cent a year ago. Total receipts, on the other hand, recorded a growth of 8.3 per cent, lower than 14.8 per cent during the same period a year ago.

The increase in revenue expenditure was driven by outgo on major subsidies which recorded a growth of 7.3 per cent in April-October 2024 on account of food and petroleum subsidies. Capital expenditure, however, witnessed a deceleration in growth. The top six ministries, which together account for over 95 per cent of the budgeted capital expenditure for 2024-25, witnessed a decline in their capital spending

Chart III.18: Services Exports and Imports: Growth Rates



Source: RBI.



during April-October 2024-25 in comparison with the corresponding period of the previous year (Chart III.20). The rise in the revenue expenditure supported the growth of total expenditure by 3.3 per cent during April-October 2024.

On the receipts side, the revenue receipts of the Union government registered a y-o-y growth of 8.7 per cent *vis-à-vis* 16.1 per cent growth in the

corresponding period of the previous year. Direct taxes increased by 11.9 per cent (y-o-y), owing to a 20.2 per cent growth in income tax. Corporate tax collections, however, remained lacklustre. Indirect taxes recorded a growth of 9.5 per cent, with GST and customs revenues recording a growth of 12.0 per cent and 6.2 per cent, respectively (Chart III.21a). Similarly, non-tax revenue collection recorded a

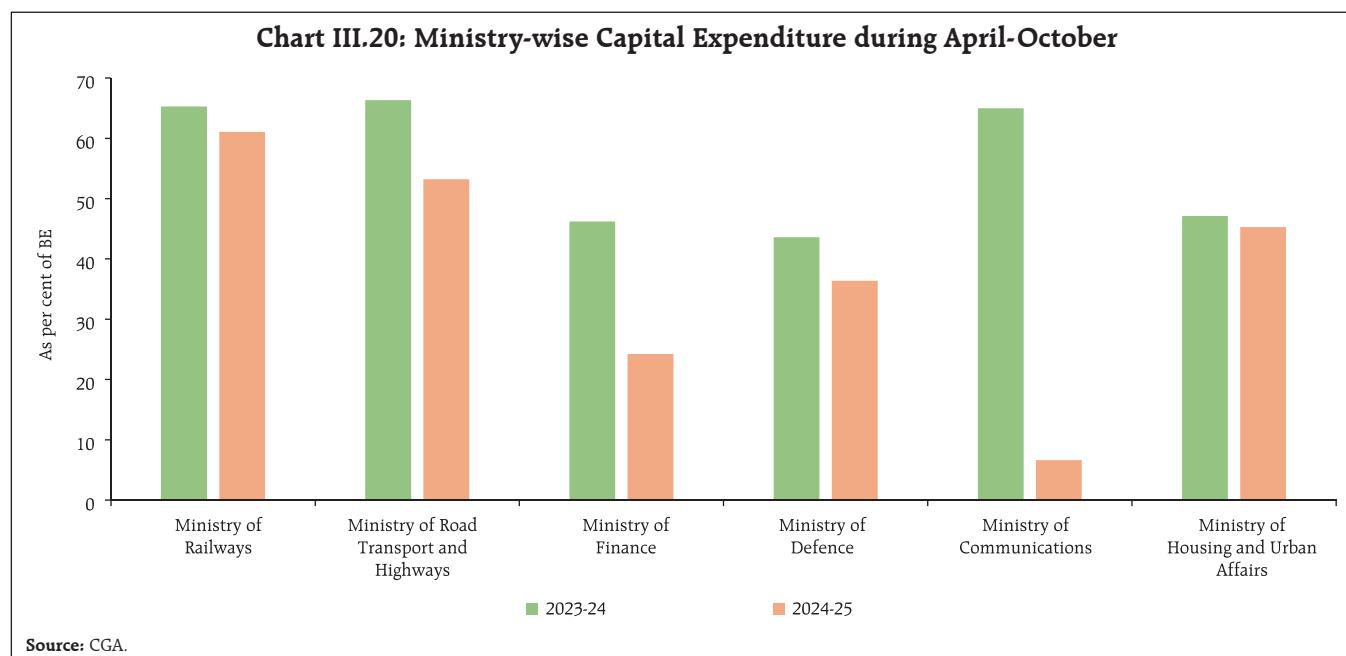
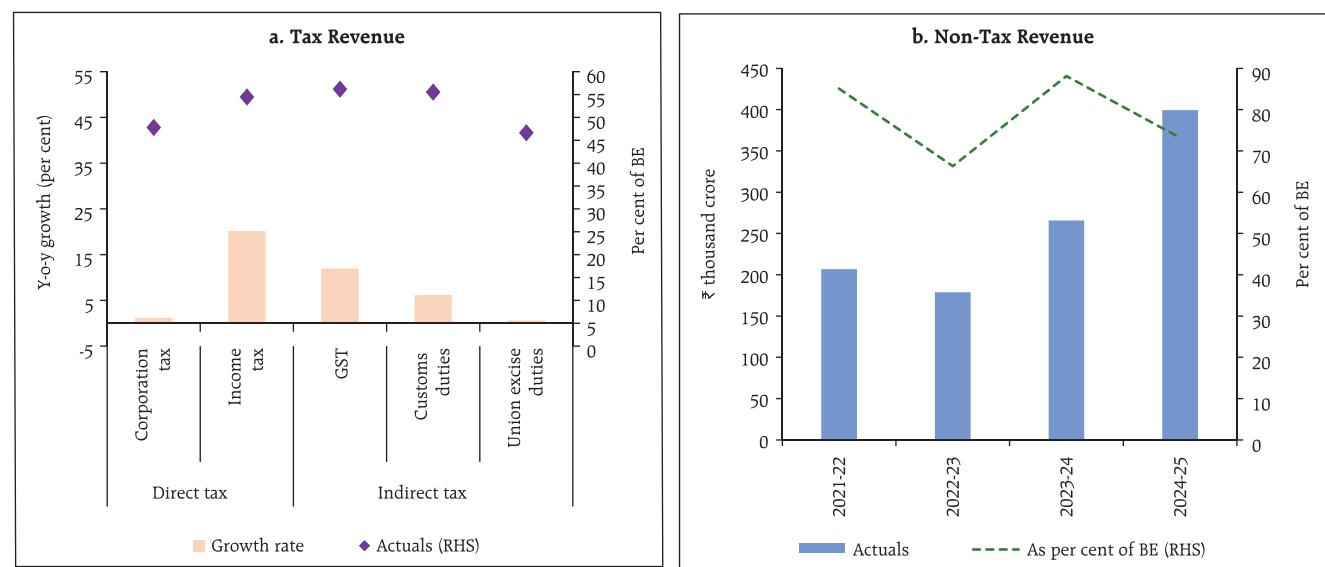


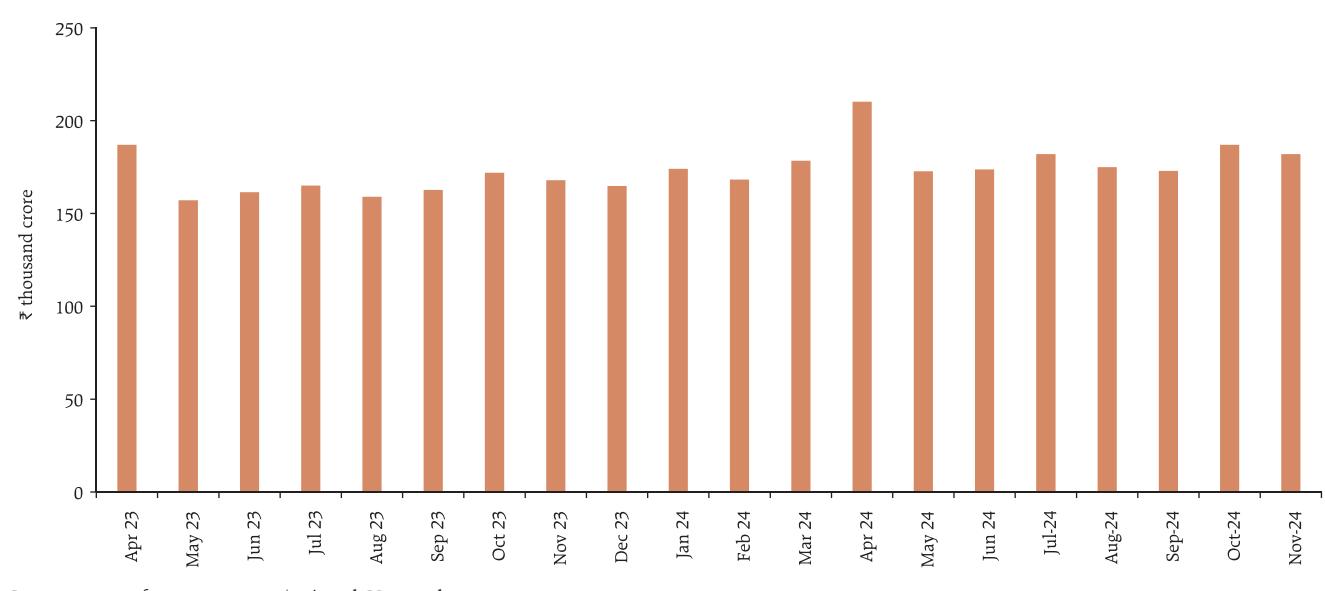
Chart III.21: Revenue Receipts of the Union Government (April-October)

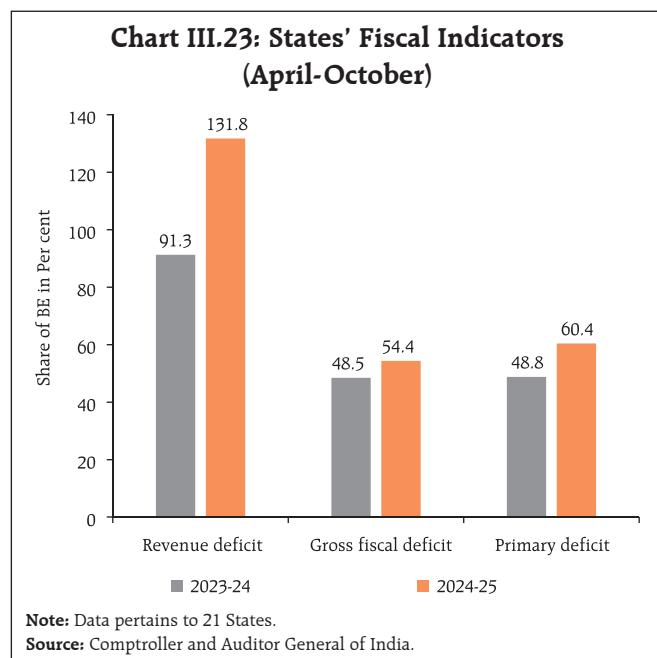
Source: CGA.

y-o-y growth of 50.2 per cent, on the back of surplus transfer of ₹2.11 lakh crore from the Reserve Bank (Chart III.21b). Despite a 10.8 per cent y-o-y growth in gross tax revenue, net tax revenue increased only by 0.2 per cent during the period, attributable to higher assignment to States by the Centre. Overall, net tax revenue during April-October 2024-25 was at 50.5 per cent of the BE.

GST collections (Centre plus States) stood at ₹1.82 lakh crore in November 2024, taking the cumulative GST collection for April-November 2024 to ₹14.57 lakh crore (9.3 per cent higher than during April-November 2023) [Chart III.22].

During April-October 2024-25, States' gross fiscal deficit (GFD), at 54.4 per cent of the budget

Chart III.22: GST Collection



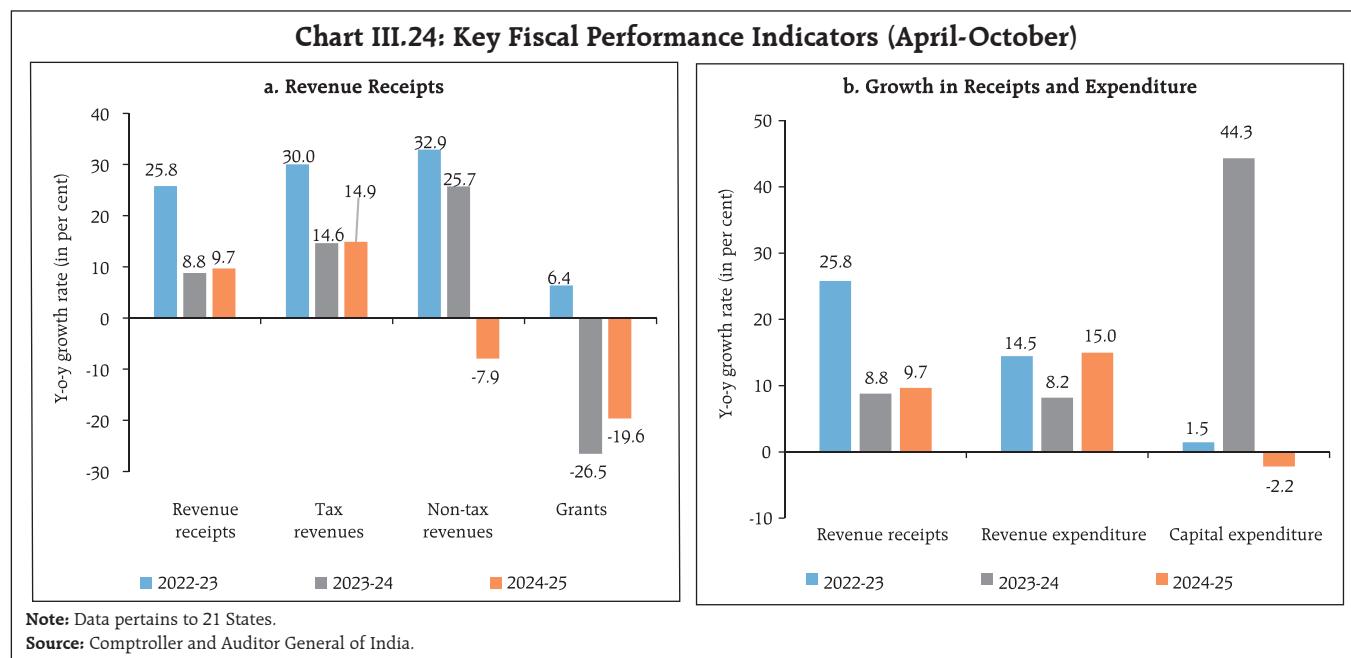
estimates¹⁵, was higher than last year's level (Chart III.23). While States' revenue receipts increased driven by higher tax revenues, non-tax revenue and grants recorded contraction (Chart III.24a). Within States' own tax revenues, sales tax/VAT collections

recovered from the contraction witnessed during the corresponding period a year ago whereas growth in States' goods and services tax (SGST) and State excise moderated.

On the expenditure side, growth in revenue expenditure picked up during April-October 2024, while capital expenditure remained lower than last year's level (Chart III.24b). Going forward, capital expenditure is expected to pick up owing partly to the Centre's provision of special assistance of ₹1.5 lakh crore long term interest free loans. During 2024-25 so far (up to November 24, 2024), capital expenditure amounting to ₹50,571.4 crore has been released to the eligible States under the said scheme.¹⁶

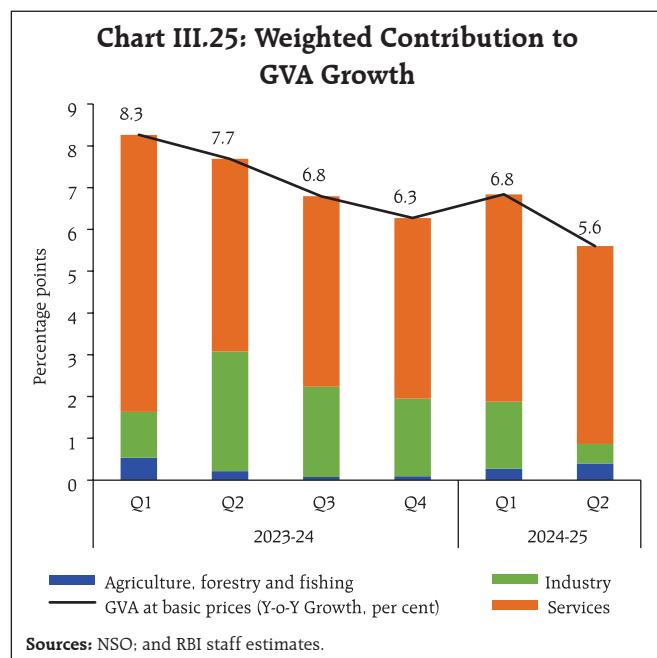
Aggregate Supply

Aggregate supply – measured by gross value added (GVA) at basic prices – grew by 5.6 per cent in Q2:2024-25 as compared with 7.7 per cent a year ago (6.8 per cent in Q1:2024-25). The deceleration in growth was largely on account of subdued industrial



¹⁵ As per provisional Accounts data.

¹⁶ Digital Sansad, response to question from Member of Parliament (MP) Dilip Saikia.



activity, while the services sector exhibited resilience and agriculture recorded an improvement (Chart III.25).

The growth in agriculture, forestry and fishing improved to 3.5 per cent in Q2:2024-25 from 1.7 per cent a year ago, driven by an increase in *kharif* foodgrains production in 2024-25¹⁷ which was supported by above normal southwest monsoon. Industrial activity recorded a modest growth of 2.1 per cent in Q2:2024-25 on an unfavourable base of 13.6 per cent in the corresponding quarter of the previous year. Within the industrial sector, mining and quarrying activity contracted due to heavy rainfall, while the growth in manufacturing – the dominant component – slackened to a five-quarter low of 2.2 per cent. The growth in electricity, gas, water supply and other utility services also moderated. The services sector remained resilient, growing by 7.1 per cent in Q2:2024-25 as compared with a growth of 6.9 per cent in Q2:2023-24 (7.7 per cent in Q1:2024-25). Growth in construction activity

softened to 7.7 per cent in Q2:2024-25 from 13.6 per cent in Q2:2023-24 partly reflecting lower than anticipated capital expenditure by both the Union and State governments. Trade, hotels, transport, communication and services related to broadcasting recorded an acceleration in growth on both y-o-y and sequential bases. The growth in financial, real estate and professional services moderated to 6.7 per cent in Q2:2024-25 as credit and deposits growth witnessed a moderation. The performance of information technology (IT) companies, however, improved over the preceding quarter. Public administration, defense, and other services (PADO) expanded on a y-o-y basis by 9.2 per cent in Q2:2024-25.

The cumulative Northeast monsoon (NEM) rainfall during October 01- December 19 was 8 per cent below its long period average (LPA), as compared with 4 per cent below LPA last year. The unusually long span of cyclone Fengal intensified the rainfall activity in southern India, closing some part of the deficit this year. The number of sub-divisions receiving deficient/large deficient rainfall, however, was higher in 2024 than a year ago (Chart III.26a).

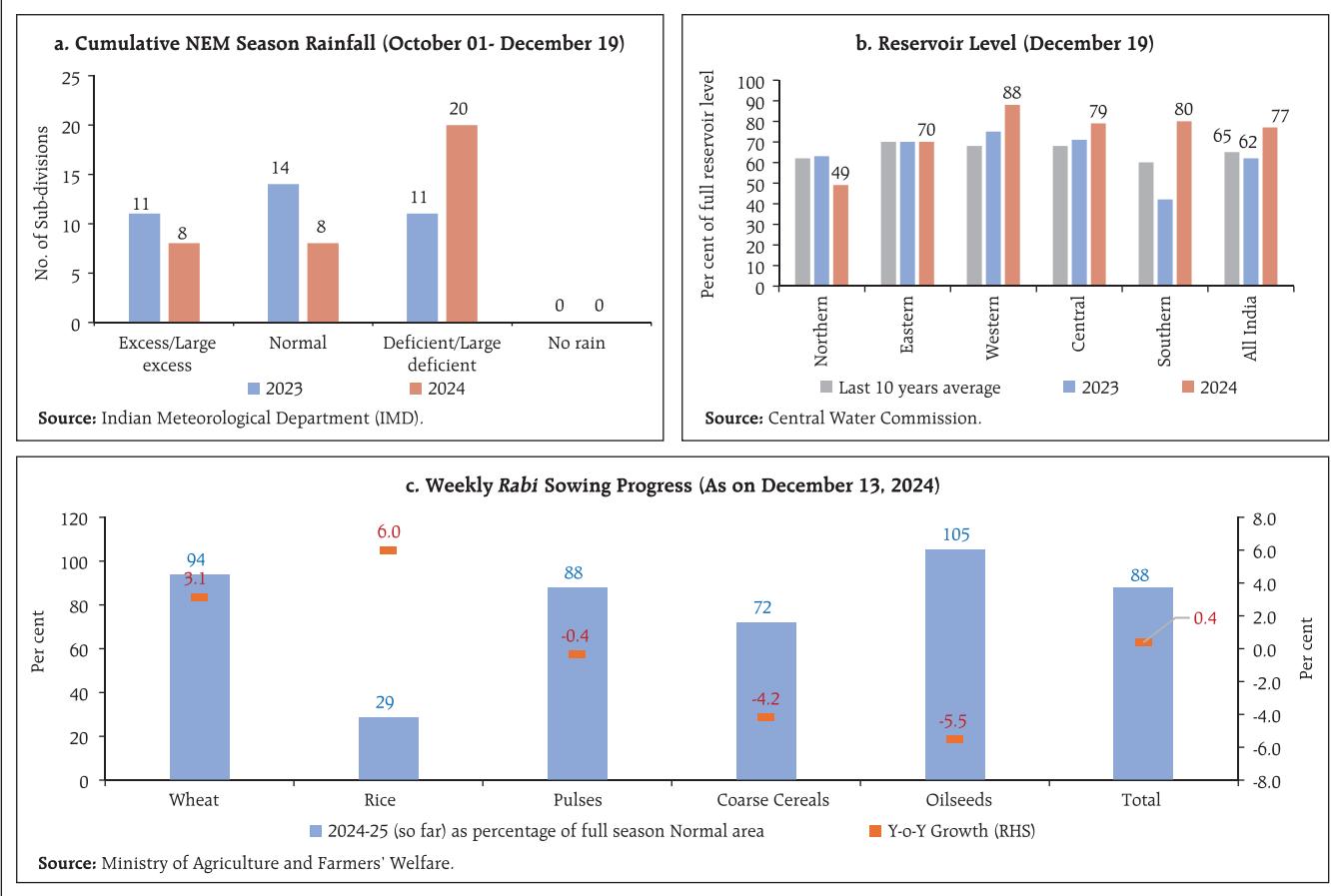
The all-India average water storage (based on 155 major reservoirs) was at 77 per cent of the total capacity as of December 19, 2024, which is 23.6 per cent and 17.9 per cent higher than last year's storage and the decadal average, respectively (Chart III.26b). The total *rabi* sown area, as of December 13, 2024 was 0.4 per cent higher than the level a year ago.¹⁸ While the acreage under wheat and rice surpassed last year's levels, it remained lower than last year for pulses, coarse cereals and oilseeds (Chart III.26c).

As of December 16, 2024, the cumulative rice procurement for the *kharif* marketing season (KMS)

¹⁷ As per the first advance estimates, the production of *kharif* foodgrains in 2024-25 is estimated at 164.7 million tonnes, which is 5.7 per cent higher than the final estimates of 2023-24.

¹⁸ Based on the data released by Ministry of Agriculture and Farmers' Welfare, which covered 88 per cent of full season normal area as on December 13, 2024.

Chart III.26: Outlook for Rabi Season



2024-25 was 4.2 per cent higher over the corresponding period of the previous year (Chart III.27). The

buffer stock of rice at 515.6 lakh tonnes¹⁹ stood 5.0 times the norm as on December 01, 2024. The wheat stock stood at 206 lakh tonnes, almost equal to the buffer norm.

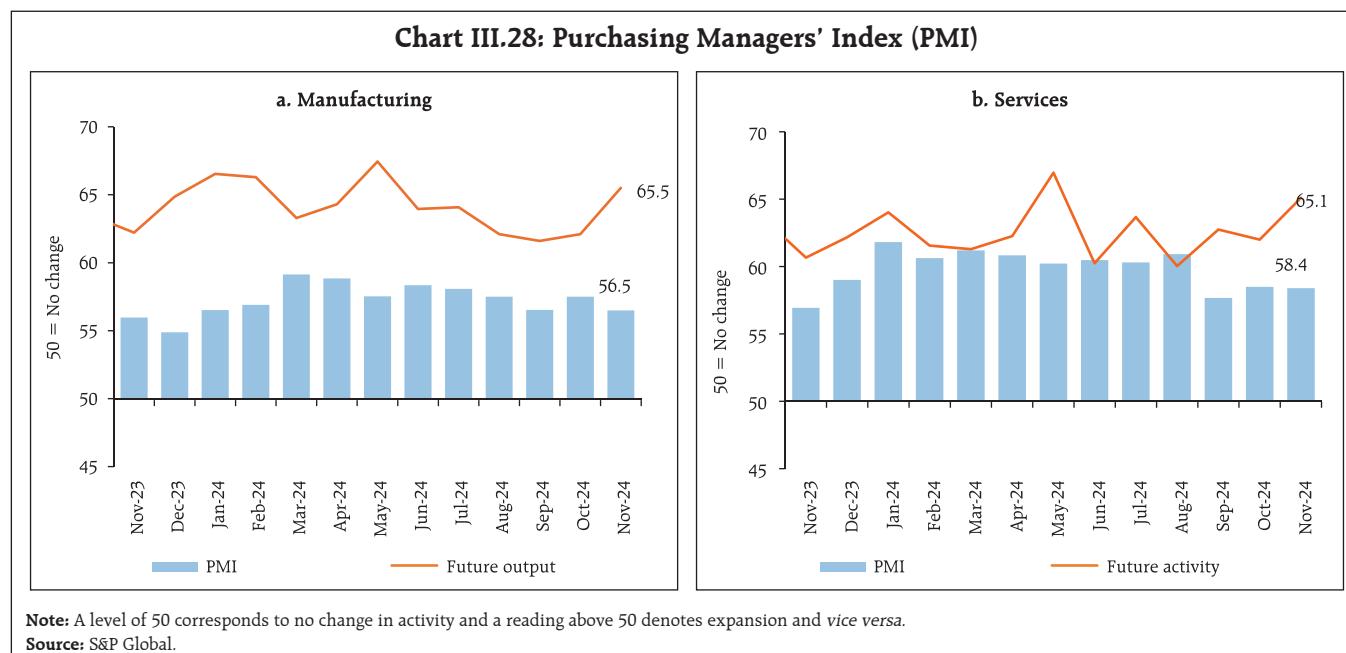
On November 28, 2024, the Government of India announced the sale of 2.5 million tonne of wheat through e-auctions under Open Market Sale Scheme (OMSS) till March 2025 to augment domestic supply and alleviate price pressures.²⁰ Further, on December 11, 2024, the Government revised down the stock limit for wheat stocking entities to ensure ample supplies in the market.²¹

¹⁹ Including unmilled paddy equivalent.

²⁰ The sale would be at a reserve price of ₹2,325 per quintal for fair and average quality (FAQ) grain and ₹2,300 per quintal for Under Reduced Specifications (URS) grain.

²¹ <https://pib.gov.in/PressReleaseDetail.aspx?PRID=2083178®=3&lang=1>

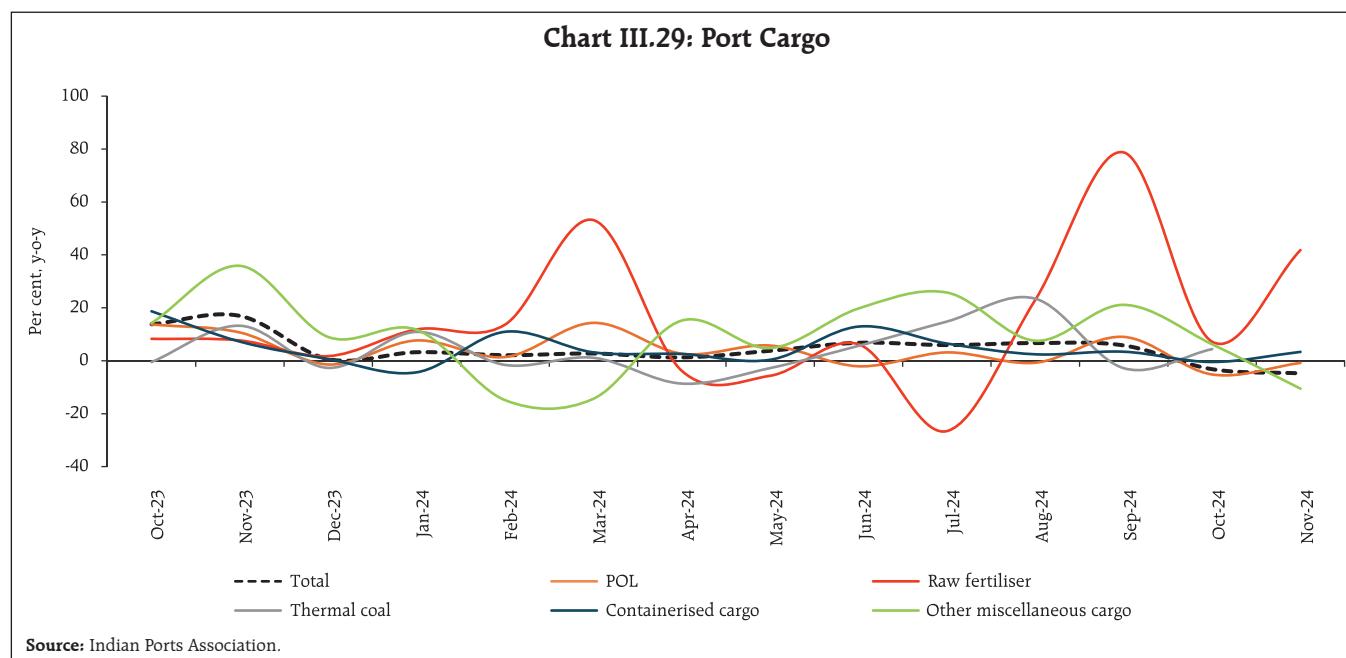
Note: *: As on December 19; #: As on December 01.
Source: Food Corporation of India.

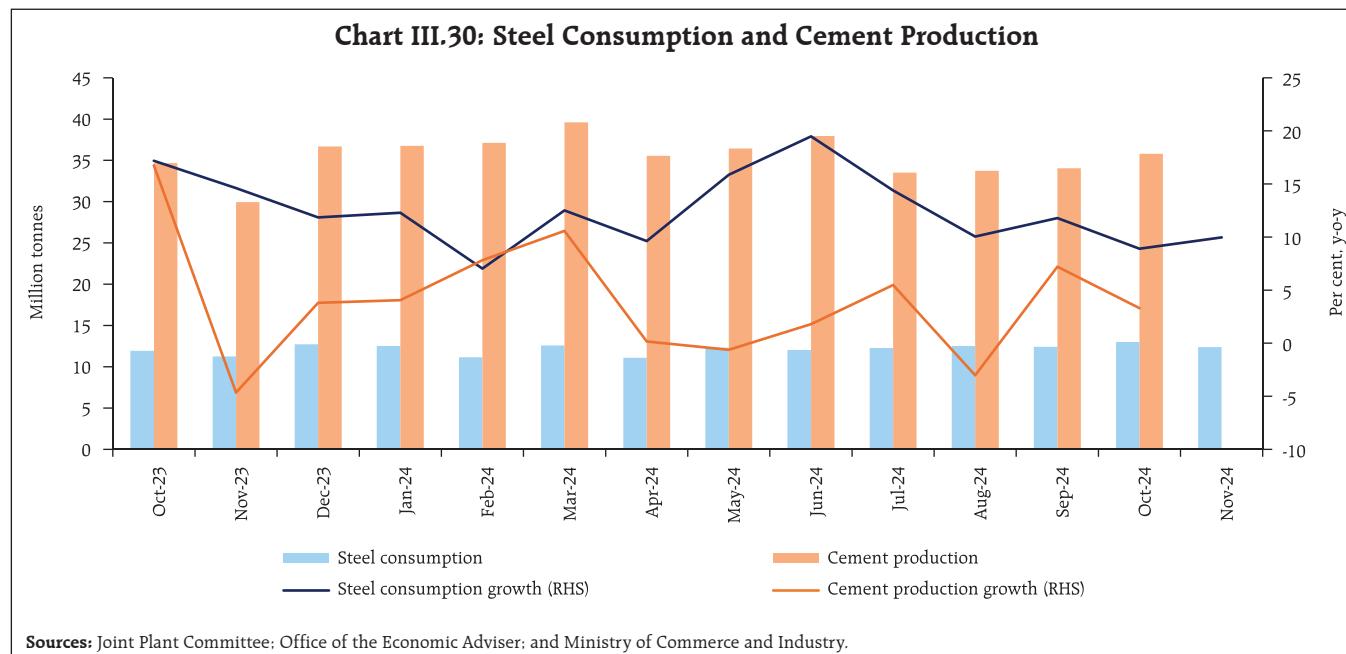


India's manufacturing PMI registered a sequential moderation but remained in expansionary territory during November as external demand - as reflected in increase in export orders - provided support (Chart III.28a). The services PMI continued to record robust expansion driven by strong demand and new business gains (Chart III.28b). Business expectations for both manufacturing and services remained upbeat, as evident in the future output assessment.

Port traffic contracted in November 2024, driven by iron ore and petroleum, oil and, lubricants (Chart III.29).

The construction sector exhibited a mixed picture; steel consumption recorded a double-digit growth (y-o-y) in November whereas cement production growth decelerated in October (Chart III.30).





Available high frequency indicators for the services sector reflect resilient economic activity in October/November (Table III.2).

Table III.1: High Frequency Indicators- Services

Sector	Indicator	(y-o-y, per cent)													
		Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24
Urban demand	Passenger Vehicles Sales	33.9	21.0	21.7	31.9	27.0	26.0	1.3	4.0	3.1	-2.5	-1.8	-1.4	0.9	4.4
	Two-Wheeler Sales	20.1	31.3	16.0	26.2	34.6	15.3	30.8	10.1	21.3	12.5	9.3	15.8	14.2	-1.1
Rural demand	Three-Wheeler Sales	42.1	30.8	30.6	9.5	8.3	4.3	14.5	14.4	12.3	5.1	8.0	7.1	-0.2	-1.3
	Tractor Sales	-4.3	6.4	-19.8	-15.3	-30.6	-23.1	-3.0	0.0	3.6	1.6	-5.8	3.7	22.4	-1.3
Trade, hotels, transport, communication	Commercial Vehicles Sales	3.2			-3.8			3.5			-11.0				
	Railway Freight Traffic	8.5	4.3	6.4	6.4	10.1	8.6	1.4	3.7	10.1	4.5	0.0		1.5	
	Port Cargo Traffic	13.8	16.9	0.6	3.2	2.1	2.7	1.3	3.8	6.8	5.9	6.7	5.8	-3.2	-5.0
	Domestic Air Cargo Traffic*	10.6	9.0	8.7	10.0	11.5	8.7	0.3	10.3	10.3	8.8	0.6	14.0	8.9	-28.5
	International Air Cargo Traffic*	15.0	4.9	12.2	19.3	30.2	22.5	16.2	19.2	19.6	24.4	20.7	20.5	18.4	3.2
	Domestic Air Passenger Traffic *	10.7	8.7	8.1	5.0	5.8	4.7	3.8	5.9	6.9	7.6	6.7	7.4	9.6	13.6
	International Air Passenger Traffic *	17.5	19.8	18.1	17.0	19.3	15.0	16.8	19.6	11.3	8.8	11.1	11.2	10.3	8.7
	GST E-way Bills (Total)	30.5	8.5	13.2	16.4	18.9	13.9	14.5	17.0	16.3	19.2	12.9	18.5	16.9	16.3
	GST E-way Bills (Intra State)	30.0	22.7	14.2	17.9	21.1	15.8	17.3	18.9	16.4	19.0	13.1	19.0	18.3	5.4
	GST E-way Bills (Inter State)	31.2	-16.2	11.4	13.8	15.0	10.7	9.6	13.6	16.3	19.6	12.5	17.7	14.4	44.1
	Hotel occupancy	9.3	-8.6	1.6	2.6	1.8	2.7	-1.4	-2.6	-3.1	3.6	0.7	2.1	-5.3	
Construction	Average revenue per room	14.8	15.9	12.8	11.0	4.1	6.7	4.8	1.8	2.8	7.6	5.2	3.5	4.8	
	Tourist Arrivals	19.8	16.8	7.8	10.4	15.8	8.0	7.7	0.3	9.0	-1.3	-4.2			
PMI Index#	Steel Consumption	15.3	14.5	13.7	12.3	7.0	12.5	11.5	13.0	21.1	13.8	10.3	11.8	8.9	10.0
	Cement Production	17.0	-4.8	3.8	4.0	7.8	10.6	0.2	-0.6	1.9	5.5	-3.0	7.2	3.3	
PMI Index#	Services	58.4	56.9	59.0	61.8	60.6	61.2	60.8	60.2	60.5	60.3	60.9	57.7	58.5	58.4

<< Contraction ----- Expansion >>

Note: #: Data in levels. *: November 2024 data are based on the monthly average of daily figures. The Heat-map is constructed for each indicator for the period July-2021 till date.

Sources: SIAM; Ministry of Railways; Tractor and Mechanisation Association; Indian Ports Association; Office of Economic Adviser; GSTN; Airports Authority of India; HVS Anarock; Ministry of Tourism; Joint Plant Committee; and IHS Markit.

Inflation

Headline inflation, as measured by y-o-y changes in the all-India consumer price index (CPI)²², fell to 5.5 per cent in November 2024 from 6.2 per cent in October 2024 (Chart III.31). The decline in inflation by around 70 basis points (bps) was both on account of a month-over-month (m-o-m) decline in prices by about 15 bps and a favourable base effect of about 55 bps. CPI food and CPI fuel groups recorded a negative momentum of around (-) 50 bps and (-) 10 bps, respectively, during the month while CPI core (excluding food and fuel) group recorded a positive momentum of approximately 20 bps.

Food inflation declined to 8.2 per cent in November from 9.7 per cent in October. In terms of sub-groups, significant moderation in inflation was observed in vegetables, pulses and their products, fruits, and sugar, whereas inflation in edible oils and fats, meat and fish, and prepared meals picked up. Inflation in cereals and non-alcoholic beverages group remained steady, while deflation in prices of spices deepened (Chart III.32).

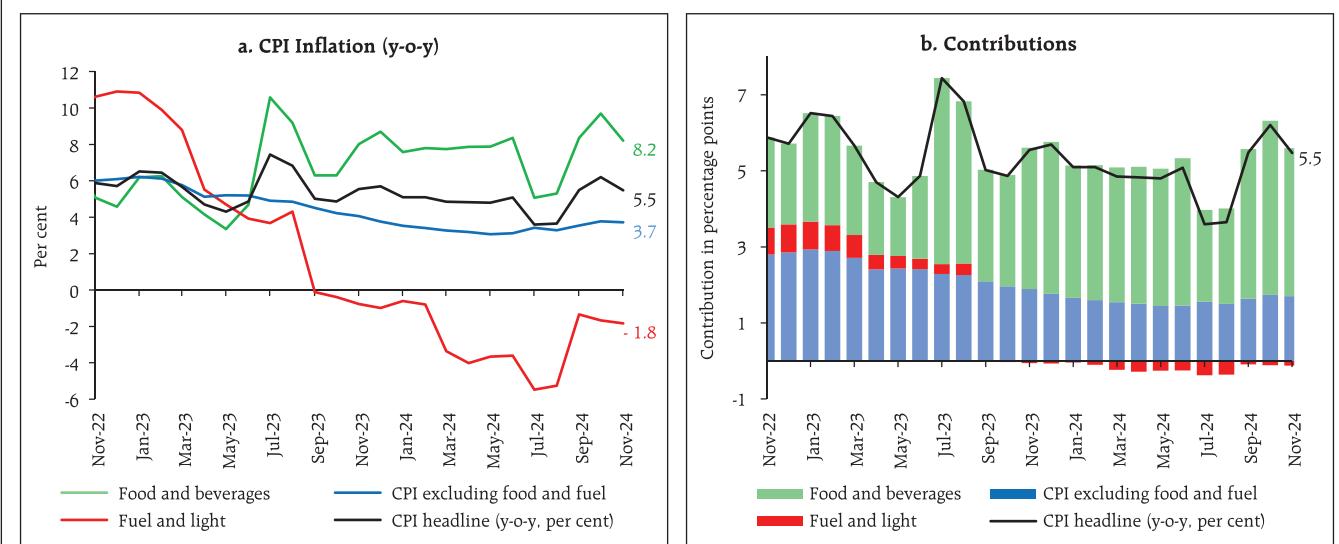
Fuel and light deflation deepened to (-) 1.8 per cent in November from (-) 1.7 per cent in October, on account of a higher rate of deflation in kerosene and LPG, and a lower rate of inflation in electricity.

Core inflation eased to 3.7 per cent in November 2024 from 3.8 per cent in October. Among the sub-groups, moderation in inflation was observed in transport and communication, personal care and effects, and pan, tobacco and intoxicants while inflation remained steady for health, education, and clothing and footwear. Housing, recreation and amusement, and household goods and services, however, registered an increase in inflation (Chart III.33).

In terms of regional distribution, inflation moderated in both rural and urban areas in November, with rural inflation at 6.0 per cent being higher than urban inflation at 4.8 per cent. Majority of states experienced inflation between 4 to 6 per cent (Chart III.34).

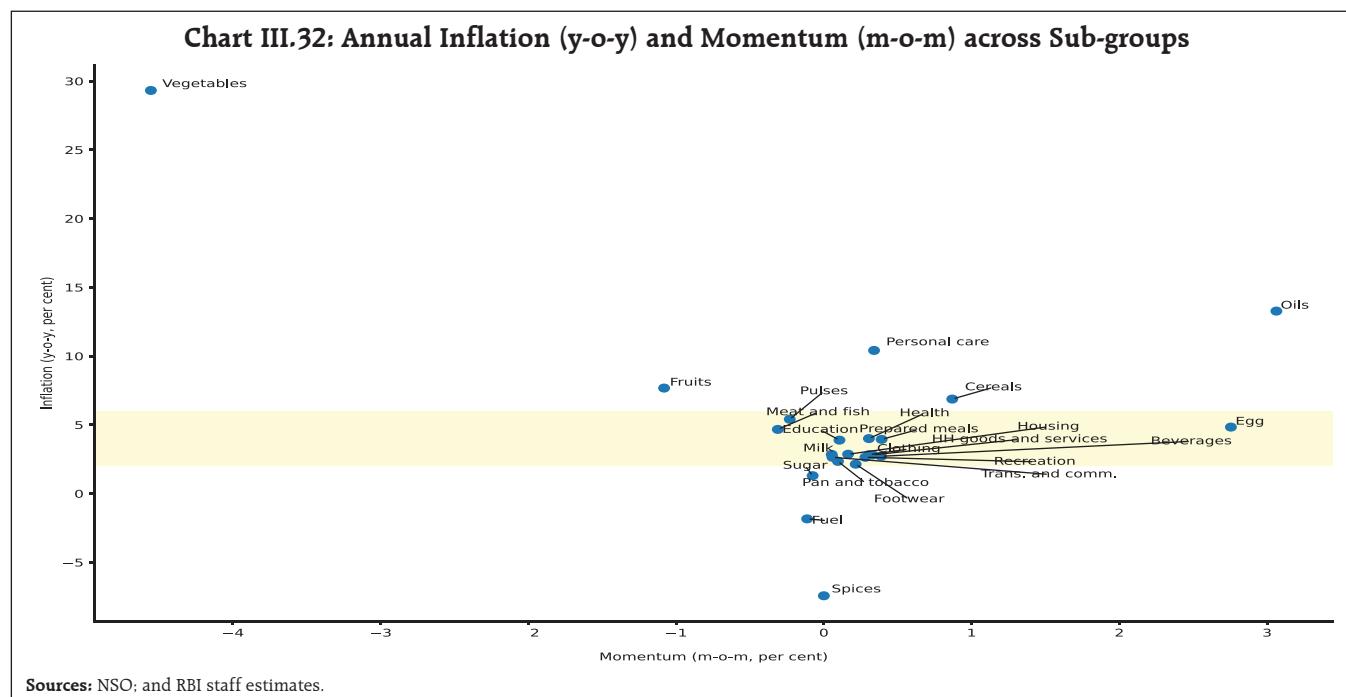
High frequency food price data for December so far (up to 19th) showed a fall in rice prices, while

Chart III.31: Trends and Drivers of CPI Inflation



Sources: NSO; and RBI staff estimates.

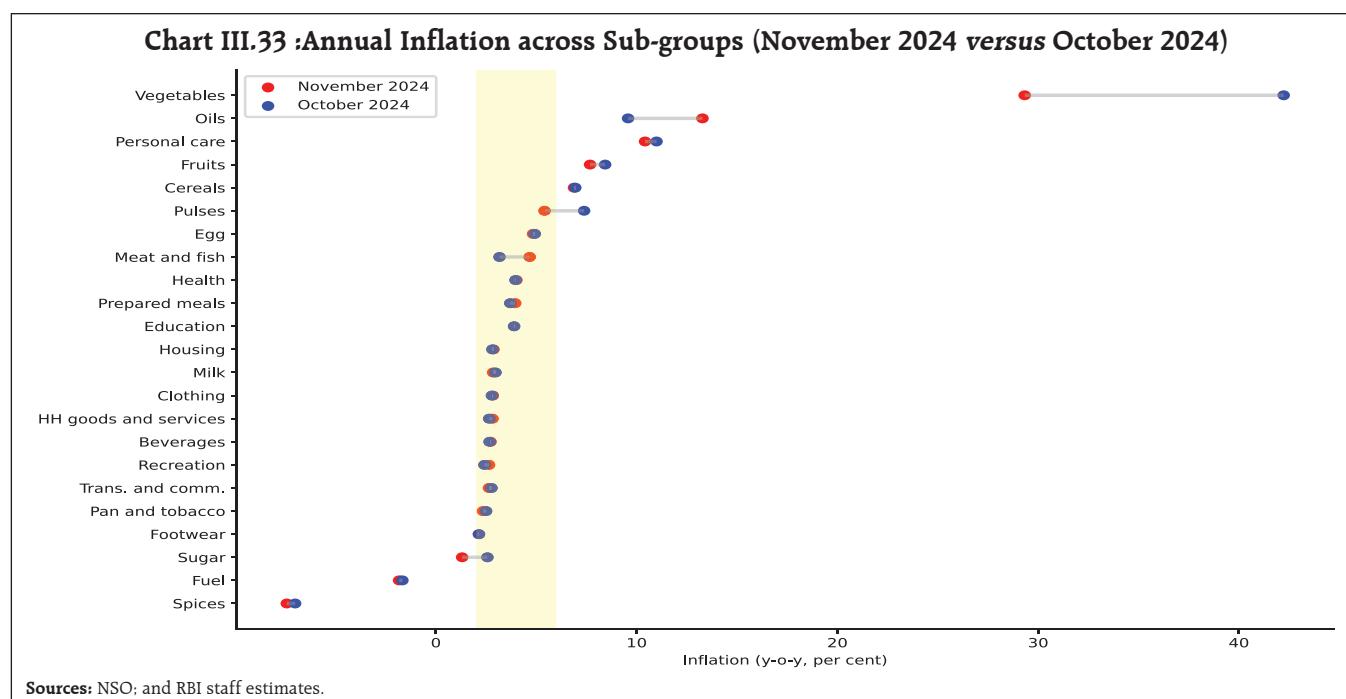
²² As per the provisional data released by the NSO on December 12, 2024.



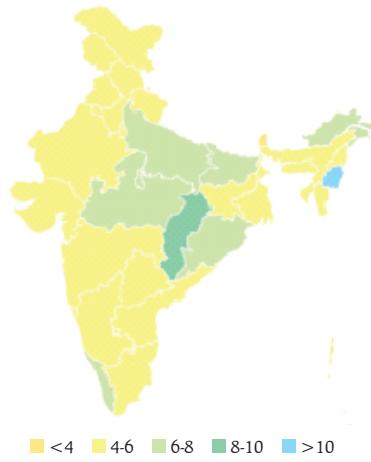
wheat and *atta* prices continued to firm up. Edible oil prices, too, continued exhibiting upside pressures. Pulses prices, however, registered a broad-based decline. Among key vegetables, onion and tomato prices fell, while potato prices remained range bound (Chart III.35).

Retail selling prices of petrol, diesel, and kerosene remained unchanged in December thus far (up to 19th). LPG prices were also kept unchanged during this period (Table III.2).

As per the PMIs, input costs across both manufacturing and services firms increased at a



**Chart III.34 : Spatial Distribution of Inflation
November 2024
(CPI-Combined, y-o-y), (per cent)**



Note: Map is for illustrative purposes only.

Sources: NSO; and RBI Staff estimates.

faster rate in November, with input cost in services recording the largest expansion in fifteen months.

Table III.2: Petroleum Products Prices

Item	Unit	Domestic Prices			Month-over-month (per cent)	
		Dec-23	Nov-24	Dec-24^	Nov-24	Dec-24^
Petrol	₹/litre	102.92	100.99	101.02	0.0	0.0
Diesel	₹/litre	92.72	90.45	90.48	0.0	0.0
Kerosene (subsidised)	₹/litre	52.09	43.95	43.95	2.4	0.0
LPG (non-subsidised)	₹/cylinder	913.25	813.25	813.25	0.0	0.0

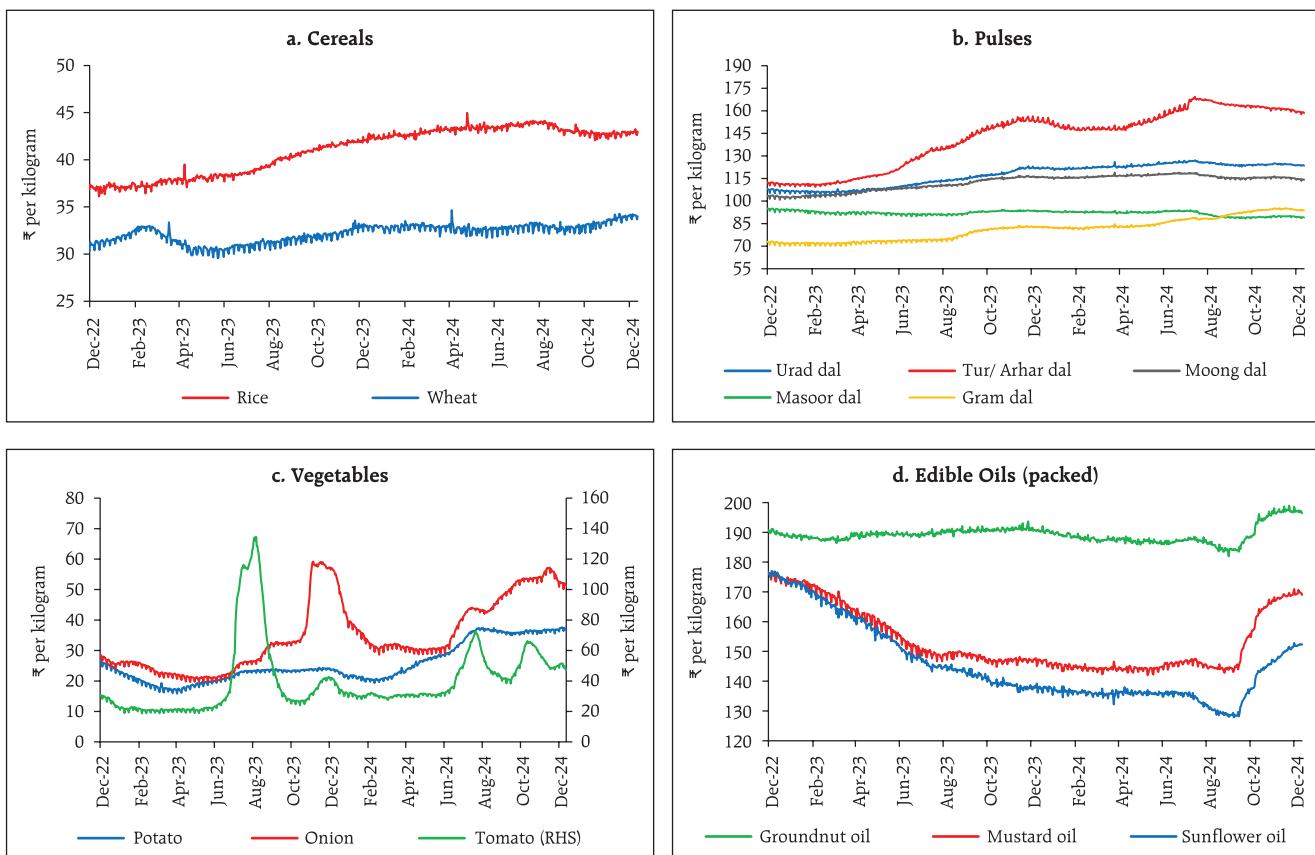
Notes: 1. ^ : For the period December 1-19, 2024.

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.

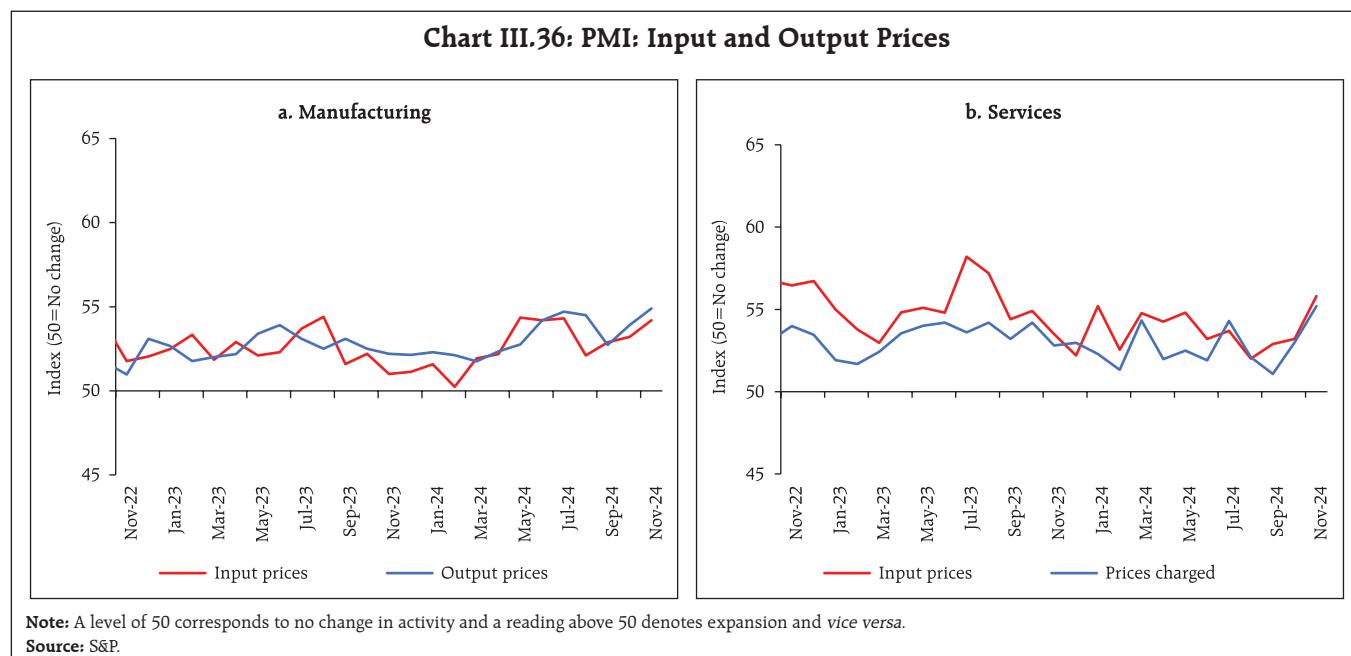
Sources: IOCL; Petroleum Planning and Analysis Cell (PPAC); and RBI staff estimates.

Selling price pressures also increased sharply across manufacturing and services firms, with manufacturing firms recording the highest rate in

Chart III.35: DCA Essential Commodity Prices



Sources: NSO; and RBI staff estimates.

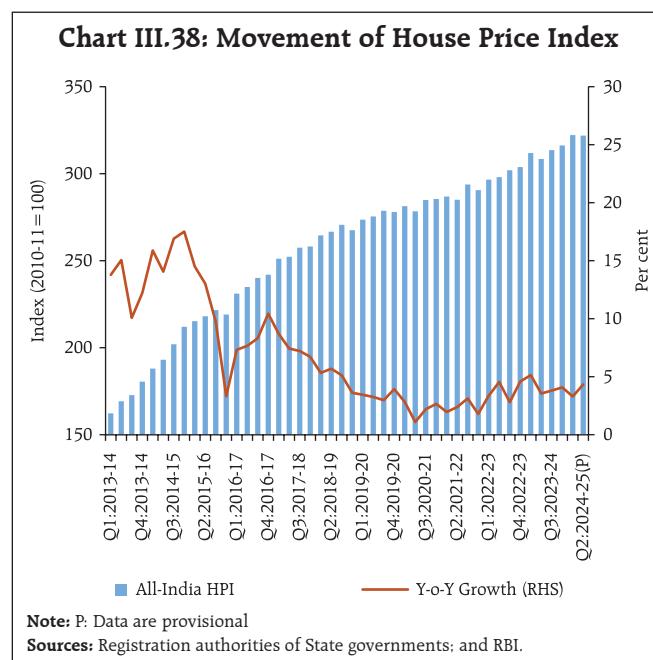
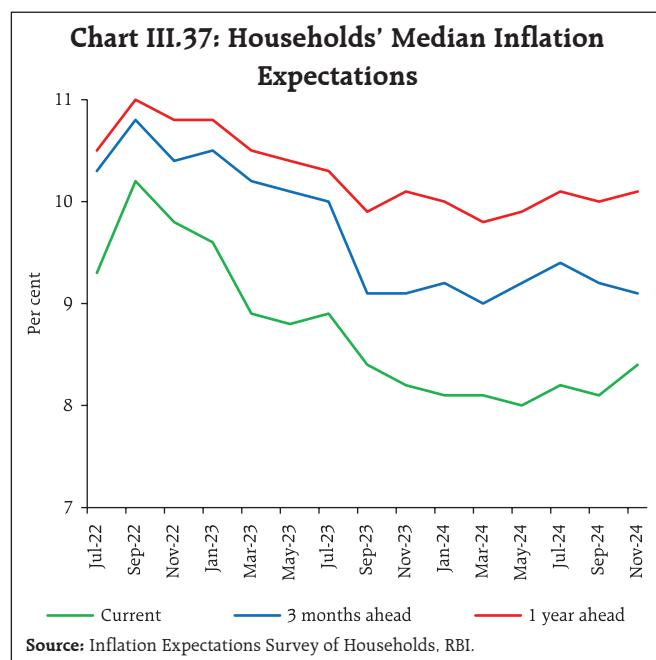


the last eleven years, and services firms recording the fastest pace of output price increase in around twelve years (Chart III.36).

Households' perception of current inflation increased by 30 basis points (bps) in November 2024 from its September level. Their one-year ahead inflation expectations rose 10 bps even as

three-month ahead expectations fell by 10 bps (Chart III.37).

The all-India housing price index (HPI), based on property registration data from 10 major cities, increased by 4.3 per cent (y-o-y) in Q2:2024-25 as compared to 3.3 per cent in the previous quarter and 3.5 per cent a year ago (Chart III.38).



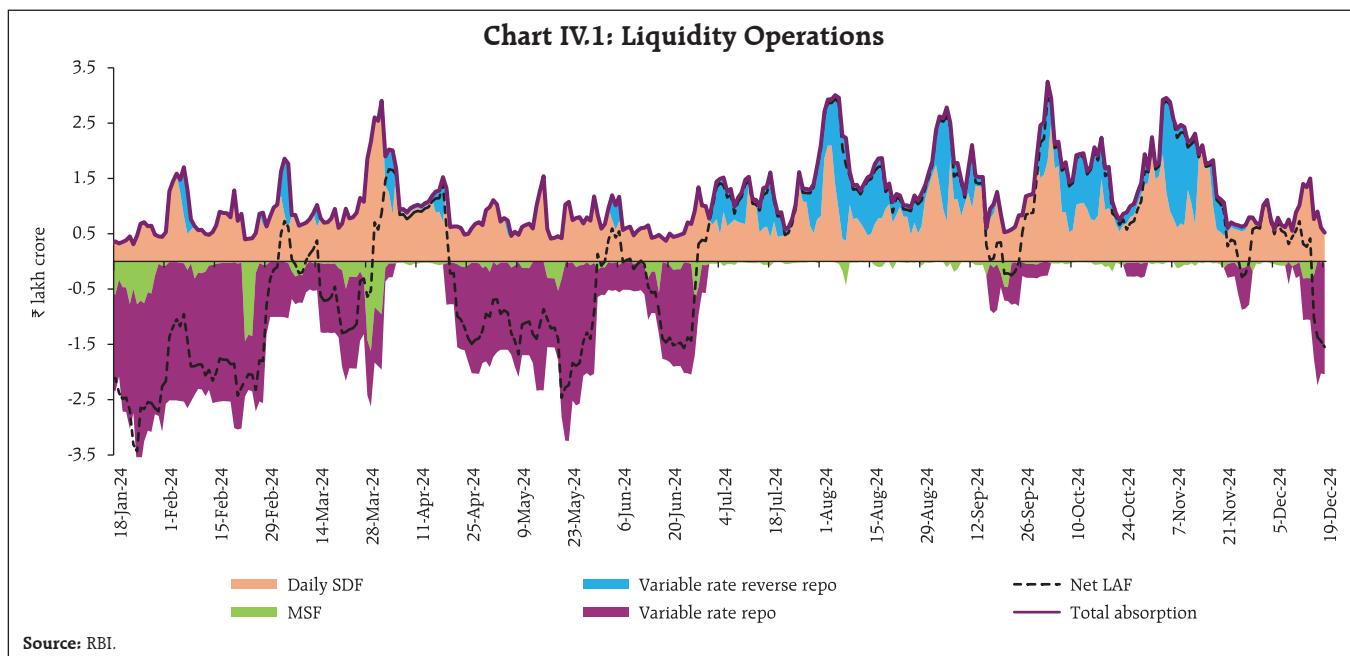
IV. Financial Conditions

System liquidity moderated in the second half of November 2024 with the build-up in government cash balances on account of goods and services tax (GST) collections, an increase in currency in circulation and capital outflows. It turned into a deficit during the last week of November before easing in early December on the back of higher government spending. System liquidity again turned into deficit during December 16-19, 2024 on account of advance tax payments. On an average, however, system liquidity remained in surplus during the second half of November and early December, with the average daily net absorption under the liquidity adjustment facility (LAF) moderating to ₹0.39 lakh crore during November 16 to December 19, 2024 from ₹1.72 lakh crore during October 16 to November 15, 2024 (Chart IV.1). The Reserve Bank conducted two way operations in response to the dynamically evolving liquidity conditions. During the second half of November, one main and three fine-tuning variable rate reverse repo (VRRR) operations were conducted, cumulatively absorbing ₹0.99 lakh crore from the banking system. To alleviate temporary liquidity tightness because of large GST outflows, however, four fine-tuning variable rate repo (VRR) operations of 1-6 days maturity were conducted during November 22-28, 2024, cumulatively injecting ₹1.0 lakh crore into the banking system. Further, in view of liquidity tightness due to advance tax payments, the Reserve Bank conducted one main and six fine-tuning VRR operations during December 09-20, 2024, cumulatively injecting ₹4.4 lakh crore in to the banking system

Even as system liquidity remained adequate during July-November, it was likely to tighten in the ensuing months due to tax outflows, increase in currency in circulation and volatility in capital flows. In order to alleviate the potential liquidity stress, the cash reserve ratio (CRR) of all banks was reduced in two equal tranches of 25 bps each to 4.0 per cent of net demand and time liabilities (NDTL) with effect from the fortnights beginning December 14, 2024 and December 28, 2024, thus releasing primary liquidity of about ₹1.16 lakh crore cumulatively to the banking system.

Of the average total absorption of ₹0.92 lakh crore during November 16 to December 19, 2024, placement of funds under the standing deposit facility (SDF) accounted for about 88 per cent. Average

Chart IV.1: Liquidity Operations



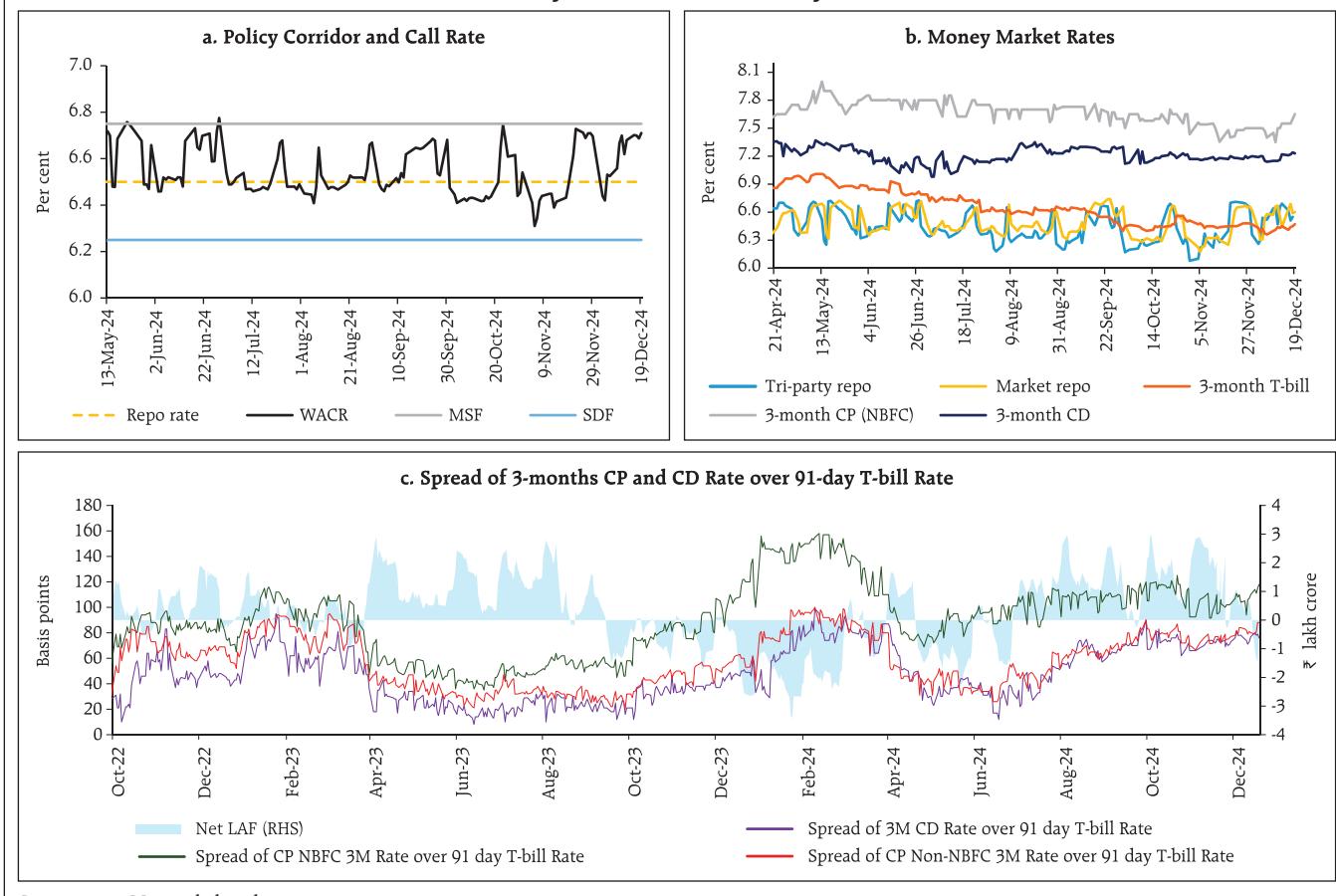
recourse to the marginal standing facility (MSF) remained low at ₹0.08 lakh crore during November 16 to December 19, 2024.

In the overnight money market, the weighted average call rate (WACR) remained within the LAF corridor, averaging 6.62 per cent during November 16 to December 19, 2024, up from 6.48 per cent during October 16 to November 15, 2024 (Chart IV.2a). The WACR firmed up for a brief period during November 22-29 and December 10-19, although it remained within the policy corridor. In the collateralised segment, both the tri-party repo and the market repo rates averaged 6 basis points (bps) and 5 bps, respectively, above the policy repo rate during November 16 to December 19, 2024 (Chart IV.2b). In the secondary market, the spread of 3-month CP (NBFC) and CD rates over the 91-day T-bill rate stood

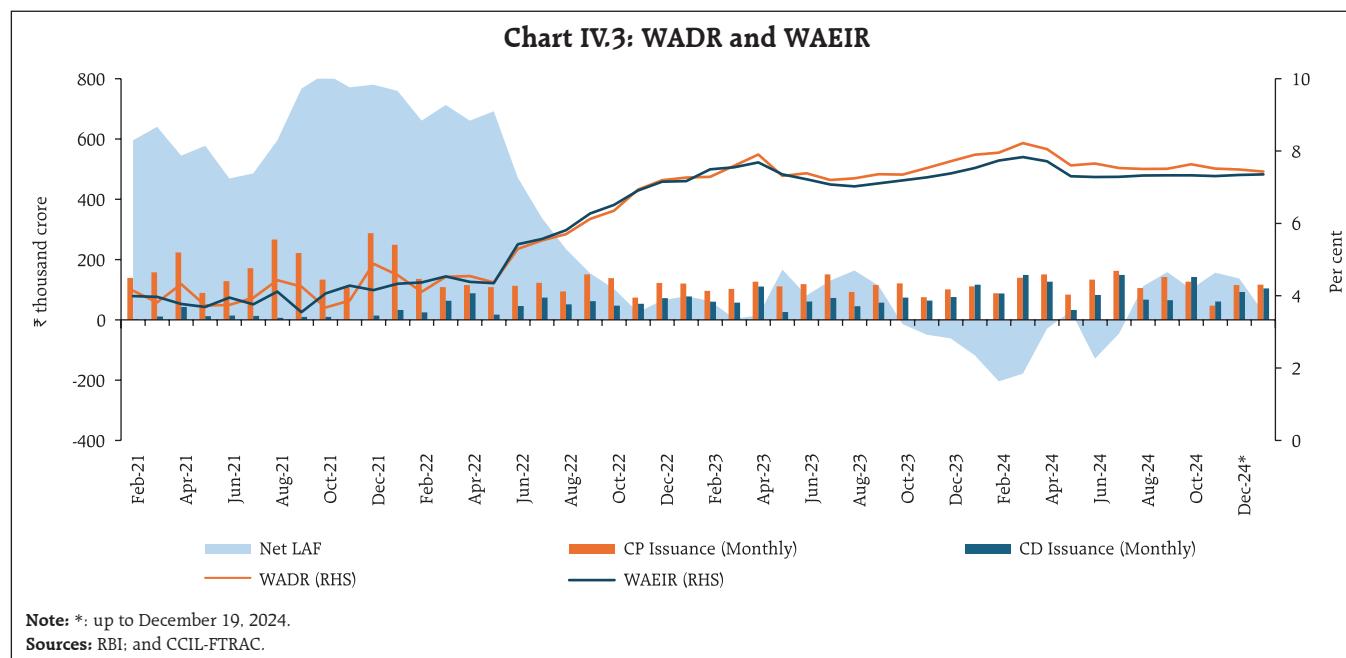
at 109 bps and 77 bps, respectively, during December 2024 (up to December 19) - higher than 104 bps and 44 bps a year ago (Chart IV.2c). Although the spreads tend to ease during periods of surplus liquidity, they have increased in recent months, mainly due to a decline in 91-day T-bill rates, barring the second half of December.

In the short-term money market segment, yields on 3-month treasury bills (T-bills) and 3-month commercial paper (CP) issued by non-banking financial companies (NBFCs) moderated marginally during November 16 - December 19 from the previous month. Rates on 3-month certificates of deposit (CDs) remained rangebound during this period (Chart IV.2b). The average risk premium in the money market (spread between 3-month CP and 91-day T-bill rates) declined by 3 bps.

Chart IV.2: Policy Corridor and Money Market Rates



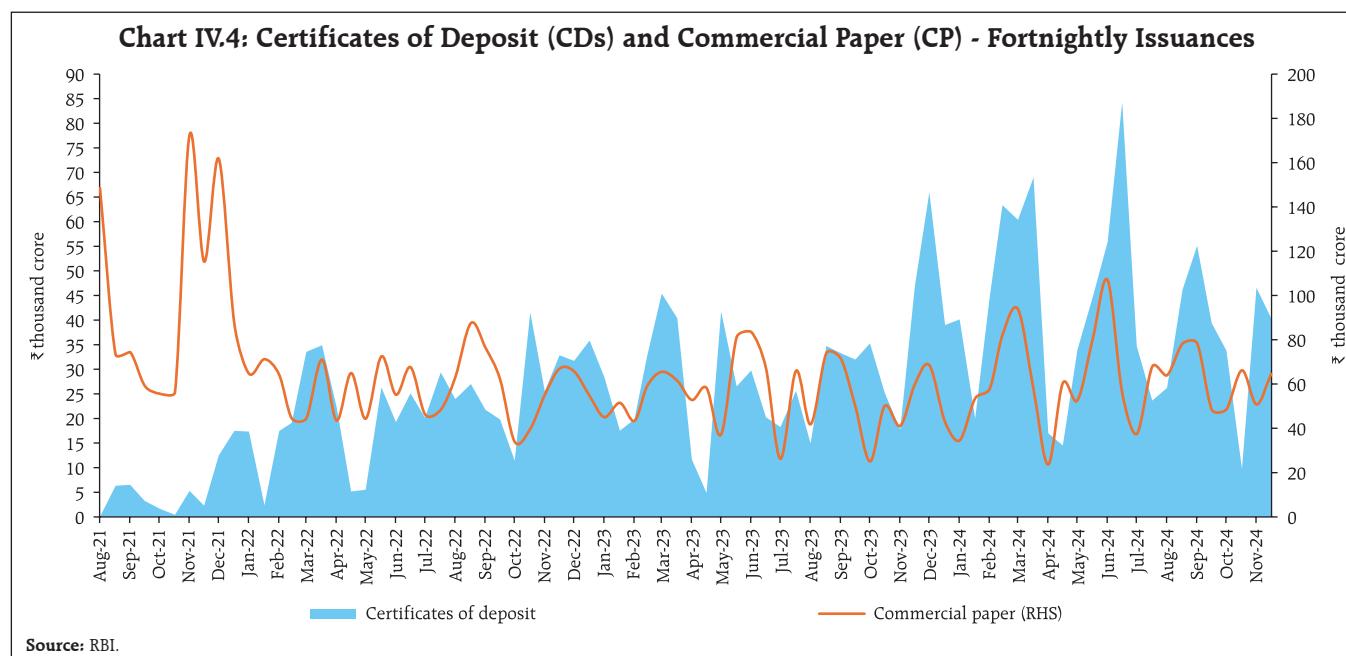
Sources: RBI; CCIL; and Bloomberg.



The weighted average discount rate (WADR) of CPs stood at 7.43 per cent in December 2024 (up to December 19), lower than 7.89 per cent during the corresponding period of the previous year, on expectations of lower interest rates going forward (Chart IV.3). Also, the weighted average effective interest rate (WAEIR) of CDs softened to 7.36 per cent (up to December 19, 2024) from 7.52 per cent

a year ago as the gap between credit and deposit growth narrowed.

In the primary market, CD issuances grew by 68 per cent (y-o-y) to ₹6.88 lakh crore during April–November 2024, significantly higher than ₹4.09 lakh crore in the corresponding period of the previous year, reflecting banks' funding requirements (Chart IV.4). CP issuances stood at ₹9.85 lakh crore during



2024-25 (up to November), higher than ₹8.85 lakh crore in the corresponding period of the previous year. With the Reserve Bank increasing the risk weight on bank loans to NBFCs in November 2023, these entities have been relying on alternative market instruments to mobilise resources.

The 10-year G-sec yield remained relatively stable during the second half of November even as US treasury yields hardened. The benchmark yield softened to its lowest level in almost three years on December 4, 2024 on expectations of monetary policy easing by the Reserve Bank in the backdrop of a sharper-than-expected slowdown in GDP growth in Q2:2024-25 (Chart IV.5a). The G-sec yield curve shifted downward along the mid segment of the term structure. During November 16 – December 19, the average term spread (10-year minus 91-day T-bills) remained stable at 36 bps (Chart IV.5b).

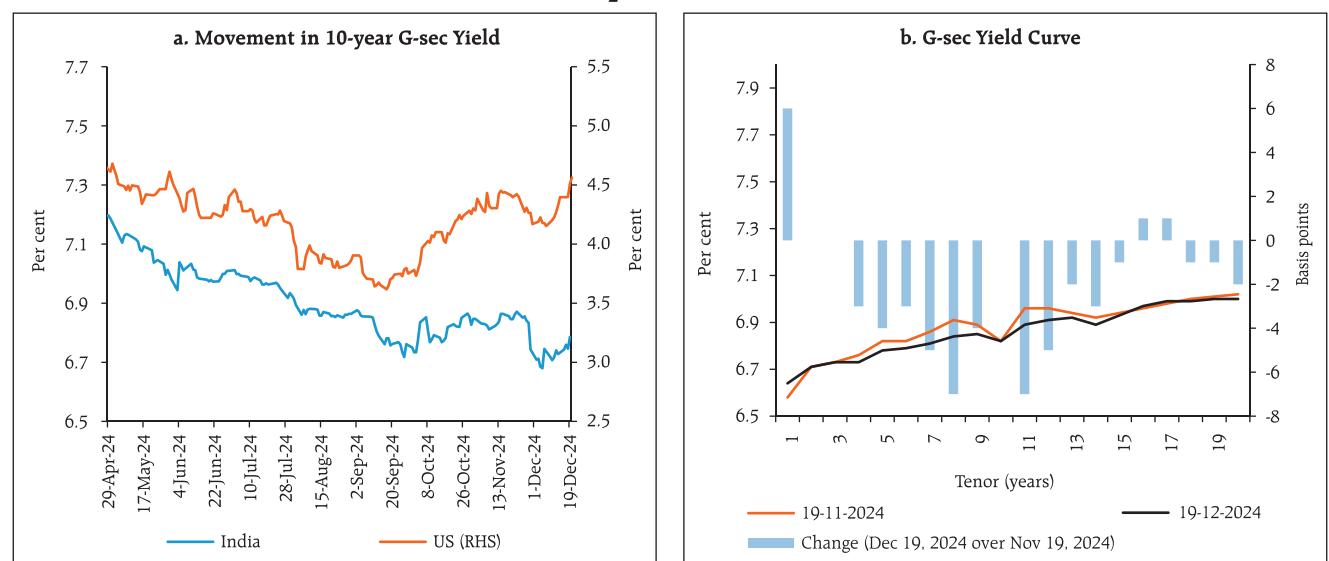
The spread of the 10-year Indian G-sec yield over the 10-year US bond fell to 222 bps as on December 19, 2024 from 310 bps in mid-September and 324 bps a year ago. Domestic bond yields fell sharply after

November 29, 2024 reaching a three year low in early December. FPI flows to domestic debt instruments turned positive in December 2024 after outflows in October and November. The volatility of yields in the Indian bond market remains low relative to US treasuries (Chart IV.6).

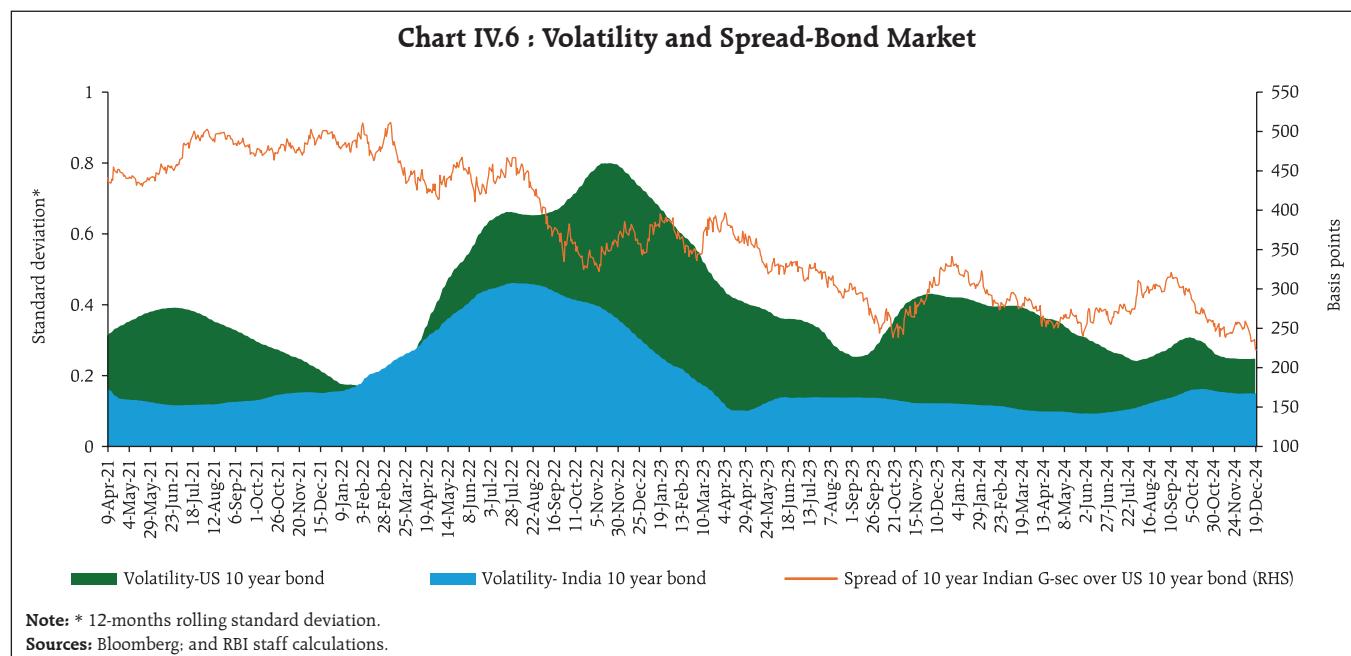
Corporate bond issuances have picked up pace in recent months as corporates took advantage of lower yields to diversify funding sources. Overall, corporate bond issuances during 2024-25 (up to November) were higher at ₹6.06 lakh crore as compared with ₹4.99 lakh crore during the corresponding period of the previous year. Corporate bond yields across the ratings and the tenor spectrum generally declined, while the associated risk premia generally increased during November 18 to December 18, 2024 (Table IV.1).

Reserve money (RM) recorded a growth of 6.3 per cent (y-o-y) as on December 13, 2024 (6.4 per cent a year ago) [Chart IV.7]. The growth in currency in circulation (CiC), the largest component of RM, stood at 6.1 per cent (y-o-y) as on December 13, 2024 as compared with 3.9 per cent a year ago.

Chart IV.5: Developments in the G-sec Market



Sources: Bloomberg; CCIL; and RBI staff estimates.



On the sources side (assets), RM comprises net domestic assets (NDA) and net foreign assets (NFA) of the Reserve Bank. Foreign currency assets increased by 5.2 per cent (y-o-y) as on December 13, 2024. Gold – a major component of NFA – grew by 46.2 per cent, mainly due to revaluation gains from gold prices. As a result, its share in NFA rose from 8.1 per cent as at end-October 2023 to 10.7 per cent as on December 13, 2024 (Chart IV.8).

Money supply (M_3) rose by 10.0 per cent (y-o-y) as on November 29, 2024 (11.2 per cent a year ago).²³ Aggregate deposits with banks, accounting for around 87 per cent of M_3 , increased by 10.6 per cent (12.2 per cent a year ago).

Scheduled commercial banks' (SCBs') credit growth moderated to 11.8 per cent as on November 29, 2024 (16.3 per cent a year ago) [Chart IV.9].

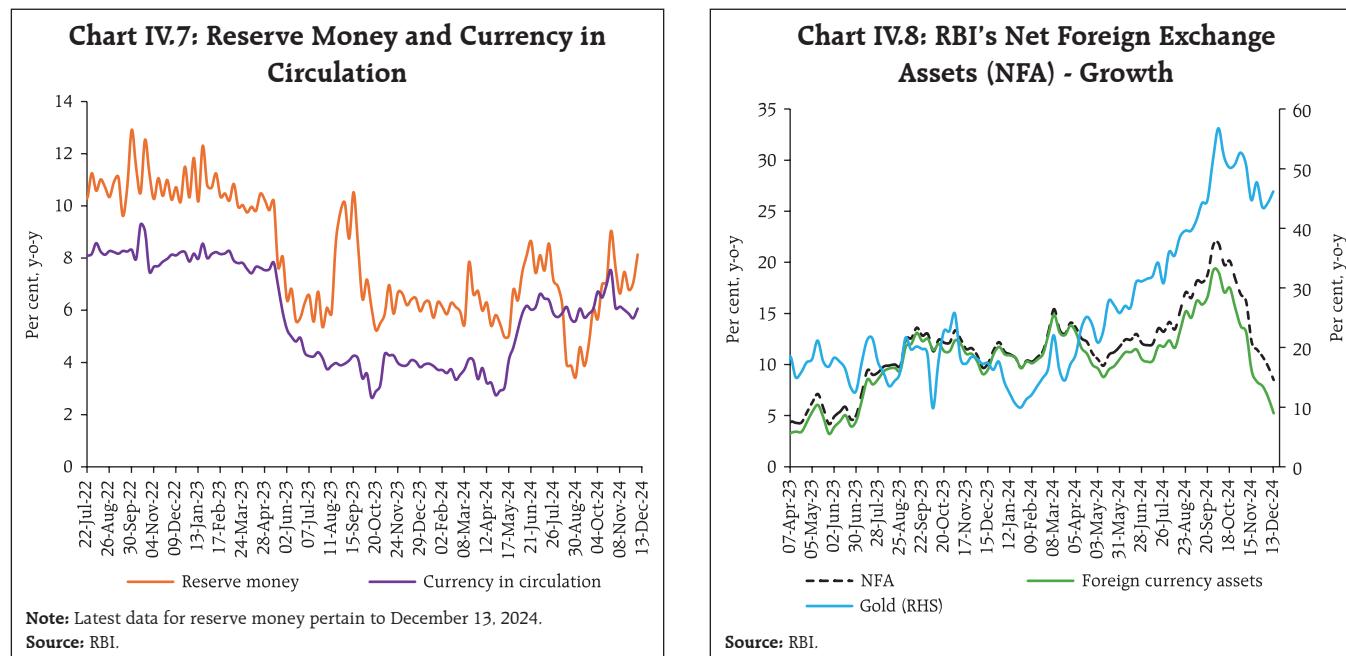
Table IV.1: Financial Markets - Rates and Spread

Instrument	Interest Rates (per cent)			Spread (basis points) (Over Corresponding Risk-free Rate)		
	Oct 18, 2024 – Nov 18, 2024	Nov 18, 2024 – Dec 18, 2024	Variation	Oct 18, 2024 – Nov 18, 2024	Nov 18, 2024 – Dec 18, 2024	Variation
1	2	3	(4 = 3-2)	5	6	(7 = 6-5)
Corporate Bonds						
(i) AAA (1-year)	7.79	7.82	3	111	114	3
(ii) AAA (3-year)	7.75	7.68	-7	90	88	-2
(iii) AAA (5-year)	7.61	7.60	-1	72	75	3
(iv) AA (3-year)	8.50	8.47	-3	166	167	1
(v) BBB- (3-year)	12.14	12.12	-2	530	533	3

Note: Yields and spreads are computed as averages for the respective periods.

Sources: FIMMDA; and Bloomberg.

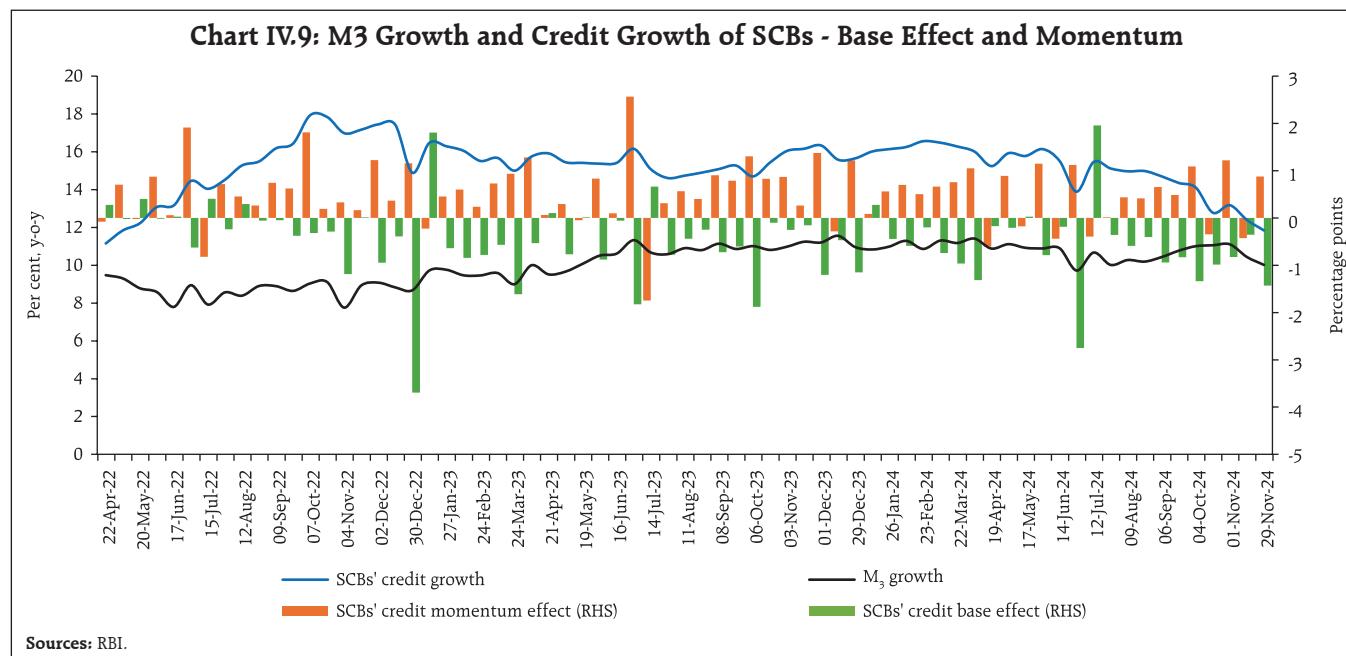
²³ Excluding the impact of the merger of a non-bank with a bank (with effect from July 1, 2023).

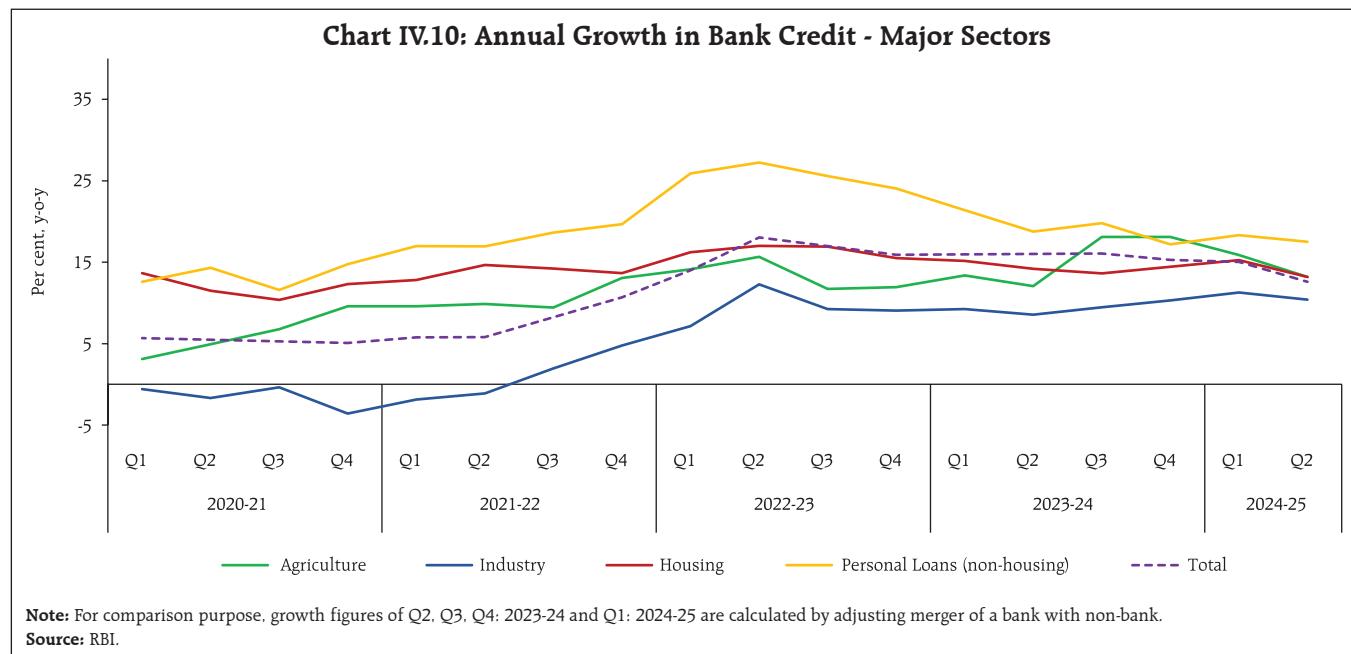


Personal loans (housing and non-housing) remained the prime driver of overall credit expansion up to September 2024; credit to industry continued to register double digit growth (Chart IV.10).

SCBs' lending to the private corporate sector, which accounts for nearly a quarter of the total

bank credit, decelerated during Q2:2024-25 from the high growth registered in the previous quarter (Chart IV.11). While growth in working capital loans accelerated for the second successive quarter, growth in term loans continued to decelerate (Chart IV.12).

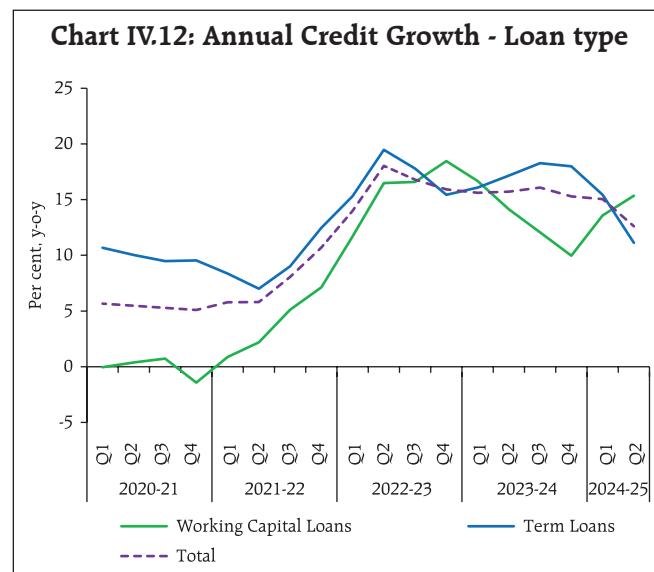
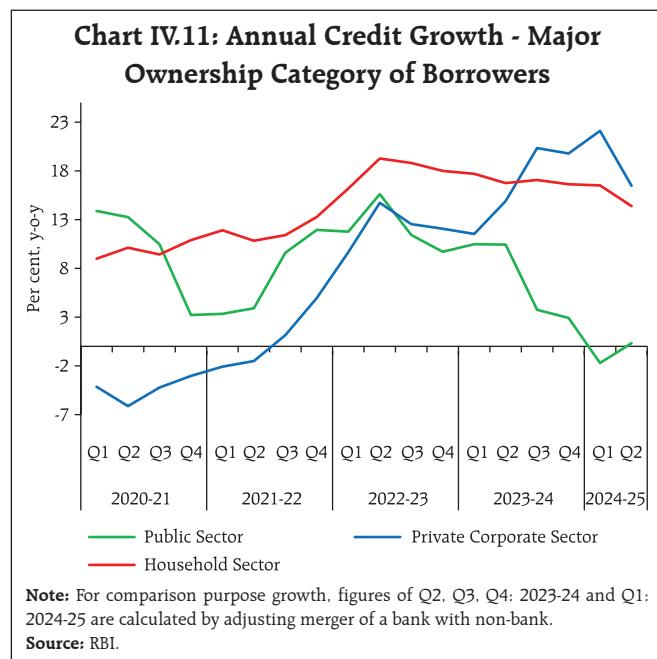


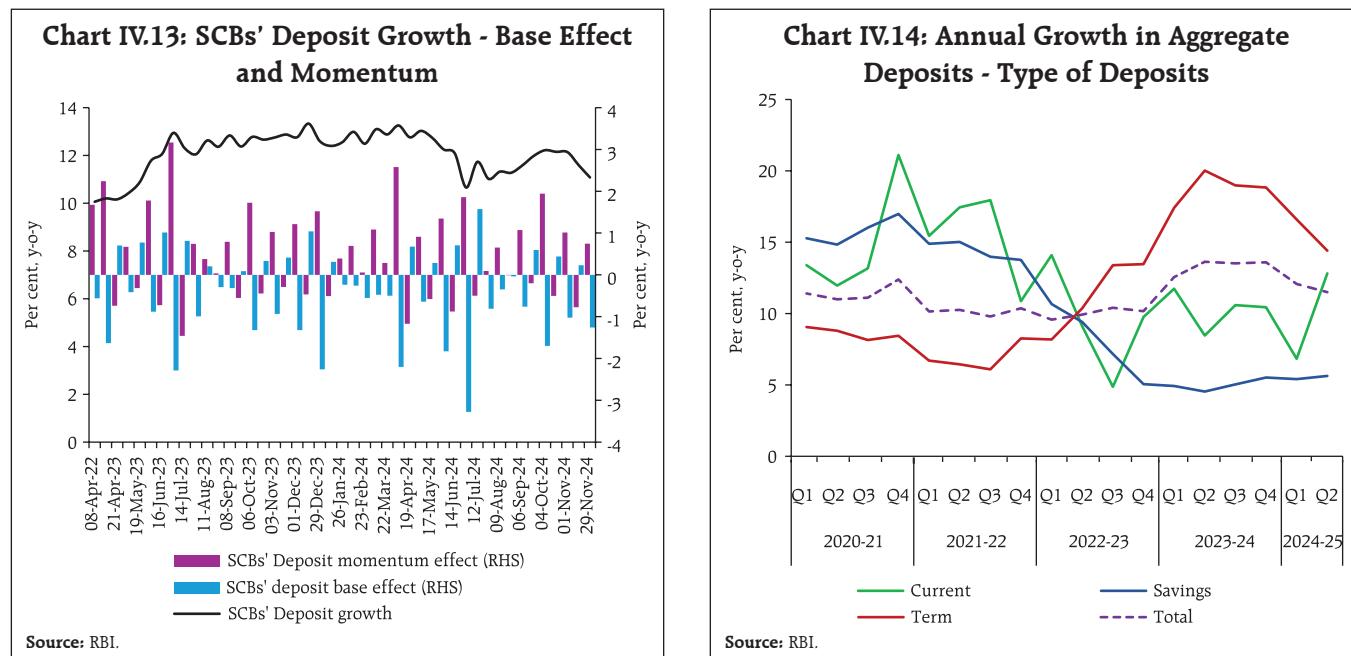


SCBs' deposit growth (excluding the impact of the merger) moderated from 11.3 per cent at the end of August 2024 to 11.1 per cent as on November 29, 2024 (Chart IV.13).

During the recent monetary policy tightening cycle, the growth in current account and savings

account (CASA) deposits was outpaced by the growth in term deposits. The share of term deposits in total deposits rose further to 61.4 per cent in September 2024 from 59.8 per cent a year ago and 57.2 per cent in March 2023 (Chart IV.14). The share of term deposits bearing over 7 per cent interest rate in total term deposits increased to 68.8 per cent in



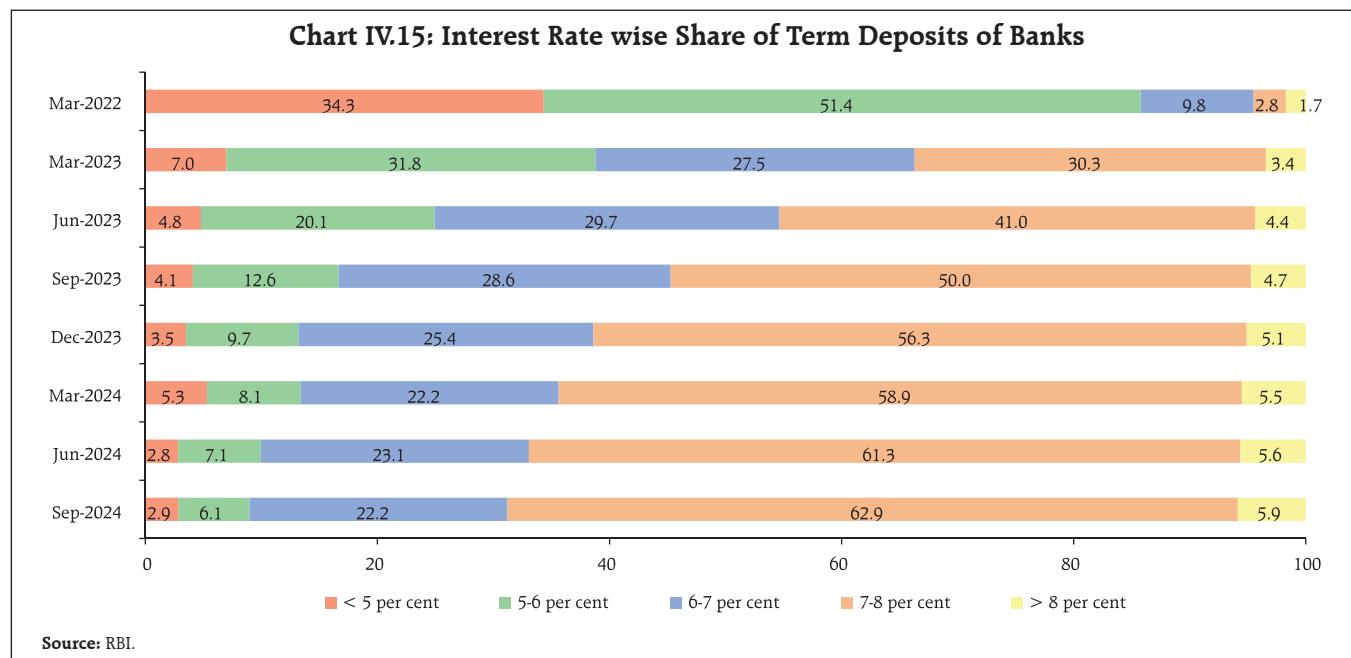


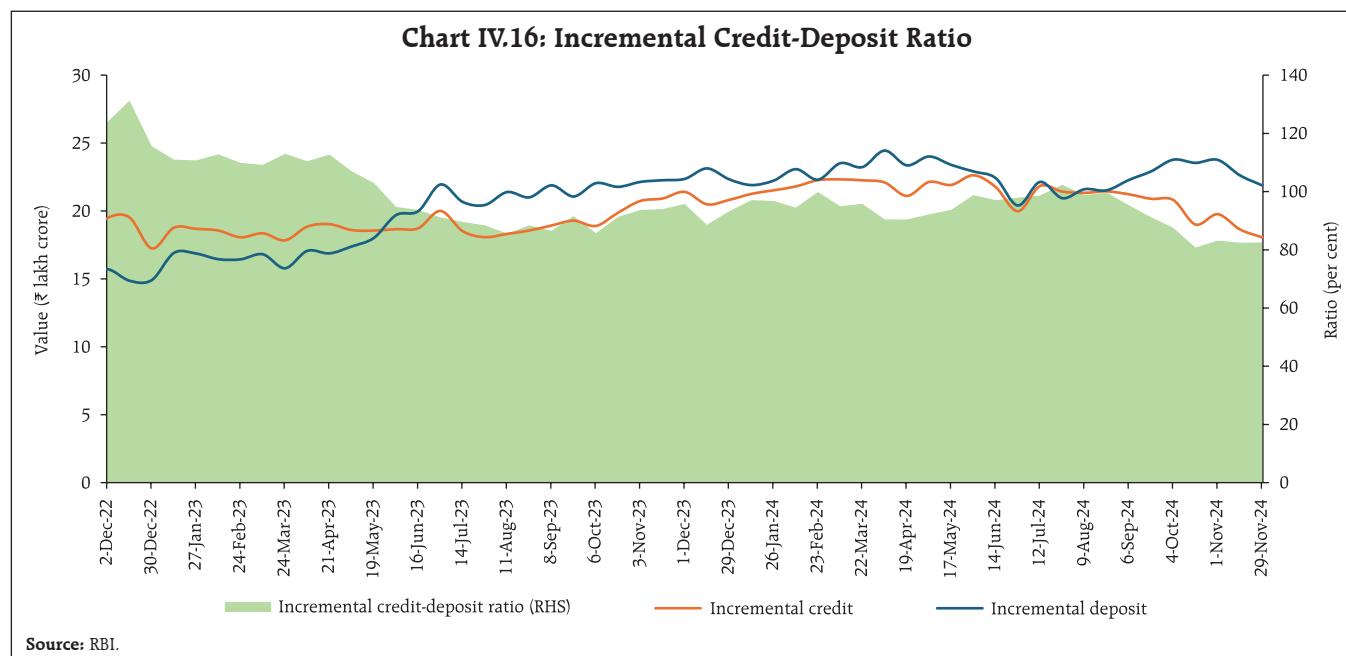
September 2024 from 54.7 per cent a year ago, 33.7 per cent in March 2023 and 4.5 per cent in March 2022 (Chart IV.15).

SCBs' incremental credit-deposit ratio declined from 95.8 as at end-March 2024 to 82.5 as on November 29, 2024, with incremental deposit outpacing incremental credit during August – November 2024 (till November 29) [Chart IV.16]. With the statutory

requirements for CRR and SLR at 4.5 per cent and 18 per cent, respectively, around 77 per cent of deposits was available with the banking system for credit expansion as on November 29, 2024.

In response to the 250 bps increase in the policy repo rate since May 2022, banks have revised their repo linked external benchmark-based lending rates (EBLRs) up by a similar magnitude. The median 1-year

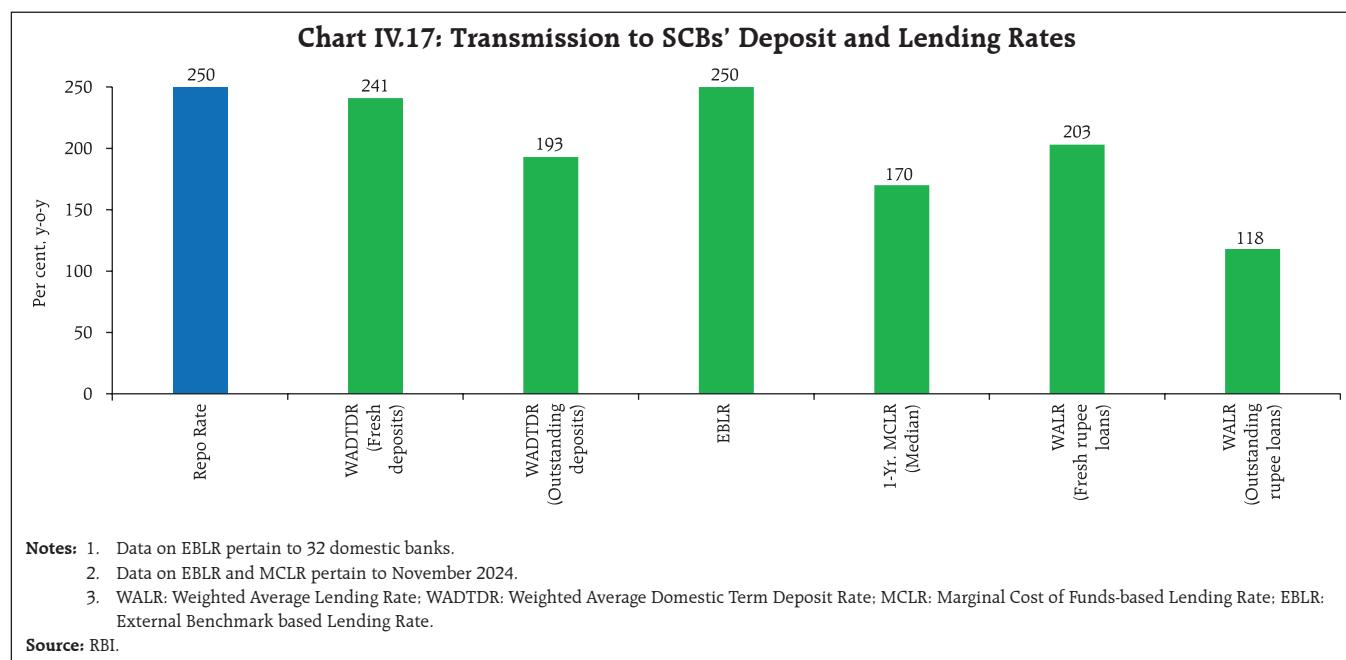


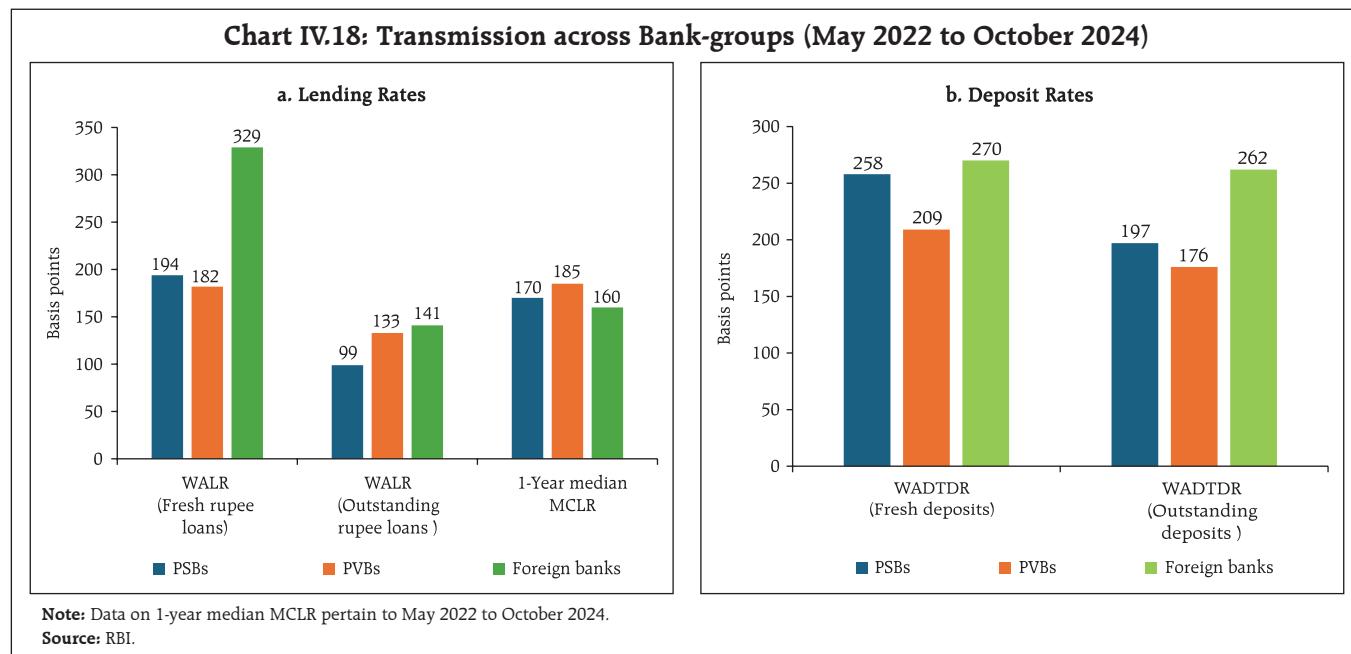


marginal cost of funds-based lending rate (MCLR) increased by 170 bps during May 2022 to November 2024. Consequently, the weighted average lending rates (WALRs) on fresh and outstanding rupee loans increased by 203 bps and 118 bps, respectively, during May 2022 to October 2024. On the deposit side, the weighted average domestic term deposit rates (WADTDRs) on fresh and outstanding deposits

increased by 241 bps and 193 bps, respectively, during the same period (Chart IV.17).

Transmission across bank groups indicates that the increase in the WALR on fresh rupee loans was higher for public sector banks (PSBs) than for the private banks (PVBs). In the case of outstanding loans, however, the transmission among PSBs was lower. In deposits, transmission to WADTDRs of

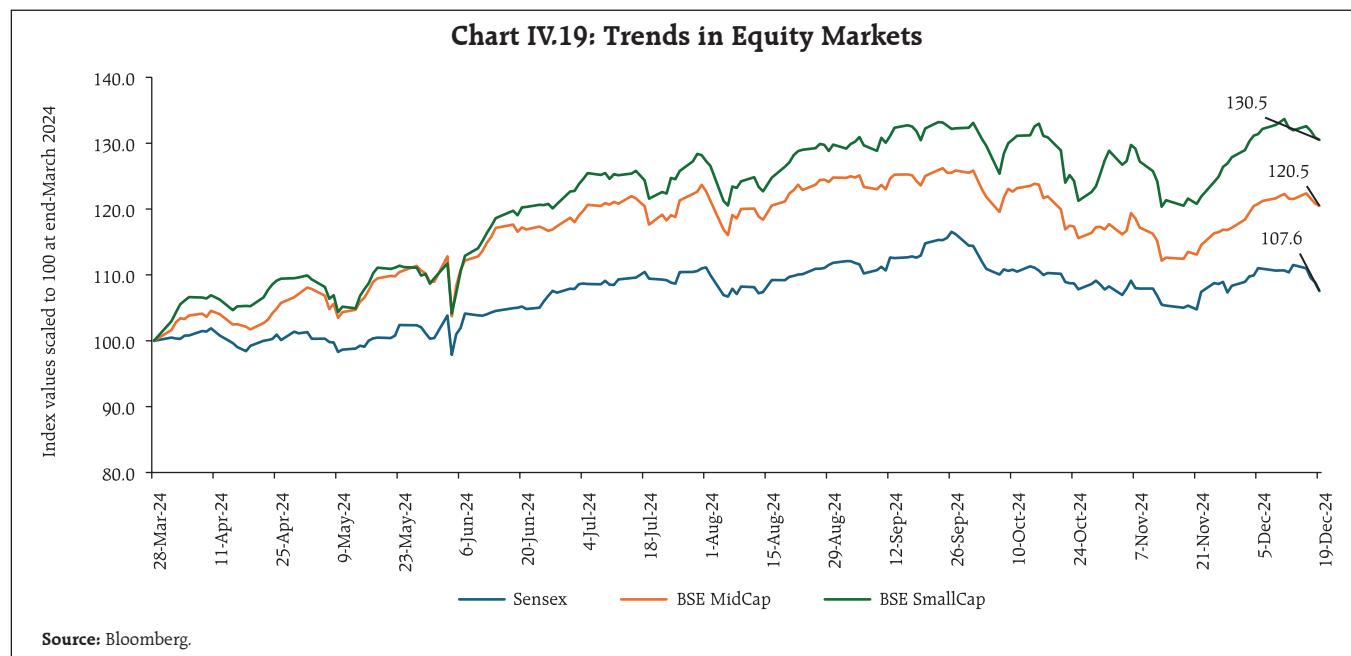


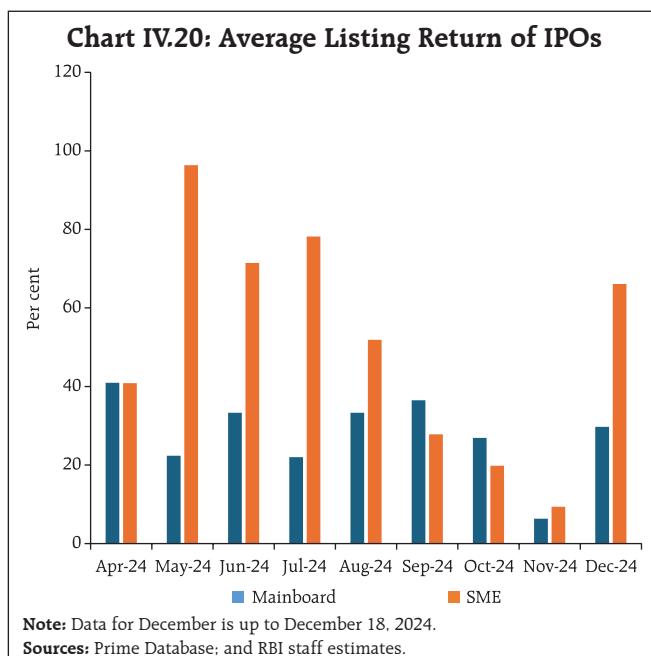


both fresh and outstanding deposits was higher for PSBs compared to PVBs during May 2022 and October 2024 (Chart IV.18).

Indian equity markets recorded losses in the first three weeks of November amidst weak corporate earnings, FPI sell-offs, geopolitical uncertainties, and valuation concerns. Markets, however, rebounded toward the month-end following the announcement

of State election results and started off December on a strong note, driven by positive global cues. Subsequently, markets experienced a decline ahead of key monetary policy announcements, which was further exacerbated by indications by the US Fed regarding lower magnitude of interest rate cuts in 2025. Overall, the BSE Sensex gained 2.1 per cent since November 14, 2024 to close at 79,218 on December 19,

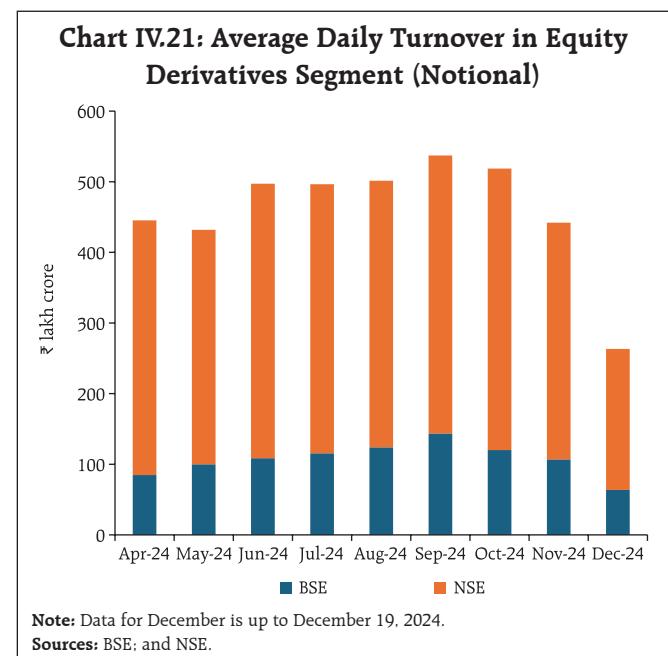




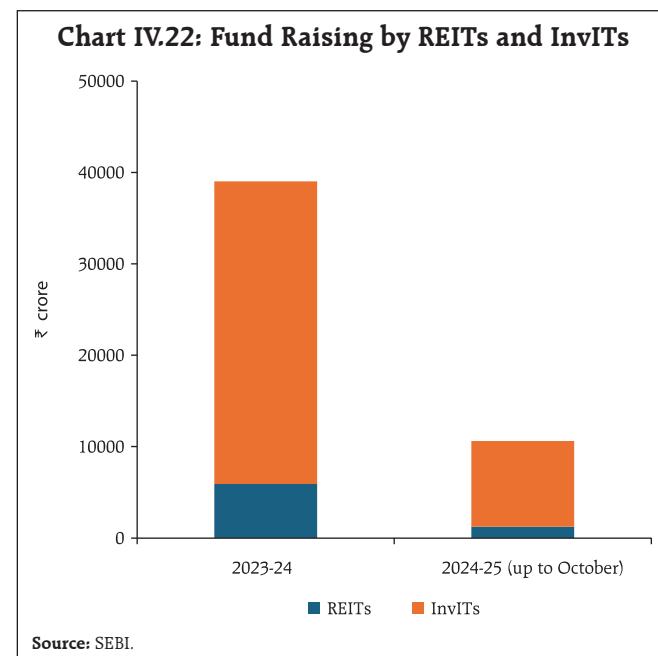
2024 (Chart IV.19). The midcap and smallcap segments continued to outperform the benchmark.

The ongoing volatility in equity markets, coupled with regulatory initiatives²⁴ aimed at enhancing the functioning of primary markets, impacted sentiment in the primary equity market, as evidenced by subdued subscription levels²⁵ and listing performance of Initial Public Offerings (IPOs) in November (Chart IV.20).

Several regulatory measures aimed at strengthening the equity index derivatives framework to enhance investor protection and market stability - such as the rationalisation of weekly index derivatives products and an increase in contract sizes - came into effect in the second half of November 2024. Subsequently, there has been moderation in the average daily turnover in the equity derivatives segment (Chart IV.21).



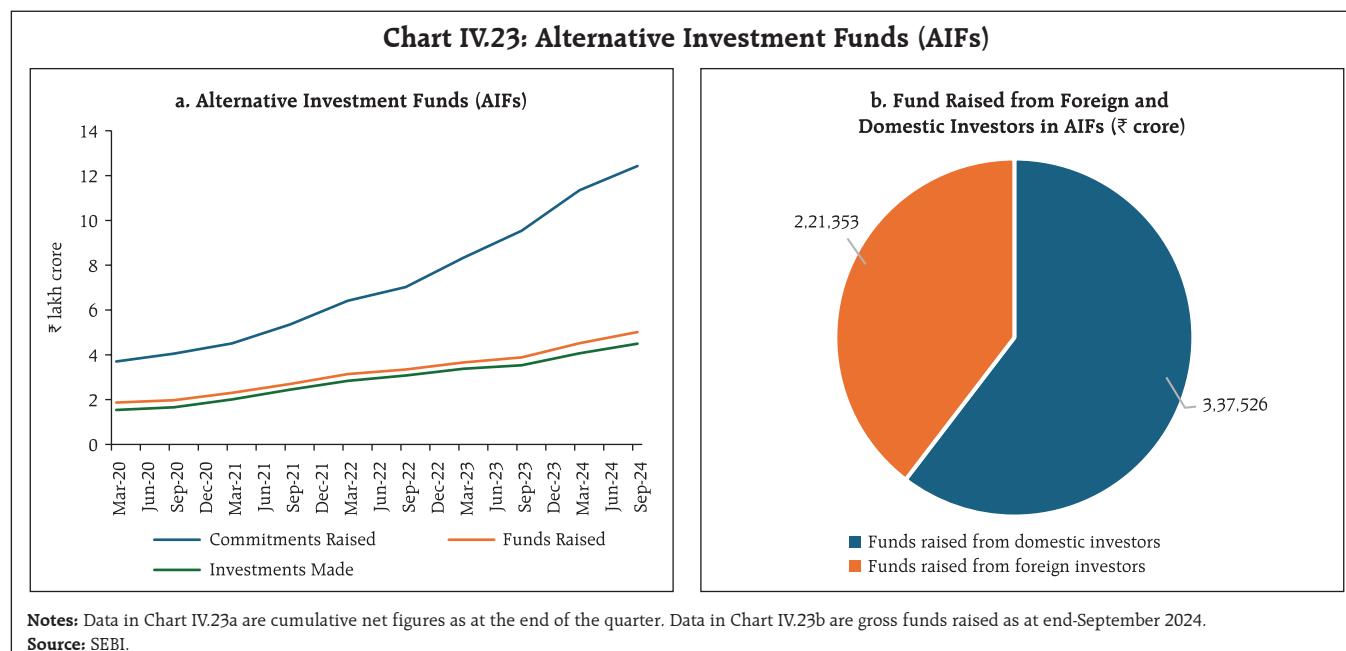
Resource mobilisation by Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs) has been subdued in the current financial year (Chart IV.22). December marked the introduction of the first Small and Medium Real Estate Investment Trust (SM REIT).²⁶



²⁴ https://www.sebi.gov.in/reports-and-statistics/reports/nov-2024/consultation-paper-on-review-of-sme-segment-framework-under-sebi-icdr-regulations-2018-and-applicability-of-corporate-governance-provisions-under-sebi-lodr-regulations-2015-on-sme-companies-to-_88627.html

²⁵ <https://www.moneycontrol.com/news/business/markets/ipo-frenzy-cools-down-in-november-as-subscription-levels-take-a-hit-12881753.html>

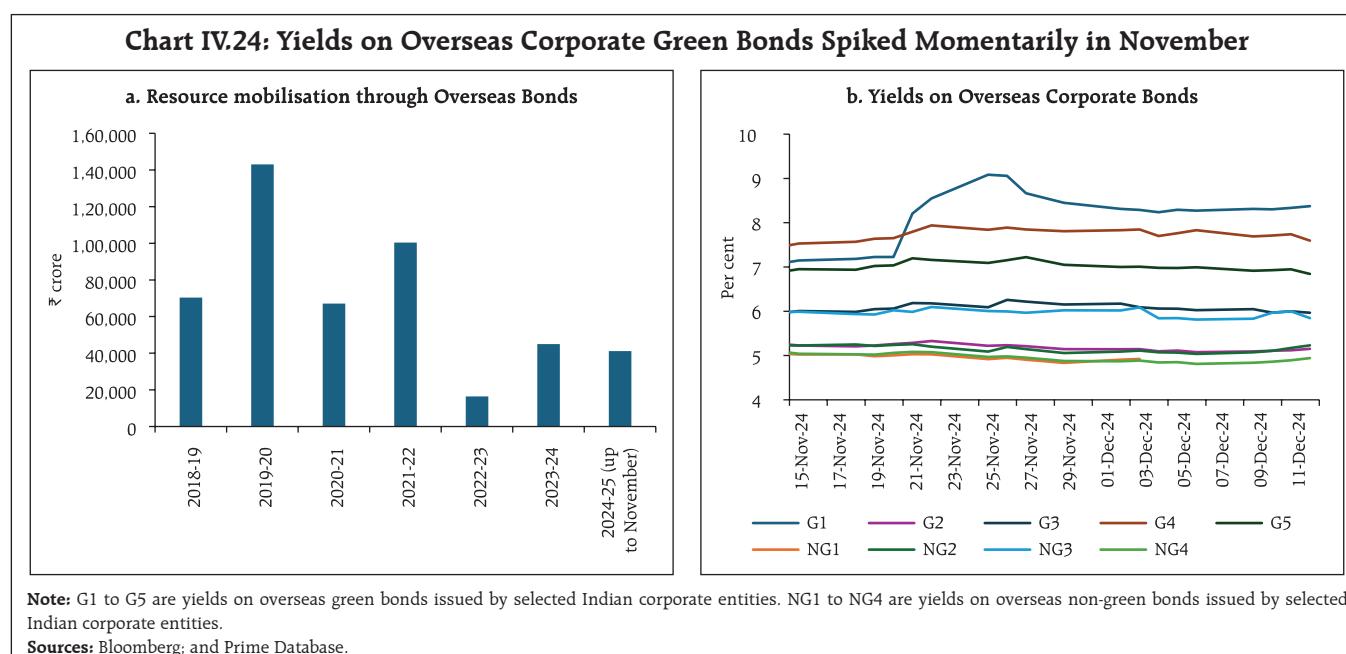
²⁶ [https://www.sebi.gov.in/filings/sm-reit-issues/dec-2024/property-share-investment-trust-propshare_platina_89388.html](https://www.sebi.gov.in/filings/sm-reit-issues/dec-2024/property-share-investment-trust-propshare-platina_89388.html)



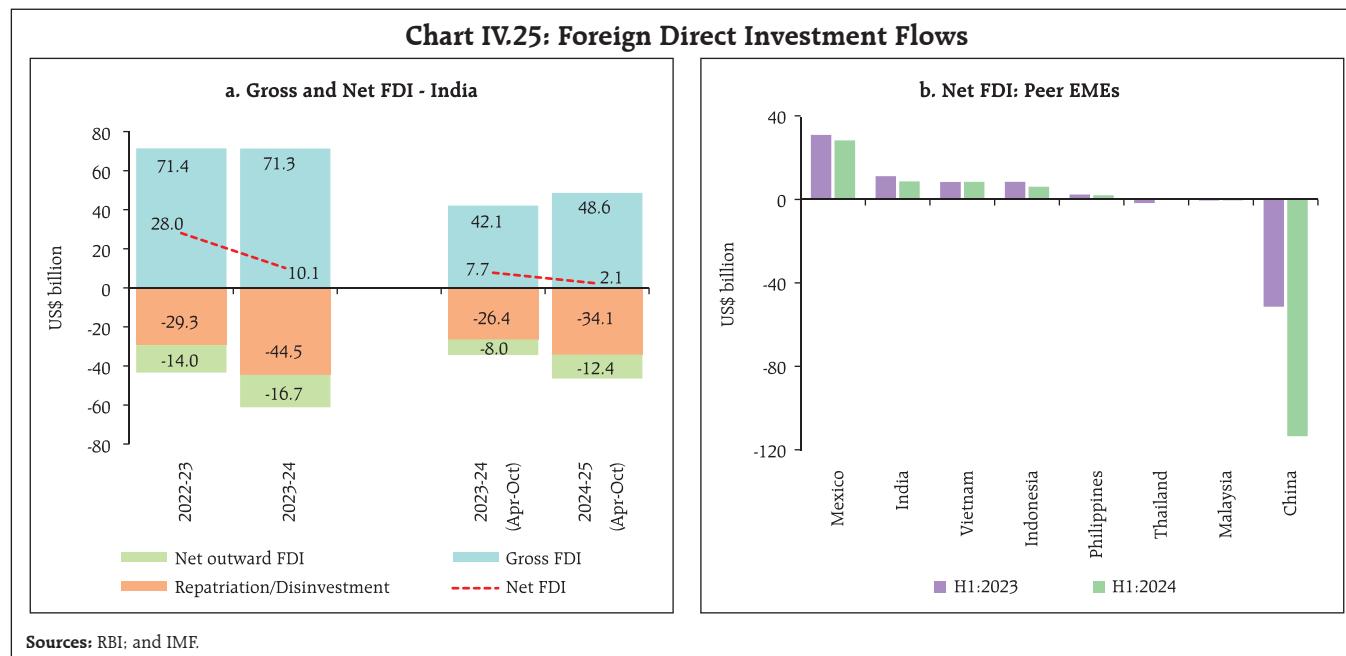
Alternative Investment Funds (AIFs) are gaining momentum, offering vital capital for higher-risk ventures²⁷ (Chart IV.23a). Notably, a significant portion of investments in AIFs is being sourced from domestic investors (Chart IV.23b).

Indian firms have actively raised funds from overseas markets, complementing domestic resource

mobilisation. After subdued activity in the past two years, overseas fundraising has seen a modest revival in the current financial year (Chart IV.24a). In the second half of November, there was a brief uptick in yields on overseas bonds issued by a specific conglomerate (Chart IV.24b). Certain green bonds issued by other domestic corporates in overseas



²⁷ https://www.business-standard.com/markets/news/alternative-investment-funds-gain-currency-as-fund-raise-tops-rs-5-trillion-124112601117_1.html



markets also witnessed marginal hardening of yields, but the effect was limited and it reversed quickly.

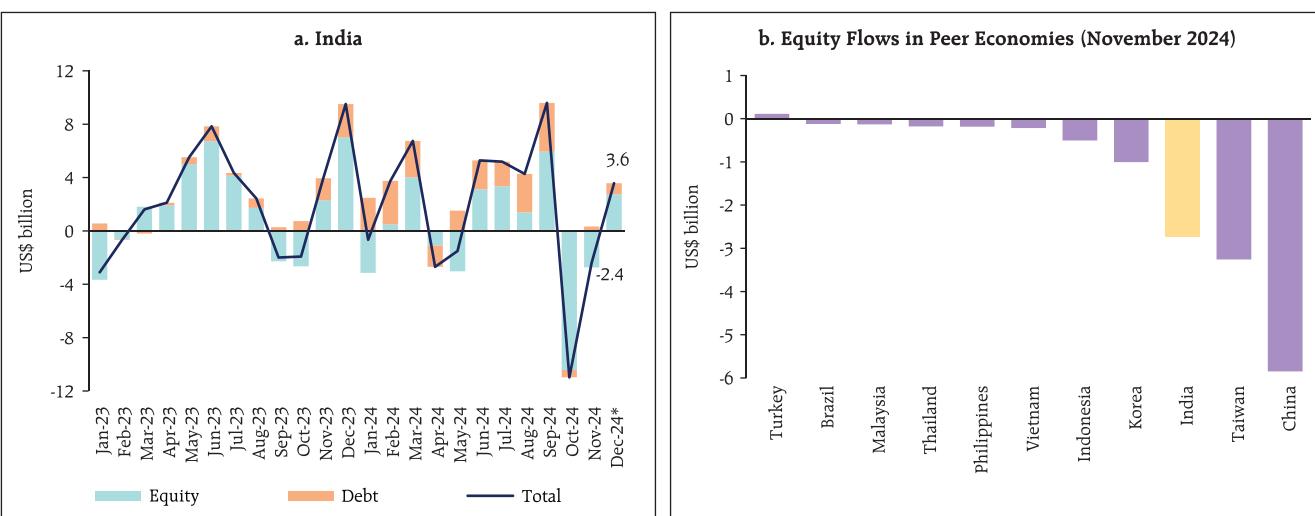
Gross inward foreign direct investment (FDI) rose to US\$ 48.6 billion during April-October 2024 from US\$ 42.1 billion a year ago (Chart IV.25a). More than 60 per cent of the gross FDI inflows were directed to manufacturing, financial services, electricity and other energy, and retail and wholesale trade sectors. Major source countries included Singapore, Mauritius, the UAE, the Netherlands, and the US, contributing more than three-fourths of the flows during the period.

Net FDI decelerated to US\$ 2.1 billion during April-October 2024 from US\$ 7.7 billion a year ago, majorly due to the rise in repatriation and net outward FDI. While repatriation rose to US\$ 34.1 billion during April-October 2024 from US\$ 26.4 billion a year ago, net outward FDI increased to US\$ 12.4 billion from US\$ 8.0 billion during the same period. A similar moderation is visible in net FDI across most peer emerging market economies (EMEs) during H1:2024 as compared to a year ago (Chart IV.25b).

Foreign portfolio investors (FPIs) continued to remain net sellers in Indian financial markets in November 2024, as a rising US dollar and US yields post US elections along with high domestic stock valuations and concerns over the growth slowdown impacted sentiments. Net FPI outflows were to the tune of US\$ 2.4 billion in November 2024, with net outflows of US\$ 2.7 billion in equity and net inflows of US\$ 0.3 billion in debt segment. However, FPI flows turned positive during December (up to December 18) with net inflows of US\$ 3.6 billion (Chart IV.26a). Within sectors, oil, gas and consumable fuels, and automobile and auto components recorded the highest equity outflows while, information technology and financial services received the largest inflows during November. Rising global economic and financial uncertainties during November resulted in equity outflows from other EMEs as well (Chart IV.26b).

External commercial borrowings (ECBs) disbursements as well as new loan registrations were higher during April-October 2024 in comparison to the corresponding period last year (Chart IV.27a). Adjusting for outflows on account of principal

Chart IV.26: Net Portfolio Investments



Notes: 1. Debt also includes investments under the hybrid instruments.

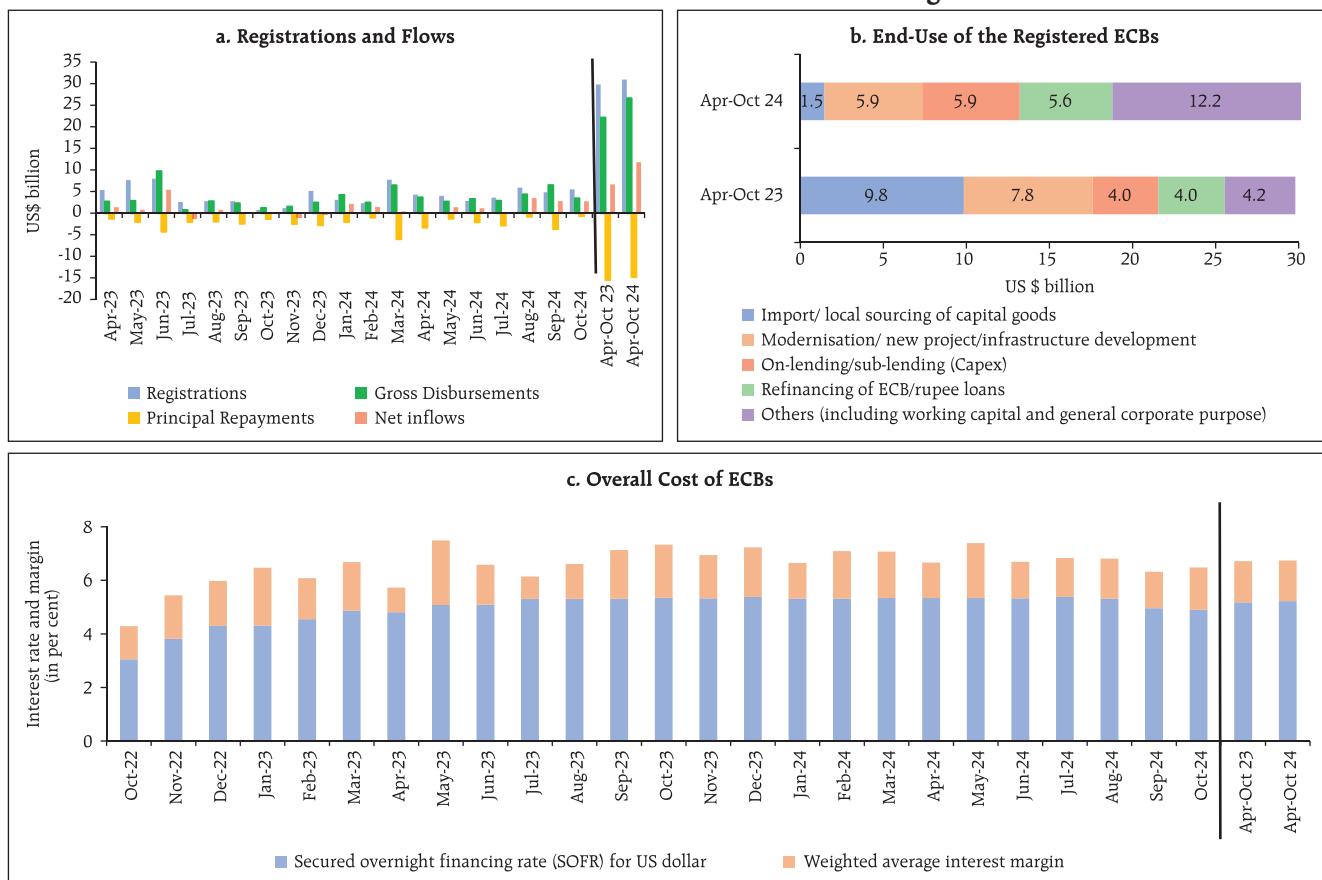
2. *: Data up to December 18, 2024.

Sources: National Securities Depository Limited (NSDL); and Institute of International Finance.

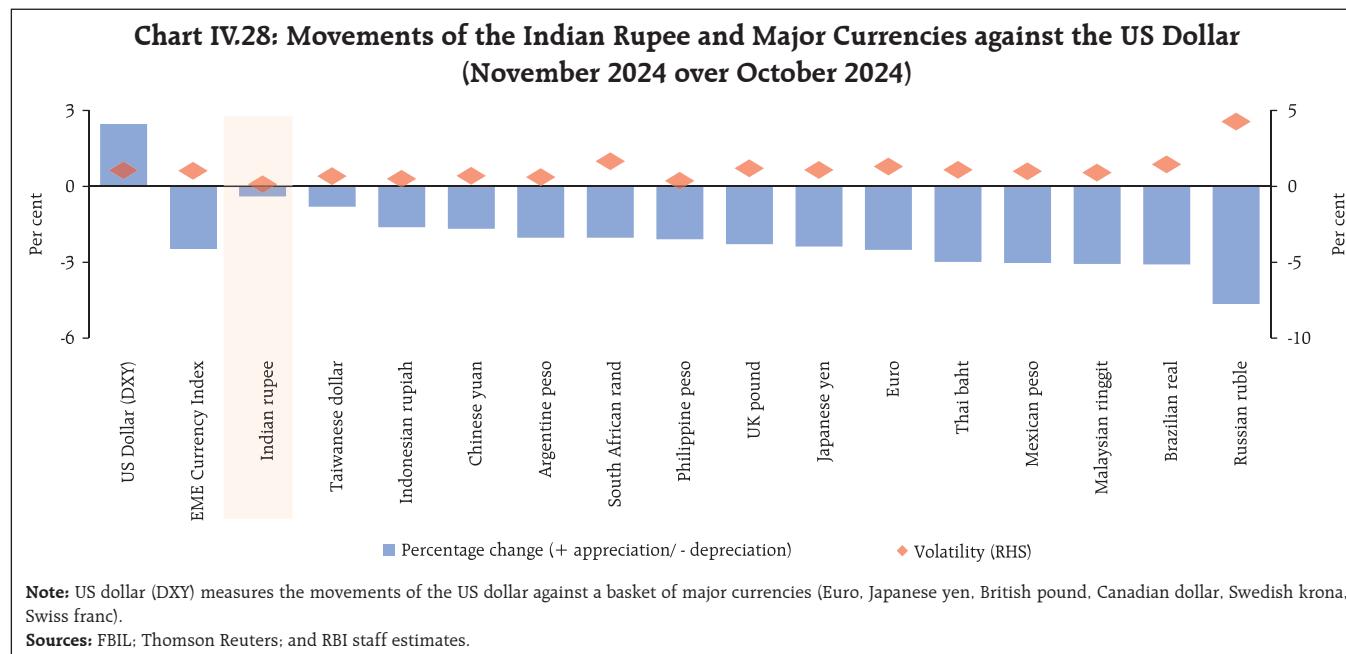
repayments, net ECB inflows during the current financial year so far were 76 per cent higher than a

year ago. Over 40 per cent of ECBs registered during April-October 2024 were earmarked for capital

Chart IV.27: External Commercial Borrowings



Sources: Form ECB, RBI; and RBI staff estimates.



expenditure purposes, including on-lending and sub-lending (Chart IV.27b).

The overall cost of new ECBs registered during October 2024 rose by 16 bps due to increase in the weighted average interest margin (WAIM). The overall cost of ECBs registered during April-October 2024 at 6.7 per cent remained similar to that in the corresponding period last year (Chart IV.27c).

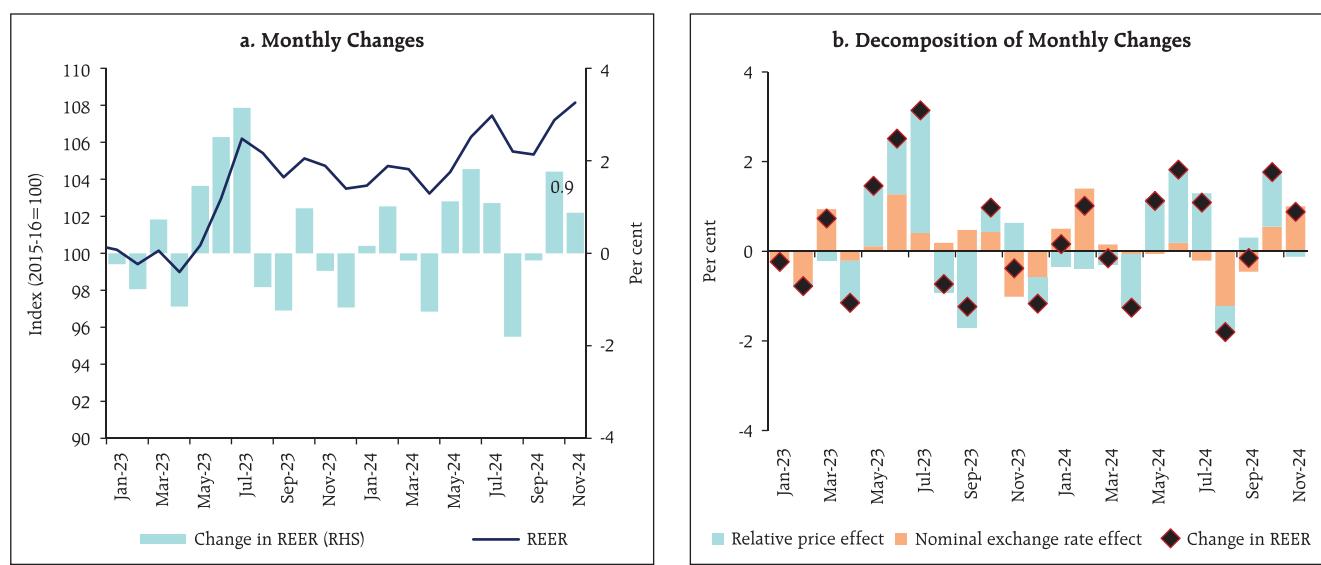
Net accretion to non-resident deposits almost doubled to US\$ 11.9 billion during April-October 2024 from US\$ 6.1 billion a year ago, due to higher accretion in all three accounts, namely, Non-Resident (External) Rupee Accounts [NR(E)RA], Non-Resident Ordinary (NRO) and Foreign Currency Non-Resident (Banks) [FCNR(B)] accounts.

During November 2024, EME currencies faced pressures from strong FPI outflows, a strengthening US dollar, and rising US yields. Amidst these headwinds, the Indian rupee (INR) depreciated by

0.4 per cent (m-o-m) in November 2024 which was modest as compared to other major currencies. Despite heightened global uncertainties, the INR exhibited the lowest volatility among major currencies (Chart IV.28).

In terms of the 40-currency real effective exchange rate (REER), the INR appreciated by 0.9 per cent (m-o-m) in November 2024 as appreciation of the INR in nominal effective terms more than offset negative relative price differentials (Chart IV.29).

The foreign exchange reserves increased by US\$ 6.4 billion during 2024-25 so far to US\$ 652.9 billion on December 13, 2024. At the current level, it stands equivalent to more than 11 months of imports and about 96 per cent of external debt outstanding at end-June 2024 (Chart IV.30a). India's foreign exchange reserves remained robust, as reflected in sustainable levels of reserve adequacy metrics (Chart IV.30b).

Chart IV.29: Movements in the 40-Currency Real Effective Exchange Rate

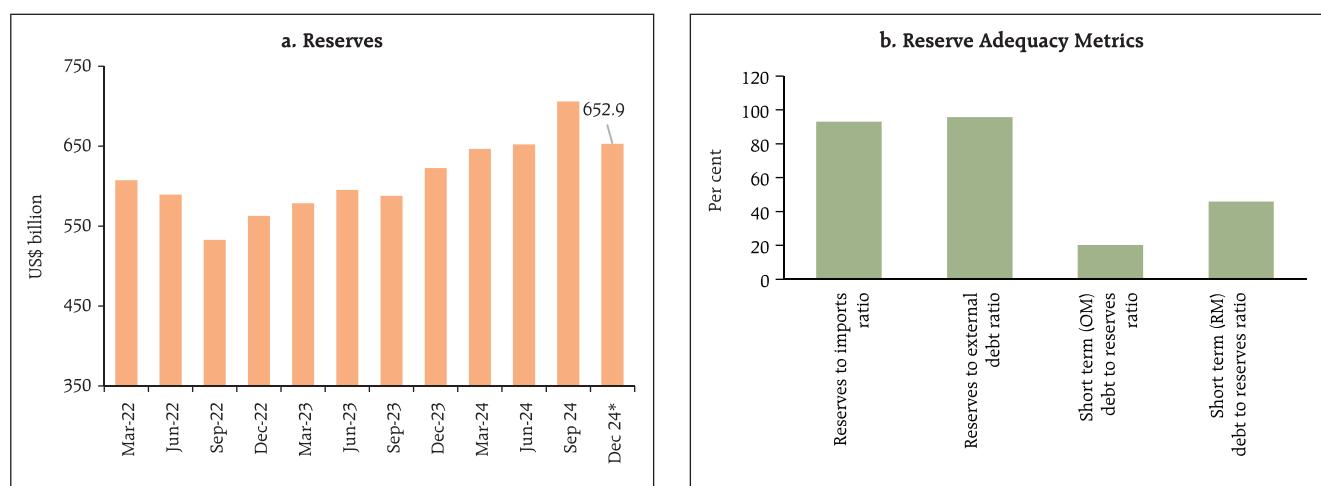
Source: RBI.

Payment Systems

Most modes of digital payments recorded expansion on a y-o-y basis in November 2024, albeit with a deceleration from the festival month of October (Table IV.2). Notably, the transactions using Bharat Bill Payment System (BBPS) and the Unified Payments Interface (UPI) registered robust growth.

The National Electronic Toll Collection (NETC) system, displayed higher growth (y-o-y) both in volume and value terms in November.

During 2024-25 so far (up to October 2024), the issuance of new cards has increased, primarily driven by debit cards. Both the volume and value of credit and debit card transactions sustained

Chart IV.30: Foreign Exchange Reserves

Notes: 1. *: Data for December 13.

2. OM: Original Maturity; RM: Residual Maturity. The reserve adequacy metrics have been calculated using the latest available reserves data and annualised merchandise imports and external debt for June 2024.

Sources: RBI; respective central bank websites; and RBI staff estimates.

Table IV.2: Growth in Select Payment Systems

(y-o-y, per cent)

Payment System Indicators	Transaction Volume				Transaction Value			
	Oct-23	Oct-24	Nov-23	Nov-24	Oct-23	Oct-24	Nov-23	Nov-24
RTGS	18.0	19.3	6.2	9.6	16.6	26.8	10.6	9.1
NEFT	38.2	45.4	45.7	21.5	19.6	27.3	17.5	5.4
UPI	56.2	45.4	53.7	37.8	41.6	37.0	46.1	23.9
IMPS	2.2	-5.3	1.9	-13.6	15.5	16.9	17.7	4.4
NACH	-1.5	64.5	65.9	-9.3	11.9	43.5	27.2	9.9
NETC	13.0	7.9	12.3	11.9	24.4	10.4	14.1	14.5
BBPS	26.6	101.0	29.5	88.8	59.2	299.2	66.7	266.4

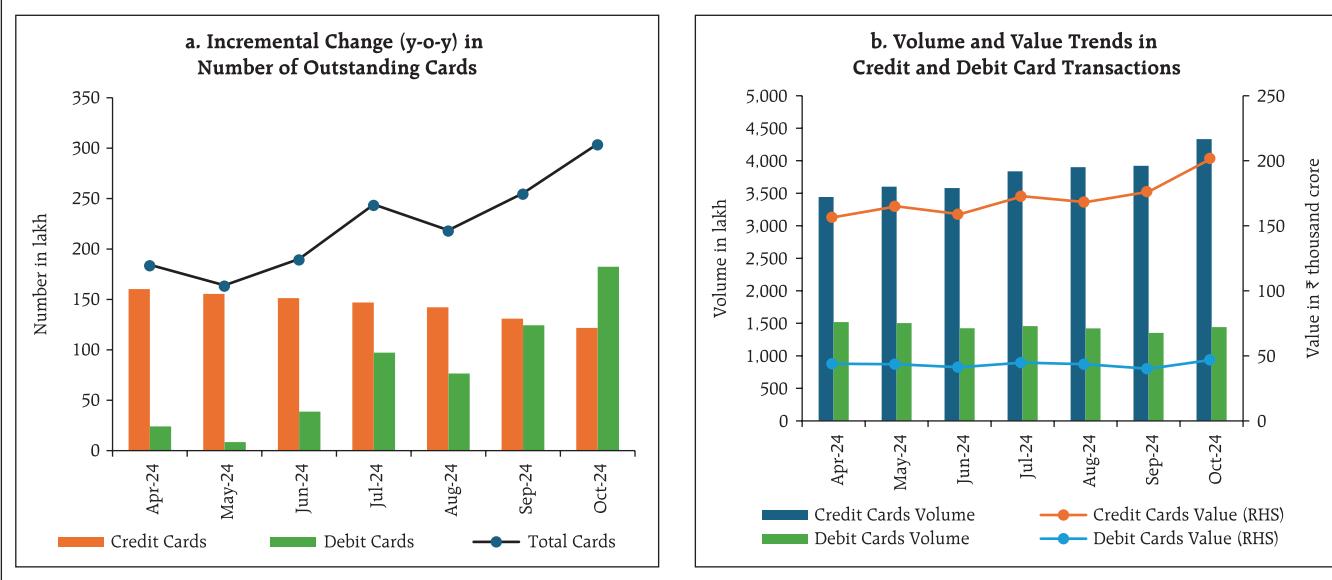
Note: RTGS: Real Time Gross Settlement, NEFT: National Electronic Funds Transfer, UPI: Unified Payments Interface, IMPS: Immediate Payment Service, NACH: National Automated Clearing House, NETC: National Electronic Toll Collection, BBPS: Bharat Bill Payment System.

Source: RBI.

momentum in October 2024 due to the festive season (Chart IV.31).

The National Payments Corporation of India (NPCI) has introduced several new features, including the Bharat Interface for Money (BHIM) app's new National Pension System (NPS) contribution facility, which promotes financial inclusion and simplifies retirement planning with fast processing and easy

access.²⁸ Additionally, a new product type for Aadhaar Payment Bridge (APB) and Automated Clearing House (ACH) transactions has been implemented to streamline the processing of direct benefit transfers, effective November 23, 2024, with the Reserve Bank as the sponsor.²⁹ National Automated Clearing House (NACH) member banks, corporations, and aggregators will participate in these changes. The NPCI has also made the Advanced Encryption Standard (AES)

Chart IV.31: Trends in Card Growth and Transaction Activity

Source: RBI staff estimates.

²⁸ NPCI Press Release, November 13, 2024.

²⁹ NPCI Circular, November 16, 2024.

mandatory for the Online Mandate Gateway System (ONMAGS) application, which manages electronic mandates for recurring payments. This will ensure faster, more efficient encryption and compliance with industry standards.³⁰

In its statement on developmental and regulatory policies dated December 6, 2024³¹, the Reserve Bank proposed linking the FX-Retail platform (launched by CCIL in 2019) with Bharat Connect³² to enhance accessibility and transparency in foreign exchange pricing for MSMEs and individuals. The pilot will enable USD transactions via bank and non-bank systems, with broader expansion planned. Additionally, the Reserve Bank proposed allowing Small Finance Banks (SFBs) to extend pre-sanctioned credit lines through the UPI, facilitating access to low-ticket, short-tenor products for 'new-to-credit' customers.

In the FinTech sector, the Reserve Bank has proposed constituting a committee to develop a Framework for Responsible and Ethical Enablement of AI (FREE-AI) in the financial sector. To address digital fraud, the Reserve Bank is conducting a hackathon titled "Zero Financial Frauds", which includes a specific problem statement on mule accounts aimed at fostering innovative solutions to curb their misuse. An AI/ML-based model, MuleHunter.AI, piloted by the Reserve Bank Innovation Hub (RBIH), has shown promising results in detecting mule bank accounts. Following successful trials with two major public sector banks, the Reserve Bank encourages banks for wider collaboration with RBIH to advance this initiative.

V. Conclusion

The global economy stands ready to enter 2025 with resilience as disinflation and monetary policy

pivots gain traction, supported by recovering real incomes, steady labour markets, and a gradual revival in global trade. Challenges, however, persist in the form of ongoing geopolitical tensions, concerns over growing protectionism and a large public debt overhang. These developments have adverse implications for emerging market economies (EMEs), with their currencies and equities vulnerable to the sharp bouts of declines seen in 2024 in a highly uncertain environment for trade and capital flows.

India's growth trajectory is poised to lift in the second half of 2024-25, driven mainly by resilient domestic private consumption demand. Supported by record level foodgrains production, rural demand, in particular, is gaining momentum. Sustained government spending on infrastructure is expected to further stimulate economic activity and investment. Global headwinds, however, pose risks to the evolving outlook for growth and inflation.

Expectations around India's resilient growth trajectory going forward are also coalescing with a more sustainable underpinnings in view of positive climate action, with increased policy focus on renewable energy, electric vehicles (EVs), green hydrogen, and steps towards institutionalizing the carbon market. These concerted efforts indicate a promising path toward achieving net-zero emissions. Leveraging global frameworks for carbon trading and scaling climate finance, including green bonds, will further reinforce decoupling of growth and emissions. Alongside, India is riding the wave of digitalisation to boost growth, improve productivity and enhance the reach of products and services, spurred by shifts in more discerning consumer behaviour and the deepening reach of online shopping, particularly in smaller towns. This surge also underscores a growing investor confidence and the momentum of innovative energies driving India's FinTech ascendency.

³⁰ NPCI Circular, November 18, 2024.

³¹ RBI Press Release, December 6, 2024.

³² Earlier known as Bharat Bill Payment System.

Government Finances 2024-25: A Half-Yearly Review

by Harshita Yadav, Aayushi Khandelwal, Kovuri Akash Yadav, Rachit Solanki, Anoop K Suresh, Samir Ranjan Behera and Atri Mukherjee ^

The gross fiscal deficit as per cent of budget estimates moderated in H1:2024-25 over H1:2023-24 in case of both Centre and States, primarily on account of robust receipts, deceleration in their revenue expenditure growth and decline in capital expenditure. This provides fiscal room to them to boost capex in the latter half of 2024-25 which would aid in sustaining the post pandemic gains in expenditure quality and support medium-term growth prospects. Several States have announced sops in their 2024-25 Budgets; such spending may divert resources away from critical social and economic infrastructure development.

Introduction

The Union Budget 2024-25 chalked out a medium-term road map for Indian economy by presenting a detailed trajectory for the pursuit of *Viksit Bharat*. With its special focus on employment, skilling, micro, small and medium enterprises (MSMEs) and the middle class, the budget aimed at maintaining high growth rate while ensuring allocation of adequate resources for developmental needs. Continuing the thrust on infrastructure development, the Budget 2024-25 had provisioned ₹11.11 lakh crore (3.4 per cent of GDP) for capital expenditure which is higher than 3.2 per cent of GDP achieved in 2023-24 (provisional accounts, PA). On the other hand, revenue expenditure was budgeted to decline marginally from 11.8 per cent of GDP in 2023-24 (PA) to 11.4 per cent of GDP in 2024-25 (budget estimates, BE) thereby enhancing the overall quality of government expenditure. Further, towards

incentivising States' capital spending, allocation under the scheme – Special Assistance to States for Capital Investment - was enhanced. Overall, the Union Budget aimed at fiscal consolidation in 2024-25 in line with the medium-term target of GFD below 4.5 per cent of the GDP by 2025-26. The States too have endeavoured for fiscal consolidation in 2024-25, budgeting a consolidated GFD of 3.2 per cent of the GDP in 2024-25.

The Centre's revenue collections comprising both tax and non-tax sources were buoyant in H1:2024-25, primarily driven by income tax, goods and service tax (GST) and higher surplus transfer by the Reserve Bank. On account of robust receipts and relatively flat government spending, Centre's GFD as per cent of BE during H1:2024-25 was the lowest in the last one decade. The growth in States' revenue receipts during H1:2024-25 was driven by tax revenues, while there was a contraction in non-tax revenues and grants from the Centre. On the expenditure front, States sustained the pace of revenue expenditure during H1:2024-25, while their capital expenditure declined.^{1,2}

The rest of the article is structured as follows: Section II analyses the receipt and expenditure of the Centre and States (at a quarterly frequency) for H1:2024-25. Section III deals with the outcomes in terms of key deficit indicators and their financing for the Centre as well as States. Section IV presents estimates on General government (Centre plus States) finances for H1 of 2024-25. Section V sets out concluding observations.

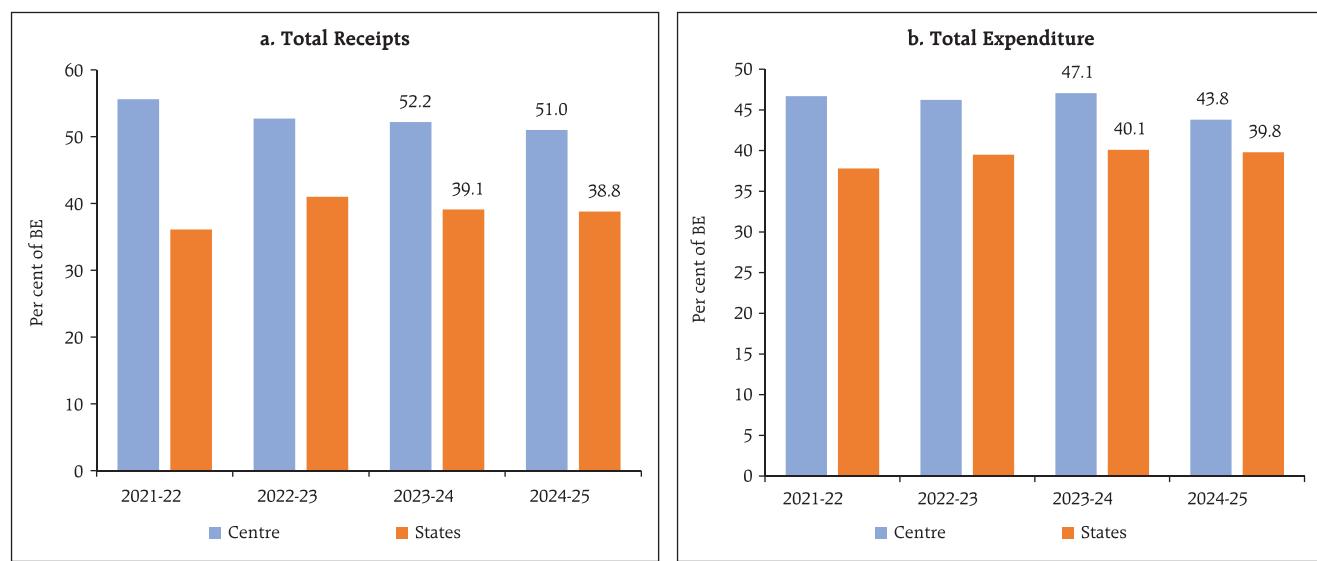
II. Fiscal Outcomes in Q1 and Q2

During H1:2024-25, the Central government collected more than 50 per cent of its total budgeted receipts, in line with the trend witnessed during the recent past. On a year-on-year (y-o-y) basis, total receipts during H1:2024-25 rose by 15.5 per cent. On

[^] This article is prepared under the overall guidance of Smt. Rekha Misra. The authors are from the Department of Economic and Policy Research (DEPR) of the Reserve Bank of India. The views expressed in this article are those of the authors and do not represent the views of the Reserve Bank of India.

¹ The data pertain to 22 States for which the data for April-September 2024 are available. GFD-GDP ratio is estimated using GSDP data for the same 22 States.

² Detailed statements on half yearly and quarterly financial position of the Centre as well as States are provided in Appendix Tables (I to IV).

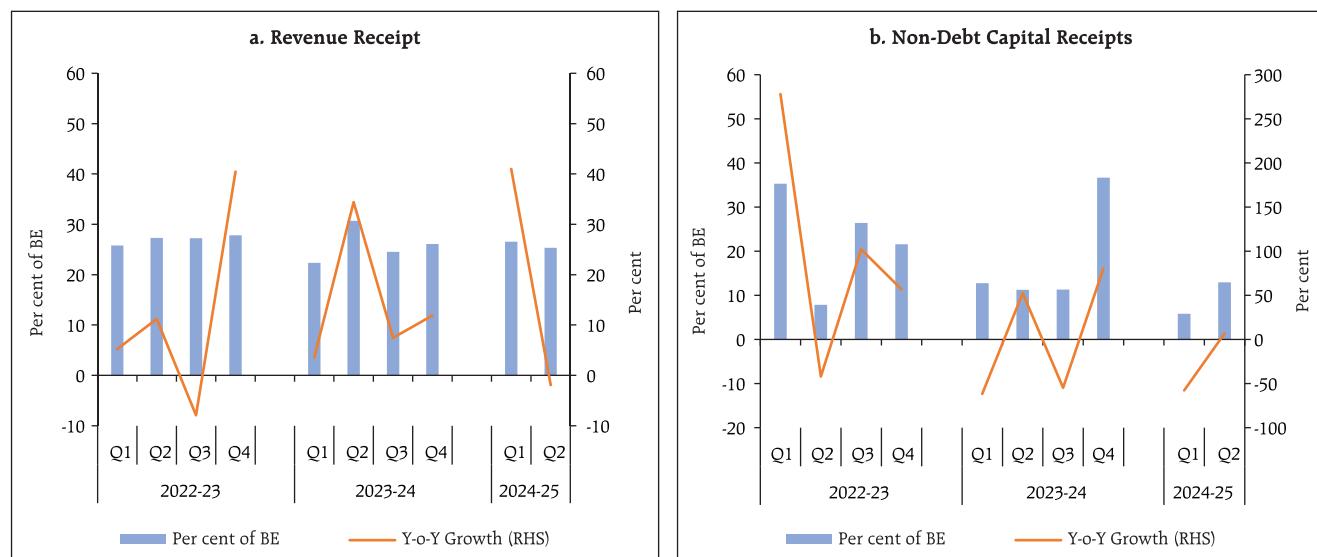
Chart 1: Total Receipts and Expenditure in H1

Sources: Controller General of Accounts (CGA); and Comptroller and Auditor General (CAG).

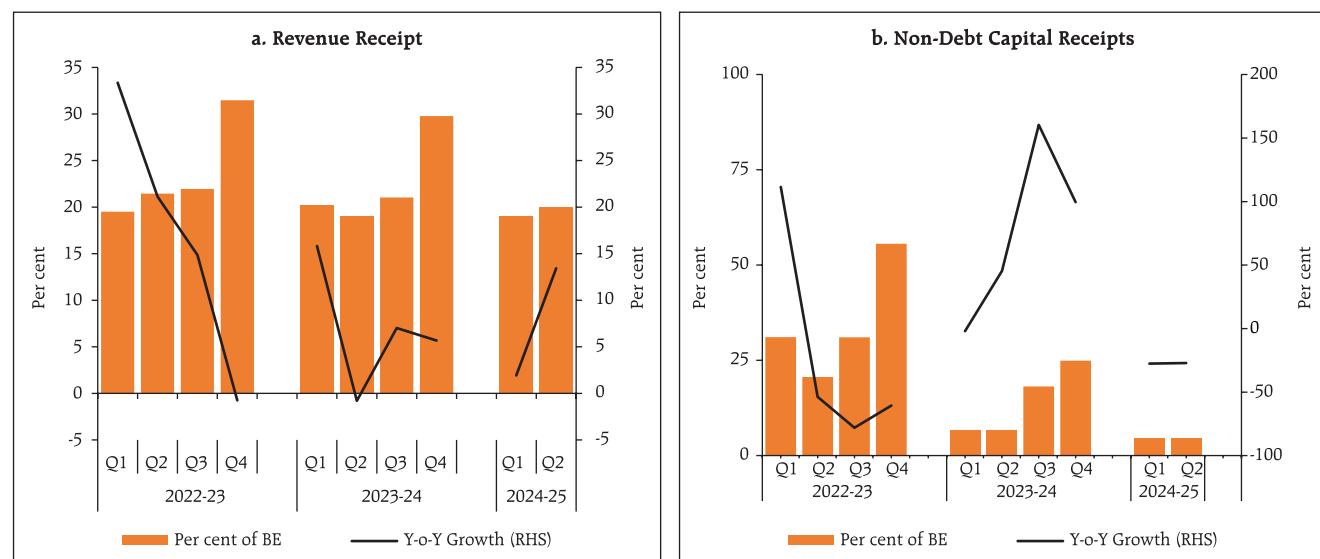
the other hand, the Centre's total expenditure was contained below 50 per cent of the BE in H1:2024-25, in line with the pattern observed during the past three years (Chart 1a). States' GFD stood at 43.9 per cent of the BE in H1:2024-25, marginally lower than the previous year mainly attributable to a slowdown in total expenditure as the States expended 39.8 per cent of BE vis-à-vis 40.1 per cent of BE in H1:2023-24 (Chart 1b).

a. Receipts

Revenue receipts of the Central government remained strong with a y-o-y growth of 16.1 per cent during H1:2024-25. In Q1:2024-25, the growth in the revenue receipts was 41.0 per cent on account of robust tax collections as well as the large surplus transfer of ₹2.1 lakh crore by the Reserve Bank. During Q2:2024-25, the revenue receipts contracted by 2.0 per cent, attributable to a fall in direct tax collections (Chart 2a).

Chart 2: Quarterly Breakup of Centre's Receipts

Sources: CGA; and Budget documents of the Union government.

Chart 3: Quarterly Breakup of States' Receipts

Sources: CAG; and Budget documents of State governments.

The performance of the non-debt capital receipts was subdued in Q1:2024-25, but recorded improvement in Q2:2024-25 (Chart 2b).³

States' revenue receipts clocked a y-o-y growth of 7.5 per cent in H1:2024-25 (7.1 per cent in H1:2023-24), with growth in Q1 and Q2 at 1.9 per cent and 13.4 per cent, respectively. Tax revenue, which accounted for 85.7 per cent of the revenue receipts during H1:2024-25, exhibited a growth of 16.4 per cent and 7.4 per cent in Q1:2024-25 and Q2:2024-25, respectively. States' non-debt capital receipts⁴ contracted in both Q1 and Q2 of 2024-25 (Chart 3a and b).

The Centre's direct tax collection grew by 14.4 per cent on y-o-y basis in H1:2024-25, primarily led by a growth of 25.0 per cent in income tax collections with corporate tax collections registering a tepid growth of 2.3 per cent (Chart 4a). Similar to the pattern witnessed in H1:2023-24, income tax collections exceeded the corporate tax collections in H1:2024-25, reflecting, *inter alia*, measures towards improving taxpayers' compliance and broadening the tax base. Moreover, within direct tax collection, receipts from security transaction tax have been robust in recent years with increased volume of trading in the Indian stock market (Box A).

Box A: Security Transaction Tax - Indian Experience

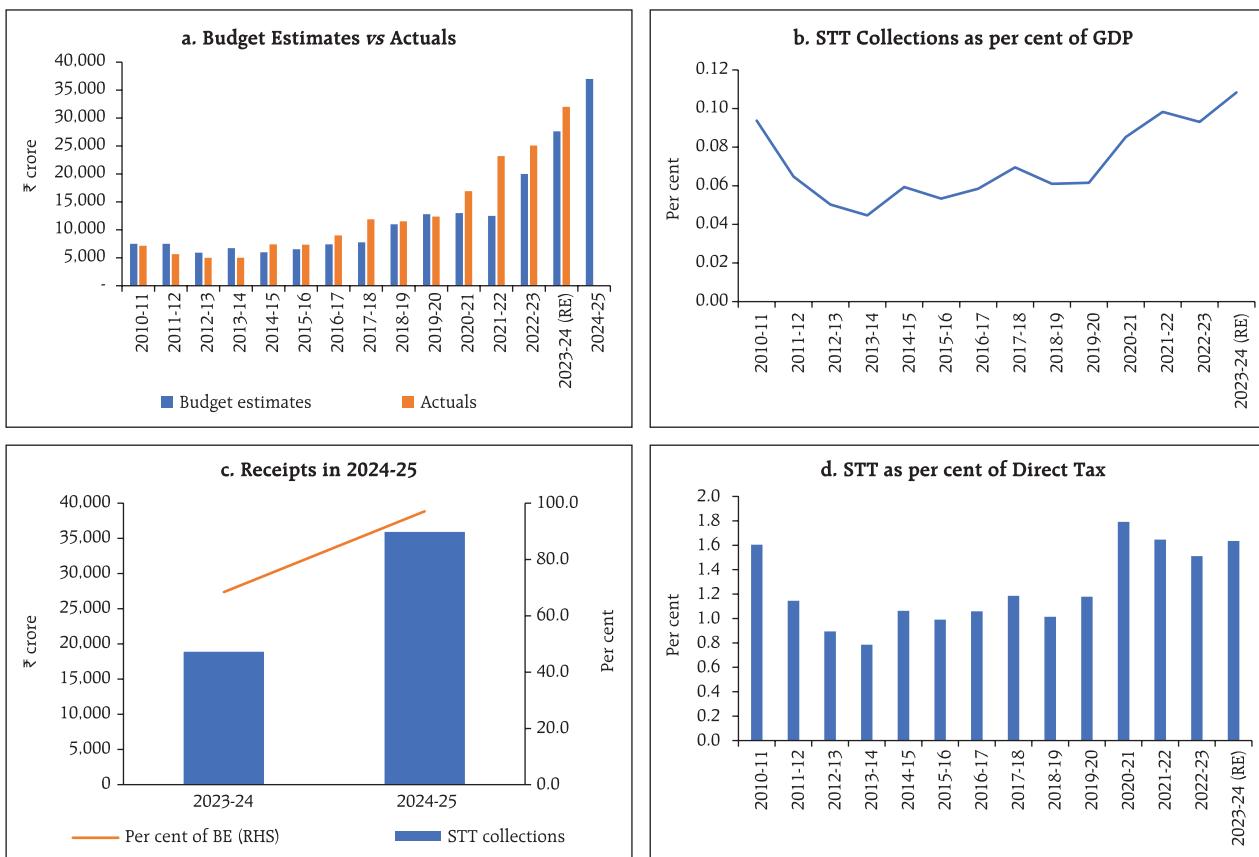
Security transaction tax (STT) is a direct tax levied on the buying and selling of securities in stock exchanges. It was introduced in India during 2004-05 with the objective of augmenting revenue generation, eliminate tax evasion, level the playing field for all the participants in the stock market and reduce the volatility in the market by driving away noise traders/speculators. Several G-20

economies such as United Kingdom, Russia, France, Italy, Turkey, South Korea, India, Indonesia, China, and South Africa have imposed some sort of tax on the financial transactions carried out by their residents (Matheson, 2012). On the other hand, some advanced economies, *viz.*, Portugal, Netherlands, Sweden, Japan, Italy, and Germany have repealed financial transaction taxes, attributable

(Contd.)

³ Non-debt capital receipts include recoveries of loans and advances and miscellaneous capital receipts (*viz.*, disinvestment and other receipts).

⁴ Non-debt capital receipts of the States comprise of recoveries of loans and advances disbursed by them to subordinate/parastatal entities and other miscellaneous capital receipts.

Chart A.1: Trends in STT Collection in India

Note: In Chart A.1c, STT collections for 2024-25 and 2023-24 are as on November 10, 2024, and November 10, 2023, respectively.

Sources: Union budget documents; and Central Board of Direct Taxes (CBDT).

to competitive pressures emanating from technological changes and liberalisation that have enabled shifting trading to other markets less costly (Hillman and Ashford, 2012; Burman *et al.*, 2016).

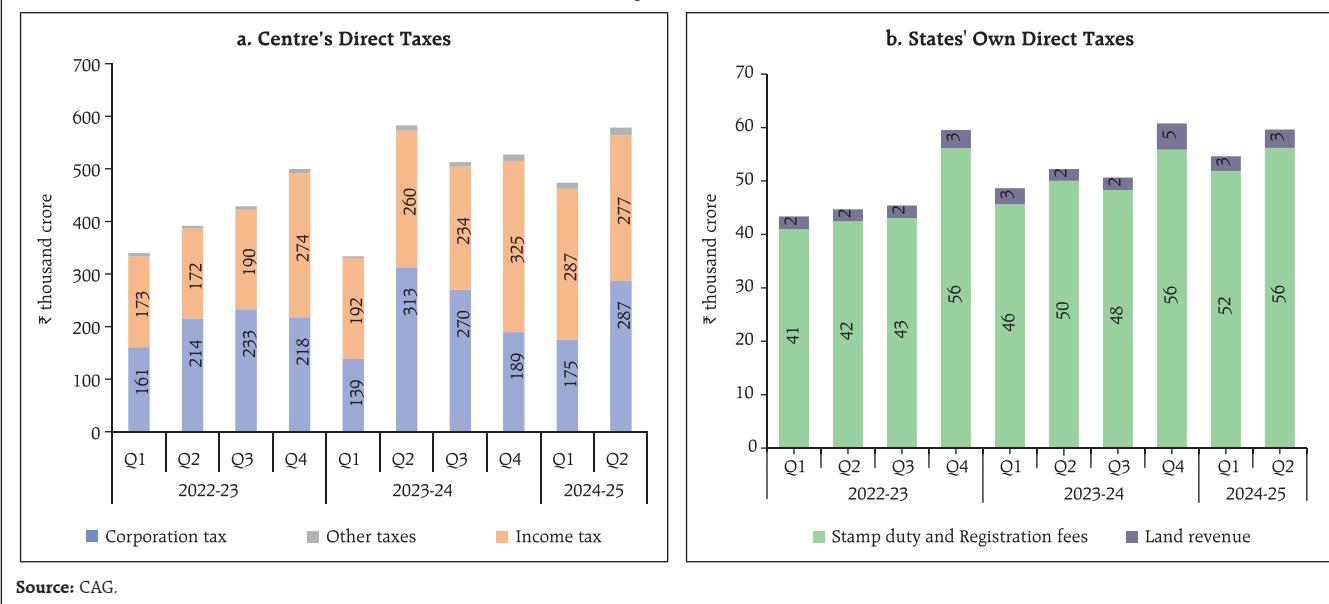
The revenue mobilisation from STT has witnessed a rising trend, both in absolute terms and as per cent of GDP on account of buoyant equity market as well as the increased volume of trading in the Indian stock market over the past few years (Chart A.1a and 1b). As on November 10, 2024, the STT collections have registered a y-o-y growth of 90.0 per cent achieving 97 per cent of its BE for 2024-25 (Chart A.1c). The share of STT in direct taxes collections of Centre has increased in the post-pandemic period (Chart A.1d).

States' own direct tax collection (comprising of land revenue and receipts from stamp duty and registration fees) performed well during H1:2024-25

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with a growth of 13.2 per cent (12.2 per cent in Q1 and 14.2 per cent in Q2) (Chart 4b).

Chart 4: Quarterly Direct Tax Collections

Source: CAG.

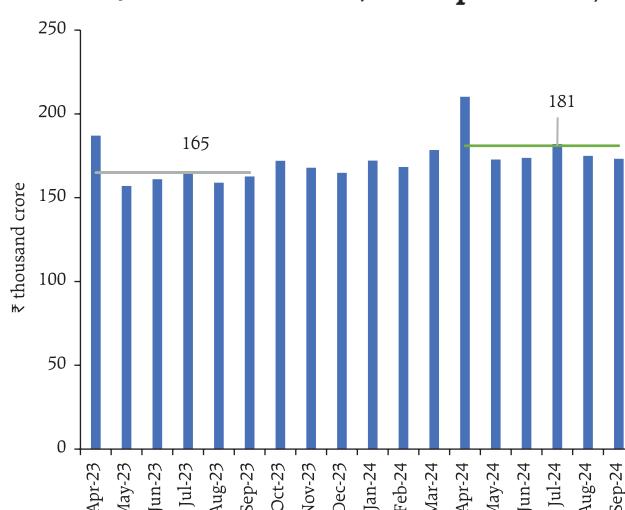
The Centre's indirect tax collection grew by 8.9 per cent (y-o-y) in H1:2024-25⁵, led by GST. During Q1:2024-25, the indirect tax collections grew by 5.6 per cent (8.9 per cent Q1:2023-24), supported by 9.1 per cent growth in GST collections (11.5 per cent growth during Q1:2023-24). On the other hand, customs and excise duty collections witnessed a contraction in Q1:2024-25. In Q2:2024-25, buoyed by the festive demand, GST collections posted a growth of 11.8 per cent (6.0 per cent a year ago). Customs and excise duty collections recovered in Q2 with a growth of 15.6 per cent and 5.7 per cent, respectively.

The GST collection (Centre plus States) in H1:2024-25 amounted to ₹10.9 lakh crore, registering a y-o-y growth of 9.5 per cent (11.1 per cent growth recorded in H1:2023-24), with average monthly collections in Q1 and Q2 of ₹1.86 lakh crore and ₹1.77 lakh crore, respectively (Chart 5).

In the case of States, the growth in tax revenues in H1:2024-25 was supported by States GST (SGST) and tax devolution from the Centre. Strong growth in SGST reflected rising demand, higher tax rates and greater compliance. In H1:2024-25, the assignment

to States recorded a growth of 19.6 per cent over the corresponding period of the previous year (Chart 6a and b).

Centre's non-tax revenue witnessed a contraction of 5.7 per cent y-o-y in Q2:2024-25, as higher dividends and profits as well as interest receipts⁶ were

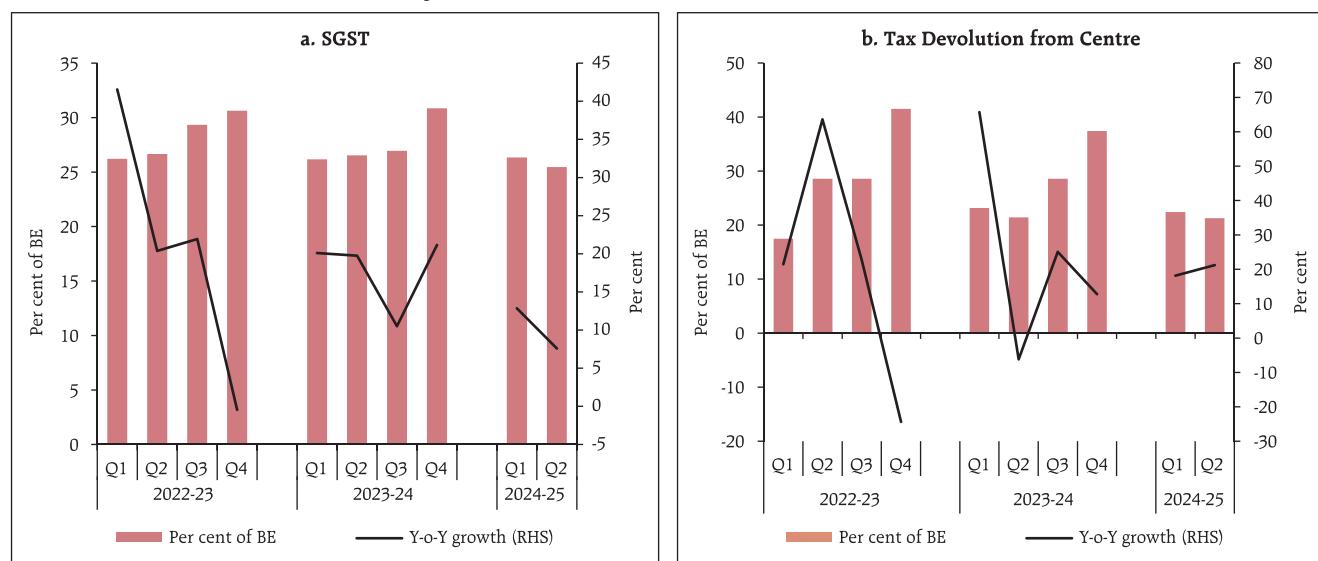
Chart 5: GST Collections (Centre plus States)

Note: The grey and green line represent the average GST collections in H1:2023-24 and H1:2024-25, respectively.

Sources: Press Information Bureau (PIB); and GST Website.

⁵ During H1:2023-24, Centre's indirect tax collections grew by 6.5 per cent over H1:2022-23.

⁶ Non-tax revenue from 'dividends and profits' and 'interest receipts' accounts for 53.0 and 7.0 per cent of the budgeted non-tax revenue, respectively, in 2024-25.

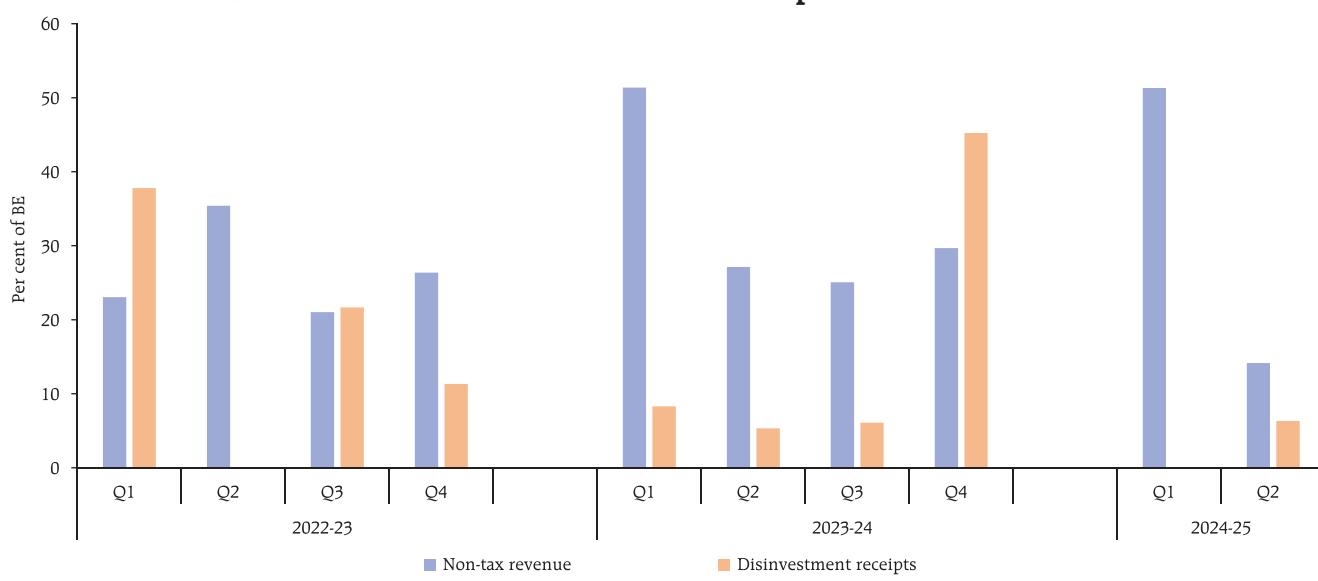
Chart 6: Quarterly Performance of SGST and Tax Devolution from Centre

Source: CGA; and CAG.

offset by a fall in revenue from economic services.⁷ Disinvestment receipts remained muted in H1:2024-25 with 6.3 per cent of the budgeted amount being raised (11.4 per cent in H1:2023-24) (Chart 7).⁸

b. Expenditure

In 2024-25 (BE), the total expenditure of the Central government has been budgeted to grow by 8.5 per cent over 2023-24 (PA), with revenue expenditure

Chart 7: Non-tax Revenue and Disinvestment Receipts of the Central Government

Source: CGA.

⁷ Non-tax revenue from economic services includes agriculture and allied activities (receipts from agricultural farms, commercial crops, fees from agricultural education, fees for quality control and grading of agricultural products, etc.), irrigation and flood control (receipts of Central Water Commission and Central Water Power Research Station, Pune etc.), communication (includes license fees from telecom operators and receipts on account of spectrum usage charges) etc. Non-tax revenue from economic services accounts for 33.4 per cent of the budgeted non-tax revenues in 2024-25.

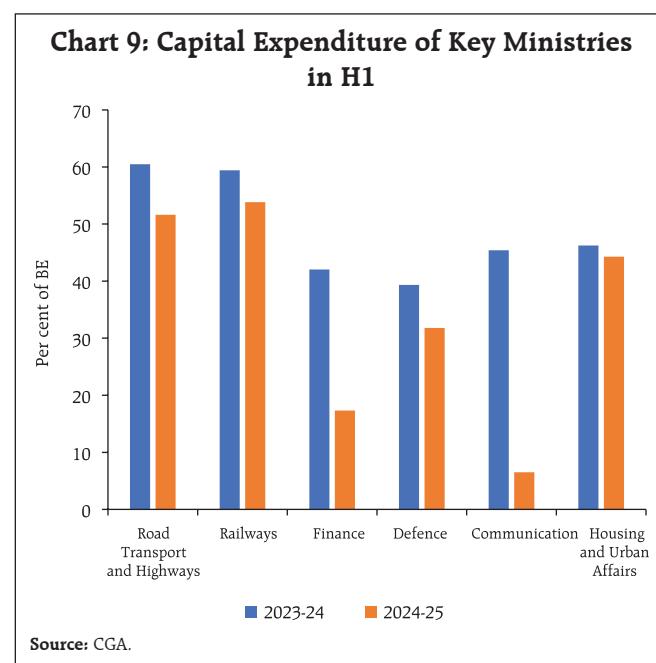
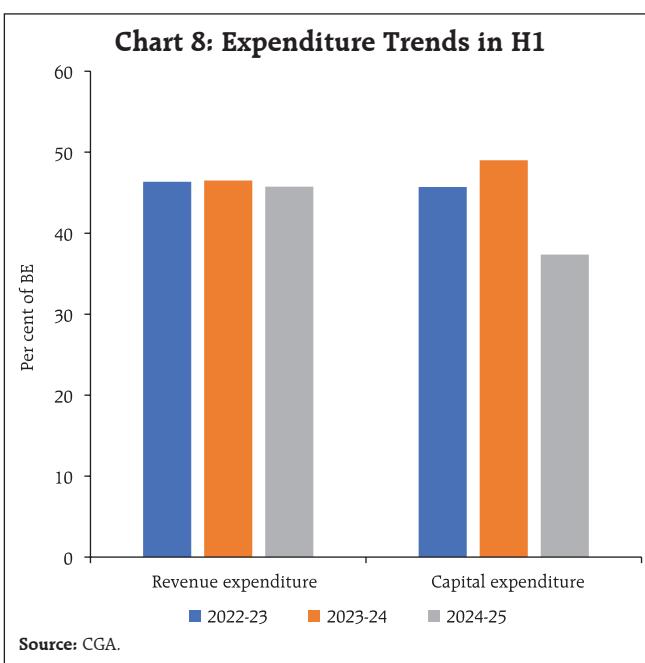
⁸ During H1:2024-25, the government mobilised ₹3,167 crore in the form of disinvestment receipts as compared with ₹6,949 crore during the corresponding period of the previous year.

growth budgeted at 6.2 per cent and capital expenditure growth at 17.1 per cent.⁹ In H1:2024-25, revenue expenditure as per cent of BE remained broadly in line with previous years trends while capital expenditure registered moderation. The relatively lower share of budgeted expenditure realised during H1:2024-25 is, *inter alia*, attributable to the model code of conduct imposed during the general elections in Q1:2024-25 (Chart 8).

Capital expenditure of the top 6 ministries,¹⁰ which comprise 95 per cent of the total budgeted capex for 2024-25, fell to 37.3 per cent of BE during H1:2024-25 (*vis-à-vis* 51.8 per cent of BE in H1:2023-24) (Chart 9). Similarly, the expenditure under the scheme for 'Special Assistance to States for Capital Investment' fell to ₹30,040 crore during H1:2024-25 (*vis-à-vis* ₹53,541 crore during H1:2023-24).¹¹ In September 2024, the Ministry of Finance (MoF), Government of

India (GoI) eased the cash management guidelines which should boost public spending¹² including capital expenditure in H2:2024-25. Further, the Union government had also proposed the first batch of supplementary demand for grants for 2024-25 during the winter session of parliament which involves a net cash outgo of ₹44,143 crore (Chart 10).

The outgo of the Central government on major subsidies, comprising food, fuel and fertilisers, moderated to 56.3 per cent of BE in H1:2024-25 from 55.1 per cent of BE in H1:2023-24, primarily attributable to lower y-o-y expenditure on nutrient based subsidy on account of a fall in international fertiliser prices (58.2 per cent of BE in H1:2024-25 *vis-à-vis* 95.9 per cent of BE in H1:2023-24). Food and fertiliser subsidies accounted for 56.6 per cent and 41.7 per cent of total outgo on major subsidies in H1:2024-25 *vis-à-vis* 46.1 per cent and 53.4 per

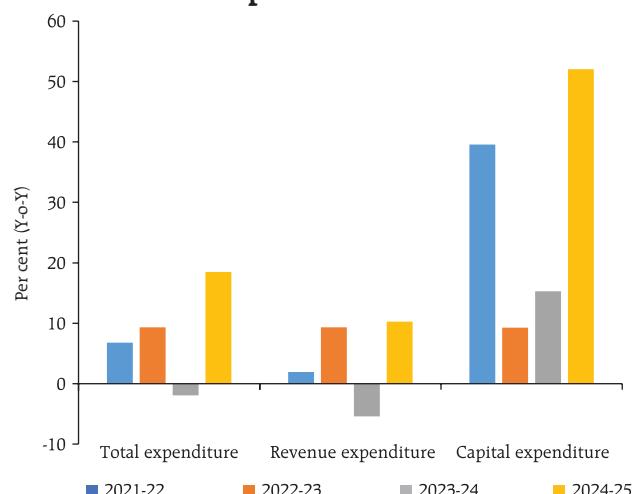


⁹ Capital outlay (*viz.*, capital expenditure excluding loans and advances) was budgeted to increase by 16.7 per cent in 2024-25 *vis-à-vis* an increase of 26.0 per cent in 2023-24 (PA).

¹⁰ Ministry of Road Transport and Highways, Ministry of Railways, Ministry of Finance, Ministry of Defence, Ministry of Communications and Ministry of Housing and Urban Affairs.

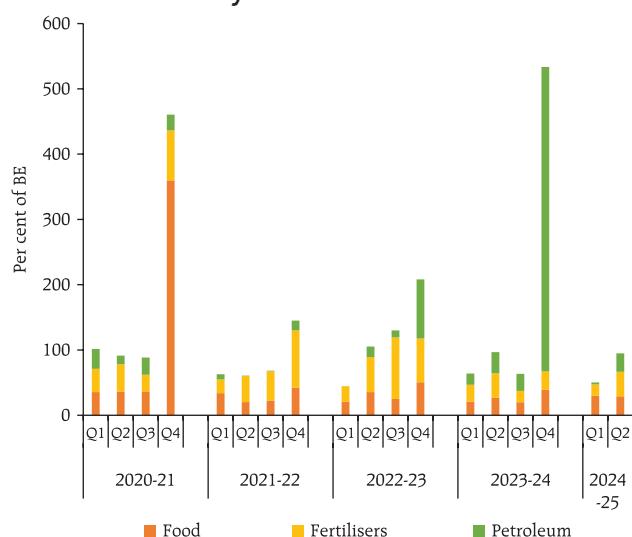
¹¹ Monthly Summary Report, Department of Expenditure.

¹² As per the office memorandum released by the Department of Economic Affairs (DEA) on September 4, 2024, the stipulations pertaining to the big releases (₹500 crore or more) will be relaxed until further notice to provide operational flexibility to execute the budget. The newly provided relaxations will remain subjected to the compliance guidelines of single nodal agency (SNA)/central nodal agency (CNA) and of monthly expenditure plan (MEP)/quarterly expenditure plan (QEP).

Chart 10: Expenditure Growth in H2

Note: Expenditure growth for 2024-25 is the implied growth rate based on actuals up to September 2024 and the budget estimates for 2024-25 plus expenditure proposals in the first supplementary demand for grants.

Sources: CGA; and Union budget documents.

Chart 11: Quarterly Expenditure on Major Subsidies by the Central Government

Sources: CGA; and Union budget documents.

cent, respectively, in the corresponding period of the previous year (Chart 11).

India is transitioning from women's development to women led development.¹³ The Centre's expenditure for schemes for the welfare of women and empowerment of women has

grown from ₹81,249 crore in 2015-16 to ₹3,27,158 crore in 2024-25 (BE). The share of the gender budget in the total Union Budget has increased to 6.8 per cent in 2024-25 (BE), the highest since the introduction of gender budget statements (GBS) in 2005-06 (Box B).

Box B: Twenty Years of Gender Budgeting in India

Gender budgeting utilises fiscal policy to promote gender equality and support the development of girls and women (IMF, 2016). It aids policy formulation by detailing gender responsiveness of budgetary practices. Gender budgets reflect policy efforts to promote gender equality - a recognised sustainable development goal (SDG). Ostry *et al.* (2018) estimated that removing barriers to female labour force participation could yield significant output and welfare gains.

Since its initiation by Australia in 1984, gender budgeting has been adopted by over 100 countries (UN Women, 2023), exhibiting varied practices in origins, fiscal policy components, legal provisions, levels of governments involved, and the role of non-government organisations (Stotsky, 2016). South Africa, an early adopter in 1995, established Gender Responsive Planning,

Budgeting, Monitoring, Evaluation and Auditing Framework (GRPBMEAF) in 2019, providing a legal basis for comprehensive institutional accountability to gender equality commitments and promoting gender responsive policy across all tiers of government. In Brazil, civil society has played a crucial role in enhancing government accountability towards gender sensitive budgeting (Raes, 2006). In China, few local governments have initiated the incorporation of gender budgeting as a public finance management tool (Alonso *et al.*, 2021). Belgium legally mandates ministries to maintain sex-disaggregated data and develop gender indicators to track progress. Finland focuses on *ex-ante* analysis, requiring ministries to report the expected gender impact of budget proposals (Elomaki and Ylostalo, 2021). India introduced its first GBS in the Union

(Contd.)

¹³ Economic Survey 2023-24.

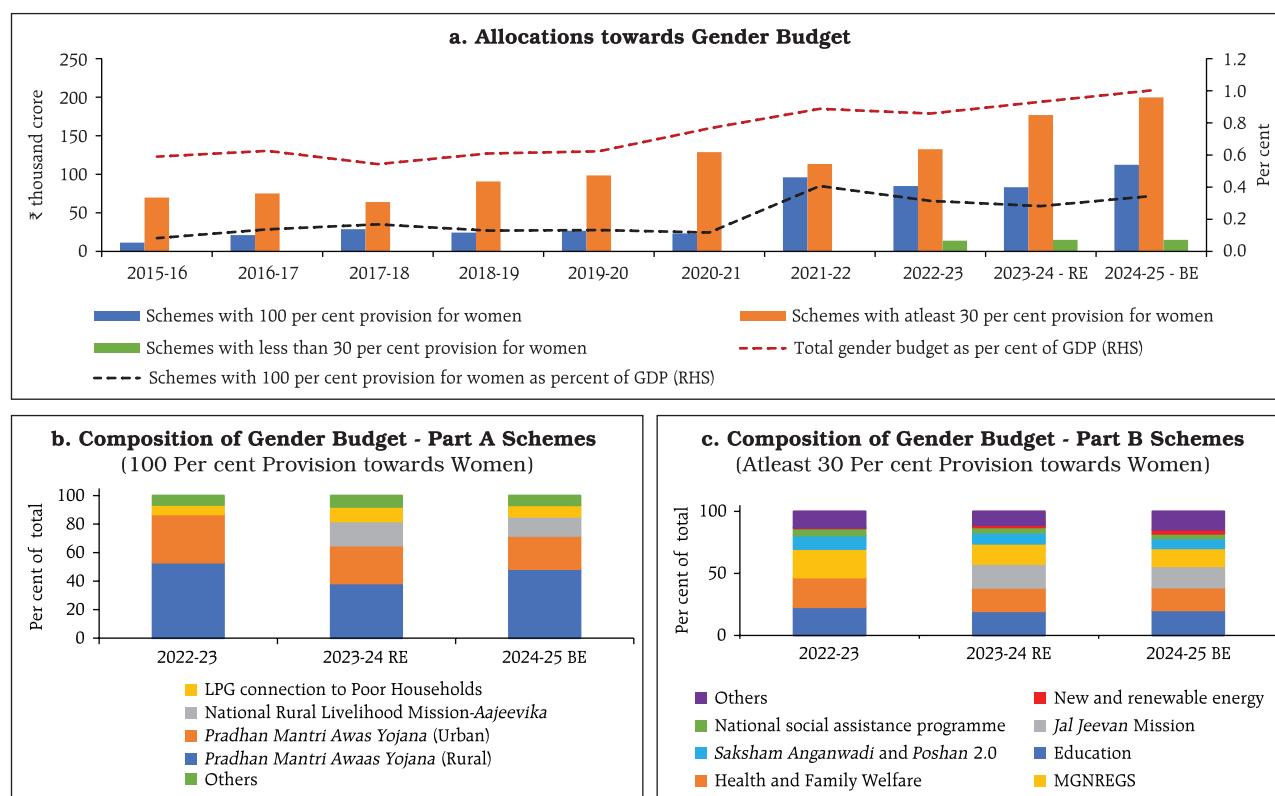
Budget 2005-06 and established Gender Budgeting Cells across ministries in 2007 to promote and report gender-responsive practices. Odisha was the first State to adopt gender budgeting in 2004-05.¹⁴ During 2024-25, 11 States presented GBSs.

Centre's Gender Budget is classified into three parts: Part A comprises schemes with 100 per cent allocation to the welfare of women; Part B includes schemes where at least 30 per cent of allocations are directed towards women's welfare; and Part C, introduced in 2024-25, encompasses schemes allocating less than 30 per cent towards women's welfare. The share of gender budget in total expenditure increased from 4.5 per cent in 2014-15 to 6.8 per cent in 2024-25 (BE), with Part A schemes becoming increasingly significant. The sharp rise

in average expenditure under Part A during 2021-25 is primarily driven by increased allocations towards the *Pradhan Mantri Awas Yojana* and LPG connections for poor households. For 2024-25 (BE), ₹3.27 lakh crore has been allocated to the gender budget, marking an 18.9 per cent increase over the revised estimates for 2023-24 (Chart B.1a).

Between 2022-23 to 2024-25, Part A primarily focused on housing, promoting self-employment, and providing clean cooking fuel to households. Among the 19 ministries in Part A, the top three - rural development (63.7 per cent); housing and urban affairs (23.3 per cent); and petroleum and natural gas (8.1 per cent) - account for over 95 per cent of the budgeted expenditure in 2024-25 (BE). Part B features more dispersed expenditure

Chart B.1: Union Gender Budget – Trends and Composition



Notes: 1. Education indicates total expenditure by Ministry of Education.
2. Health and Family Welfare includes expenditure on Flexible Pool for RCH and Health System Strengthening, the National Health Programme, the National Urban Health Mission, and other women-oriented expenditure undertaken by Department of Health and Family Welfare.

Source: Union budget documents.

(Contd.)

¹⁴ Information Bulletin, Research and Information Division, Lok Sabha Secretariat, 2016.

of around 27 ministries, focusing on education and health related expenditures, provision of clean drinking water, and livelihood security of rural women (Chart B.1b and c). Part C, introduced in 2024-25, consists of the *Pradhan Mantri Kisan Samman Nidhi* (PM-KISAN) with a budgeted outlay of ₹15,000 crore for the current financial year.

Gender budgeting has prompted changes in India's fiscal policies for education, health, and infrastructure, advancing gender-oriented goals in India (Stotsky, 2016). A global survey identified India among 23 countries with prominent gender budgeting efforts (Stotsky, 2016). Establishing clear mechanisms to classify expenditures and transparent criteria to assign weights under the gender budget could further enhance transparency. Additionally, creating a legal provision, such as the Gender Budgeting Act proposed by the NITI Aayog in 2022, could provide a robust framework to guide these efforts.

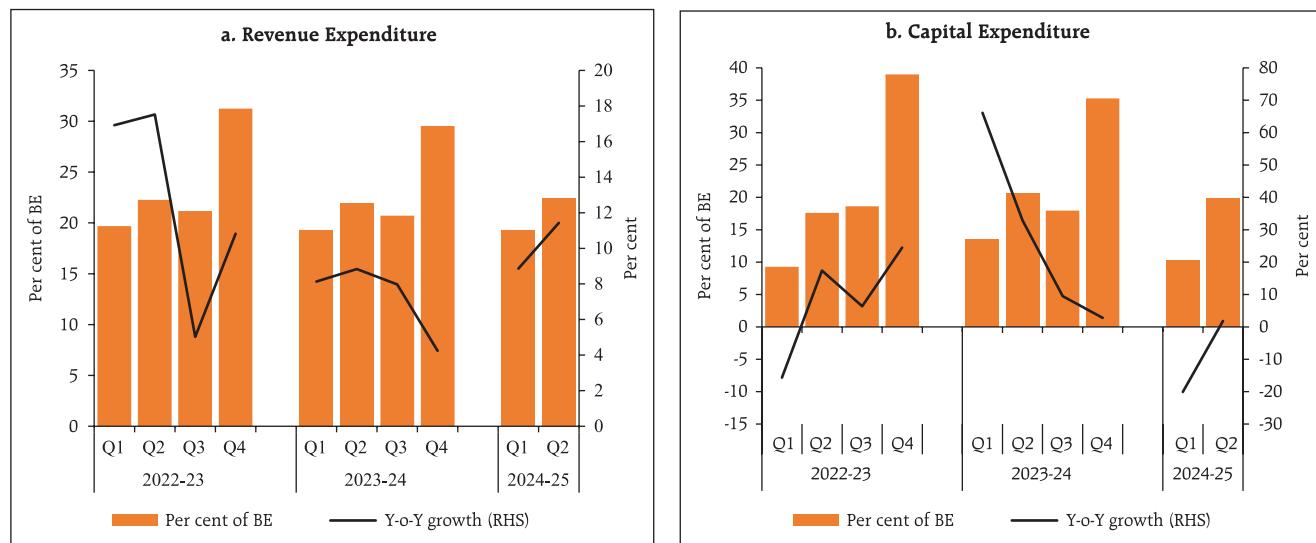
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States' revenue expenditure growth in Q1 and Q2 of 2024-25 at 8.9 per cent and 11.4 per cent, respectively, was higher than the growth registered in the corresponding quarters of 2023-24. States

exhausted 41.6 per cent of their budgeted revenue expenditure in H1:2024-25 (41.3 per cent in H1:2023-24). On the other hand, their capital expenditure contracted by 6.9 per cent in H1:2024-25, with decline

Chart 12: Quarterly Expenditure of State Governments



Sources: CAG; and Budget documents of State governments.

of 20.1 per cent in Q1:2024-25 and an increase of 1.8 per cent in Q2:2024-25 (Chart 12a and b).

Greater focus on outcomes can enhance expenditure efficiency (Box C).

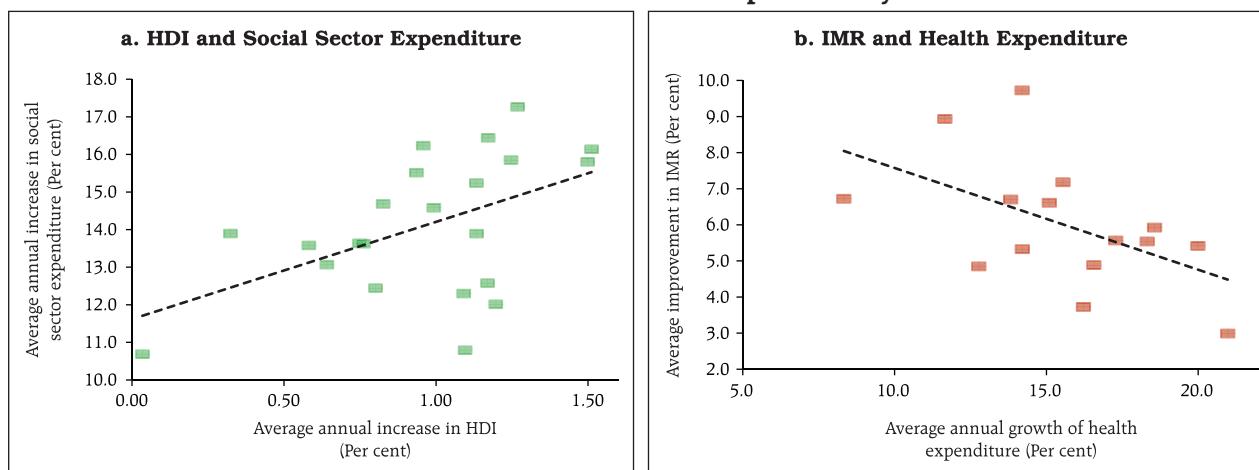
Box C: Outcome Budgeting for Enhanced Expenditure Effectiveness

Social sector expenditure by Indian states has increased significantly from 5.4 per cent of GDP in 2005-06 to 8.1 per cent in 2024-25 (BE), with growing prioritisation of education, health, and other critical social services. However, the effectiveness of this spending depends on how well it translates into tangible outcomes. Ensuring 'value for money' from public resources is crucial for the sustainable development of any economy (Jena, 2013). The NITI Aayog and the Fourteenth and Fifteenth Finance Commissions advocated performance-linked budgeting to optimise resource utilisation (Kundu, 2024). Inter-State variations in the cost-effectiveness of social sector expenditure highlight the need for greater focus on outcomes. For instance, States with higher improvement in Human Development Index (HDI) with relatively lower spending are more cost-effective. The marginal returns on social sector spending, in terms of HDI improvement, vary significantly, ranging from 0.003 per cent to 0.102 per cent (per cent improvement in HDI index for a per cent increase in social sector expenditure) [Chart C.1a]. Similarly, increased spending on health

does not uniformly translate into improved outcomes. For example, reductions in the Infant Mortality Rate (IMR) exhibit significant inter-State disparities in the marginal returns on health sector expenditure (Chart C.1b). These variations underscore the necessity of moving beyond budgetary outlays to focus on outcome-oriented public spending.

Outcome Budgeting (OB) addresses this challenge by linking public expenditure to measurable developmental outputs and outcomes. Unlike traditional budgets that focus on inputs, OB emphasises results, fostering greater transparency, accountability, and alignment with developmental priorities. Introduced at the Union level in 2005, OB has since been adopted by 11 States (CBGA, 2021). The Development Monitoring and Evaluation Office (DMEO), an attached office of NITI Aayog has developed an Output-Outcome Monitoring Framework and several State governments have created their own outcome-based budgets. The implementation and the framework of outcome budgets varies across the States. However, challenges persist, including the

Chart C.1: Outcome Indicators vis-à-vis Expenditure by the States



- Notes:**
1. States which are above 0.6 HDI value and above the median IMR are excluded from analysis as they have a higher base.
 2. Averages are calculated over 15-year period (2005-06 to 2021-22) for HDI and social sector expenditure.
 3. Averages are calculated over 10-year period (2010-11 to 2020-21) for IMR and health expenditure.

Source: RBI staff estimates.

(Contd.)

need for capacity building, increased transparency, and enhanced monitoring mechanisms.

Scaling up OB across all States and sectors, aligning its frameworks with SDG benchmarks, and investing in robust data systems are critical for institutionalising expenditure efficiency. Additionally, capacity building at the district level and collaborative knowledge sharing among States can enhance the implementation and effectiveness of OB. Institutionalising OB across all the States may facilitate the achievement of sustainable development and maximising the impact of public spending.

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III. Fiscal Deficit and its Financing

Central Government

a. Fiscal Deficit

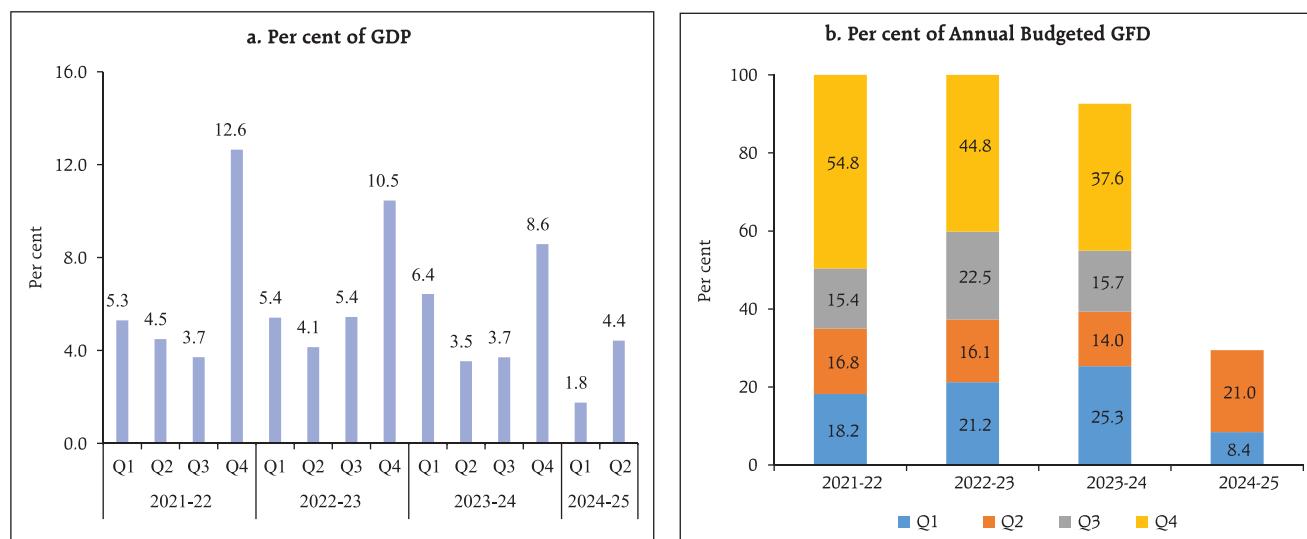
The Union government budgeted for a GFD of 4.9 per cent of GDP in 2024-25 as compared with 5.6 per cent in 2023-24 (PA), in line with the glide path to achieve medium term GFD target of below 4.5 per cent of GDP by 2025-26. During H1:2024-25, GFD of the Union government stood at 29.4 per cent of the BE, down from 39.3 per cent during the corresponding period of 2023-24, and the proportion was at its lowest

in a decade (Chart 13a and b). Similar reductions were seen in revenue deficit and primary deficit in H1:2024-25.

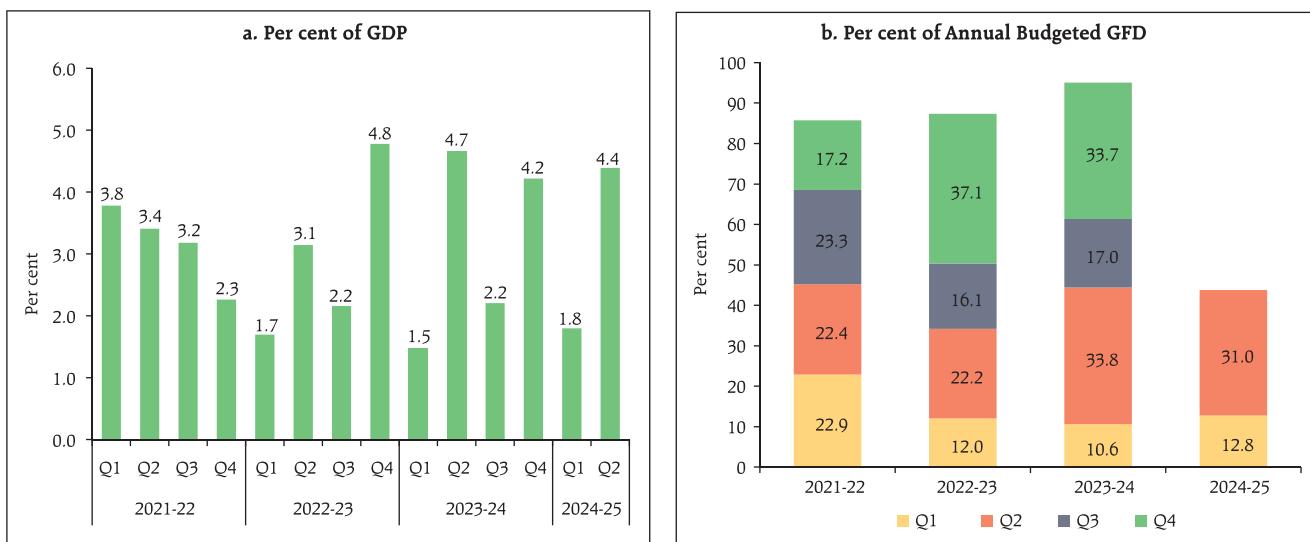
b. Financing of GFD

In H1:2024-25, the Union government completed 52.8 per cent of the budgeted market borrowings for 2024-25, which financed the major chunk of its GFD during the first half of the year. The government has decided to adhere to its borrowing target for H2:2024-25.

Chart 13: Centre's Gross Fiscal Deficit



Sources: CGA; and Union budget documents.

Chart 14: States' Gross Fiscal Deficit

Sources: CAG; and Budget documents of State governments.

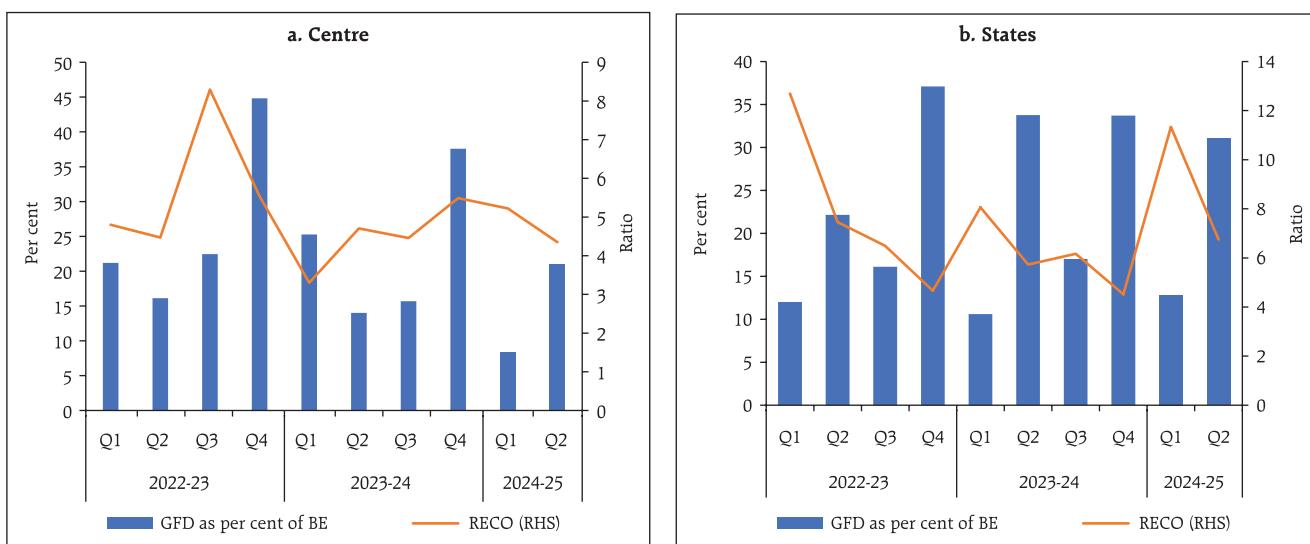
State Government

a. Fiscal Deficit

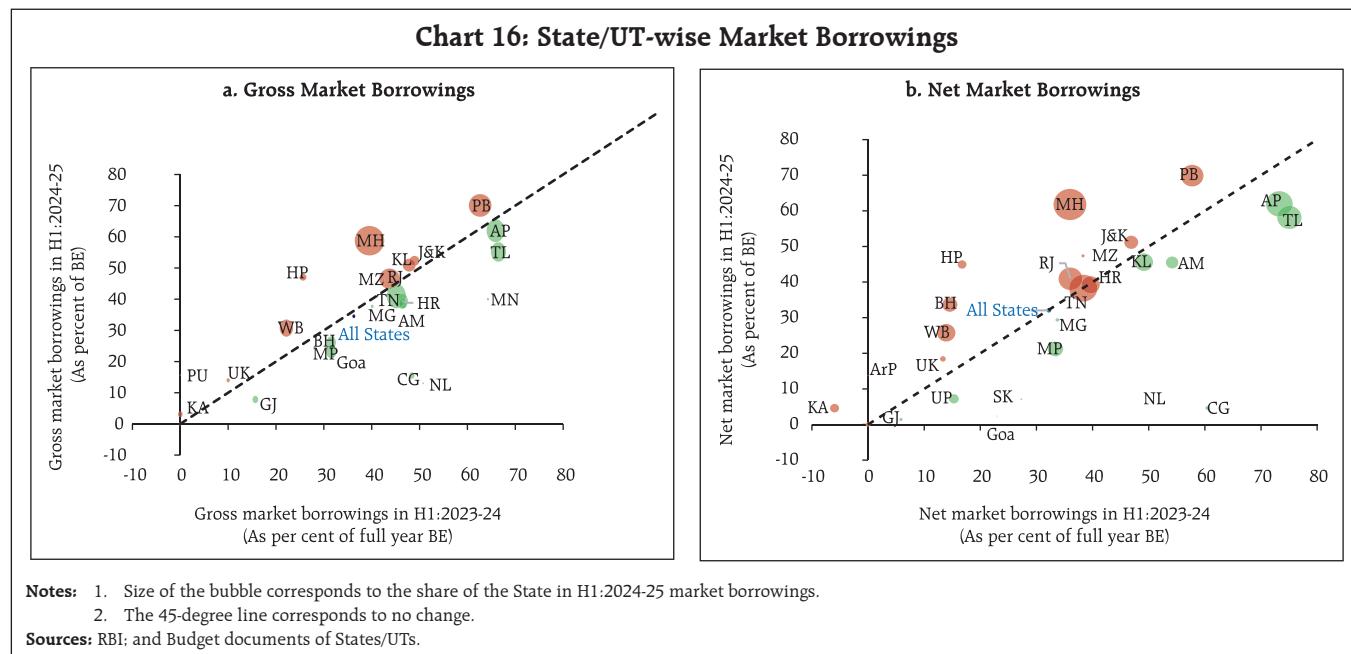
The States had budgeted a consolidated GFD of 3.2 per cent of GDP for 2024-25, as against 2.9 per cent in 2023-24 (PA). During 2024-25, the States have exhausted a lower proportion of their budgeted GFD in Q1 and Q2 compared to the previous year. Correspondingly, the fiscal space available to States in the latter half of 2024-

25 is 56.1 per cent of their budgeted GFD, above 55.6 per cent for the corresponding period of the previous year (Chart 14a and b).

The revenue expenditure to capital outlay (RECO) ratio of the Centre rose to 4.7 in H1:2024-25 from 3.9 a year ago, given the contraction in capital outlay. During the same period, the ratio for States also rose to 8.3 from 6.6 (Chart 15a and b).

Chart 15: Gross Fiscal Deficit and Quality of Expenditure for Centre and States

Sources: CGA; CAG; and budget documents of the Centre and States.



b. Financing of GFD

The net market borrowings by States during H1:2024-25 registered a growth of 13.2 per cent over the same period in the previous year. During this period, States utilised 32.1 per cent of their budgeted net market borrowings (32.2 per cent in the corresponding period of 2023-24). Thirteen States utilised a higher proportion of their budgeted net borrowings compared to the same period in the previous year. Gross market borrowings increased by 7.7 per cent over the previous year, representing 34.5 per cent of the budgeted amount (Chart 16a and b).

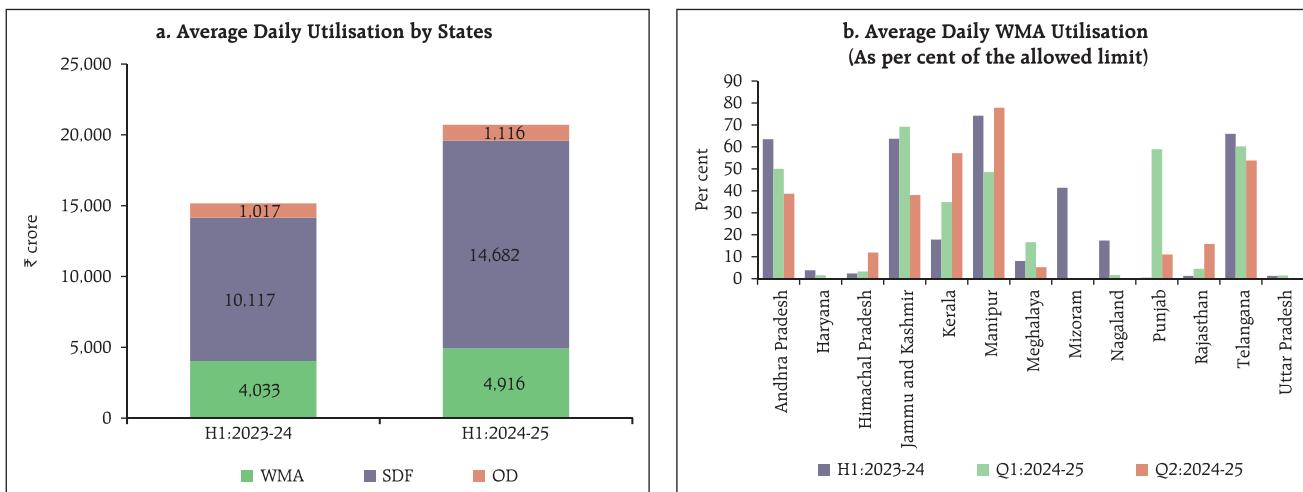
The financial accommodation availed by States through various facilities provided by the Reserve Bank increased by 36.6 per cent in H1:2024-25 over the corresponding period in the previous year. The ways and means advances (WMA) limits were revised effective July 1, 2024. The aggregate WMA

limit for States/UTs now stands at ₹60,118 crore, an increase of 27.9 per cent over the earlier limit of ₹47,010 crore. Consequently, States utilised 9.6 per cent of the permissible WMA limit in Q1:2024-25 and 8.8 per cent in Q2. The average utilisation by States under WMA and the special drawing facility (SDF) rose by 21.9 per cent and 45.1 per cent, respectively, while the usage under the overdraft (OD) facility increased by 9.8 per cent in H1:2024-25 (Chart 17a and b).

IV. General Government Finances

The GFD for the general government (Centre and States combined) is budgeted lower at 7.6 per cent of the GDP in 2024-25 (BE) from 9.0 per cent of GDP in 2023-24 (RE). In Q1:2024-25, the GFD-GDP ratio was lower on account of muted growth in total expenditure of the Centre and States along with robust tax collection. As the expenditure of the Centre and States picked up in Q2:2024-25, the GFD-

Chart 17: Financial Accommodation Availed by the States Under Various Facilities Available with the Reserve Bank



Note: The WMA limit for H1:2023-24 and Q1:2024-25 remained the same, while it was revised upward in Q2:2024-25.

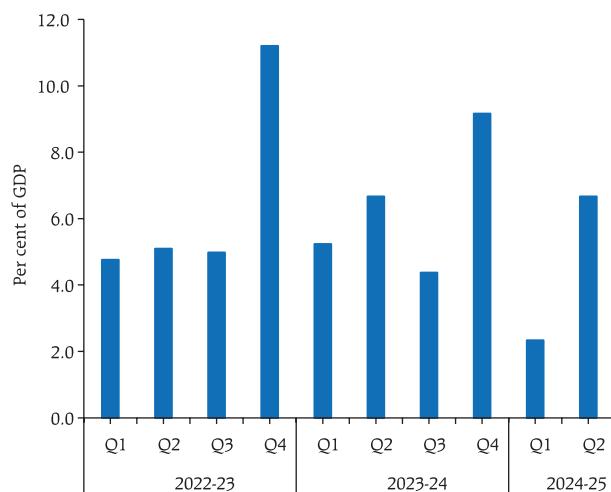
Sources: RBI Bulletin several issues; and RBI staff estimates.

GDP ratio increased in line with its previous trends (Chart 18).

V. Conclusion

The Centre recorded higher tax collections, both direct and indirect, and the buoyancy is expected to continue. Non-tax revenues of the Centre were boosted by the large surplus transfer by the Reserve Bank. The government spending, both Centre and States, was dampened in H1:2024-25 reflecting, *inter alia*, the impact of model code of conduct for general elections and is expected to pick up pace in H2:2024-25. Overall, the Centre has achieved more than half of its budgeted revenue in H1:2024-25 while containing its expenditure to less than half of what it had projected for the entire financial year. This augurs well for the Centre to meet its GFD target of 4.9 per cent of GDP for 2024-25. Several States have announced sops in their 2024-25 Budgets including free electricity to agriculture and households, free transport, allowances to unemployed youth and monetary assistance to women. Such spending may divert resources away from critical social and economic infrastructure development.

Chart 18: General Government Gross Fiscal Deficit



Note: For all quarters depicted in the chart, the combined GFD-GDP ratio is for Centre plus 22 States

Source: RBI staff estimates.

Appendix Tables

Table I: Budgetary Position of the Central Government during April-September

Item	(₹ thousand crore)				(Per cent)			
	Actuals		Budget Estimates		Percent of BE		Y-o-Y Growth Rate	
	2024-25	2023-24	2024-25	2023-24	2024-25	2023-24	2024-25	2023-24
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Revenue Receipts	1622.4	1397.1	3129.2	2632.3	51.8	53.1	16.1	19.5
1.1. Net Tax Revenue	1265.2	1160.3	2583.5	2330.6	49.0	49.8	9.0	14.7
1.2. Non-Tax Revenue	357.2	236.8	545.7	301.7	65.5	78.5	50.9	50.2
1.3. Interest Receipts	20.4	17.3	38.2	24.8	53.3	69.7	17.6	38.7
2. Capital Receipts	14.6	20.2	78.0	84.0	18.7	24.0	-27.6	-41.0
2.1. Recovery of Loans	11.4	13.2	28.0	23.0	40.8	57.5	-13.5	37.7
2.2. Other Receipts	3.2	7.0	50.0	61.0	6.3	11.4	-54.4	-71.7
3. Total Receipts (1+2)	1637.0	1417.3	3207.2	2716.3	51.0	52.2	15.5	17.7
4. Revenue Expenditure	1696.5	1628.5	3709.4	3502.1	45.7	46.5	4.2	10.0
<i>of which</i>								
(i) Interest Payments	515.0	484.3	1162.9	1080.0	44.3	44.8	6.3	10.9
5. Capital Expenditure	415.0	490.6	1111.1	1001.0	37.3	49.0	-15.4	43.1
<i>of which</i>								
(i) Loans and Advances	55.4	74.8	192.4	163.8	28.8	45.7	-25.9	217.5
6. Total Expenditure (4+5)	2111.5	2119.1	4820.5	4503.1	43.8	47.1	-0.4	16.2
7. Revenue Deficit (4-1)	74.2	231.4	580.2	869.9	12.8	26.6	-68.0	-25.6
8. Fiscal Deficit (6-3)	474.5	701.9	1613.3	1786.8	29.4	39.3	-32.4	13.2
9. Gross Primary Deficit {8-4 (i)}	-40.5	217.5	450.4	706.8	-9.0	30.8	-118.6	18.8

Source: Office of Controller General of Accounts, Ministry of Finance, Government of India.

Table II: Quarterly Position of Central Government Finances

Item	(₹ thousand crore)					(Per cent)				
	Actuals				Per cent of BE				Y-o-Y Growth Rate	
	Q1		Q2		Q1		Q2		2024-25	
	2024-25	2023-24	2024-25	2023-24	2024-25	2023-24	2024-25	2023-24	Q1	Q2
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. Revenue Receipts	829.7	588.6	792.7	808.5	26.5	22.4	25.3	30.7	41.0	-2.0
1.1. Net Tax Revenue	549.6	433.6	715.5	726.7	21.3	18.6	27.7	31.2	26.8	-1.5
1.2. Non-Tax Revenue	280.0	155.0	77.2	81.8	51.3	51.4	14.1	27.1	80.7	-5.7
1.3. Interest Receipts	11.7	9.5	8.6	7.8	30.6	38.5	22.6	31.3	22.7	11.3
2. Capital Receipts	4.5	10.7	10.1	9.5	5.8	12.7	12.9	11.3	-57.8	6.5
2.1. Recovery of Loans	4.5	6.5	6.9	6.7	16.1	28.1	24.7	29.3	-30.2	2.5
2.2. Other Receipts	0.0	4.2	3.2	2.7	0.0	6.9	6.3	4.5	-99.9	16.5
3. Total Receipts (1+2)	834.2	599.3	802.8	818.0	26.0	22.1	25.0	30.1	39.2	-1.9
4. Revenue Expenditure	788.9	772.2	907.7	856.3	21.3	22.0	24.5	24.5	2.2	6.0
<i>of which</i>										
(i) Interest Payments	264.1	243.7	251.0	240.6	22.7	22.6	21.6	22.3	8.3	4.3
5. Capital Expenditure	181.1	278.5	233.9	212.1	16.3	27.8	21.1	21.2	-35.0	10.3
<i>of which</i>										
(i) Loans and Advances	30.0	44.6	25.4	30.2	15.6	27.2	13.2	18.4	-32.7	-16.0
(ii) Capital Outlay	151.0	233.9	208.5	181.9	16.4	27.9	22.7	21.7	-35.4	14.6
6. Total Expenditure (4+5)	969.9	1050.7	1141.6	1068.5	20.1	23.3	23.7	23.7	-7.7	6.8
7. Revenue Deficit (4-1)	-40.8	183.6	115.0	47.8	-7.0	21.1	19.8	5.5	-122.2	140.5
8. Fiscal Deficit (6-3)	135.7	451.4	338.8	250.5	8.4	25.3	21.0	14.0	-69.9	35.3
9. Gross Primary Deficit {8-4 (i)}	-128.3	207.7	87.9	9.9	-28.5	29.4	19.5	1.4	-161.8	790.3

Source: Office of Controller General of Accounts, Ministry of Finance, Government of India.

Table III: Budgetary Position of the State Governments during April-September

Item	(₹ thousand crore)				(Per cent)			
	Actuals		Budget Estimates		Per cent of BE		Y-o-Y Growth Rate	
	2024-25	2023-24	2024-25	2023-24	2024-25	2023-24	2024-25	2023-24
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1. Revenue Receipts	1508.4	1403.2	3869.1	3573.7	39.0	39.3	7.5	7.1
1.1. Tax Revenue	1292.7	1156.6	3044.1	2686.9	42.5	43.0	11.8	14.6
1.2. Non-Tax Revenue	83.9	91.3	276.8	245.5	30.3	37.2	-8.1	18.5
1.3. Grants-in-aid and Contributions	131.8	155.2	548.2	641.2	24.0	24.2	-15.1	-30.7
2. Capital Receipts	2.4	3.3	25.8	24.2	9.3	13.6	-27.3	16.9
2.1. Recovery of Loans and Advances	2.3	3.2	20.2	17.8	11.5	18.0	-27.6	17.8
2.2. Other Receipts	0.1	0.1	5.6	6.4	1.2	1.3	-16.6	-9.5
3. Total Receipts	1510.8	1406.5	3894.9	3597.9	38.8	39.1	7.4	7.1
4. Revenue Expenditure	1681.0	1525.0	4038.9	3695.9	41.6	41.3	10.2	8.5
4.1 Interest Payments	220.8	194.1	503.2	459.2	43.9	42.3	13.7	12.5
5. Capital Expenditure	233.8	251.1	777.2	734.9	30.1	34.2	-6.9	44.4
5.1 Capital Outlay	202.5	230.3	706.1	658.9	28.7	34.9	-12.1	51.5
6. Total Expenditure	1914.8	1776.1	4816.1	4430.8	39.8	40.1	7.8	12.5
7. Revenue Deficit (4-1)	172.6	121.8	169.7	122.3	101.7	99.6	41.7	27.5
8. Fiscal Deficit (6-3)	404.0	369.6	921.2	833.0	43.9	44.4	9.3	38.6
9. Gross Primary Deficit (8 - 4.1)	183.2	175.5	418.0	373.8	43.8	46.9	4.4	86.7

Note: Data pertains to 22 States.

Sources: Comptroller and Auditor General of India; and Budget documents of the States.

Table IV: Quarterly Position of State Government Finances

Item	(₹ thousand crore)						(Per cent)				
	Actuals				Budget Estimates				Y-o-Y Growth Rate		
	Q1		Q2		Q1		Q2		2024-25		
	2024-25	2023-24	2024-25	2023-24	2024-25	2023-24	2024-25	2023-24	Q1	Q2	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
1. Revenue Receipts	736.7	722.8	771.7	680.4	19.0	20.2	19.9	19.0	1.9	13.4	
1.1. Tax Revenue	652.7	560.5	640.0	596.1	21.4	20.9	21.0	22.2	16.4	7.4	
1.2. Non-Tax Revenue	40.5	35.9	43.4	55.4	14.6	14.6	15.7	22.6	12.8	-21.7	
1.3. Grants-in-aid and Contributions	43.4	126.4	88.3	28.9	7.9	19.7	16.1	4.5	-65.6	206.0	
2. Capital Receipts	1.2	1.7	1.2	1.6	4.6	6.8	4.6	6.7	-27.5	-27.1	
2.1. Recovery of Loans and Advances	1.2	1.6	1.2	1.6	5.8	8.9	5.7	9.0	-26.9	-28.3	
2.2. Other Receipts	0.0	0.1	0.0	0.0	0.6	1.0	0.6	0.3	-45.3	67.8	
3. Total Receipts	737.9	724.5	772.9	682.0	18.9	20.1	19.8	19.0	1.9	13.3	
4. Revenue Expenditure	776.3	713.1	904.7	811.9	19.2	19.3	22.4	22.0	8.9	11.4	
4.1 Interest Payments	95.3	80.8	125.5	113.3	18.9	17.6	24.9	24.7	17.9	10.8	
5. Capital Expenditure	79.7	99.7	154.1	151.4	10.3	13.6	19.8	20.6	-20.1	1.8	
5.1. Capital Outlay	68.5	88.5	134.0	141.8	9.7	13.4	19.0	21.5	-22.6	-5.5	
6. Total Expenditure	855.9	812.8	1058.8	963.3	17.8	18.3	22.0	21.7	5.3	9.9	
7. Revenue Deficit	39.6	-9.7	133.0	131.5	23.3	-8.0	78.3	107.6	-506.8	1.1	
8. Fiscal Deficit (6-3)	118.1	88.3	285.9	281.3	12.8	10.6	31.0	33.8	33.7	1.7	
9. Gross Primary Deficit (8 - 4.1)	22.8	7.5	160.4	168.0	5.4	2.0	38.4	44.9	203.7	-4.5	

Note: Data pertains to 22 States.

Sources: Comptroller and Auditor General of India; and Budget documents of the States.

Daily Reserves Maintenance Behaviour of Banks

by Sujeesh Kumar[^], Manjusha Senapati[^]
and Praggya Das*

This article analyses the daily reserve maintenance behaviour of scheduled commercial banks (SCBs) in India across various cash reserve ratio (CRR) policy changes over the past decade. The analysis reveals that (i) the flexible inflation targeting (FIT) regime and introduction of automated sweep-in and sweep-out (ASISO) facility has been associated with a lower level of average daily excess reserves maintained by SCBs, freeing up incremental resources that may be used by banks for productive purposes; (ii) there has been reduction in volatility in daily reserves maintenance post ASISO, enabling banks to manage their daily reserves more effectively; and (iii) banks better manage their reserves when daily minimum maintenance requirements are at 90 per cent, with lower requirements leading to higher volatility.

Introduction

Reserve requirements, traditionally refer to the proportion of deposit liabilities with a bank that are usually impounded by central banks to increase public welfare by preventing banking panics and/or to execute changes in monetary policy. Changes in these requirements also alter the supply of credit. In a modern financial system, cash reserve ratio (CRR) requirements play multiple roles – (i) for prudential regulation by imposing liquidity buffers on financial institutions (microprudential), and thereby increasing system wide resilience against systemic

shocks (macroprudential); (ii) for monetary policy implementation in different operational frameworks; and (iii) for liquidity management (Valle *et al.*, 2022; and Gray, 2011). Minimum reserve requirements can help in guiding and stabilising overnight rates. Reserve requirements when used as an additional instrument can improve policy outcomes substantially in an economy where financial frictions are present, and the central bank has a financial stability objective. Increase in reserve requirements reduces credit and output as banks pass the higher costs and restrict financing conditions; while on the other hand, it also reduces the incidence and severity of financial stress episodes. Immediate credit/output loss is compensated by reduced probability of financial stress; thus, the reserves requirements can be used to build financial sector resilience and reduce financial stress, the benefits being higher for emerging market economies than advanced economies (Glocker and Towbin, 2012 and Cantú *et al.*, 2024).

In India, all scheduled banks are required to maintain CRR as per Section 42(1) of the Reserve Bank of India (RBI) Act, 1934. Under the Act, banks are required to maintain a specified proportion of their net demand and time liabilities (NDTL) on an average basis over a reporting fortnight as CRR balances with the RBI. The averaging of reserves over a reporting fortnight is subject to maintenance of a minimum daily balance (stipulated as a proportion of actual regulatory requirements) during the fortnight. In a reserve averaging system, banks' demand for reserves are elastic on a daily basis, but interest inelastic on a longer-term basis due to the presence of standing facilities. Within the reporting fortnight, banks choose their daily maintenance levels based on a cost-benefit analysis of interest rate expectations *vis-à-vis* the rates on standing facilities. The CRR instrument underwent several changes during the refinement of monetary policy operations and the adoption of the flexible inflation targeting (FIT) framework by the RBI.

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To provide greater flexibility to banks in managing their day-end CRR balances, the RBI provided an optional automated sweep-in and sweep-out (ASISO) facility in August 2020 under which banks were able to pre-set a specific amount (or range) that they wished to maintain at the end of the day. Any shortfall or excess balances maintained by banks would automatically trigger marginal standing facility (MSF) or standing deposit facility (SDF) /reverse repo bids under the ASISO facility.

Considering the diverse behaviour of banks in maintaining cash reserves, the article has two broad objectives. Primarily, it analyses the reserve maintenance behaviour of banks under the pre-FIT and FIT regimes. Secondly, it looks into the introduction of ASISO and 24x7 payments system facilities and their impact on the volatility of reserve maintenance of the banks. Such measures are expected to lead to better liquidity planning and hence more efficient daily reserve maintenance by banks, with less volatility in the average daily maintenance. The analysis will help to better understand the efficacy of these measures introduced by the RBI.

With this backdrop, the article is structured into six sections. The next Section presents a brief history of regulatory requirements of CRR and its evolution over time. Section III depicts some of the stylised facts on the CRR maintained by SCBs. In Section IV, recent developments in CRR are discussed, while Section V gives an empirical analysis of the volatility of daily reserve maintenance of banks; Section VI concludes the article.

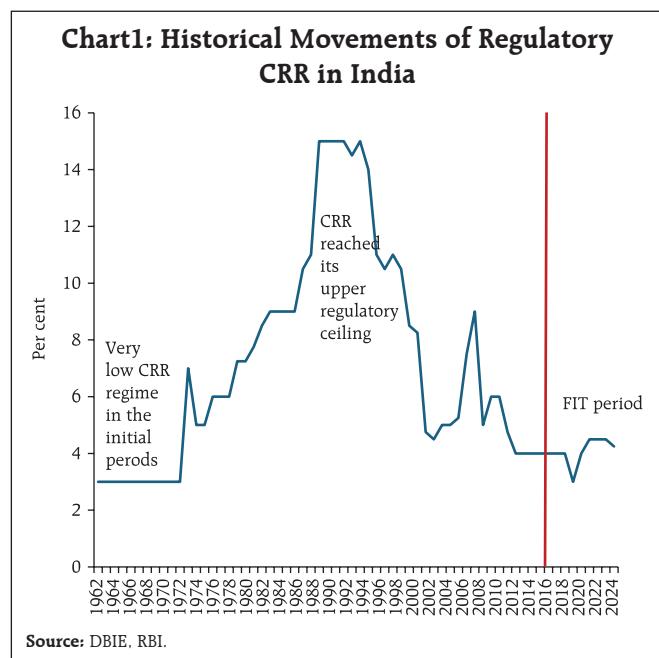
II. A Brief History of CRR in India

The reserve maintenance system in India has evolved over time. Initially, in terms of Section 42(1) of the RBI Act, the Reserve Bank could prescribe CRR for scheduled banks between 3 per cent and 20 per cent of total of their demand and time liabilities. With the amendment to the RBI Act in 2006, the RBI was

provided greater flexibility in reserves management by removing the floor or ceiling on CRR prescriptions. In view of the amendment carried out in the RBI Act, (omitting sub-section (1B) of Section 42), RBI does not pay any interest on the CRR balances maintained by SCBs with effect from the fortnight beginning March 31, 2007.

Prior to September 1962, there were two separate reserve ratios for demand and time liabilities. The CRR to be maintained was 5 per cent and 2 per cent, respectively, for the demand and time liabilities. From September 16, 1962, uniform CRR prescription of 3 per cent was applied to both demand and time liabilities. Till 1980, regulatory CRR requirement level was below 6 per cent. During the 1980s, monetization of the fiscal deficit progressively became a dominant influence on the conduct of monetary policy, which had to contend with the secondary rounds of monetary expansion entailed by primary budget financing. Consequently, the CRR evolved as one of the principal instruments of monetary policy and the level of the CRR rose progressively to 15.0 per cent by 1992. At this high level, the CRR was viewed as a punitive tax on the banking system, adversely impacting their profitability. In the ensuing period, the CRR was gradually reduced to close to 10 per cent in 1998 and further to the range of 4 to 5 per cent during 2002-2006. The CRR was raised from 5.5 per cent to 9 per cent between January 2007 to August 2008 to tighten liquidity conditions prior to the unravelling of the global financial crisis (GFC) but was subsequently reduced sharply to 5.5 per cent in November 2008 and to 4.0 per cent by February 2013. Subsequently, from the time when the RBI adopted the FIT in 2016 till the COVID-19 pandemic in 2020, CRR remained unchanged at 4.0 per cent.

The reserve requirement was reduced to 3.0 per cent to supplement systemic liquidity when the pandemic struck in March 2020. CRR was normalised back in two phases to the pre-pandemic level of 4.0



per cent in May 2021. It was subsequently increased to 4.5 per cent in May 2022 as monetary policy stance shifted to withdrawal of accommodation. In December 2024, consistent with the neutral policy stance, CRR was proactively reduced by 50 basis points to 4.0 per cent of NDTL in two equal tranches of 25 bps each with effect from the fortnight beginning December 14, and 28, 2024 (Das, S., 2024) (Chart 1).

III. Stylised Facts on the CRR Maintained by SCBs

III.1 Pattern of CRR Maintained

Behaviourally, scheduled commercial banks (SCBs) maintain reserves over and above the daily requirements for several reasons. Such liquidity buffer helps them to manage unexpected cashflows, enabling better risk management and facilitate smooth payment and settlements aiding better operational efficiency. This would also enable them to adjust average maintenance during the fortnight as banks have to maintain 100 per cent of required reserves on an average. The cash reserves maintained by SCBs exhibit fluctuations in their daily maintenance. The volatility in daily excess reserves maintained by SCBs as a proportion of NDTL has fallen during the FIT period mainly attributed by the refinements in liquidity management and operating procedure of the monetary policy (Chart 2).

SCBs' daily cash reserve maintenance pattern reveals that there was a tendency of frontloading of reserves (more reserves maintained during the first week of the fortnight). The frontloading of cash reserves by SCBs was mainly to have greater

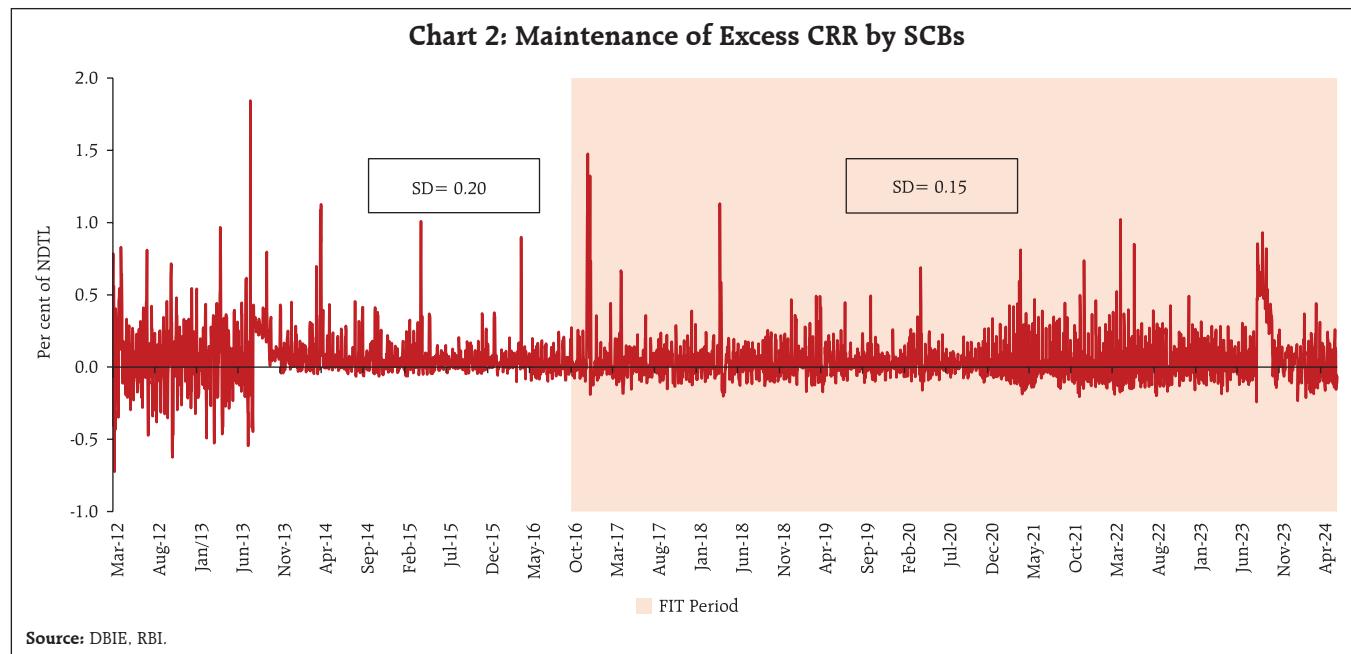
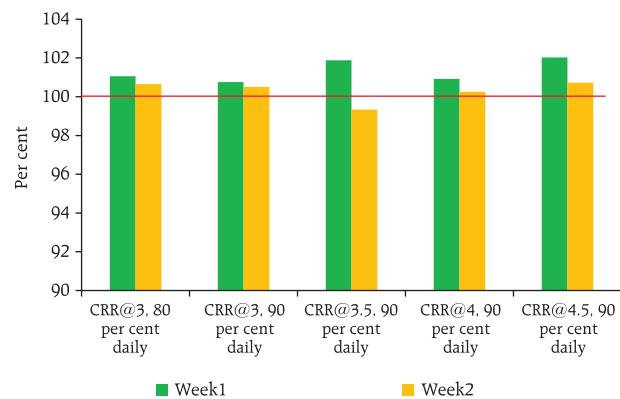


Chart 3: Patterns of Average CRR Maintenance by SCBs as a Percentage of Requirement (Week-1 vis-à-vis Week-2) over Different Regimes



Notes: (i) Daily reserve maintenance by the SCBs (excluding small finance banks and payment banks) starting from 02 March 2019 to 30 April 2024.

(ii) Red line denotes 100 per cent daily maintenance during the fortnight.

Sources: DBIE, RBI; and Authors' calculations.

flexibility to meet the average maintenance requirement. Daily maintenance of CRR depends on business considerations of banks based on the evolving interest rate scenario. Moreover, at the systemic level, if the liquidity is in surplus during the first week of the reserve maintenance period, it could take care of the average requirement for the entire fortnight if the liquidity is deficit in the second week. Further, banks also maintain surplus reserves prior to holidays/weekends to take care of the unexpected cash outflows. Unanticipated cash outflows may drain out the reserves which may have an impact on daily minimum maintenance of required reserves. During holidays, when banks do not have many avenues for mobilising resources, excess reserves are maintained (Chart 3).

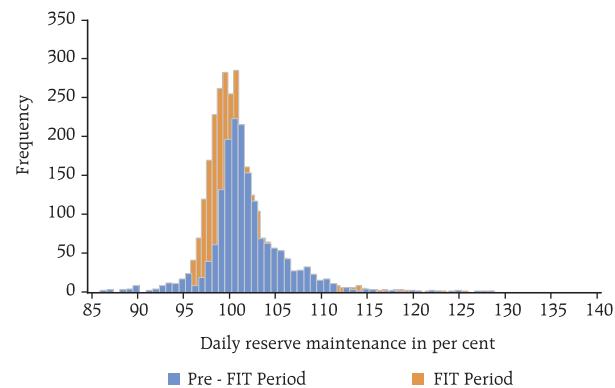
III.2 Distribution of Daily Maintenance of CRR as a Percentage of Requirement

The FIT regime adopted in September 2016 requires RBI to target the consumer price index (CPI) inflation at 4 per cent with the upper tolerance limit of 6 per cent and the lower tolerance limit of 2 per cent, while keeping in mind the objective of growth.

The monetary policy committee (MPC) decides the policy repo rate to achieve the target. The operating framework of monetary policy aims at aligning the operating target, weighted average call rate (WACR), with the policy repo rate. Proactive liquidity management of the RBI facilitates the transmission from the policy repo rate to the entire financial system, which in turn, influences aggregate demand—the key determinant to balance inflation and growth.

In India, reserves need to be maintained on an average basis over a fortnight; however, a certain per cent of the CRR requirement needs to be maintained on any given day during the fortnight. This has helped banks in their day-to-day liquidity management to meet unforeseen flows while avoiding undue volatility in demand for funds. Banks' reserve maintenance is also in consonance with the changing liquidity conditions. The distribution of daily reserve balances by all SCBs as a percentage of requirement in the pre-FIT period and FIT period indicates a clear transition in the daily maintenance pattern mainly due to the evolving and refinement of liquidity management framework (Chart 4). In the pre-FIT

Chart 4: Distribution of Daily Reserve Maintenance as a Percentage of Requirement by SCBs (Pre - FIT vis-à-vis FIT)



Note: Daily reserve maintenance by the SCBs (excluding small finance banks and payment banks) starting January 2, 2012 to September 30, 2016 represents pre-FIT period and the FIT period covering the period from October 1, 2016 to April 30, 2024.

Sources: DBIE, RBI; and Authors' calculations.

period, SCBs were maintaining reserves in the range of 85 to 120 per cent of requirement along with a positive skew. During the FIT period, the range of daily reserve balances has reduced (in the range of 95 to 115 per cent) with some outliers.

The shift in distribution of daily reserve maintenance was reflected in the changes in skewness and kurtosis. In the FIT period, more banks were maintaining below 100 per cent on some days of the fortnight. With the improvement in the liquidity management framework during the FIT period, banks choose an optimum strategy of holding reserves based on their intraday cash flows and money market participation — enabling them to be more flexible in managing daily reserve requirements. A lower kurtosis value in the FIT period also substantiates the fact that most banks have maintained close to the average daily reserves as compared with the pre-FIT period. The volatility (measured in terms of standard deviation) of the daily reserve requirements of SCBs has reduced in the FIT period, indicating that the uncertainty on liquidity has reduced as compared with the pre-FIT period (Chart 4 and Table 1).

The average (mean) daily reserve maintenance as a percentage of requirement reduced during the FIT period as compared with the pre-FIT period. The volatility (as measured by standard deviation) has also decreased to 3.5 from 4.4 in the pre-FIT period. The statistical significance of differences in means and variances under the FIT period was tested against the pre-FIT period by formulating the following two hypotheses.

Table 1: Descriptive Statistics of Daily Maintenance of CRR as a Percentage of Requirement by SCBs

(in per cent)	Pre-FIT	FIT
Mean	101.9	100.9
Median	101.2	100.3
Maximum	146.1	128.3
Minimum	86.1	94.6
Std. Dev.	4.4	3.5
Skewness	1.6	2.1
Kurtosis	13.6	10.7

Note: Daily reserve maintenance by the SCBs (excluding small finance banks and payment banks) starting January 2, 2012 to September 30, 2016 represent pre-FIT period and the FIT period covering from October 1, 2016 to April 30, 2024.

Source: DBIE, RBI.

H01: There is no significant difference in the average daily reserve maintenance of SCBs between pre-FIT and FIT regimes.

H02: There is no significant difference in the variances (volatility) of daily reserve maintenance of SCBs between pre-FIT and FIT regimes.

The above hypotheses were tested through a couple of statistical tests. Both hypotheses were rejected at 1 per cent level of significance indicating that there is a significant difference in daily maintenance of CRR for pre-FIT and FIT regime (Table 2). Lower reserves maintenance post FIT would help in freeing up incremental resources of banks that may be deployed for productive purposes. The reduction in variance of the daily reserve maintenance by SCBs from the pre-FIT and the FIT period suggests, *inter alia*, lower uncertainty about liquidity availability, thus facilitating better reserves maintenance.

Table 2: Test Results for Equality of Mean and Variance

Mean Test			Variance Test		
Test Name	Test statistic	p-value	Test Name	Test statistic	p-value
t-test	7.92***	0.00	F-test	1.57***	0.00
Welch F-test	56.51***	0.00	Bartlett	111.24***	0.00

Note: All test statistics are in favour of rejecting the null hypothesis at one per cent level of significance, indicated by ***.

Sources: DBIE, RBI; and Authors' estimates.

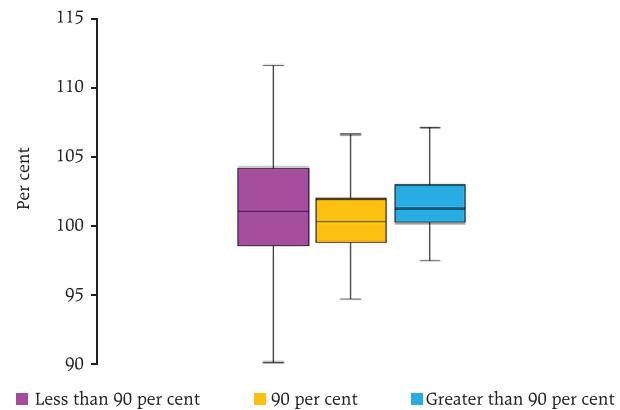
III.3 Distribution of Daily Maintenance of CRR as a Percentage of Requirement under Different Daily Minimum CRR Requirement Regimes

As discussed earlier, besides the prudential and monetary role, CRR is also used as a tool for liquidity management. CRR was used as an instrument of monetary policy and liquidity management in the pre-FIT regime, and it remains an important tool in the monetary policy toolkit even in the FIT regime. Apart from the absolute level of CRR, the norms on its daily minimum maintenance also play a crucial role in stabilising the overnight market rates. The daily minimum CRR requirement has varied between 70 per cent to 99 per cent on different occasions. In order to keep the system liquidity in surplus during the COVID-19 crisis, taking cognisance of hardships faced by banks in terms of social distancing of staff and consequent strains on reporting requirements, the daily minimum maintenance of the CRR was reduced to 80 per cent from the 90 per cent requirement (during the period from March 28, 2020 to September 25, 2020). On the contrary, daily minimum CRR balances requirement was raised to 99 per cent to tighten liquidity conditions during the 2013 taper tantrum from July 27, 2013 to September 30, 2013 as part of measures for monetary defence of the exchange rate (Kavediya and Pattanaik, 2016).

Banks' daily reserves maintenance behaviour under various prescriptions of daily minimum balances maintenance of CRR shows that there were changes in inter-fortnight variability across different regimes (Chart 5).

Volatility in the daily reserve requirements was notably high when the daily minimum prescription was low. Comparing the volatilities and average daily maintenances of CRR by SCBs under three different scenarios, i.e., when the daily minimum prescriptions was less than 90 per cent, 90 per cent, and greater than 90 per cent, SCBs exhibited least volatility for the 90 per cent prescription while other two prescriptions (more than 90 per cent and less than 90 per cent)

Chart 5: Distributional Patten of Daily CRR Maintenance of SCBs under Different Daily Minimum CRR Stipulations



Note: Daily reserve maintenance by the SCBs (excluding small finance banks and payment banks) starting from the period January 2012 to April 2024. Outliers are excluded in the charts.

Source: DBIE, RBI; and Authors' calculation.

showed higher volatility in the reserve maintenance (Table 3).

Thus, both extreme prescriptions – too much flexibility or too much stringency – were associated with increased volatility in daily reserves maintenance behaviour of banks. Extreme prescriptions have been made during challenging times and could have also resulted in more volatility in reserve maintenance by SCBs. The distributional pattern of the daily reserve requirements of SCBs under different minimum daily reserve requirement stipulations revealed that when the daily stipulations are relaxed towards the lower side, the variability of reserve maintenance seems to increase. Statistical tests for the three different scenarios confirm the significant difference in volatility of daily reserves maintenance of SCBs. The test statistics were significant at 1 per cent level

Table 3: Daily Reserve Maintenance as a Percentage of Requirement Statistics

Daily CRR requirements	Mean	Median	Std. Dev.
Scenario 1 Less than 90 percent	101.4	101.0	5.4
Scenario 2 90 percent	100.7	100.2	3.1
Scenario 3 Greater than 90 percent	102.3	101.2	3.6

Sources: DBIE, RBI; and Authors' estimates.

Table 4: Test for Equality of Variances

Test Method	Test Value
Bartlett	411.36***
Levene	117.45***
Brown-Forsythe	113.98***

Note: ***indicates significance at 1 per cent level.

Null hypothesis, H_0 : There is no significant difference in the variances (volatility) of daily reserve maintenance under three scenarios given in Table-3.

Sources: DBIE, RBI; and Authors' estimates.

for three different test criteria rejecting the null hypothesis of having no differences in volatility (Table 4).

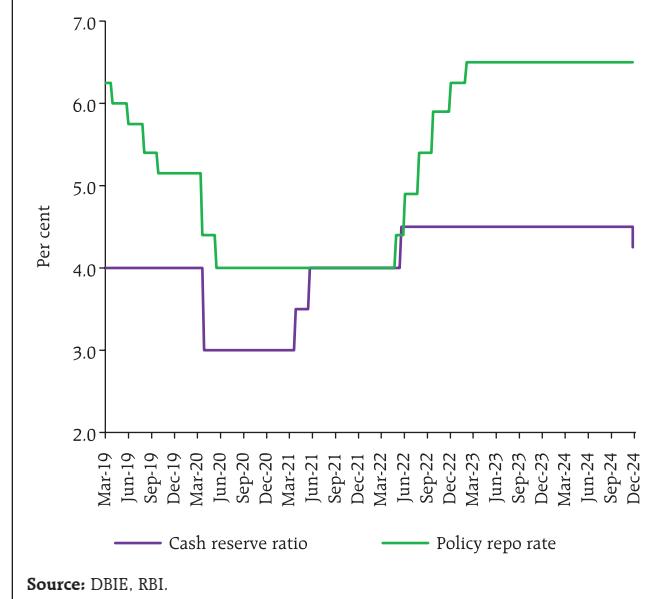
The above analysis suggests that 90 per cent daily minimum maintenance prescription for CRR is the optimal level for the SCBs. In the 90 per cent minimum daily maintenance scenario of FIT period, a significant improvement in liquidity planning and reserve maintenance by SCBs was seen (RBI, 2021).

IV. Recent Developments in CRR

During the recent years, various facets of the CRR instrument have been used in a nimble and prudent manner. To help the banks to tide over the COVID-19 related liquidity constraints, the level of CRR itself was reduced by 100 bps to 3.0 per cent of NDTL effective from March 28, 2020, for a period of one year to release primary liquidity of ₹1.37 lakh core (Das, S., 2020). Moreover, the requirement of minimum daily CRR balance maintenance was reduced from 90 per cent to 80 per cent of the prescribed CRR. Some exemptions were given to SCBs for maintenance of CRR to ensure adequate flow of credit to the productive sectors of the economy. Specifically, SCBs could deduct from their NDTL, the amount equivalent to the incremental credit disbursed by them to automobiles, residential housing, and loans to micro, small and medium enterprises (MSMEs), over and above the outstanding level of credit to these segments as at the end of the fortnight ended January 31, 2020, for maintenance of the CRR. Besides, new MSME borrowers were exempted from CRR maintenance for exposures up

to ₹25 lakhs per borrower for credit extended up to October 1, 2021, an instance where CRR was used to promote sectoral flow of credit. The reduction of CRR to 3.0 per cent was gradually restored in two phases to 4.0 per cent by May 2021. In April 2022, the RBI hiked CRR by 50 bps to 4.5 per cent of NDTL, in keeping with the MPC's stance of withdrawal of accommodation, and CRR was recently reduced by 50 basis points to 4.0 per cent of NDTL in December 2024 (Chart 6).

In the early 1990s, incremental cash reserve ratio (ICRR) was introduced by the RBI, as part of aggregate demand management, particularly during the crisis period. In addition to the balances prescribed under Section 42(1) of the RBI Act, an additional average daily balance, calculated with reference to the excess of the total of demand and time liabilities (DTL) of the bank, termed as ICRR has been occasionally used by the RBI to manage excess liquidity in the system. The ICRR as a tool was deployed by the RBI in November 2016 (between September 16 and November 11, 2016) during demonetisation i.e., withdrawal of legal tender status of ₹500 and ₹1000 denominations of banknotes, to absorb the excess

Chart 6: Movement of Repo Rate and CRR

liquidity in the system as bank deposits swelled due to return of these banknotes. Recently, ICRR was used in July 2022 countercyclically – whereas all Foreign Currency Non-Resident (Bank) [FCNR (B)] and Non-Resident (External) Rupee (NRE) deposit liabilities are included for computation of NDTL, incremental FCNR(B) and NRE deposits raised during July 30 and November 4, 2022, were exempt from inclusion in NDTL for CRR maintenance. The ICRR was also used temporarily during August-October 2023 to absorb excess liquidity from the system caused by the return of ₹2000 banknotes, RBI's surplus transfer to the government, along with pick up in government spending and capital inflows.

IV.1 Automated Sweep-In and Sweep-Out (ASISO) Facility for end of the day LAF Operations

An important development, particularly in the context of disruptions caused by the COVID-19 pandemic, was the introduction of an automatic bidding facility, in addition to the existing manual bidding, for banks to manage their end of the day CRR balances through an optional automated sweep-in and sweep-out (ASISO) facility. This facility enabled banks to set a pre-assigned amount or a range of

amount that they wished to keep as balances in their current accounts with the RBI at the end of the day, through e-Kuber¹ system. Depending upon the pre-set amount, marginal standing facility (MSF) and reverse repo bids were generated automatically without any manual intervention at the end of the day².

Although this facility was introduced to optimise the human resource deployment in the context of COVID-19 pandemic, banks have continued to use ASISO facility in managing their daily cash balances to minimise liquidity uncertainty to a certain extent. After the introduction of ASISO since August 06, 2020, the daily average level of cash reserves maintained by banks has reduced (Table 5).

The average (mean) daily reserve maintenance reduced during the ASISO period as compared with the pre-ASISO period (Table 5). The volatility (as measured by standard deviation) has decreased to 2.6 from 3.6 in the pre-ASISO period along with lower skewness and kurtosis. To test the statistical significance of the impact of ASISO on daily reserves balances by the SCBs, pre-ASISO period *vis-à-vis* ASISO period was tested through a couple of statistical tests for the following two hypotheses.

Table 5: Descriptive Statistics of the Daily Reserve Maintenance as a Percentage of Requirement by SCBs

Sample Period	Mean	Median	Max.	Min.	Standard Deviation	Skewness	Kurtosis
Pre-ASISO (01 March 2020 to 31 July 2020)	101.2	100.5	122.9	94.6	3.6	2.8	15.6
ASISO period (01 August 2020 ³ to 10 December 2020)	100.7	100.2	108.9	96.5	2.6	1.1	4.1

Note: Daily reserve maintenance by the SCBs (excluding small finance banks and payment banks) starting from 01 March 2020 to 10 December 2020. For a better comparison equal number of days have been considered for pre-ASISO and post-ASISO period.

Sources: DBIE, RBI; and Authors' estimates.

¹ e-Kuber is the Core Banking Solution (CBS) platform of RBI wherein all members (Commercial banks, scheduled UCBs, Primary Dealers, insurance companies and provident funds, who maintain current account and securities accounts with RBI) can place their bids in the auction through this electronic platform.

² If a bank's current account balance is less than the set minimum balance, the system would auto-trigger an MSF bid for the difference between the current account balance and the set minimum balance limit. In case of any shortfall of securities in a bank's Repo constituent account, the auto-triggered MSF bid will be for a reduced amount, depending on the balance of securities available in the bank's Repo constituent account. If a participant's current account balance is greater than the set maximum balance, the system would auto-trigger a Reverse Repo bid for the difference between the set maximum balance limit and the current account balance.

³ Though ASISO was introduced from 06 August 2020, data from 01 August 2020 was considered for comparison so as to cover full fortnight.

Table 6: Test Results for Equality of Mean and Variance

Mean Test			Variance Test		
Test Name	Test statistic	p-value	Test Name	Test statistic	p-value
t-test	1.040	0.292	F-test	1.952***	0.00
Welch F-test	1.116	0.290	Bartlett	10.195**	0.00

Note: ** and *** indicates significance at 5 per cent and 1 per cent levels respectively.

Sources: DBIE, RBI; and Authors' estimates.

H01: There is no significant difference in the average daily reserve maintenance of SCBs between the pre-ASISO and post-ASISO period.

H02: There is no significant difference in the variances (volatility) of daily reserve maintenance of SCBs between pre-ASISO and post-ASISO implementation.

The first hypothesis does not ascertain a statistically significant difference in daily maintenance of CRR between pre-ASISO and post-ASISO period. The second hypothesis (*H02*) on differences in variances of the daily maintenance pattern of SCBs is statistically significant indicating that the volatility in reserves maintenance has come down in the ASISO period (Table 6).

IV.II. Payment and Settlement Systems and Reserves Maintenance

The daily reserve maintenance statistics of SCBs indicated that the average daily CRR maintenance of SCBs came down marginally when the RBI introduced

24x7 services of both NEFT and RTGS — it declined to 100.7 per cent from around 101.0 per cent (Table 7).

The kernel density plot of the daily maintenance of CRR by the SCBs indicated that there is a change in the behavioural pattern of banks after the introduction of 24x7 payment and settlement systems — with both kurtosis and skewness declining (Chart 7).

V. Volatility in Daily Maintenance of CRR – Empirical Analysis

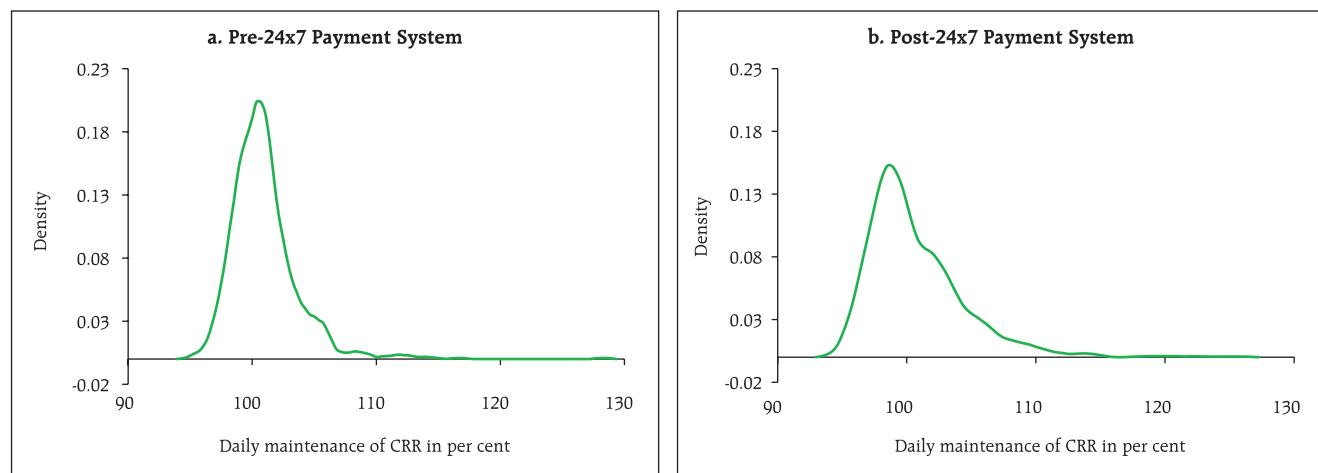
As mentioned earlier, the average excess maintenance and the volatility in daily maintenance of reserves by SCBs has declined particularly during the FIT period and subsequently, with the introduction of the ASISO facility. An empirical exercise employing generalised autoregressive conditionally heteroscedastic (GARCH) model was undertaken to formally examine the same. Variations in liquidity positions or liquidity shocks have an impact on the daily reserve maintenance by SCBs. For instance, negative liquidity shocks would put pressure on reserve maintenance level of SCBs — they will

Table 7: Descriptive Statistics of the Daily Reserve Maintenance as a Percentage of Requirement by SCBs

Sample Period	Mean	Median	Max.	Min.	Standard Deviation	Skewness	Kurtosis
Pre-24x7 Payment Systems (01 March 2020 to 31 July 2020)	101.0	100.7	128.3	95.0	2.8	2.4	16.8
Post-24x7 Payment Systems (11 December 2020 to 30 April 2024)	100.7	99.7	125.5	94.7	3.8	1.8	8.8

Note: Daily reserve maintenance by SCBs (excluding small finance banks and payment banks) starting from 02 January 2017 to 10 December 2020 considered for pre-24x7 systems period and from 11 December 2020 to 06 October 2023 for post 24x7 payment system period. Reserve maintenance with 90 percent daily requirement period considered for the comparison.

Sources: DBIE, RBI; and Authors' calculation.

Chart 7: Kernel Density Estimates: Daily Reserve Maintenance as a Percentage of Requirement by SCBs

Note: Daily reserve maintenance by the SCBs (excluding small finance banks and payment banks) starting from 02 January 2017 to 10 December 2020 considered for pre-24x7 systems period and from 11 December 2020 to 30 April 2024 for post 24x7 payment system period. Reserve maintenance under same (90 percent) daily requirement period considered.

Sources: DBIE, RBI; and Authors' calculation.

draw down on excess CRR for meeting the liquidity shortfalls. Further, the daily stipulated minimum maintenance norms for reserve requirements also affect the CRR maintained by SCBs. On the other hand, volatility of reserve maintenance is expected to be impacted by introduction of ASISO and the 24x7 payment and settlement facilities.

The analysis uses the daily data on CRR maintained by the SCBs during the period October 2016 to April 2024. Weekends are excluded as data for all variables were not available. The heteroscedastic effects on daily maintenance were tested statistically using the autoregressive conditionally heteroscedasticity (ARCH) test, which confirmed the presence of volatility clustering. Hence, a GARCH model was employed for the analysis. For robustness check, GARCH model parameters were estimated with various orders of ARCH and GARCH terms [GARCH (1,1), GARCH (1,2), GARCH (2,1) and GARCH (2,2)]⁴.

⁴ Specification of GARCH model is chosen based on the information criteria.

The dependent variable used in the model is the daily CRR maintained by SCBs as proportion of their NDTL. The explanatory variables are liquidity conditions proxied by the difference between overnight money market rates and policy repo rate. Since banks borrow funds mainly in the collateralised segment, the weighted average money market rate can be used to capture borrowing in both collateralised and uncollateralised segments. Accordingly, money market rate (MMR) spread (combined weighted averages market rates minus repo rate) has been used. The daily CRR requirements (CRR norms⁵) is also used as an explanatory variable in the mean equation.

In the variance equation, separate dummy variables for the introduction of NEFT (24x7), ASISO, RTGS (24x7) and COVID pandemic were included to capture those impacts along with ARCH and GARCH effects. The GARCH model specification is given in equations (1) and (2). The mean and variance equations of the selected GARCH (1,2) model is given as:

⁵ Though CRR is to be maintained at a prescribed per cent of NDTL on an average basis for the fortnight, the mandatory daily requirement is 90 per cent at present (varied between 70-80-90-95-99 in the past).

$$\begin{aligned} CRR_Daily_t = \omega + \alpha_0 CRR_Daily_{t-1} + \beta_0 Daily_CRR_Norms_t \\ + \phi MMR_Spread_t + \varepsilon_t \end{aligned} \quad (1)$$

and

$$\begin{aligned} \sigma_t^2 = \omega_1 + \alpha_1 \varepsilon_{t-1}^2 + \beta_1 \sigma_{t-1}^2 + \beta_2 \sigma_{t-2}^2 + \vartheta_NEFT(24X7) + \\ \mu_ASISO + \pi_RTGS(24X7) + \lambda_COVID \end{aligned} \quad (2)$$

where CRR_Daily is the daily reserve maintenance by SCBs as a per cent of their NDTL, Daily_CRR_Norm is the daily stipulated minimum requirements of CRR in per cent, MMR_Spread (is the combined weighted average money rates - repo rate) is the proxy of the liquidity conditions and ε_t is the residual error term. In the conditional variance equation (2), α_1 denotes the coefficient of the ARCH term and β_1 and β_2 represent the coefficient of GARCH terms. ϑ , μ , π and

Table 8: Estimated Parameters of GARCH (1,2) Model

Mean Equation	
Variables	Parameters
Constant	85.178*** (3.387)
CRR_Daily (-1)	0.128*** (0.025)
MMR_Spread	-0.415*** (0.090)
Daily CRR_Norms	0.031 (0.022)
Variance Equation	
Variables	Parameters
Constant	1.557*** (0.164)
ARCH (1)	0.309*** (0.018)
GARCH (1)	0.051 (0.041)
GARCH (2)	0.488*** (0.038)
Dummy NEFT (24x7)	-0.323 (0.447)
Dummy ASISO	-0.569* (0.373)
Dummy RTGS (24x7)	1.444*** (0.400)
Dummy COVID	0.320 (0.500)
DW-statistics	1.817
LM test (F-statistics)	0.039

Notes: (i) Dependent variable is the daily CRR maintenance.
(ii) *, ** and *** indicates significance at 10 per cent, 5 per cent and 1 per cent levels respectively.

(iii) Standard errors in given in parenthesis.

Sources: DBIE, RBI; and Authors' estimates.

λ capture the dummy variable effects on the volatility. The estimated parameters of the GARCH (1,2) models are presented in Table 8.

In the same modelling framework, individual money market rates viz, weighted average call money rates, weighted average tri-party rate, and the market repo rates were used in alternative model specifications to study the individual rate impact on the volatility of reserve maintenance. The results are given in the annex.

The coefficients of the spread between money market rates and repo rate have statistically significant negative impact on volatility of CRR maintenance. This indicates that when liquidity conditions become tighter, banks tend to reduce / draw down their excess CRR maintained with the RBI. However, the regulatory daily CRR norms/requirement do not have any impact on the reserve maintenance in the post FIT period. This could be due to banks keeping excess reserves over and above the RBI prescribed norms, *inter alia*, due to 24X7 RTGS and NEFT which could have increased the precautionary demand for reserves by SCBs.

The NEFT dummy is found to be insignificant in the conditional variance model indicating that introduction of NEFT 24x7 did not alter the volatility of the reserve maintenance. This could be because the NEFT transactions are mainly retail transactions, which are smaller in size, and they might not affect the overall liquidity available with the banks.

The variance equation of the model confirmed the significance of ASISO facility implemented for SCBs. The ASISO variable coefficient is negative and significant, indicating that ASISO facility has significantly reduced the volatility in the reserve maintenance of banks and enabled them to effectively manage their daily reserves.

The introduction of 24x7 RTGS has been associated with an increase in the volatility in CRR

maintenance as reflected in the positive coefficient for RTGS in the variance equation. RTGS functions on a round-the-clock basis, which can lead to fund withdrawal at any time, causing higher uncertainty and hence higher volatility in reserve maintenance when large interbank transfers take place. Banks generally maintain higher reserves prior to holidays or weekends to take care of uncertain cash flows.

Effective from December 30, 2023, the reversal of liquidity facilities under both the SDF and the MSF were allowed during weekends and holidays. This would facilitate liquidity management of banks by reducing their liquidity uncertainty and, hence, volatility in reserve maintenance, going forward.

VI. Conclusion

Reserves requirements and its various attributes (the CRR level, the daily minimum maintenance, incremental reserves requirements and exemptions on reservable liabilities) are effective liquidity management tools. The level of CRR *per se* is modulated to adjust the overall liquidity conditions with the banking system in accordance with the stance of monetary policy. The present study focusses on the policy implication of the changes in other facets of reserves requirement – the daily reserves maintenance of banks after the transition to the FIT regime and after the introduction of the ASISO facility and the daily minimum reserves maintenance requirement. The analysis reveals that (i) after the adoption of FIT by the RBI and with the introduction of ASISO facility, the average daily reserves maintained by the SCBs have been lower, thus freeing up incremental resources of banks that may be deployed for productive purposes; (ii) the volatility in daily reserves maintenance as percentage of requirement is significantly lower under the post ASISO regime, enabling banks to effectively manage their daily reserves; and (iii) the present 90 per cent of the daily minimum reserves maintenance

requirement is appropriate – minimum daily maintenance requirement of less than 90 per cent leads to higher variability in reserves maintenance. The findings of the study, the first such known work on the subject, therefore, provide lessons for the future use of various facets of reserve requirements as a policy tool.

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Annex

Adopting the same notations used in the model1 & 2 stated in the article, three separate models considering three different market rates are given below:

Model1- Mean equation

$$CRR_Daily_t = \omega + \alpha_0 CRR_Daily_{t-1} + \beta_0 Daily_CRR_Norms_t + \Phi_1 call\ rate_Spread_t + \varepsilon_t$$

Model 2- mean equation

$$CRR_Daily_t = \omega + \alpha_0 CRR_Daily_{t-1} + \beta_0 Daily_CRR_Norms_t + \Phi_2 Triparty\ rate_Spread_t + \varepsilon_t$$

Model3- mean equation

$$CRR_Daily_t = \omega + \alpha_0 CRR_Daily_{t-1} + \beta_0 Daily_CRR_Norms_t + \Phi_3 Market\ repo\ rate_Spread_t + \varepsilon_t$$

Variance equation

$$\sigma_t^2 = \omega_1 + \alpha_1 \varepsilon_{t-1}^2 + \beta_1 \sigma_{t-1}^2 + \beta_2 \sigma_{t-2}^2 + \vartheta_NEFT(24X7) + \mu_ASISO + \pi_RTGS(24X7) + \lambda_COVID$$

The estimated parameters of the above three models are given in table -1.

Table 1: Estimated Parameters of GARCH (1,2) Model

Variables	Mean Equation		
	Model 1	Model 2	Model 3
Constant	84.800*** (3.067)	82.067*** (3.092)	84.548*** (3.456)
CRR_Daily (-1)	0.131*** (0.024)	0.124*** (0.024)	0.128*** (0.025)
Call rate Spread	-0.977*** (0.154)		
Triparty rate Spread		-0.810*** (0.079)	
Market repo rate Spread			-0.482*** (0.104)
Daily CRR_Norms	0.030 (0.019)	0.069*** (0.019)	0.023* (1.677)
Variance Equation			
Constant	1.488*** (0.160)	1.706*** (0.170)	1.568*** (0.165)
ARCH (1)	0.319*** (0.019)	0.341*** (0.020)	0.310*** (0.018)
GARCH (1)	0.037 (0.035)	0.035 (0.040)	0.056 (0.042)
GARCH (2)	0.507*** (0.034)	0.462*** (0.038)	0.481*** (0.039)
Dummy NEFT (24x7)	-0.540 (0.369)	-0.280 (0.509)	-0.354 (0.446)
Dummy ASISO	-0.737** (0.408)	-0.581* (0.405)	-0.616* (0.382)
Dummy RTGS (24x7)	1.157*** (0.398)	1.499*** (0.421)	1.420*** (0.400)
Dummy COVID	0.719* (0.434)	0.135 (0.550)	0.375 (0.504)
DW-statistics	1.792	1.789	1.815
LM test (F-statistics)	0.109	0.075	0.046

Notes: (i) Dependent variable is the daily CRR maintenance.

(ii) *, ** and *** indicates significance at 10 per cent, 5 per cent and 1 per cent levels respectively.

(iii) Standard errors in given in parenthesis.

(iv) Call rate spread = Call rate minus repo rate, Triparty rate spread = Triparty rate minus repo rate and Market repo rate spread = Market repo rate minus repo rate

Sources: DBIE, RBI; and Authors' estimates.

Real Effective Exchange Rate and its Implications for India's Trade Balance

by Srijashree Sardar, Dipak R. Chaudhari, Priyanka Priyadarshini, Anshul and Sangeeta Das ^

This article examines the impact of movements in the real effective exchange rate (REER) on India's merchandise trade balance using a non-linear autoregressive distributed lag (NARDL) model. The empirical findings suggest that depreciation in REER improves trade balance while appreciation deteriorates it. The impact of REER depreciation on trade balance is more than an equivalent REER appreciation in the short-run and vice versa in the long-run. Cross-country estimates indicate that the REER is influenced by productivity differential, terms of trade, government expenditure and net foreign assets.

Introduction

Exchange rate is one of the indicators impacting country's external competitiveness. One issue in this regard is as to whether the real exchange rate (RER) is a useful measure for this purpose. The nominal effective exchange rate (NEER) is a trade weighted average exchange rate of domestic currency in terms of a basket of foreign currencies, while the real effective exchange rate (REER) is an inflation-adjusted trade-weighted average value of the domestic currency in terms of its trading partners' currencies. In the short-run, REER movements may primarily reflect changes in the nominal exchange rate, as prices are generally sticky in the short-run (Darvas, 2021). Although imperfect, REER fairly signals large

overvaluation/undervaluation and makes it one of the early warning tools for policymakers (Cenedese and Stolper, 2012).

The relationship between REER and trade balance can be ambiguous. In the trade channel, REER depreciation could be beneficial for net exports, while the finance channel can offset these benefits and can reduce GDP growth (BIS, 2018). Cardarelli and Rebucci (2007) found a stable link between REER and trade balances through expenditure switching channel; later studies suggest that the relationship could be asymmetric and non-linear. Currency depreciation can have a stronger effect on trade balance than currency appreciation of equal magnitude (Bahmani-Oskooee and Aftab, 2017; and Arize, 2017). There is evidence of J-curve effect – depreciation of REER may immediately worsen the trade balance with reversal over time, leading to improvement in trade balance. Bhat and Bhat (2021) found no evidence of J-curve phenomenon in the case of India; the authors found that appreciation deteriorates trade balance, while depreciation improves it in the short run. However, in the long run, only depreciation impacts trade balance. This indicates asymmetric impact of REER movements on trade balance. Paray, Wani and Yasmin (2022) using post liberalisation period also found no evidence of 'J-curve' effect and 'Marshal-Lerner' conditions in India. The study also indicated that among other macroeconomic variables, exchange rate is a highly influential factor in India's trade balance.

Against this background, Section II discusses approaches to equilibrium exchange rate (EER) estimation. Section III empirically estimates equilibrium real exchange rate for a panel of eight countries. Section IV provides an overview of REER estimation in India. Section V empirically examines asymmetric impact of REER on trade balance of India using non-linear autoregressive distributed lag model (NARDL), while section VI provides concluding observations.

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II. Approaches to Estimate Real Exchange Rate

Conceptual Background for Estimating Real Exchange Rate

A common equilibrium exchange rate approach focuses on deviations of the exchange rate from the Purchasing Power Parity (PPP) proposition, which postulates that the equilibrium exchange rate between two countries is determined by their respective purchasing powers, and, in turn, their inflation rates.

Deviations from PPP imply that, $q = s - (p - p^*) = \varepsilon \neq 0$ where q is the real exchange rate, s is the nominal exchange rate, and p and p^* are the domestic and foreign prices respectively (all in log terms). ε stands for factors that can explain the non-stationary movement of q . The Behavioural Equilibrium Exchange Rate (BEER) approach assumes a cointegrating relationship between q and ε , yielding a reduced form estimation of the Equilibrium Real Exchange Rate (ERER). The acronym BEER is often used to indicate, by extension, a whole family of models that follow similar methodologies. Another approach calculates ERER as the one that satisfies both medium-term internal and external balances¹ and is known as the Fundamental Equilibrium Exchange Rate (FEER). In a recent study, Patra *et al.* (2024) devise a suite of approaches for estimating equilibrium exchange rates for India and state that the alternative approaches are preferable to static indicators such as the REER or others that belong in the genre of the simple PPP framework.

REER in emerging economies is mainly driven by economic fundamentals, interest rate differential and terms of trade (Raut, 2021). Clark and MacDonald (1999) found that BEER, in the long run, is determined by terms of trade, relative price of non-traded to traded goods, the stock of net foreign assets

and interest rate differential. According to Clark and MacDonald (*op. cit.*), both the FEER and BEER approaches have strengths and weaknesses: The BEER approach provides a direct estimate of misalignment and is useful for short-term analysis, subject to the risk of model misspecification; conversely, the FEER approach is more robust but relies heavily on the assumptions of full employment and capital account sustainability.

The equilibrium REER depends, *inter alia*, upon - i) Net Foreign Assets: debtor countries (foreign liabilities exceeding foreign assets), *ceteris paribus*, need a more depreciated real exchange rate to generate trade surpluses necessary to service their external liabilities; ii) Productivity Differential: higher productivity is related to appreciation in REER; iii) Terms of Trade: favourable terms of trade can appreciate the REER through income or wealth effects; and iv) Government Consumption: higher government consumption is associated with the appreciation of REER as such consumption is mostly related with non-tradable sector than tradable sector leading to higher relative prices (Lee *et al.*, 2008).

Estimation of REER in Practice

In practice, REER computation needs to account for four major components: the range of foreign trading partners, their relative weights, the price indices and choice of base year. International organisations, including BIS, OECD, World Bank and IMF publish REERs for different countries. These databases employ different computation methodologies, country, and currency composition, thereby yielding different figures for the REER. The US Federal Reserve compiles six types of REER indices based on different country weights on a monthly frequency.² The Bank of England currently calculates the Sterling exchange rate index at daily, monthly and quarterly frequencies.³ A broader

¹ Here, internal balance is characterised by full employment level of output and low and stable inflation, while external balance is a sustainability of balance of payments.

² <https://www.federalreserve.gov/releases/h10/summary/>

³ <https://www.bankofengland.co.uk/statistics/details/further-details-about-effective-exchange-rate-indices-data>

currency index provides a global picture by taking a large number of currencies, while a smaller index gauges competitiveness over advanced economies (Fung *et al.*, 2006). The preferred index could depend on the context of the study (Klau and Fung, 2006).

III. Equilibrium Real Exchange Rate: Cross Country Analysis

To understand the potential determinants of REER, a panel regression empirical exercise is carried out in this section covering the following countries: India, Brazil, China, Indonesia, Malaysia, Russia, South Korea and Thailand, with annual data of 27 years- 1994 to 2021. As discussed in the previous section, the CPI-based REER is expected to be determined by the following four fundamentals in the long run: Net foreign assets (NFA), productivity differential, commodity terms of trade (ToT) and government consumption expenditure. NFA data has been sourced from Lane and Milesi-Ferretti (2018), database. Productivity differential is obtained as real per capita GDP of a country *vis-à-vis* its 64 trading partners multiplied by their corresponding trade weights. GDP data is sourced from the World Bank and trade weights data have been sourced from BIS. Commodity terms of trade (ToT) was estimated in line with Gruss and Kebhaj (2019) - log of terms of trade index (June 2012=100) which is the commodity net export price index (weighted by net exports to total

Table 1: Results of Panel Unit Root Tests

Variable	Level	First Difference
	LLC t-stat	LLC t-stat
LREER	-1.55 (0.06)	-9.11*** (0.00)
GEXPR/GDP	-1.54 (0.06)	-4.16*** (0.00)
Productivity Differential	-1.21 (0.11)	-3.39*** (0.00)
NFA/GDP	-0.43 (0.33)	-4.99*** (0.00)
ToT	-1.68 (0.06)	-7.29*** (0.00)

Note: Figure in brackets are p-values; *** indicates statistical significance at 1 per cent.

Source: Authors' estimates.

Table 2: DOLS Estimates of Long-run Cointegrating Relationship

Variable	Coefficient	p-value
Dependent variable: log of REER (LREER)		
GEXPR / GDP	1.99*** (4.24)	0.00
NFA / GDP	-0.16*** (-4.99)	0.00
Productivity Differential	1.74*** (13.29)	0.00
ToT	0.27*** (7.81)	0.00
Adjusted R ²		0.79
Observations		184

Note: Figure in brackets are t-statistics; *** indicates statistical significance at 1 per cent.

Source: Authors' estimates.

commodity trade). Data on government consumption expenditure as a ratio of GDP (GEXPR/GDP) was sourced from World Bank. Panel unit root test (Levin *et al.*, 2002) results depict that all the variables are first difference stationary (Table 1).

Evidence of panel cointegration - long-run relationship between the LREER and the set of fundamentals - among the variables is indicated by the Kao (1999) test. The results of dynamic ordinary least squares (DOLS) methodology developed by Stock and Watson (1993) have been summarised in Table 2.

The ERER approach does not provide the information on how quickly the exchange rate would adjust to restore equilibrium. Therefore, the long-run model was estimated with an error-correction specification. The results suggest that it takes approximately, on an average, four years to halve the gap between actual and equilibrium exchange rates

Table 3: Error Correction Term Coefficient

	Coefficient	p-value
Error Correction Term	-0.12*** (-3.84)	0.00

Note: Figure in brackets are t-statistics; *** indicates statistical significance at 1 per cent.

Source: Authors' estimates.

for the selected countries and time period (Table 3).

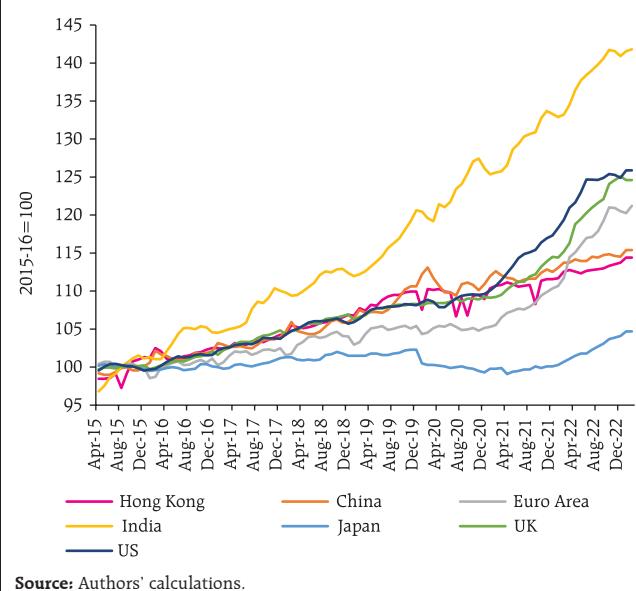
IV. REER Estimates for India

The Reserve Bank of India (RBI) computes two REER indices - 40-currency (broad) and 6-currency (narrow) – representing 88 per cent (Guria and Sokal, 2021) and 40 per cent of India's trade, respectively. The indices use 3-year moving geometric mean trade weights of India's bilateral trade (exports plus imports) with partner countries (forty/six countries). This method suitably reflects the dynamically changing pattern of India's foreign trade with its major trading partners. The 40-currency REER/NEER is available in two series - trade weighted and export weighted. The 6-currency is computed on trade weighted basis only; however, it is also available on rolling base year series, in addition to 2015-16 base year.

A comparison of 40-currency and 6-currency REER / NEER indices indicates long-run co-movement (Chart 1). The transitory divergence in 40-currency and 6-currency REER during January 2021 to April 2022 was due to higher inflation in the rest of the countries (excluding 6-currency).

The most commonly used price index in REER

Chart 2: CPI Co-movements in the Select Countries



calculation is the consumer price index (CPI) as it is available timely (Ellis, 2001) [Chart 2].

In the 6-currency REER, USD and Chinese renminbi each have 28 per cent weight, Euro has 26 per cent, Hong Kong Dollar has 8 per cent, while UK pound and Japanese Yen have equal weights of 5 per cent each. Of these, five currencies are in global top

Chart 1: REER/NEER Movements

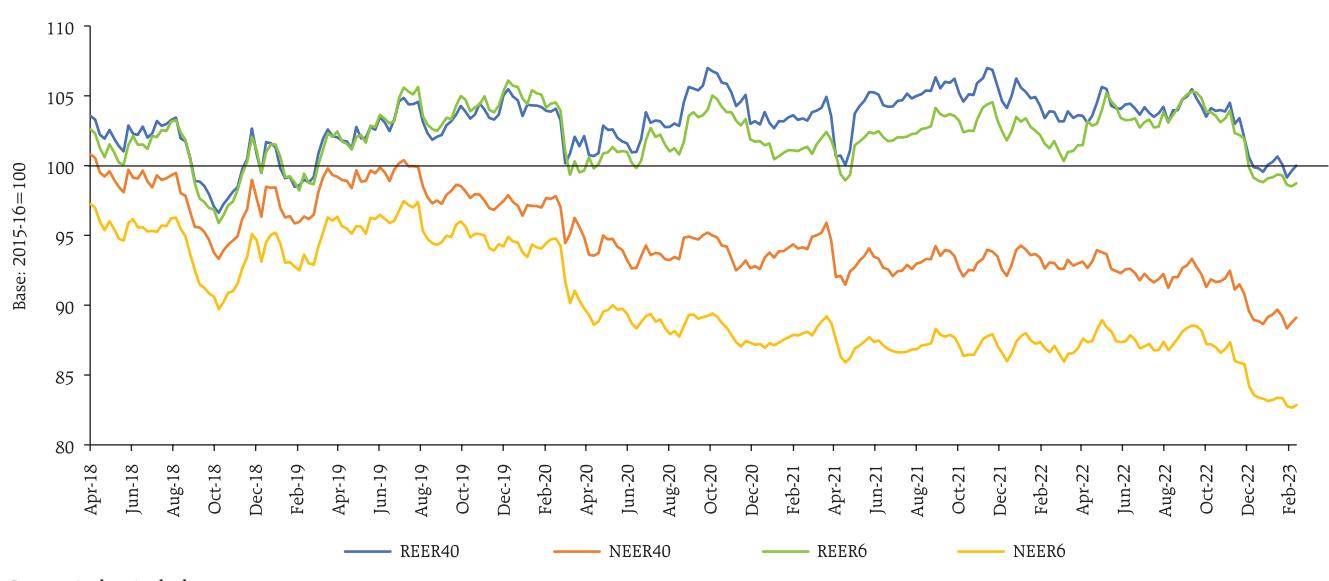


Table 4: Global Top Five Currencies

Rank	Currency	Share in OTC FX trading	Amount of currency trade daily (USD bn)	Share in Official Reserve composition
1	USD	88	6,641	58.36
2	EUR	31	2,293	20.47
3	JPY	17	1,253	5.51
4	GBP	13	969	4.95
5	CNY	7	526	2.69

Source: BIS Triennial Survey on Global Foreign Exchange Market, October 2022 and IMF, COFER dated March 31, 2023.

five in terms of currency trade and central banks' official reserves (Table 4).⁴ However, the USD still holds top share in central banks' coffers.

The select 6 currencies had a share of 43 per cent in India's merchandise export and 37 per cent in merchandise import in 2021-22. The coverage of 6-currency REER and NEER in total trade increased from 33 per cent in 2012-13 to 43 per cent in 2020-

21 before declining to 39 per cent in 2021-22 due to Covid led disruptions. The share of imports from these 6 economies has been increasing which may reflect concentration in merchandise imports due to product quality of intermediate inputs among others (Table 5).

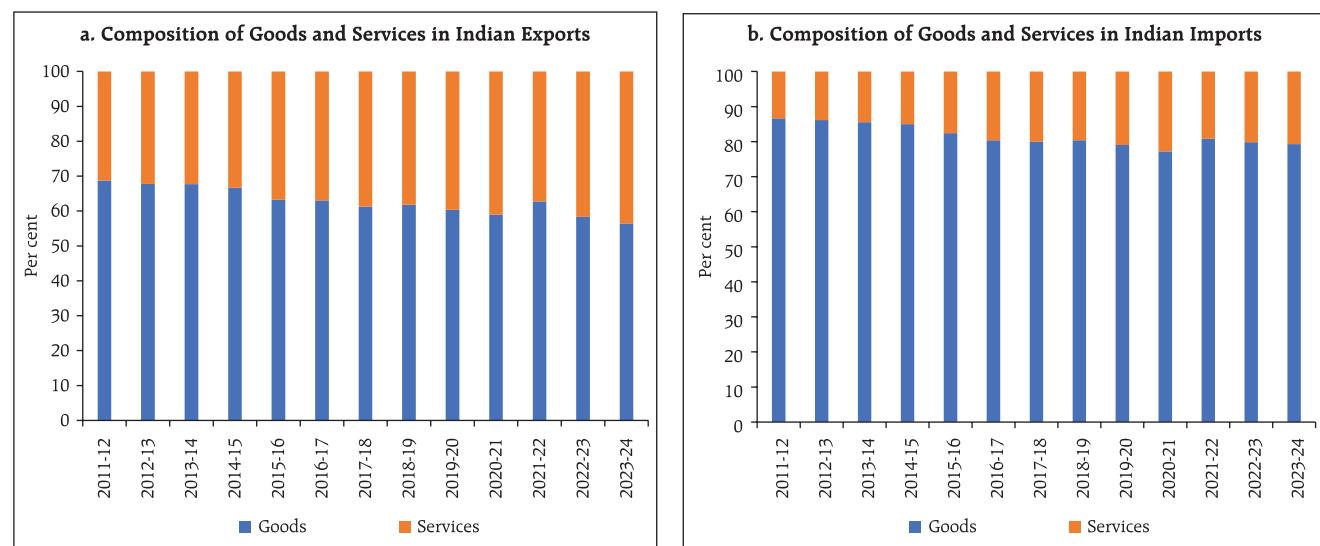
The Covid pandemic and protectionist trends have led to a change in direction as well as share of India's trading partners in the past few years. India's direction of exports has moved toward North America and Africa with the combined share increasing from 17.3 per cent in 2009-10 to 27 per cent in 2021-22 (Annex Chart 1A and 1B). The share of imports from Asia has increased from 28.6 per cent in 2009-10 to 36.6 per cent in 2021-22, mainly driven by China while the share of EU has declined from 13.3 per cent in 2009-10 to 8.4 per cent in 2021-22. Similarly, the composition of India's current account has been changing over time with services exports gaining importance as compared to merchandise exports. The share of services exports in India's total exports of goods and services increased from 31 per cent in 2011-12 to 44 per cent in 2023-24, while share of services in the total imports increased to 21 per cent from 13 per cent during the same period (Chart 3a and 3b). Further, the average services export growth of India at 14 per cent in the past 30 years (1993-2022) when world services export growth was only 4.3 per cent in 2022 indicates higher potential for skilled labour economies like India (Gajbhiye et al., 2024). In services exports, 'telecommunication, computer and information services' and 'other business services' dominate India's exports. In this context, central banks in some economies like Bank of England and Reserve Bank of New Zealand also include trade in services in their REER compilation. However, data availability and quality of bilateral trade in services statistics are the main issues in getting services included in the REER compilation. As such, many institutions such as BIS, OECD and central

Table 5: India's Bilateral Merchandise Trade (Export + Import) Shares

	2017-18	2018-19	2019-20	2020-21	2021-22	5-years average
China	11.66	10.31	10.39	12.59	11.19	11.18
USA	9.69	10.42	11.28	11.73	11.54	10.95
Eurozone	10.17	10.72	10.41	10.66	10.13	10.40
UAE	6.49	7.10	7.50	6.31	7.04	6.92
Saudi Arabia	3.57	4.03	4.20	3.21	4.14	3.87
Hong Kong	3.30	3.67	3.54	3.69	2.91	3.39
Singapore	2.30	3.30	3.00	3.20	2.91	2.94
Iraq	2.48	2.86	3.25	2.30	3.32	2.89
Korea Rp	2.71	2.54	2.60	2.54	2.47	2.57
Indonesia	2.65	2.50	2.44	2.55	2.53	2.53
Switzerland	2.60	2.28	2.30	2.84	2.39	2.46
Japan	2.04	2.09	2.15	2.24	1.99	2.09
Australia	2.34	1.97	1.60	1.79	2.42	2.05
Malaysia	1.91	2.04	2.05	2.10	1.88	1.99
UK	1.89	2.00	1.96	1.91	1.69	1.88

Source: Directorate General of Commercial Intelligence and Statistics (DGCI&S); Authors' calculation.

⁴ As per IMF's currency composition of official foreign exchange reserves (COFER) for Q4:2022, share of USD declined to 58.36 per cent, lowest in 25 years, reflecting weakness of USD on account of Ukraine-Russia conflict and sanctions on Russia by the US (<https://www.imf.org/en/Blogs/Articles/2021/05/05/blog-us-dollar-share-of-global-foreign-exchange-reserves-drops-to-25-year-low>)

Chart 3: Composition of India's Foreign Trade

Source: Database on Indian Economy (DBIE).

banks, do not use services in the REER compilation (Klau and Fung, 2006). However, these limitations notwithstanding, the merchandise trade-based REER serves as a useful indicator of competitiveness.

Dominant Currency Paradigm

The trade-weighted REER and NEER assume that the use of a country's currency in world trade is closely tied to its share in world trade. In other words, depreciation of a country's currency *vis-à-vis* all the trade partners increases the price of imports in domestic currency, making imports costlier and thus reducing demand for foreign goods. At the same time, it also reduces the price of exports in destination country leading to increase in exports. In this context, in the presence of "Dominant Currency Paradigm" - when trade is invoiced in the dominant country's currency (*viz.* USD, Euro) regardless of the origin or destination of trade flows - the traditional expenditure switching effects could be weak (Boz *et al.*, 2020; Gopinath, 2015). With the high share of trade invoiced in US dollar and Euro, the computation of REER based on trade shares may not fully capture the currency competitiveness. Boz *et al.* (*op. cit.*)

find that USD exchange rate passthrough is higher *vis-à-vis* bilateral exchange rates in imports, for a country with higher share of trade invoicing in USD. Further, the paper also finds that depreciation of domestic currency with respect to USD in comparison to bilateral exchange rate leads to a greater decrease in trade volumes.

V. Impact of REER on India's Trade Balance: Empirical Analysis

Literature in case of India reflects similar findings as was observed in the cross country analysis set out above (Ghosh *et al.*, 2023; Raut, 2021). For the empirical analysis in this article, a set of five variables are used with quarterly frequency covering the period from April 2012 to June 2024. The dependent variable trade balance (TB) was in deficit throughout the period. The TB is expressed as the absolute figure of the difference between exports and imports *i.e.*, $| \text{export} - \text{import} |$. The increase (decline) in TB indicates deterioration (improvement) in trade balance. This is also in line with the REER construction, as decline in REER reflects depreciation and improvement in trade balance

(Bhat and Bhat, 2021). India's GDP and OECD-GDP are taken as domestic demand and foreign demand, respectively. Both the 40-currency REER (broad index) and 6-currency REER (narrow index) are used in two separate models to understand the exchange rate dynamics. The geopolitical risk (GPR) index has been included in the models acknowledging adverse impact of geopolitical events on the international trade (Gajbhiye, et al., 2024).

To account for seasonality, all the variables are transformed into seasonally adjusted quarterly series using X-13 ARIMA and then transformed into logarithmic scale. A Vector Error Correction Model (VECM) followed by a non-linear autoregressive distributed lag (NARDL) model has been used for 40-currency and 6-currency REER (base year 2015-16) to compare and examine the asymmetric relationship between trade balance and REER.

Considering the asymmetric impact of REER on trade balance, the estimable function could be expressed in the form as follows:

$$\ln TB_t = \alpha + \beta_1 \ln REER_t [+] + \beta_2 \ln REER_t [-] + \gamma \ln YD_t + \delta \ln YF_t + \theta \ln GPR_t + e_t$$

Here, the trade balance (TB) is determined by REER [+] (appreciation), REER [-] (depreciation), domestic demand (YD) and foreign demand (YF), geopolitical risk (GPR) and other factors (e_t). The ARDL cointegration technique is used to determine long-run relationship between the series with different order of integration (Pesaran and Shin, 1999, and Pesaran et al. 2001). The reparametrized result gives the short-run dynamics and long run relationship of the

select variables. Here, the Johansen test is applied to estimate cointegrating relationship of TB with REER and India's domestic demand and foreign demand. The sources and descriptive statistics of the variables under study have been given in Annex (Table 1A and 2A). In this case, the standard augmented Dickey-Fuller (ADF) unit root test and Phillips-Perron unit root test explain that no series under consideration is integrated of order 2 or higher order (Annex Table 3A) confirming suitability of variables for ARDL model.

Empirical Results:

Cointegration Test

The bounds test results for both the models considering regressors as 40-currency REER/6-currency REER confirm cointegration relationship among the select variables (Table 6).

Symmetry Test

Further, to explore the asymmetric relationship between TB and REER (both 40-currency and 6-currency), NARDL model has been employed. The coefficient symmetry test indicates the existence of long run and short run asymmetrical association between trade balance and REER for both broad and narrow indices (Table 7).

Short run and long run relationship

The short-run impact of variables on the trade balance highlights that except for foreign demand (GDP_OECD), all other coefficients of model M1 (40-currency REER) are statistically significant while

Table 7: Coefficients Symmetry Test

	Long-Run		Short-Run	
	F-statistic	Probability	F-statistic	Probability
M1 (with 40-Currency REER)	11.487***	0.002	4.356**	0.044
M2 (with 6-Currency REER)	12.293***	0.001	7.431***	0.010

Note: I(0) and I(1) are respectively the stationary and non-stationary bounds at 5 per cent significance level.

Source: Authors' estimates.

Note: *** and ** denote significance at 1 per cent and 5 per cent levels.
Source: Authors' estimates.

in M2 (6-currency REER), all indicators are significant except foreign demand and 6-currency REER [+], i.e., the appreciation factor (Table 8). The significant negative coefficients of $\Delta \ln YD$ in both models show that the expansion in India's GDP worsens the trade balance in the short run since a productivity-driven increase in income may lead to a higher demand for imports.

The results indicate that the effect of REER depreciation is significant for both the REER (broad and narrow) and stronger than REER appreciation, although appreciation is statistically insignificant for 6-currency REER. Thus, the relationship between these two variables is asymmetric, i.e., currency depreciation impacts the balance of trade more than an equivalent currency appreciation in the short-run, which is in line with other studies (Bhat and Bhat, 2021; Parray et al., 2022) and contrary to Raut (2021). The Error Correction terms (ECT) are negative with an associated coefficient estimate of -0.545 and -0.483, for 40-currency REER and 6-currency REER, respectively, and are highly significant.

Table 8: NARDL Error Correction Estimation-Short Run Coefficients

Variables	M1: 40-currency REER		M2: 6-currency REER	
	Coefficient	P-value	Coefficient	P-value
ECT	-0.545*** (0.127)	0.000	-0.483*** (0.123)	0.000
$\Delta \ln TB_{t-1}$	0.393*** (0.088)	0.000	0.303*** (0.080)	0.001
$\Delta \ln YD_t$	-4.555*** (1.252)	0.001	-4.262*** (1.209)	0.001
$\Delta \ln YF_t$	-1.881 (2.757)	0.499	-1.557 (2.655)	0.561
$\Delta \ln REER_t [+]$	3.583* (2.425)	0.101	2.442 (1.959)	0.219
$\Delta \ln REER_t [-]$	-5.871*** (2.425)	0.003	-5.460*** (1.534)	0.001
C	30.021*** (6.998)	0.000	25.413*** (6.478)	0.000

Note: ***, ** and * denote significance at 1 per cent, 5 per cent and 10 per cent level. Figures in Parenthesis are standard errors.

Source: Authors' estimates.

In the long-run, the asymmetric effect of REER changes – appreciation (+) and depreciation (–) – is also evident in model M1, although here the impact of currency appreciation is stronger than an equivalent currency depreciation in contrast to the short-run dynamics (Table 9). The rising productivity within the tradable goods sector has played a significant role in the sustained trend of appreciation in REER (Patra, et al., 2024). The foreign demand (YF) is also statistically significant with expected signs indicating that increase in foreign demand leads to increase in India's exports demand and improves trade balance.

Table 9: NARDL - Long Run Asymmetry Test Estimation

Dependent Variable: $\ln TB$
Deterministic: Unrestricted constant and restricted trend

Variables	M1: 40-currency REER		M2: 6-currency REER	
	Coefficient	P-value	Coefficient	P-value
$\ln TB_{t-1}$	-0.545*** (0.150)	0.001	-0.483*** (0.145)	0.002
$\ln YD_t$	0.784 (1.379)	0.574	0.241 (1.394)	0.864
$\ln YF_t$	-7.237* (4.009)	0.079	-5.969* (3.916)	0.076
$\ln REER_t [+]$	5.504** (2.086)	0.012	2.815** (1.214)	0.026
$\ln REER_t [-]$	-2.900** (1.835)	0.022	-2.218 (1.391)	0.120
$\ln GPR_t$	0.060 (0.126)	0.637	0.059 (0.123)	0.542
C	30.021** (14.420)	0.045	25.413* (14.016)	0.078
Trend	-0.047** (0.020)	0.026	-0.021* (0.012)	0.093

Residual Diagnostics		
	M1	M2
Log likelihood	31.22	32.46
Ramsey RESET Test	0.60 (0.55)	0.10 (0.92)
Adjusted R ²	0.76	0.73
Akaike information criterion	-0.744	-0.794
Durbin-Watson stat	2.104	2.055

Note: ***, ** and * denote significance at 1 per cent, 5 per cent and 10 per cent level. Figures in Parenthesis are standard errors.

Source: Authors' estimates.

The coefficients of domestic demand (YD) are not statistically significant in both the models in long-run. Residual diagnostics check reflects stability of the model (Annex, Chart 1C).

VI. Conclusion

Currency movements along with other domestic and global variables impact exports and imports. An appropriate level of currency value is difficult to estimate considering dynamic nature of underlying factors including macroeconomic variables and their projections, along with geopolitical uncertainties. Real effective exchange rate (REER), the inflation-adjusted trade-weighted average value of the domestic currency in terms of its trading partners' currencies, is calculated by various central banks and international institutions as one of the indicators for external competitiveness. Cross-country evidence is, however, not unanimous on the impact of REER on trade balance and on the 'J-curve' phenomenon. Our empirical findings on India suggest an asymmetrical impact of REER movements on India's trade balance, with REER depreciation impact on trade balance being more than an equivalent REER appreciation in the short-run and vice versa in the long-run.

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Annex

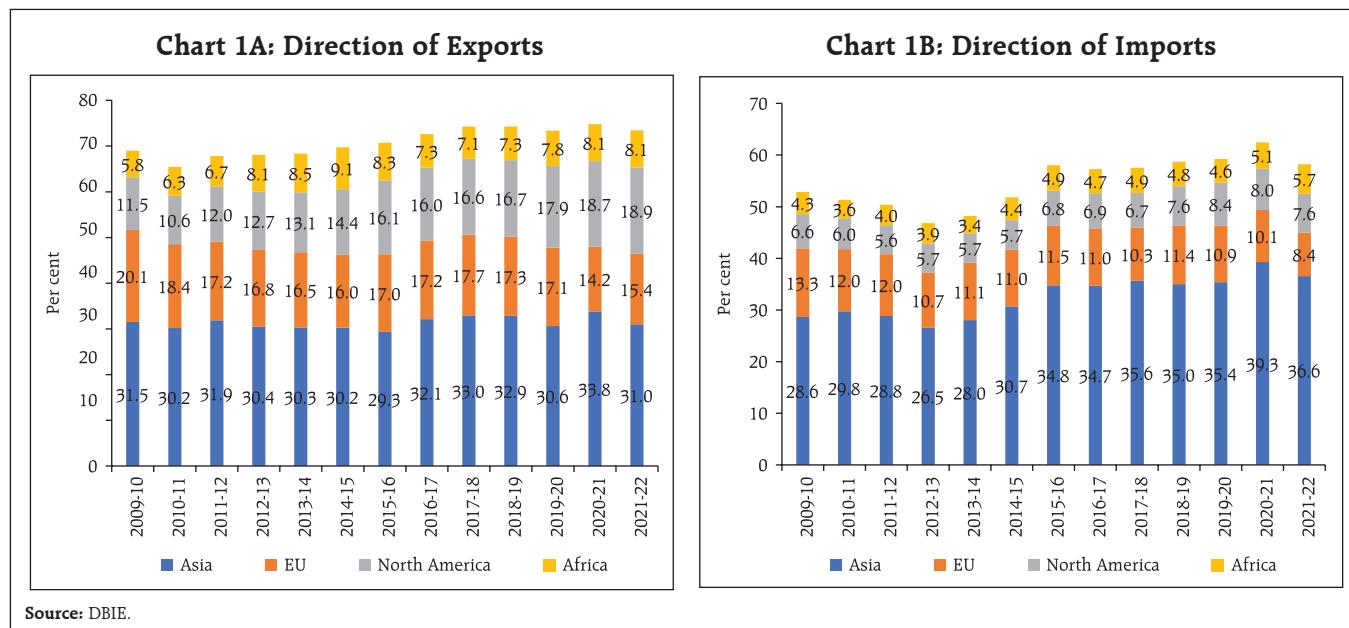


Table 1A: Descriptive Statistics

Variables	Frequency	Source
Trade Balance	Quarterly*	RBI DBIE
GDP_OECD	Quarterly	OECD
GDP_India	Quarterly	MOSPI
40-Currency REER	Quarterly*	RBI DBIE
6-Currency REER	Quarterly*	RBI DBIE
Geopolitical Risk (GPR)	Quarterly*	Economic Policy Uncertainty

Note: * Quarterly series have been computed by averaging the monthly series.

Table 2A: Descriptive Statistics

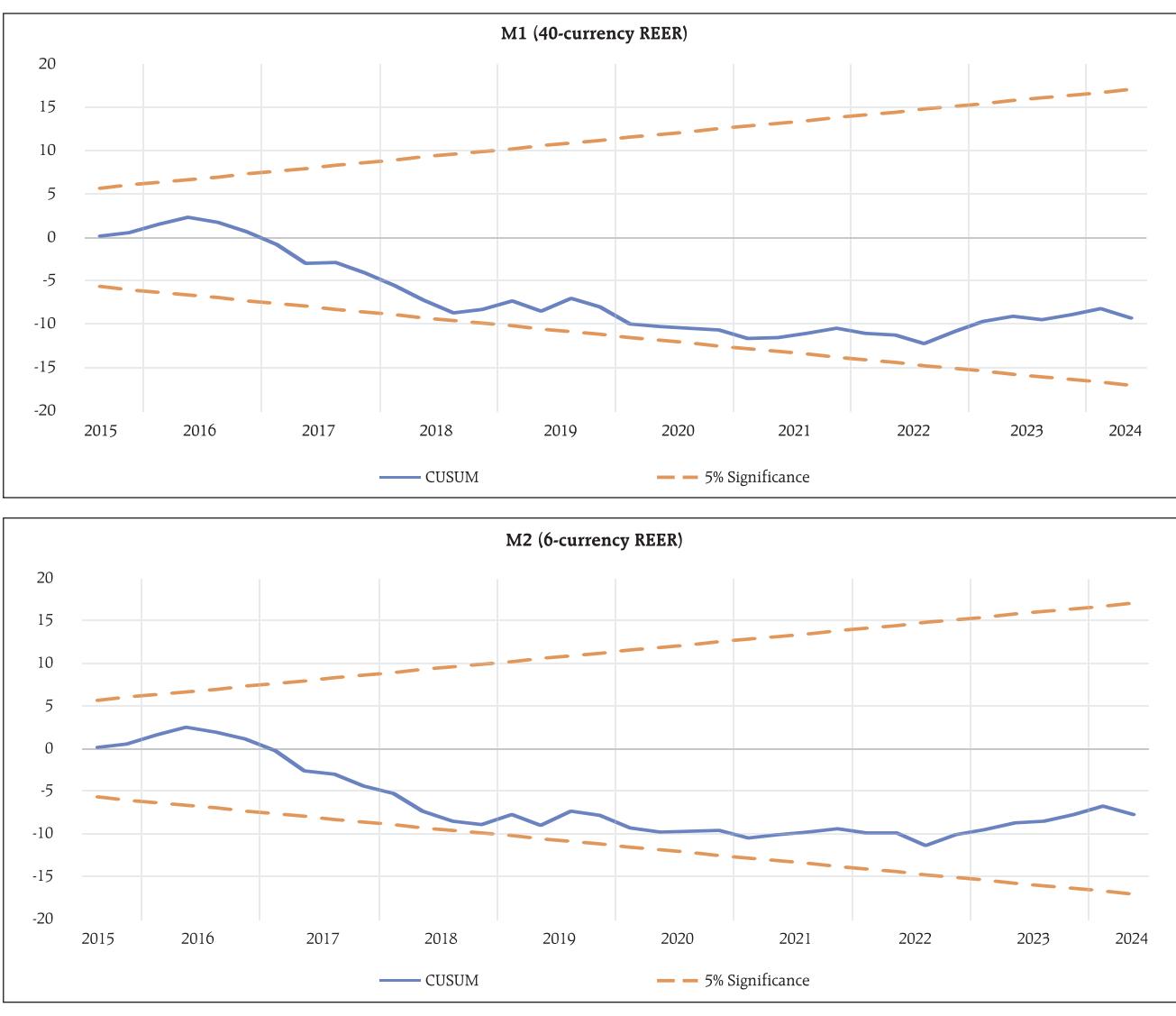
	LNTB	LN40REER	LN6REER	LNGPR	LNYD	LNYF
Mean	2.198	4.612	4.607	4.594	3.469	4.652
Median	2.184	4.624	4.618	4.544	3.508	4.662
Maximum	3.043	4.669	4.677	5.336	3.813	4.761
Minimum	0.972	4.502	4.486	4.220	3.112	4.540
Std. Dev.	0.432	0.044	0.044	0.228	0.203	0.070
Skewness	-0.175	-0.926	-1.068	0.985	-0.197	-0.056
Kurtosis	3.112	2.883	3.807	3.946	1.932	1.798
Jarque-Bera	0.282	7.171	10.867	9.947	2.698	3.038
Probability	0.869	0.028	0.004	0.007	0.260	0.219

Source: Authors' calculations.

Table 3A: Result of ADF test and Phillips-Perron test (at first difference)

Series	Probability	
	ADF Test	Phillips-Perron Test
D(lnTB)	0.0000	0.0001
D(lnREER_40C)	0.0000	0.0000
D(lnREER_6C)	0.0000	0.0000
D(lnYD)	0.0001	0.0001
D(lnYF)	0.0001	0.0001
D(lnGPR)	0.0001	0.0001

Source: Authors' estimates.

Chart 1C: Stability Test (CUSUM Test)

Source: Authors' calculations.

CURRENT STATISTICS

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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

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50 (a)	Flow of Financial Assets and Liabilities of Households - Instrument-wise	201
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Notes: .. = Not available.

– = Nil/Negligible.

P = Preliminary/Provisional. PR = Partially Revised.

No. 1: Select Economic Indicators

Item	2023-24	2023-24		2024-25	
		Q1	Q2	Q1	Q2
		1	2	3	4
1 Real Sector (% Change)					
1.1 GVA at Basic Prices	7.2	8.3	7.7	6.8	5.6
1.1.1 Agriculture	1.4	3.7	1.7	2.0	3.5
1.1.2 Industry	9.3	5.0	13.6	7.4	2.1
1.1.3 Services	7.9	10.4	6.9	7.7	7.1
1.1a Final Consumption Expenditure	3.8	4.6	4.1	6.3	5.7
1.1b Gross Fixed Capital Formation	9.0	8.5	11.6	7.5	5.4
	2023-24		2023		2024
			Sep.	Oct.	Sep.
			1	2	3
1.2 Index of Industrial Production	5.9	6.4	11.9	3.1	3.5
2 Money and Banking (% Change)					
2.1 Scheduled Commercial Banks					
2.1.1 Deposits	12.9	11.5	12.5	10.8	11.9
	(13.5)	(12.3)	(13.2)	(10.4)	(11.5)
2.1.2 Credit #	16.3	13.0	15.8	13.7	13.1
	(20.2)	(17.6)	(20.4)	(12.3)	(11.8)
2.1.2.1 Non-food Credit #	16.3	13.1	16.0	13.7	13.1
	(20.2)	(17.6)	(20.5)	(12.4)	(11.8)
2.1.3 Investment in Govt. Securities	11.1	16.7	16.8	7.7	9.2
	(12.8)	(18.9)	(18.9)	(6.8)	(8.1)
2.2 Money Stock Measures					
2.2.1 Reserve Money (M0)	5.6	6.4	5.5	6.0	9.0
2.2.2 Broad Money (M3)	11.1	10.9	10.8	10.8	11.1
	(11.6)	(11.5)	(11.4)	(10.4)	(10.7)
3 Ratios (%)					
3.1 Cash Reserve Ratio	4.50	4.50	4.50	4.50	4.50
3.2 Statutory Liquidity Ratio	18.00	18.00	18.00	18.00	18.00
3.3 Cash-Deposit Ratio	5.0	5.4	5.2	5.1	5.2
	(5.0)	(5.4)	(5.1)	(5.1)	(5.2)
3.4 Credit-Deposit Ratio	78.1	75.3	76.7	77.3	77.5
	(80.3)	(77.8)	(79.2)	(79.2)	(79.4)
3.5 Incremental Credit-Deposit Ratio #	95.8	69.7	88.7	64.6	69.2
	(113.4)	(99.5)	(119.5)	(61.6)	(66.2)
3.6 Investment-Deposit Ratio	29.5	30.3	30.4	29.4	29.7
	(29.8)	(30.6)	(30.8)	(29.6)	(29.9)
3.7 Incremental Investment-Deposit Ratio	25.8	33.2	36.1	27.6	32.5
	(28.4)	(37.0)	(40.2)	(26.2)	(30.6)
4 Interest Rates (%)					
4.1 Policy Repo Rate	6.50	6.50	6.50	6.50	6.50
4.2 Fixed Reverse Repo Rate	3.35	3.35	3.35	3.35	3.35
4.3 Standing Deposit Facility (SDF) Rate *	6.25	6.25	6.25	6.25	6.25
4.4 Marginal Standing Facility (MSF) Rate	6.75	6.75	6.75	6.75	6.75
4.5 Bank Rate	6.75	6.75	6.75	6.75	6.75
4.6 Base Rate	9.10/10.25	8.85/10.10	8.95/10.10	9.10/10.40	9.10/10.40
4.7 MCLR (Overnight)	8.00/8.60	7.95/8.45	7.95/8.45	8.15/8.45	8.15/8.45
4.8 Term Deposit Rate >1 Year	6.50/7.25	6.00/7.25	6.00/7.75	6.00/7.25	6.00/7.25
4.9 Savings Deposit Rate	2.70/3.00	2.70/3.00	2.70/3.00	2.70/3.00	2.70/3.00
4.10 Call Money Rate (Weighted Average)	6.85	6.75	6.74	6.61	6.63
4.11 91-Day Treasury Bill (Primary) Yield	-	6.86	6.93	6.65	6.51
4.12 182-Day Treasury Bill (Primary) Yield	7.28	7.08	7.14	6.72	6.64
4.13 364-Day Treasury Bill (Primary) Yield	7.31	7.08	7.16	6.70	6.60
4.14 10-Year G-Sec Par Yield (FBIL)	7.31	7.22	7.35	6.78	6.81
5 Reference Rate and Forward Premium					
5.1 INR-US\$ Spot Rate (Rs. Per Foreign Currency)	83.37	83.06	83.25	83.67	84.08
5.2 INR-Euro Spot Rate (Rs. Per Foreign Currency)	90.22	87.94	87.90	93.46	90.96
5.3 Forward Premium of US\$ 1-month (%)	1.00	1.88	1.02	1.65	1.49
3-month (%)	1.11	1.69	1.33	1.74	1.69
6-month (%)	1.31	1.75	1.71	2.11	2.01
6 Inflation (%)					
6.1 All India Consumer Price Index	5.4	5.0	4.9	5.5	6.2
6.2 Consumer Price Index for Industrial Workers	5.19	4.7	4.5	4.2	4.4
6.3 Wholesale Price Index	-0.7	-0.1	-0.3	1.9	2.4
6.3.1 Primary Articles	3.5	4.4	2.3	6.5	8.1
6.3.2 Fuel and Power	-4.7	-3.3	-1.6	-3.9	-5.8
6.3.3 Manufactured Products	-1.7	-1.3	-1.1	1.1	1.5
7 Foreign Trade (% Change)					
7.1 Imports	-5.3	-14.0	10.3	1.5	3.6
7.2 Exports	-3.1	-2.8	5.8	0.4	17.2

Note : Financial Benchmark India Pvt. Ltd. (FBIL) has commenced publication of the G-Sec benchmarks with effect from March 31, 2018 as per RBI circular FMRD.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						
	2023-24	2023	2024				
			Nov.	Nov. 01	Nov. 08	Nov. 15	Nov. 22
	1	2	3	4	5	6	7
1 Issue Department							
1.1 Liabilities							
1.1.1 Notes in Circulation	3482333	3323212	3527267	3531647	3526683	3522024	3511550
1.1.2 Notes held in Banking Department	11	14	15	16	15	14	14
1.1/1.2 Total Liabilities (Total Notes Issued) or Assets	3482344	3323226	3527282	3531663	3526698	3522038	3511564
1.2 Assets							
1.2.1 Gold	162996	145478	209424	203652	196661	201838	200142
1.2.2 Foreign Securities	3318885	3177439	3317503	3327709	3329781	3320008	3311092
1.2.3 Rupee Coin	463	309	355	302	256	193	330
1.2.4 Government of India Rupee Securities	-	-	-	-	-	-	-
2 Banking Department							
2.1 Liabilities							
2.1.1 Deposits	1782333	1623298	1657709	1631529	1538908	1504093	1441830
2.1.1.1 Central Government	101	100	101	100	101	100	101
2.1.1.2 Market Stabilisation Scheme	-	-	-	-	-	-	-
2.1.1.3 State Governments	42	42	42	42	43	42	42
2.1.1.4 Scheduled Commercial Banks	1008618	931741	991970	985702	1008450	1004627	1023815
2.1.1.5 Scheduled State Co-operative Banks	10092	8115	8314	8076	8248	8232	8311
2.1.1.6 Non-Scheduled State Co-operative Banks	6412	4644	5501	5261	5274	5214	5297
2.1.1.7 Other Banks	48725	49647	50483	50437	50489	50482	50545
2.1.1.8 Others	545400	506029	460768	439066	313086	294163	232464
2.1.1.9 Financial Institution Outside India	162944	122979	140531	142843	153217	141233	121255
2.1.2 Other Liabilities	1804747	1628598	1915994	1916373	1829501	1859836	1914051
2.1/2.2 Total Liabilities or Assets	3587080	3251896	3573704	3547901	3368409	3363929	3355881
2.2 Assets							
2.2.1 Notes and Coins	11	14	15	17	15	14	14
2.2.2 Balances Held Abroad	1480408	1274744	1680295	1648867	1517215	1504608	1532888
2.2.3 Loans and Advances							
2.2.3.1 Central Government	-	-	-	-	11817	-	-
2.2.3.2 State Governments	2300	16275	31294	37124	28634	22714	16465
2.2.3.3 Scheduled Commercial Banks	266021	207355	9032	15981	6623	32892	21293
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	12398	3169	7470	7202	7202	8428	8428
2.2.3.9 Financial Institution Outside India	162650	124108	139077	140946	151391	139508	120491
2.2.4 Bills Purchased and Discounted							
2.2.4.1 Internal	-	-	-	-	-	-	-
2.2.4.2 Government Treasury Bills	-	-	-	-	-	-	-
2.2.5 Investments	1365425	1373135	1312814	1312676	1270354	1269831	1272720
2.2.6 Other Assets	297868	253095	393708	385089	375157	385934	383580
2.2.6.1 Gold	272028	240882	377097	368543	358260	368906	365807

* 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	
Oct. 1, 2024	-	-	-	-	93815	2209	151065	-484	20	-	-	-	-	-	-	-	-	-243175
Oct. 2, 2024	-	-	-	-	-	691	114749	-	-	-	-	-	-	-	-	-	-	-114058
Oct. 3, 2024	-	-	-	-	48120	636	181857	-762	-	-	-	-	-	-	-	-	-	-230103
Oct. 4, 2024	-	-	-	-	44275	3536	250753	-399	-	-	-	-	-	-	-	-	-	-291891
Oct. 5, 2024	-	-	-	-	-	2912	140551	-	-	-	-	-	-	-	-	-	-	-137639
Oct. 6, 2024	-	-	-	-	-	758	131358	-	-	-	-	-	-	-	-	-	-	-130600
Oct. 7, 2024	-	-	-	-	36825	2730	89452	-	-	-	-	-	-	-	-	-	-	-123547
Oct. 8, 2024	-	-	-	-	9398	5308	88739	-550	-	-	-	-	-	-	-	-	-	-93379
Oct. 9, 2024	-	-	-	-	-	4085	53102	642	-	-	-	-	-	-	-	-	-	-48375
Oct. 10, 2024	-	-	-	-	-	2180	56656	-	-	-	-	-	-	-	-	-	-	-54476
Oct. 11, 2024	-	-	-	-	45260	1303	102686	275	-	-	-	-	-	-	-	-	-	-146368
Oct. 12, 2024	-	-	-	-	-	435	81735	-	-	-	-	-	-	-	-	-	-	-81300
Oct. 13, 2024	-	-	-	-	-	360	83165	-	-	-	-	-	-	-	-	-	-	-82805
Oct. 14, 2024	-	-	-	-	24070	1982	94487	-	-	-	-	-	-	-	-	-	-	-116575
Oct. 15, 2024	-	-	-	-	26060	1528	76656	-975	-	-	-	-	-	-	-	-	-	-102163
Oct. 16, 2024	-	-	-	-	38133	5872	73858	980	-	-	-	-	-	-	-	-	-	-105139
Oct. 17, 2024	-	-	-	-	40385	5717	82925	-	-	-	-	-	-	-	-	-	-	-117593
Oct. 18, 2024	-	-	-	-	74828	4216	148845	-	-	-	-	-	-	-	-	-	-	-219457
Oct. 19, 2024	-	-	-	-	-	6591	88873	-	-	-	-	-	-	-	-	-	-	-82282
Oct. 20, 2024	-	-	-	-	-	2464	57488	-	-	-	-	-	-	-	-	-	-	-55024
Oct. 21, 2024	-	-	-	-	-	18597	88775	-	-	-	-	-	-	-	-	-	-	-70178
Oct. 22, 2024	-	-	-	-	-	2603	67234	166	-	-	-	-	-	-	-	-	-	-64465
Oct. 23, 2024	-	-	-	-	-	4620	54112	1208	-	-	-	-	-	-	-	-	-	-48284
Oct. 24, 2024	-	-	-	-	-	6800	66081	-	-	-	-	-	-	-	-	-	-	-59281
Oct. 25, 2024	-	-	25005	-	-	2403	68481	102	-	-	-	-	-	-	-	-	-	-40971
Oct. 26, 2024	-	-	-	-	-	521	71862	-	-	-	-	-	-	-	-	-	-	-71341
Oct. 27, 2024	-	-	-	-	-	534	75425	-	-	-	-	-	-	-	-	-	-	-74891
Oct. 28, 2024	-	-	-	-	-	1648	103800	-2	-	-	-	-	-	-	-	-	-	-102154
Oct. 29, 2024	-	-	-	-	-	4514	121659	-1227	-	-	-	-	-	-	-	-	-	-118372
Oct. 30, 2024	-	-	-	-	35525	2005	138324	-	-	-	-	-	-	-	-	-	-	-171844
Oct. 31, 2024	-	-	-	-	24697	2350	142255	-	-	-	-	-	-	-	-	-	-	-164602

No. 4: Sale/ Purchase of U.S. Dollar by the RBI**i) Operations in onshore / offshore OTC segment**

Item	2023-24	2023		2024	
		Oct.	Sep.	Oct.	
		1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US \$ Million) (1.1-1.2)	41271	-310	9639	-9275	
1.1 Purchase (+)	194296	36650	28930	27503	
1.2 Sale (-)	153025	36960	19291	36778	
2 ₹ equivalent at contract rate (₹ Crores)	339528	-3604	80549	-77969	
3 Cumulative (over end-March) (US \$ Million)	41271	17377	8547	-728	
(₹ Crore)	339528	141063	70945	-7023	
4 Outstanding Net Forward Sales (-)/ Purchase (+) at the end of month (US \$ Million)	-541	-14608	-14580	-49180	

ii) Operations in currency futures segment

Item	2023-24	2023		2024	
		Oct.	Sep.	Oct.	
		1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US \$ Million) (1.1-1.2)	0	0	0	0	0
1.1 Purchase (+)	7930	1948	2149	2531	
1.2 Sale (-)	7930	1948	2149	2531	
2 Outstanding Net Currency Futures Sales (-)/ Purchase (+) at the end of month (US \$ Million)	-1080	-4187	-200	-3229	

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

Item	As on October 31 , 2024		
	Long (+)	Short (-)	Net (1-2)
	1	2	3
1. Upto 1 month	0	28180	-28180
2. More than 1 month and upto 3 months	0	21000	-21000
3. More than 3 months and upto 1 year	0	0	0
4. More than 1 year	0	0	0
Total (1+2+3+4)	0	49180	-49180

No. 5: RBI's Standing Facilities

(₹ Crore)

Item	As on the Last Reporting Friday							
	2023-24	2023	2024					
			Nov. 17	Jun. 28	Jul. 26	Aug. 23	Sep. 20	Oct. 18
	1	2	3	4	5	6	7	8
1 MSF	49906	111386	46848	2021	1818	21731	4216	18513
2 Export Credit Refinance for Scheduled Banks								
2.1 Limit	-	-	-	-	-	-	-	-
2.2 Outstanding	-	-	-	-	-	-	-	-
3 Liquidity Facility for PDs								
3.1 Limit	9900	4900	9900	9900	9900	9900	9900	9900
3.2 Outstanding	9810	3181	9061	9062	8541	8547	7223	8428
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)	59716	114567	55909	11083	10359	30278	11439	26941

Money and Banking

No. 6: Money Stock Measures

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/ reporting Fridays				
	2023-24	2023	2024		
		Oct. 20	Sep. 20	Oct. 04	Oct. 18
	1	2	3	4	5
1 Currency with the Public (1.1 + 1.2 + 1.3 – 1.4)	3410276	3201682	3392284	3385407	3415233
1.1 Notes in Circulation	3477795	3272342	3455216	3457952	3482799
1.2 Circulation of Rupee Coin	32689	30906	33851	34090	34090
1.3 Circulation of Small Coins	743	743	743	743	743
1.4 Cash on Hand with Banks	101185	102379	98253	108126	103162
2 Deposit Money of the Public	2681424	2463354	2735069	2831531	2786278
2.1 Demand Deposits with Banks	2586888	2390414	2640984	2735673	2687986
2.2 'Other' Deposits with Reserve Bank	94536	72940	94085	95858	98292
3 M1 (1 + 2)	6091700	5665036	6127353	6216938	6201510
4 Post Office Saving Bank Deposits	195777	211685	199017	199017	199017
5 M2 (3 + 4)	6287477	5876721	6326370	6415955	6400527
6 Time Deposits with Banks	18739918	17940702	19751495	20077665	20015200
	(18848160)	(18074897)	(19826970)	(20151734)	(20087772)
7 M3 (3 + 6)	24831618	23605738	25878848	26294604	26216711
	(24939860)	(23739933)	(25954324)	(26368673)	(26289282)
8 Total Post Office Deposits	1313366	1235171	1361211	1361211	1361211
9 M4 (7 + 8)	26144984	24840909	27240059	27655815	27577922
	(26253226)	(24975104)	(27315535)	(27729884)	(27650493)

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

No. 7 : Sources of Money Stock (M₃)

(₹ Crore)

Sources	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2023-24	2023	2024		
		Oct. 20	Sep. 20	Oct. 04	Oct. 18
	1	2	3	4	5
1 Net Bank Credit to Government	7512016	7264124	7562614	7825013	7862266
1 Net Bank Credit to Government (Including Merger)	(7603571)	(7375380)	(7626155)	(7888568)	(7923856)
1.1 RBI's net credit to Government (1.1.1–1.1.2)	1193213	1018574	921112	1127976	1132433
1.1.1 Claims on Government	1370428	1392816	1340430	1348304	1336185
1.1.1.1 Central Government	1363828	1372589	1313984	1312495	1312788
1.1.1.2 State Governments	6600	20227	26447	35809	23398
1.1.2 Government deposits with RBI	177215	374243	419318	220328	203752
1.1.2.1 Central Government	177172	374200	419275	220286	203710
1.1.2.2 State Governments	42	42	42	42	42
1.2 Other Banks' Credit to Government	6318803	6245550	6641501	6697038	6729833
1.2 Other Banks Credit to Government (Including Merger)	(6410358)	(6356807)	(6705043)	(6760593)	(6791423)
2 Bank Credit to Commercial Sector	16672145	15606774	17412955	17596094	17539625
2 Bank Credit to Commercial Sector (Including Merger)	(17202832)	(16193204)	(17889364)	(18063790)	(18005269)
2.1 RBI's credit to commercial sector	14406	5245	10589	8715	9175
2.2 Other banks' credit to commercial sector	16657739	15601529	17402366	17587379	17530449
2.2 Other banks credit to commercial sector (Including Merger)	(17188426)	(16187959)	(17878775)	(18055074)	(17996094)
2.2.1 Bank credit by commercial banks	15901477	14871457	16648643	16830083	16772030
2.2.1 Bank credit by commercial banks (Including Merger)	(16432164)	(15457887)	(17125052)	(17297778)	(17237674)
2.2.2 Bank credit by co-operative banks	738194	712806	734471	737766	737425
2.2.3 Investments by commercial and co-operative banks in other securities	18068	17266	19252	19530	20994
2.2.3 Investments by commercial and co-operative banks in other securities (Including Merger)	(18068)	(17266)	(19252)	(19530)	(20994)
3 Net Foreign Exchange Assets of Banking Sector (3.1 + 3.2)	5567245	5046813	5995690	6097395	5996912
3.1 RBIs net foreign exchange assets (3.1.1 - 3.1.2)	5240824	4686133	5628983	5730688	5630205
3.1.1 Gross foreign assets	5241083	4686386	5629252	5730956	5630473
3.1.2 Foreign liabilities	259	254	269	268	268
3.2 Other banks' net foreign exchange assets	326421	360680	366707	366707	366707
4 Government's Currency Liabilities to the Public	33432	31649	34594	34833	34833
5 Banking Sector's Net Non-monetary Liabilities	4953219	4343621	5127005	5258732	5216925
5 Banking Sectors Net Non-monetary Liabilities (Including Merger)	(5467219)	(4907113)	(5591480)	(5715913)	(5671588)
5.1 Net non-monetary liabilities of RBI	1789875	1472881	1957063	1975781	1926354
5.2 Net non-monetary liabilities of other banks (residual)	3163344	2870740	3169942	3282950	3290572
5.2 Net non-monetary liabilities of other banks (residual) (Including Merger)	(3677343)	(3434232)	(3634417)	(3740132)	(3745234)
M₃(1+2+3+4–5)	24831618	23605738	25878848	26294604	26216711
M ₃ (1+2+3+4–5) (Including Merger)	(24939860)	(23739933)	(25954324)	(26368673)	(26289282)

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				
	2023-24	2023	2024		
		Oct. 20	Sep. 20	Oct. 04	Oct. 18
		1	2	3	4
Monetary Aggregates					
NM ₁ (1.1+1.2.1+1.3)	6091700	5665036	6127353	6205106	6174216
NM ₂ (NM ₁ + 1.2.2.1)	14424855	13655165	14895519	15116396	15057715
NM ₂ (NM ₁ + 1.2.2.1) (Including Merger)	(14473564)	(13715553)	(14929483)	(15149727)	(15090372)
NM ₃ (NM ₂ +1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 - 2.4 - 2.5)	25387764	24244761	26491792	26863711	26780721
NM ₃ (NM ₂ + 1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 - 2.4 - 2.5) (Including Merger)	(25496006)	(24378956)	(26567267)	(26937780)	(26853293)
1 Components					
1.1 Currency with the Public	3410276	3201682	3392284	3374087	3390372
1.2 Aggregate Deposits of Residents	21105009	20146256	22125797	22538540	22429094
1.2 Aggregate Deposits of Residents (Including Merger)	(21213252)	(20280451)	(22201272)	(22612609)	(22501665)
1.2.1 Demand Deposits	2586888	2390414	2640984	2735673	2687986
1.2.2 Time Deposits of Residents	18518121	17755843	19484812	19802867	19741107
1.2.2.1 Time Deposits of Residents (Including Merger)	(18626364)	(17890038)	(19560288)	(19876936)	(19813679)
1.2.2.1.1 Short-term Time Deposits	8333155	7990129	8768166	8911290	8883498
1.2.2.1.2 Short-term Time Deposits (Including Merger)	(8381864)	(8050517)	(8802130)	(8944621)	(8916155)
1.2.2.1.2.1 Certificates of Deposits (CDs)	369399	306354	467853	593488	1138455
1.2.2.1.2.2 Long-term Time Deposits	10184967	9765713	10716647	10891577	10857609
1.2.2.2 Long-term Time Deposits (Including Merger)	(10244500)	(9839521)	(10758158)	(10932315)	(10897523)
1.3 'Other' Deposits with RBI	94536	72940	94085	95346	95858
1.4 Call/Term Funding from Financial Institutions	777942	823882	879626	855738	865397
2 Sources					
2.1 Domestic Credit	25295986	23974822	26153058	26417079	26580505
2.1 Domestic Credit (Including Merger)	(25918227)	(24672509)	(26693009)	(26948329)	(27107740)
2.1.1 Net Bank Credit to the Government	7512016	7264124	7562614	7654383	7857809
2.1.1.1 Net Bank Credit to the Government (Including Merger)	(7603571)	(7375380)	(7626155)	(7717938)	(7919399)
2.1.1.1.1 Net RBI credit to the Government	1193213	1018574	921112	957345	1127976
2.1.1.1.2 Credit to the Government by the Banking System	6318803	6245550	6641501	6697038	6729833
2.1.1.2 Credit to the Government by the Banking System (Including Merger)	(6410358)	(6356807)	(6705043)	(6760593)	(6791423)
2.1.2 Bank Credit to the Commercial Sector	17783970	16710698	18590445	18762696	18722697
2.1.2.1 Bank Credit to the Commercial Sector (Including Merger)	(18314656)	(17297128)	(19066853)	(19230391)	(19188341)
2.1.2.1.1 Bank Credit to the Commercial Sector	14406	5245	10589	10556	8715
2.1.2.1.2 Credit to the Commercial Sector by the Banking System	17769564	16705453	18579856	18752140	18713981
2.1.2.2 Credit to the Commercial Sector by the Banking System (Including Merger)	(18300250)	(17291883)	(19056265)	(19219835)	(19179626)
2.1.2.2.1 Other Investments (Non-SLR Securities)	1089184	1089235	1162164	1152524	1171485
2.2 Government's Currency Liabilities to the Public	33432	31649	34594	34833	34833
2.3 Net Foreign Exchange Assets of the Banking Sector	5110820	4695347	5546300	5581039	5595422
2.3.1 Net Foreign Exchange Assets of the RBI	5240824	4686133	5628983	5742984	5730688
2.3.2 Net Foreign Currency Assets of the Banking System	-130004	9214	-82683	-161946	-135266
2.4 Capital Account	3912897	3873660	4437226	4468336	4450085
2.5 Other items (net)	1653576	1146888	1269410	1158085	1434618

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

No. 9: Liquidity Aggregates

(₹ Crore)

Aggregates	2023-24	2023	2024		
		Oct.	Aug.	Sep.	Oct.
		1	2	3	4
1 NM₃	25387764	24244761	26360365	26491792	26780721
	(25496006)	(24378956)	(26439312)	(26567267)	(26853293)
2 Postal Deposits	729246	697675	724264	724264	724264
3 L₁ (1 + 2)	26117010	24942436	27084629	27216056	27504985
	(26225252)	(25076631)	(27163576)	(27291531)	(27577557)
4 Liabilities of Financial Institutions	85150	12676	68118	68824	68842
4.1 Term Money Borrowings	2375	67084	395	94	31
4.2 Certificates of Deposit	70245	1148	54670	55520	55520
4.3 Term Deposits	12531	53260	13054	13210	13291
5 L₂ (3 + 4)	26202160	25009520	27152748	27284880	27573827
	(26310403)	(25143715)	(27231695)	(27360355)	(27646398)
6 Public Deposits with Non-Banking Financial Companies	102994	102994	..
7 L₃ (5 + 6)	26305155	27387874	..

Note : 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					
	2023-24	2023	2024			
		Oct. 20	Sep. 20	Oct. 4	Oct. 18	
		1	2	3	4	5
1 Components						
1.1 Currency in Circulation	3511461	3304061	3490538	3493534	3518394	
1.2 Bankers' Deposits with the RBI	1025449	978509	1018975	1049286	1047801	
1.2.1 Scheduled Commercial Banks	956011	917856	956255	985504	984541	
1.3 'Other' Deposits with the RBI	94536	72940	94085	95858	98292	
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 - 2.4 - 2.5)	4631446	4355510	4603598	4638678	4664487	
2 Sources						
2.1 RBI's Domestic Credit	1147066	1110609	897083	848938	925802	
2.1.1 Net RBI credit to the Government	1193213	1018574	921112	1127976	1132433	
2.1.1.1 Net RBI credit to the Central Government (2.1.1.1 + 2.1.1.2 + 2.1.1.3 + 2.1.1.4 - 2.1.1.5)	1186655	998389	894708	1092209	1109078	
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	1363369	1372232	1313609	1312034	1312480	
2.1.1.1.3.1 Central Government Securities	1363369	1372232	1313609	1312034	1312480	
2.1.1.1.4 Rupee Coins	459	357	375	460	308	
2.1.1.1.5 Deposits of the Central Government	177172	374200	419275	220286	203710	
2.1.1.2 Net RBI credit to State Governments	6557	20185	26404	35767	23355	
2.1.2 RBI's Claims on Banks	-60553	86791	-34618	-287753	-215806	
2.1.2.1 Loans and Advances to Scheduled Commercial Banks	-60553	86791	-34618	-287753	-215806	
2.1.3 RBI's Credit to Commercial Sector	14406	5245	10589	8715	9175	
2.1.3.1 Loans and Advances to Primary Dealers	9358	3181	8547	6851	7223	
2.1.3.2 Loans and Advances to NABARD	-	-	-	-	-	
2.2 Government's Currency Liabilities to the Public	33432	31649	34594	34833	34833	
2.3 Net Foreign Exchange Assets of the RBI	5240824	4686133	5628983	5730688	5630205	
2.3.1 Gold	439319	377545	531633	552160	567032	
2.3.2 Foreign Currency Assets	4801522	4308605	5097367	5178546	5063191	
2.4 Capital Account	1589134	1599957	1874081	1899968	1868537	
2.5 Other Items (net)	200741	-127076	82982	75814	57816	

No. 11: Reserve Money - Components and Sources

(₹ Crore)

Item	2023-24	Outstanding as on March 31/last Fridays of the month/Fridays						
		2023	2024					
			Oct. 27	Sep. 27	Oct. 4	Oct. 11	Oct. 18	
		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)	4631446	4345605	4660892	4638678	4666693	4664487	4738791	
1 Components								
1.1 Currency in Circulation	3511461	3303821	3482214	3493534	3523196	3518394	3534780	
1.2 Bankers' Deposits with RBI	1025449	967229	1083333	1049286	1046572	1047801	1107212	
1.3 'Other' Deposits with RBI	94536	74556	95346	95858	96925	98292	96799	
2 Sources								
2.1 Net Reserve Bank Credit to Government	1193213	966714	957345	1127976	1084120	1132433	1060149	
2.2 Reserve Bank Credit to Banks	-60553	98814	-84648	-287753	-187351	-215806	-57604	
2.3 Reserve Bank Credit to Commercial Sector	14406	5244	10556	8715	9254	9175	10761	
2.4 Net Foreign Exchange Assets of RBI	5240824	4734666	5742984	5730688	5646393	5630205	5605044	
2.5 Government's Currency Liabilities to the Public	33432	31939	34833	34833	34833	34833	35180	
2.6 Net Non-Monetary Liabilities of RBI	1789875	1491772	2000178	1975781	1920556	1926354	1914738	

No. 12: Commercial Bank Survey

(₹ Crore)

Item	Outstanding as on last reporting Fridays of the month/ reporting Fridays of the month				
	2023-24	2023	2024		
		Oct. 20	Sep. 20	Oct. 4	Oct. 18
	1	2	3	4	5
1 Components					
1.1 Aggregate Deposits of Residents	20145188 (20253430)	19196756 (19330951)	21163509 (21238985)	21571259 (21645328)	21461667 (21534239)
1.1.1 Demand Deposits	2443853	2248738	2498373	2591898	2544608
1.1.2 Time Deposits of Residents	17701334 (17809577)	16948018 (17082213)	18665136 (18740611)	18979362 (19053430)	18917060 (18989631)
1.1.2.1 Short-term Time Deposits	7965600	7626608	8399311	8540713	8512677
1.1.2.1.1 Certificates of Deposits (CDs)	369399	306354	467853	593488	1138455
1.1.2.2 Long-term Time Deposits	9735734	9321410	10265825	10438649	10404383
1.2 Call/Term Funding from Financial Institutions	777942	823882	879626	855738	865397
2 Sources					
2.1 Domestic Credit	23019606 (23641847)	21908853 (22606540)	24156294 (24696244)	24378899 (24910150)	24374654 (24901888)
2.1.1 Credit to the Government	6014054 (6105610)	5941476 (6052733)	6338211 (6401753)	6392075 (6455630)	6427051 (6488641)
2.1.2 Credit to the Commercial Sector	17005551 (17536238)	15967377 (16553808)	17818082 (18294491)	17986824 (18454519)	17947603 (18413248)
2.1.2.1 Bank Credit	15901477 (16432164)	14871457 (15457887)	16648643 (17125052)	16830083 (17297778)	16772030 (17237674)
2.1.2.1.1 Non-food Credit	15878397 (16409083)	14851616 (15438046)	16628718 (17105126)	16812281 (17279977)	16753376 (17219020)
2.1.2.2 Net Credit to Primary Dealers	22904	14953	15588	12500	12311
2.1.2.3 Investments in Other Approved Securities	949	696	649	680	741
2.1.2.4 Other Investments (in non-SLR Securities)	1080222	1080272	1153202	1143561	1162522
2.2 Net Foreign Currency Assets of Commercial Banks (2.2.1-2.2.2-2.2.3)	-130004	9214	-82683	-161946	-135266
2.2.1 Foreign Currency Assets	241661	307346	358411	296215	312870
2.2.2 Non-resident Foreign Currency Repatriable Fixed Deposits	221796	184860	266682	274798	274093
2.2.3 Overseas Foreign Currency Borrowings	149868	113272	174411	183363	174043
2.3 Net Bank Reserves (2.3.1+2.3.2-2.3.3)	893350	921868	1077119	1201275	1364526
2.3.1 Balances with the RBI	931483	917856	956255	1020447	985504
2.3.2 Cash in Hand	89433	90803	86246	96180	91269
2.3.3 Loans and Advances from the RBI	127566	86791	-34618	-84648	-287753
2.4 Capital Account	2299592	2249532	2538975	2544198	2557377
2.5 Other items (net) (2.1+2.2+2.3-2.4-1.1-1.2)	560230	569765	568620	447033	719472
2.5.1 Other Demand and Time Liabilities (net of 2.2.3)	787560	786851	856786	784675	776573
2.5.2 Net Inter-Bank Liabilities (other than to PDs)	197781	171368	131836	130446	120447

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 22, 2024	2023				2024			
		2023		2024		Oct. 20	Sep. 20	Oct. 04	Oct. 18
		1	2	3	4				
1 SLR Securities	6106558 (6015003)	6053429 (5942172)	6402402 (6338860)	6456310 (6392755)	6489381 (6427792)				
2 Other Government Securities (Non-SLR)	177136	179196	157582	158164	158963				
3 Commercial Paper	61175	52425	63049	60808	63266				
4 Shares issued by									
4.1 PSUs	8475	9137	13615	13742	14005				
4.2 Private Corporate Sector	77722	82998	97368	96230	96674				
4.3 Others	5624	5484	6834	7425	7500				
5 Bonds/Debentures issued by									
5.1 PSUs	103070	92111	123351	122464	118817				
5.2 Private Corporate Sector	287596	293530	250152	241746	232102				
5.3 Others	124690	107552	146237	145161	148322				
6 Instruments issued by									
6.1 Mutual funds	62499	75975	111561	109990	137470				
6.2 Financial institutions	172340	183337	183453	187833	185401				

Note: 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			
	2023-24	2023	2024		2023-24	2023	2024	
		Oct.	Sep.	Oct.		Oct.	Sep.	Oct.
	1	2	3	4	5	6	7	8
Number of Reporting Banks	210	210	208	208	137	137	135	135
1 Liabilities to the Banking System	554117	513463	453177	461959	549351	508338	448404	456793
1.1 Demand and Time Deposits from Banks	298452	235644	298150	299445	294471	232079	293853	294684
1.2 Borrowings from Banks	182566	204553	131578	138138	182429	203787	131408	138074
1.3 Other Demand and Time Liabilities	73100	73267	23449	24377	72452	72472	23143	24034
2 Liabilities to Others	22664868	21715840	24067308	24168976	22190597	21267483	23597567	23695315
2.1 Aggregate Deposits	20932067	19992340	22197886	22268274	20475226	19560877	21746608	21811286
	(20823825)	(19859128)	(22123057)	(22196282)	(20366984)	(19427665)	(21671779)	(21739295)
2.1.1 Demand	2492916	2338952	2630676	2576598	2443853	2293187	2582832	2527554
2.1.2 Time	18439151	17653388	19567210	19691676	18031373	17267690	19163776	19283733
2.2 Borrowings	782260	842859	905313	922304	777942	837715	900827	917220
2.3 Other Demand and Time Liabilities	950541	880641	964109	978397	937428	868891	950132	966808
3 Borrowings from Reserve Bank	222716	160738	33302	30948	222716	160738	33302	30948
3.1 Against Usance Bills /Promissory Notes	-	-	-	-	-	-	-	-
3.2 Others	222716	160738	33302	30948	222716	160738	33302	30948
4 Cash in Hand and Balances with Reserve Bank	1043272	1024881	1132310	1156513	1020916	1003049	1110006	1133410
4.1 Cash in Hand	91886	98703	92085	93424	89433	96056	89559	90430
4.2 Balances with Reserve Bank	951386	926178	1040225	1063089	931483	906993	1020447	1042981
5 Assets with the Banking System	455057	408298	400518	415954	374474	353220	333625	347173
5.1 Balances with Other Banks	246384	222223	253200	267325	198327	182491	201534	214836
5.1.1 In Current Account	12010	11658	15512	11859	8971	8952	12452	8521
5.1.2 In Other Accounts	234373	210565	237687	255466	189357	173540	189082	206314
5.2 Money at Call and Short Notice	39614	38379	27376	31346	12355	26277	16083	18904
5.3 Advances to Banks	51325	52436	45009	47217	48368	51793	44328	46589
5.4 Other Assets	117734	95260	74933	70066	115424	92659	71681	66845
6 Investment	6256962	6173361	6589114	6666871	6106558	6024145	6439289	6514977
	(6165407)	(6064025)	(6525561)	(6613035)	(6015003)	(5914808)	(6375736)	(6461140)
6.1 Government Securities	6249319	6167013	6580833	6657864	6105610	6023428	6438770	6513979
6.2 Other Approved Securities	7643	6348	8281	9007	949	717	519	998
7 Bank Credit	16866336	15890756	17661371	17768822	16432164	15488344	17215335	17315981
	(16335650)	(15305241)	(17190229)	(17304521)	(15901477)	(14902828)	(16744193)	(16851679)
7a Food Credit	75472	69256	69694	72843	23081	20829	19075	22204
7.1 Loans, Cash-credits and Overdrafts	16565348	15619626	17344195	17451631	16134303	15220100	16901348	17002083
7.2 Inland Bills-Purchased	60471	46713	67186	69489	60467	46701	65696	67977
7.3 Inland Bills-Discounted	199761	184831	211015	209055	197358	182597	209905	207905
7.4 Foreign Bills-Purchased	16662	16327	15988	15841	16412	16096	15793	15597
7.5 Foreign Bills-Discounted	24094	23259	22987	22807	23624	22849	22592	22419

Note: Data in column Nos. (4) & (8) are Provisional

1. Data since July 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. 15: Deployment of Gross Bank Credit by Major Sectors

(₹ Crore)

Sector	Outstanding as on				Growth(%)	
	Mar. 22, 2024	2023	2024		Financial year so far	Y-o-Y
			Oct. 20	Sep. 20	Oct. 18	2024
	1	2	3	4	%	%
I. Bank Credit (II + III)	16432164	15457887	17125371	17238250	4.9	11.5
	(15901477)	(14871457)	(16648962)	(16772605)	(5.5)	(12.8)
II. Food Credit	23081	19841	19926	18654	-19.2	-6.0
III. Non-food Credit	16409083	15438046	17105445	17219596	4.9	11.5
	(15878397)	(14851616)	(16629037)	(16753951)	(5.5)	(12.8)
1. Agriculture & Allied Activities	2071251	1909689	2167287	2205299	6.5	15.5
2. Industry (Micro and Small, Medium and Large)	3652804	3498502	3801604	3774252	3.3	7.9
	(3635810)	(3480987)	(3786279)	(3759186)	(3.4)	(8.0)
2.1 Micro and Small	726315	681618	750825	749790	3.2	10.0
2.2 Medium	303998	280699	334412	335822	10.5	19.6
2.3 Large	2622490	2536185	2716366	2688640	2.5	6.0
3. Services	4592227	4245994	4736957	4784938	4.2	12.7
	(4490467)	(4122802)	(4654649)	(4704550)	(4.8)	(14.1)
3.1 Transport Operators	230175	214259	245008	246407	7.1	15.0
3.2 Computer Software	25917	24665	29760	30581	18.0	24.0
3.3 Tourism, Hotels & Restaurants	77513	75612	78753	79732	2.9	5.4
3.4 Shipping	7067	6620	7166	7782	10.1	17.6
3.5 Aviation	43248	39419	44458	46168	6.8	17.1
3.6 Professional Services	167234	153150	177730	186251	11.4	21.6
3.7 Trade	1025752	960414	1072493	1079498	5.2	12.4
3.7.1. Wholesale Trade ¹	538744	499225	567242	571159	6.0	14.4
3.7.2 Retail Trade	487008	461188	505251	508339	4.4	10.2
3.8 Commercial Real Estate	469013	445596	497333	507671	8.2	13.9
	(400470)	(359499)	(441714)	(452869)	(13.1)	(26.0)
3.9 Non-Banking Financial Companies (NBFCs) ² of which,	1548027	1444263	1529006	1536655	-0.7	6.4
3.9.1 Housing Finance Companies (HFCs)	325626	322128	324354	321110	-1.4	-0.3
3.9.2 Public Financial Institutions (PFIs)	226963	190547	203257	198320	-12.6	4.1
3.10 Other Services ³	998281	881996	1055250	1064193	6.6	20.7
	(978198)	(858939)	(1037408)	(1046715)	(7.0)	(21.9)
4. Personal Loans	5331290	5002636	5596719	5647476	5.9	12.9
	(4919468)	(4557230)	(5219246)	(5278594)	(7.3)	(15.8)
4.1 Consumer Durables	23713	22178	23764	23640	-0.3	6.6
4.2 Housing	2718715	2561961	2845505	2871845	5.6	12.1
	(2331935)	(2144011)	(2490574)	(2525138)	(8.3)	(17.8)
4.3 Advances against Fixed Deposits	125239	114983	125694	127533	1.8	10.9
4.4 Advances to Individuals against share & bonds	8492	7812	9546	9060	6.7	16.0
4.5 Credit Card Outstanding	257016	240635	271813	281392	9.5	16.9
4.6 Education	119380	110852	129116	130309	9.2	17.6
4.7 Vehicle Loans	589251	553141	617180	616405	4.6	11.4
4.8 Loan against gold jewellery	102562	98747	147081	154282	50.4	56.2
4.9 Other Personal Loans	1386921	1292327	1427020	1433009	3.3	10.9
	(1362113)	(1265407)	(1404553)	(1410905)	(3.6)	(11.5)
5. Priority Sector (Memo)						
(i) Agriculture & Allied Activities ⁴	2081856	1934682	2164159	2200460	5.7	13.7
(ii) Micro & Small Enterprises ⁵	1974191	1849829	2057867	2076956	5.2	12.3
(iii) Medium Enterprises ⁶	490703	461739	543388	557829	13.7	20.8
(iv) Housing	755222	743033	750223	752216	-0.4	1.2
	(660572)	(643177)	(663719)	(665965)	(0.8)	(3.5)
(v) Education Loans	62235	61110	62389	62673	0.7	2.6
(vi) Renewable Energy	5991	5007	6778	7122	18.9	42.2
(vii) Social Infrastructure	2613	2607	1124	1120	-57.1	-57.0
(viii) Export Credit	11774	11844	11290	12094	2.7	2.1
(ix) Others	61336	59553	58561	58045	-5.4	-2.5
(x) Weaker Sections including net PSLC- SF/MF	1647778	1555743	1711473	1742896	5.8	12.0

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

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

6 "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	Mar. 22, 2024	Outstanding as on			Growth(%)	
		2023		2024	Financial year so far	Y-o-Y
		Oct. 20	Sep. 20	Oct. 18	2024-25	2024
		1	2	3	4	%
2 Industries (2.1 to 2.19)		3652804 (3635810)	3498502 (3480987)	3801604 (3786279)	3774252 (3759186)	3.3 (3.4)
2.1 Mining & Quarrying (incl. Coal)		54166	53476	52560	50116	-7.5
2.2 Food Processing		208864	173180	192363	190283	-8.9
2.2.1 Sugar		26383	14666	18789	17191	-34.8
2.2.2 Edible Oils & Vanaspati		19700	18117	17113	17331	-12.0
2.2.3 Tea		5692	6172	6157	6429	12.9
2.2.4 Others		157089	134226	150304	149332	-4.9
2.3 Beverage & Tobacco		31136	26257	31690	31286	0.5
2.4 Textiles		256048	243278	256793	256840	0.3
2.4.1 Cotton Textiles		99199	93930	93859	92827	-6.4
2.4.2 Jute Textiles		4280	4176	4155	4253	-0.6
2.4.3 Man-Made Textiles		45111	42899	46812	47416	5.1
2.4.4 Other Textiles		107458	102272	111967	112344	4.5
2.5 Leather & Leather Products		12588	12212	12788	12639	0.4
2.6 Wood & Wood Products		23839	22514	25229	25319	6.2
2.7 Paper & Paper Products		46426	45266	49765	50089	7.9
2.8 Petroleum, Coal Products & Nuclear Fuels		132356	119637	169289	152974	15.6
2.9 Chemicals & Chemical Products		249347	230650	263369	259944	4.2
2.9.1 Fertiliser		37569	30621	32556	31511	-16.1
2.9.2 Drugs & Pharmaceuticals		81036	77182	86061	88499	9.2
2.9.3 Petro Chemicals		23157	19315	30677	25848	11.6
2.9.4 Others		107584	103532	114075	114086	6.0
2.10 Rubber, Plastic & their Products		90420	85895	94633	95674	5.8
2.11 Glass & Glassware		12090	11022	12447	12483	3.3
2.12 Cement & Cement Products		59757	60562	59806	60805	1.8
2.13 Basic Metal & Metal Product		384447	366382	422794	422883	10.0
2.13.1 Iron & Steel		273803	251807	300521	300263	9.7
2.13.2 Other Metal & Metal Product		110645	114575	122273	122621	10.8
2.14 All Engineering		196643	191489	218183	219320	11.5
2.14.1 Electronics		43175	44029	50514	49889	15.6
2.14.2 Others		153468	147460	167669	169431	10.4
2.15 Vehicles, Vehicle Parts & Transport Equipment		113185	110017	114310	113603	0.4
2.16 Gems & Jewellery		84860	95702	91172	92443	8.9
2.17 Construction		133520	129624	141905	138635	3.8
2.18 Infrastructure		1304096	1277597	1299854	1298577	-0.4
2.18.1 Power		644042	618733	641606	646057	0.3
2.18.2 Telecommunications		138192	138008	124047	121495	-12.1
2.18.3 Roads		318072	318483	325928	325803	2.4
2.18.4 Airports		7280	7960	8428	8117	11.5
2.18.5 Ports		6681	7292	6702	5823	-12.8
2.18.6 Railways		13062	12047	11940	11230	-14.0
2.18.7 Other Infrastructure		176767	175075	181203	180051	1.9
2.19 Other Industries		259016	243743	292655	290339	12.1
						19.1

Note: (1) Data since July 28, 2023 include the impact of the merger of a non-bank with a bank. 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							
		Sep. 29	Jul. 26	Aug. 09	Aug. 23	Aug. 30	Sep. 06	Sep. 20	Sep. 27
	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	139499.8	134816.8	133835.2	133649.7	133771.9	133484.9	131009.0	133236.7
2 Demand and Time Liabilities									
2.1 Demand Liabilities	30226.7	30578.4	28112.2	27873.9	27398.4	27177.9	28015.9	27871.3	27646.4
2.1.1 Deposits									
2.1.1.1 Inter-Bank	9101.3	7067.1	8204.5	7890.8	7972.0	7554.0	8324.4	8039.9	7743.1
2.1.1.2 Others	15000.4	16389.1	13980.0	14068.5	13618.3	13721.9	13695.0	13761.7	13473.1
2.1.2 Borrowings from Banks	130.0		179.9	299.8					179.9
2.1.3 Other Demand Liabilities	5995.0	7122.2	5747.8	5614.8	5808.1	5902.0	5996.5	6069.7	6250.3
2.2 Time Liabilities	198141.8	179527.1	183917.4	182003.8	181518.0	181698.8	181365.2	180677.8	181476.5
2.2.1 Deposits									
2.2.1.1 Inter-Bank	72308.4	53493.1	61265.5	60102.2	58935.4	59084.4	59157.2	59278.4	59406.1
2.2.1.2 Others	123788.5	123110.7	120836.7	119766.7	120031.4	120050.0	119789.9	117247.3	119763.6
2.2.2 Borrowings from Banks	673.6	1364.0	653.8	940.7	1263.8	1235.0	1123.9	2852.3	1143.3
2.2.3 Other Time Liabilities	1371.3	1559.3	1161.3	1194.2	1287.4	1329.4	1294.2	1299.8	1163.5
3 Borrowing from Reserve Bank	0.0								
4 Borrowings from a notified bank / Government	95914.5	71616.1	86318.6	84421.5	82219.7	84199.0	84699.7	87192.9	87696.9
4.1 Demand	27317.7	18837.6	24467.9	25452.2	24027.2	23957.2	23942.2	23761.2	23412.8
4.2 Time	68596.8	52778.5	61850.7	58969.3	58192.5	60241.8	60757.5	63431.7	64284.1
5 Cash in Hand and Balances with Reserve Bank	16263.7	12007.1	13611.0	13590.9	11787.9	11195.1	11754.2	12126.7	12368.8
5.1 Cash in Hand	960.0	709.5	687.9	780.2	679.8	699.1	683.4	822.3	780.9
5.2 Balance with Reserve Bank	15303.7	11297.6	12923.1	12810.7	11108.1	10496.0	11070.8	11304.4	11587.9
6 Balances with Other Banks in Current Account	2088.1	2034.4	1700.0	1709.6	1586.6	1607.4	1697.0	1841.0	1658.2
7 Investments in Government Securities	77700.5	72473.9	75409.2	75025.8	74867.2	75232.9	75681.3	73803.6	73488.7
8 Money at Call and Short Notice	34355.3	22621.2	18960.1	16731.3	14985.4	14673.7	14683.1	14879.4	15615.3
9 Bank Credit (10.1+11)	135141.9	119241.1	136993.2	136583.7	138287.3	136830.6	138748.4	138876.6	138973.3
10 Advances									
10.1 Loans, Cash-Credits and Overdrafts	134936.8	119187.8	136836.3	136416.6	138117.1	136641.1	138544.2	138702.8	138795.8
10.2 Due from Banks	142185.2	119129.5	134692.9	135559.1	137049.5	137902.0	139259.2	141899.6	143516.4
11 Bills Purchased and Discounted	205.1	53.3	156.9	167.1	170.2	189.5	204.2	173.8	177.5

Prices and Production

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

Group/Sub group	2023-24			Rural			Urban			Combined		
	Rural	Urban	Combined	Nov.23	Oct.24	Nov.24 (P)	Nov.23	Oct.24	Nov.24 (P)	Nov.23	Oct.24	Nov.24 (P)
	1	2	3	4	5	6	7	8	9	10	11	12
1 Food and beverages	185.9	192.7	188.4	190.2	206.7	206.2	196.6	214.1	212.3	192.6	209.4	208.4
1.1 Cereals and products	181.4	181.7	181.5	184.8	196.3	198.1	184.2	194.1	195.5	184.6	195.6	197.3
1.2 Meat and fish	213.0	221.3	215.9	210.9	221.6	220.9	219.6	230.5	229.8	214.0	224.7	224.0
1.3 Egg	185.4	189.5	187.0	190.4	194.1	199.3	194.8	199.0	204.7	192.1	196.0	201.4
1.4 Milk and products	181.4	181.5	181.4	182.2	186.9	187.2	182.3	187.9	187.8	182.2	187.3	187.4
1.5 Oils and fats	165.3	158.7	162.9	162.6	181.0	186.8	156.7	168.2	172.8	160.4	176.3	181.7
1.6 Fruits	172.1	179.9	175.7	174.6	192.5	190.7	182.7	196.1	193.8	178.4	194.2	192.1
1.7 Vegetables	183.9	229.9	199.5	199.9	270.5	259.9	246.0	333.9	315.2	215.5	292.0	278.7
1.8 Pulses and products	192.2	196.5	193.7	202.9	215.0	214.5	209.3	220.1	219.4	205.1	216.7	216.2
1.9 Sugar and confectionery	126.2	128.1	126.9	129.7	131.3	131.1	130.9	133.0	133.2	130.1	131.9	131.8
1.10 Spices	238.0	228.4	234.8	249.8	229.7	230.0	239.7	225.0	224.3	246.4	228.1	228.1
1.11 Non-alcoholic beverages	180.7	168.2	175.5	181.8	185.4	186.0	169.0	174.0	174.8	176.5	180.6	181.3
1.12 Prepared meals, snacks, sweets	193.3	200.9	196.8	193.7	199.6	200.5	201.8	210.2	210.8	197.5	204.5	205.3
2 Pan, tobacco and intoxicants	202.0	207.1	203.3	202.9	207.4	208.1	208.5	213.5	212.2	204.4	209.0	209.2
3 Clothing and footwear	192.9	181.5	188.4	193.7	198.3	199.0	182.4	187.1	187.4	189.2	193.9	194.4
3.1 Clothing	193.5	183.5	189.6	194.4	199.2	200.0	184.5	189.2	189.6	190.5	195.3	195.9
3.2 Footwear	189.4	170.2	181.4	189.8	192.9	193.4	171.0	175.2	175.4	182.0	185.5	185.9
4 Housing	--	176.7	176.7	--	--	--	177.9	182.7	183.0	177.9	182.7	183.0
5 Fuel and light	183.0	178.9	181.4	182.4	181.1	180.8	175.8	169.7	169.6	179.9	176.8	176.6
6 Miscellaneous	181.7	173.7	177.8	182.5	189.9	190.4	174.4	181.5	181.8	178.6	185.8	186.2
6.1 Household goods and services	181.5	171.8	176.9	182.0	185.8	186.4	172.3	177.4	178.0	177.4	181.8	182.4
6.2 Health	190.8	185.2	188.7	191.9	198.6	199.3	186.2	193.6	194.0	189.7	196.7	197.3
6.3 Transport and communication	171.1	161.4	166.0	171.7	176.4	176.6	161.7	165.5	165.6	166.4	170.7	170.8
6.4 Recreation and amusement	175.8	171.1	173.2	176.4	180.4	181.0	171.8	176.0	176.4	173.8	177.9	178.4
6.5 Education	184.0	179.1	181.1	185.2	191.8	192.0	180.4	187.6	187.8	182.4	189.3	189.5
6.6 Personal care and effects	186.3	187.4	186.8	186.7	205.1	206.0	187.9	207.3	207.7	187.2	206.0	206.7
General Index (All Groups)	185.6	182.4	184.1	188.2	199.5	199.4	184.2	193.7	193.1	186.3	196.8	196.5

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	2023-24		2023	2024	
			1	2	3	4	5
							6
1 Consumer Price Index for Industrial Workers	2016	2.88		137.9	138.4	143.3	144.5
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89		1229	1241	1304	1315
3 Consumer Price Index for Rural Labourers	1986-87	-		1240	1251	1316	1326

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

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

Item	2023-24	2023		2024	
		Oct.	Sep.	Sep.	Oct.
		1	2	3	4
1 Standard Gold (₹ per 10 grams)		60624	58773	72878	76713
2 Silver (₹ per kilogram)		72243	70084	86187	93352

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	2023-24	2023		2024		
			Nov.	Sep.	Oct.(P)	Nov.(P)	
	1	2	3	4	5	6	
1 ALL COMMODITIES	100.000	151.4	153.1	154.7	156.1	156.0	
1.1 PRIMARY ARTICLES	22.618	183.0	187.6	195.5	200.3	197.9	
1.1.1 FOOD ARTICLES	15.256	191.3	197.0	210.8	218.0	214.0	
1.1.1.1 Food Grains (Cereals+Pulses)	3.462	193.8	200.0	212.4	213.7	214.8	
1.1.1.2 Fruits & Vegetables	3.475	210.2	226.1	264.1	291.8	273.2	
1.1.1.3 Milk	4.440	180.3	181.5	185.3	185.6	185.3	
1.1.1.4 Eggs, Meat & Fish	2.402	172.1	167.8	172.6	171.0	173.1	
1.1.1.5 Condiments & Spices	0.529	235.4	246.0	243.2	242.9	244.5	
1.1.1.6 Other Food Articles	0.948	189.5	199.3	207.9	219.3	215.4	
1.1.2 NON-FOOD ARTICLES	4.119	162.4	163.8	162.2	161.3	162.2	
1.1.2.1 Fibres	0.839	168.0	166.6	163.8	160.1	159.0	
1.1.2.2 Oil Seeds	1.115	185.0	185.0	184.6	185.5	185.9	
1.1.2.3 Other non-food Articles	1.960	134.9	136.0	140.2	139.2	138.9	
1.1.2.4 Floriculture	0.204	279.7	304.7	244.7	247.3	270.0	
1.1.3 MINERALS	0.833	217.7	215.8	223.2	223.8	228.5	
1.1.3.1 Metallic Minerals	0.648	204.2	205.8	213.8	214.6	220.1	
1.1.3.2 Other Minerals	0.185	265.0	250.6	256.4	256.0	258.1	
1.1.4 CRUDE PETROLEUM & NATURAL GAS	2.410	153.6	159.0	146.1	146.7	146.1	
1.2 FUEL & POWER	13.152	152.0	156.2	147.2	146.5	147.1	
1.2.1 COAL	2.138	136.4	136.7	135.6	135.5	135.5	
1.2.1.1 Coking Coal	0.647	143.4	143.4	143.4	143.4	143.4	
1.2.1.2 Non-Coking Coal	1.401	124.8	125.8	125.8	125.8	125.8	
1.2.1.3 Lignite	0.090	267.6	258.1	232.0	229.5	229.5	
1.2.2 MINERAL OILS	7.950	159.0	162.5	154.3	152.9	154.0	
1.2.3 ELECTRICITY	3.064	145.0	153.3	136.7	137.4	137.3	
1.3 MANUFACTURED PRODUCTS	64.231	140.2	140.2	141.9	142.5	143.0	
1.3.1 MANUFACTURE OF FOOD PRODUCTS	9.122	160.5	162.0	171.0	173.3	177.3	
1.3.1.1 Processing and Preserving of meat	0.134	145.3	145.1	152.2	152.8	153.2	
1.3.1.2 Processing and Preserving of fish, Crustaceans, Molluscs and products thereof	0.204	142.9	145.2	144.9	146.0	148.9	
1.3.1.3 Processing and Preserving of fruit and Vegetables	0.138	130.4	131.8	132.8	133.2	132.7	
1.3.1.4 Vegetable and Animal oils and Fats	2.643	145.0	142.2	162.8	169.9	182.0	
1.3.1.5 Dairy products	1.165	179.1	180.2	180.0	180.9	182.0	
1.3.1.6 Grain mill products	2.010	175.6	180.0	186.6	187.3	190.2	
1.3.1.7 Starches and Starch products	0.110	157.1	157.5	174.6	173.5	169.5	
1.3.1.8 Bakery products	0.215	165.4	166.0	169.6	170.1	172.8	
1.3.1.9 Sugar, Molasses & honey	1.163	134.6	140.0	138.2	139.0	138.4	
1.3.1.10 Cocoa, Chocolate and Sugar confectionery	0.175	139.8	140.6	160.5	162.2	160.7	
1.3.1.11 Macaroni, Noodles, Couscous and Similar farinaceous products	0.026	149.9	155.1	153.8	155.7	158.1	
1.3.1.12 Tea & Coffee products	0.371	176.2	180.0	204.5	199.9	193.8	
1.3.1.13 Processed condiments & salt	0.163	192.1	198.1	192.8	192.9	190.8	
1.3.1.14 Processed ready to eat food	0.024	146.3	146.7	151.7	151.3	152.6	
1.3.1.15 Health supplements	0.225	179.1	180.0	186.2	186.9	191.5	
1.3.1.16 Prepared animal feeds	0.356	208.3	212.7	211.4	209.4	206.3	
1.3.2 MANUFACTURE OF BEVERAGES	0.909	131.5	131.7	134.3	134.5	134.9	
1.3.2.1 Wines & spirits	0.408	133.3	134.5	136.0	136.4	137.0	
1.3.2.2 Malt liquors and Malt	0.225	135.6	135.4	138.6	139.0	139.2	
1.3.2.3 Soft drinks; Production of mineral waters and Other bottled waters	0.275	125.5	124.7	128.3	128.2	128.5	
1.3.3 MANUFACTURE OF TOBACCO PRODUCTS	0.514	173.5	175.0	177.5	176.1	177.4	
1.3.3.1 Tobacco products	0.514	173.5	175.0	177.5	176.1	177.4	

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023		2024	
			Nov.	Sep.	Oct.(P)	Nov.(P)
			1	2	3	4
1.3.4 MANUFACTURE OF TEXTILES	4.881	134.6	134.2	135.8	135.9	135.9
1.3.4.1 Preparation and Spinning of textile fibres	2.582	120.1	120.0	121.6	121.1	120.6
1.3.4.2 Weaving & Finishing of textiles	1.509	157.5	156.4	156.4	157.3	158.4
1.3.4.3 Knitted and Crocheted fabrics	0.193	120.0	118.1	123.4	125.3	123.6
1.3.4.4 Made-up textile articles, Except apparel	0.299	156.6	156.7	160.9	161.2	159.9
1.3.4.5 Cordage, Rope, Twine and Netting	0.098	139.2	137.1	141.1	142.1	143.2
1.3.4.6 Other textiles	0.201	129.6	131.2	136.1	135.0	135.4
1.3.5 MANUFACTURE OF WEARING APPAREL	0.814	150.8	151.4	153.6	153.9	153.8
1.3.5.1 Manufacture of Wearing Apparel (woven), Except fur Apparel	0.593	148.7	148.8	150.9	151.0	151.0
1.3.5.2 Knitted and Crocheted apparel	0.221	156.6	158.4	160.9	161.6	161.5
1.3.6 MANUFACTURE OF LEATHER AND RELATED PRODUCTS	0.535	124.1	124.0	125.0	125.2	125.7
1.3.6.1 Tanning and Dressing of leather; Dressing and Dyeing of fur	0.142	107.3	106.7	104.9	106.4	106.0
1.3.6.2 Luggage, HandAgs, Saddlery and Harness	0.075	140.9	141.3	142.8	142.9	143.8
1.3.6.3 Footwear	0.318	127.7	127.6	129.7	129.4	130.1
1.3.7 MANUFACTURE OF WOOD AND PRODUCTS OF WOOD AND CORK	0.772	146.6	147.7	148.6	148.9	148.4
1.3.7.1 Saw milling and Planing of wood	0.124	137.8	136.8	142.2	142.1	141.9
1.3.7.2 Veneer sheets; Manufacture of plywood, Laminboard, Particle board and Other panels and Boards	0.493	146.1	147.9	147.1	147.8	147.3
1.3.7.3 Builder's carpentry and Joinery	0.036	206.4	208.7	216.4	216.2	214.2
1.3.7.4 Wooden containers	0.119	139.8	139.6	140.9	140.3	139.8
1.3.8 MANUFACTURE OF PAPER AND PAPER PRODUCTS	1.113	140.3	138.4	139.8	139.9	139.0
1.3.8.1 Pulp, Paper and Paperboard	0.493	147.6	145.7	144.6	144.2	143.7
1.3.8.2 Corrugated paper and Paperboard and Containers of paper and Paperboard	0.314	140.9	140.8	146.9	148.0	148.6
1.3.8.3 Other articles of paper and Paperboard	0.306	128.0	124.4	124.6	124.6	121.3
1.3.9 PRINTING AND REPRODUCTION OF RECORDED MEDIA	0.676	182.3	184.0	185.3	185.4	186.7
1.3.9.1 Printing	0.676	182.3	184.0	185.3	185.4	186.7
1.3.10 MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS	6.465	136.9	136.0	136.5	136.3	136.1
1.3.10.1 Basic chemicals	1.433	139.9	139.0	138.1	137.2	138.2
1.3.10.2 Fertilizers and Nitrogen compounds	1.485	142.8	143.0	142.7	143.2	143.2
1.3.10.3 Plastic and Synthetic rubber in primary form	1.001	132.3	129.1	134.0	134.2	133.1
1.3.10.4 Pesticides and Other agrochemical products	0.454	132.8	132.8	128.8	130.3	129.5
1.3.10.5 Paints, Varnishes and Similar coatings, Printing ink and Mastics	0.491	143.7	144.6	141.3	139.7	137.8
1.3.10.6 Soap and Detergents, Cleaning and Polishing preparations, Perfumes and Toilet preparations	0.612	139.7	138.8	138.9	138.8	139.7
1.3.10.7 Other chemical products	0.692	134.4	133.1	136.5	136.6	135.3
1.3.10.8 Man-made fibres	0.296	103.6	102.8	104.6	102.9	102.9
1.3.11 MANUFACTURE OF PHARMACEUTICALS, MEDICINAL CHEMICAL AND BOTANICAL PRODUCTS	1.993	142.9	142.4	144.1	143.5	144.1
1.3.11.1 Pharmaceuticals, Medicinal chemical and Botanical products	1.993	142.9	142.4	144.1	143.5	144.1
1.3.12 MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS	2.299	127.5	126.8	128.7	129.2	128.6
1.3.12.1 Rubber Tyres and Tubes; Retreading and Rebuilding of Rubber Tyres	0.609	113.7	113.5	115.0	116.6	116.8
1.3.12.2 Other Rubber Products	0.272	107.3	107.3	113.7	113.6	112.2
1.3.12.3 Plastics products	1.418	137.3	136.3	137.4	137.6	136.8
1.3.13 MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS	3.202	134.7	134.6	130.6	130.1	130.6
1.3.13.1 Glass and Glass products	0.295	163.8	163.4	163.4	162.4	162.2
1.3.13.2 Refractory products	0.223	119.7	119.5	119.8	118.8	123.6
1.3.13.3 Clay Building Materials	0.121	123.9	118.5	123.9	126.0	127.5
1.3.13.4 Other Porcelain and Ceramic Products	0.222	122.3	122.6	124.5	124.7	124.6
1.3.13.5 Cement, Lime and Plaster	1.645	137.3	137.5	128.9	128.3	128.6

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023		2024	
			Nov.	Sep.	Oct.(P)	Nov.(P)
	1	2	3	4	5	6
1.3.13.6 Articles of Concrete, Cement and Plaster	0.292	137.7	137.9	138.7	138.1	138.9
1.3.13.7 Cutting, Shaping and Finishing of Stone	0.234	130.3	132.2	135.4	135.2	135.5
1.3.13.8 Other Non-Metallic Mineral Products	0.169	102.4	100.1	97.2	94.5	93.8
1.3.14 MANUFACTURE OF BASIC METALS	9.646	141.0	140.2	137.7	139.0	138.6
1.3.14.1 Inputs into steel making	1.411	140.3	138.8	130.4	134.3	132.2
1.3.14.2 Metallic Iron	0.653	153.6	151.8	138.3	145.2	139.9
1.3.14.3 Mild Steel - Semi Finished Steel	1.274	119.9	118.3	114.1	114.8	117.7
1.3.14.4 Mild Steel - Long Products	1.081	141.3	141.2	138.9	140.1	139.6
1.3.14.5 Mild Steel - Flat products	1.144	143.4	142.7	132.5	131.9	132.1
1.3.14.6 Alloy steel other than Stainless Steel- Shapes	0.067	137.6	137.0	132.9	134.6	133.7
1.3.14.7 Stainless Steel - Semi Finished	0.924	136.4	133.8	130.7	128.1	126.6
1.3.14.8 Pipes & tubes	0.205	169.7	170.2	163.3	163.9	163.4
1.3.14.9 Non-ferrous metals incl. precious metals	1.693	144.8	143.6	155.6	157.5	157.9
1.3.14.10 Castings	0.925	141.0	143.3	144.9	144.7	144.5
1.3.14.11 Forgings of steel	0.271	173.3	175.1	170.8	172.7	172.8
1.3.15 MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT	3.155	138.6	139.3	136.3	135.3	135.3
1.3.15.1 Structural Metal Products	1.031	132.3	133.2	131.5	129.9	129.6
1.3.15.2 Tanks, Reservoirs and Containers of Metal	0.660	157.6	157.7	150.1	147.2	147.0
1.3.15.3 Steam generators, Except Central Heating Hot Water Boilers	0.145	106.3	105.9	111.2	112.9	112.0
1.3.15.4 Forging, Pressing, Stamping and Roll-Forming of Metal; Powder Metallurgy	0.383	141.4	145.3	138.9	139.9	140.3
1.3.15.5 Cutlery, Hand Tools and General Hardware	0.208	108.4	109.2	102.0	101.9	102.4
1.3.15.6 Other Fabricated Metal Products	0.728	143.8	143.5	144.0	143.5	144.3
1.3.16 MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS	2.009	119.3	120.0	121.7	121.7	121.2
1.3.16.1 Electronic Components	0.402	115.0	115.0	117.6	117.1	117.1
1.3.16.2 Computers and Peripheral Equipment	0.336	135.3	135.1	135.4	135.3	133.6
1.3.16.3 Communication Equipment	0.310	136.1	139.4	145.1	145.7	145.9
1.3.16.4 Consumer Electronics	0.641	103.6	104.4	101.0	101.1	100.5
1.3.16.5 Measuring, Testing, Navigating and Control equipment	0.181	113.8	113.8	120.9	120.9	120.9
1.3.16.6 Watches and Clocks	0.076	157.2	158.6	167.5	167.5	167.7
1.3.16.7 Irradiation, Electromedical and Electrotherapeutic equipment	0.055	108.3	107.1	117.7	117.0	115.2
1.3.16.8 Optical instruments and Photographic equipment	0.008	103.8	103.6	107.0	107.0	108.7
1.3.17 MANUFACTURE OF ELECTRICAL EQUIPMENT	2.930	131.4	131.2	133.4	133.5	133.8
1.3.17.1 Electric motors, Generators, Transformers and Electricity distribution and Control apparatus	1.298	130.1	130.3	131.6	131.6	132.8
1.3.17.2 Batteries and Accumulators	0.236	137.8	138.6	141.3	141.3	141.7
1.3.17.3 Fibre optic cables for data transmission or live transmission of images	0.133	123.4	125.6	121.2	121.2	116.5
1.3.17.4 Other electronic and Electric wires and Cables	0.428	146.1	144.7	153.2	154.6	153.8
1.3.17.5 Wiring devices, Electric lighting & display equipment	0.263	116.8	116.2	118.7	118.0	118.7
1.3.17.6 Domestic appliances	0.366	133.8	132.5	131.7	131.6	130.7
1.3.17.7 Other electrical equipment	0.206	120.9	120.2	123.2	124.1	124.9
1.3.18 MANUFACTURE OF MACHINERY AND EQUIPMENT	4.789	129.0	129.2	130.9	131.0	130.8
1.3.18.1 Engines and Turbines, Except aircraft, Vehicle and Two wheeler engines	0.638	128.9	129.5	133.2	133.9	133.6
1.3.18.2 Fluid power equipment	0.162	131.9	132.3	133.8	134.1	134.6
1.3.18.3 Other pumps, Compressors, Taps and Valves	0.552	117.4	117.0	118.5	118.3	118.6
1.3.18.4 Bearings, Gears, Gearing and Driving elements	0.340	127.7	126.5	127.6	128.0	127.2
1.3.18.5 Ovens, Furnaces and Furnace burners	0.008	83.7	83.2	85.8	86.3	87.0
1.3.18.6 Lifting and Handling equipment	0.285	128.6	128.7	129.5	129.7	130.0

No. 21: Wholesale Price Index (Concl'd.)
 (Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023		2024		
			Nov.	Sep.	Oct.(P)	Nov.(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	130.2
1.3.18.8 Other general-purpose machinery	0.437	145.2	145.0	148.5	146.7	147.1	
1.3.18.9 Agricultural and Forestry machinery	0.833	142.5	143.2	145.2	145.3	145.6	
1.3.18.10 Metal-forming machinery and Machine tools	0.224	122.5	122.9	122.8	123.1	123.1	
1.3.18.11 Machinery for mining, Quarrying and Construction	0.371	88.6	88.8	88.8	89.1	89.5	
1.3.18.12 Machinery for food, Beverage and Tobacco processing	0.228	124.4	124.2	126.1	126.3	126.0	
1.3.18.13 Machinery for textile, Apparel and Leather production	0.192	137.2	137.9	142.8	142.8	138.2	
1.3.18.14 Other special-purpose machinery	0.468	144.7	144.9	144.7	144.5	144.6	
1.3.18.15 Renewable electricity generating equipment	0.046	70.8	70.6	68.5	68.6	68.6	
1.3.19 MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS	4.969	128.4	128.2	129.6	129.6	129.4	
1.3.19.1 Motor vehicles	2.600	128.5	128.7	130.0	129.9	129.6	
1.3.19.2 Parts and Accessories for motor vehicles	2.368	128.2	127.6	129.1	129.2	129.2	
1.3.20 MANUFACTURE OF OTHER TRANSPORT EQUIPMENT	1.648	143.1	143.8	144.4	145.2	145.5	
1.3.20.1 Building of ships and Floating structures	0.117	163.7	163.7	177.9	177.9	177.9	
1.3.20.2 Railway locomotives and Rolling stock	0.110	107.4	108.9	110.0	109.5	107.8	
1.3.20.3 Motor cycles	1.302	144.7	145.4	145.2	146.4	146.9	
1.3.20.4 Bicycles and Invalid carriages	0.117	137.9	138.5	133.7	133.3	133.3	
1.3.20.5 Other transport equipment	0.002	159.2	163.0	163.0	164.1	162.9	
1.3.21 MANUFACTURE OF FURNITURE	0.727	159.6	159.2	159.4	159.5	162.6	
1.3.21.1 Furniture	0.727	159.6	159.2	159.4	159.5	162.6	
1.3.22 OTHER MANUFACTURING	1.064	158.2	161.3	178.9	184.0	183.8	
1.3.22.1 Jewellery and Related articles	0.996	157.9	161.3	180.1	185.5	185.3	
1.3.22.2 Musical instruments	0.001	187.0	186.0	204.7	199.7	205.2	
1.3.22.3 Sports goods	0.012	155.2	155.3	164.4	168.0	167.8	
1.3.22.4 Games and Toys	0.005	159.6	159.3	162.7	163.6	162.4	
1.3.22.5 Medical and Dental instruments and Supplies	0.049	163.1	162.2	159.7	158.6	158.6	
2 FOOD INDEX	24.378	179.8	183.9	195.9	201.2	200.3	

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	2022-23	2023-24	April-October		October	
				2023-24	2024-25	2023	2024
	1	2	3	4	5	6	7
General Index	100.00	138.5	146.7	143.7	149.4	144.9	149.9
1 Sectoral Classification							
1.1 Mining	14.37	119.9	128.9	119.4	123.7	127.4	128.5
1.2 Manufacturing	77.63	137.1	144.7	141.9	147.3	142.1	147.9
1.3 Electricity	7.99	185.2	198.3	204.8	215.9	203.8	207.8
2 Use-Based Classification							
2.1 Primary Goods	34.05	139.2	147.7	144.4	150.3	146.1	149.9
2.2 Capital Goods	8.22	100.3	106.6	104.4	108.5	106.1	109.4
2.3 Intermediate Goods	17.22	149.4	157.3	155.1	161.3	157.5	163.4
2.4 Infrastructure/ Construction Goods	12.34	160.7	176.3	172.8	182.5	175.9	183.0
2.5 Consumer Durables	12.84	114.5	118.6	118.4	128.1	123.0	130.2
2.6 Consumer Non-Durables	15.33	147.7	153.7	148.3	147.3	142.4	146.3

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	Financial Year	April – October				
		2024-25 (Budget Estimates)	2024-25 (Actuals)	2023-24 (Actuals)	Percentage to Budget Estimates	
					2024-25	2023-24
		1	2	3	4	5
1 Revenue Receipts		3129200	1704267	1567722	54.5	59.6
1.1 Tax Revenue (Net)		2583499	1304973	1301957	50.5	55.9
1.2 Non-Tax Revenue		545701	399294	265765	73.2	88.1
2 Non Debt Capital Receipt		78000	18807	22990	24.1	27.4
2.1 Recovery of Loans		28000	13275	14990	47.4	65.2
2.2 Other Receipts		50000	5532	8000	11.1	13.1
3 Total Receipts (excluding borrowings) (1+2)		3207200	1723074	1590712	53.7	58.6
4 Revenue Expenditure of which :		3709401	2007353	1847488	54.1	52.8
4.1 Interest Payments		1162940	596347	545086	51.3	50.5
5 Capital Expenditure		1111111	466545	546924	42.0	54.6
6 Total Expenditure (4+5)		4820512	2473898	2394412	51.3	53.2
7 Revenue Deficit (4-1)		580201	303086	279766	52.2	32.2
8 Fiscal Deficit (6-3)		1613312	750824	803700	46.5	45.0
9 Gross Primary Deficit (8-4.1)		450372	154477	258614	34.3	36.6

Source: Controller General of Accounts (CGA), Ministry of Finance, Government of India and Interim Union Budget 2024-25.

No. 24: Treasury Bills – Ownership Pattern

(₹ Crore)

Item	2023-24	2024						
		Oct. 27	Sep. 20	Sep. 27	Oct. 4	Oct. 11	Oct. 18	Oct. 25
		1	2	3	4	5	6	7
1 91-day								
1.1 Banks	18054	10711	3475	5662	3677	3099	3987	4445
1.2 Primary Dealers	22676	21650	8242	5698	7262	8191	8176	7867
1.3 State Governments	5701	20974	71688	69688	70088	63073	75533	94683
1.4 Others	88670	99139	94083	90440	89862	88511	84636	84488
2 182-day								
2.1 Banks	84913	78300	51781	44787	42339	40097	38664	39780
2.2 Primary Dealers	87779	91001	37767	30674	32794	35358	31454	30680
2.3 State Governments	4070	13556	13909	13909	14647	11983	14467	13595
2.4 Others	102311	81399	79152	78239	78367	77046	79882	81040
3 364-day								
3.1 Banks	91819	82167	84627	84526	84887	84987	85022	82642
3.2 Primary Dealers	159085	187124	117499	122233	118548	112750	113087	115669
3.3 State Governments	41487	48417	31022	28145	30738	32439	34933	34600
3.4 Others	165095	152709	183873	173241	173565	176263	172892	169689
4 14-day Intermediate								
4.1 Banks								
4.2 Primary Dealers								
4.3 State Governments	318736	126331	175422	167512	91586	221354	188558	162948
4.4 Others	442	831	811	449	107	338	4325	547
Total Treasury Bills (Excluding 14 day Intermediate T Bills) #	871662	887147	777119	747242	746773	733795	742733	759178

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		Competitive	Non-Competitive								
		1	2	3	4	5	6	7	8	9	10				
91-day Treasury Bills															
2024-25															
Oct. 3	7000	76	23192	2478	44	6822		2478	9300	98.41		6.4739			
Oct. 9	7000	87	23189	6572	45	6913		6572	13485	98.42		6.4300			
Oct. 16	7000	78	21113	24058	40	6942		24058	31000	98.42		6.4515			
Oct. 23	7000	98	24300	26210	47	6940		26210	33150	98.41		6.4797			
Oct. 30	7000	82	16356	878	51	6972		878	7850	98.40		6.5116			
182-day Treasury Bills															
2024-25															
Oct. 3	6000	68	14035	1565	43	5973		1565	7538	96.83		6.5630			
Oct. 9	6000	65	13434	21	42	5979		21	6000	96.84		6.5424			
Oct. 16	6000	80	17881	2721	27	5986		2721	8707	96.84		6.5493			
Oct. 23	6000	90	13089	2513	58	5987		2513	8500	96.82		6.5970			
Oct. 30	6000	71	10555	258	54	5986		258	6244	96.80		6.6404			
364-day Treasury Bills															
2024-25															
Oct. 3	6000	93	19584	2921	38	5956		2921	8877	93.87		6.5487			
Oct. 9	6000	119	26630	1815	58	5974		1815	7789	93.89		6.5283			
Oct. 16	6000	93	23167	2526	41	5974		2526	8500	93.87		6.5438			
Oct. 23	6000	76	19741	358	48	5983		358	6341	93.83		6.5991			
Oct. 30	6000	73	21019	694	29	5986		694	6680	93.83		6.5991			

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
October 01 ,2024	5.10-6.55	6.47
October 03 ,2024	5.10-6.55	6.44
October 04 ,2024	5.10-6.50	6.41
October 05 ,2024	5.50-6.50	6.09
October 07 ,2024	5.10-6.50	6.43
October 08 ,2024	5.10-6.75	6.42
October 09 ,2024	5.10-6.60	6.43
October 10 ,2024	5.10-6.50	6.43
October 11 ,2024	5.10-6.50	6.43
October 14 ,2024	5.10-6.50	6.42
October 15 ,2024	5.00-6.50	6.42
October 16 ,2024	5.10-6.50	6.44
October 17 ,2024	5.10-6.50	6.43
October 18 ,2024	5.10-6.60	6.44
October 19 ,2024	5.50-6.55	6.23
October 21 ,2024	5.10-6.90	6.49
October 22 ,2024	5.10-6.90	6.65
October 23 ,2024	5.10-6.90	6.74
October 24 ,2024	5.10-6.85	6.68
October 25 ,2024	5.10-6.75	6.61
October 28 ,2024	5.10-6.75	6.61
October 29 ,2024	5.10-6.50	6.44
October 30 ,2024	5.10-6.60	6.45
October 31 ,2024	5.75-6.65	6.54
November 04 ,2024	5.10-6.50	6.41
November 05 ,2024	5.10-6.40	6.31
November 06 ,2024	5.10-6.40	6.34
November 07 ,2024	5.10-6.50	6.41
November 08 ,2024	5.10-6.55	6.44
November 11 ,2024	5.10-6.55	6.45
November 12 ,2024	5.10-6.55	6.45
November 13 ,2024	5.10-6.72	6.39
November 14 ,2024	5.10-6.51	6.41

Note: Includes Notice Money.

No. 27: Certificates of Deposit

Item	2023		2024		
	Oct. 20		Sep. 6	Sep. 20	Oct. 4
	1	2	3	4	5
1 Amount Outstanding (₹ Crore)	313142.07	463005.01	474683.60	468063.51	484133.94
1.1 Issued during the fortnight (₹ Crore)	35271.26	55104.80	67552.42	39383.42	33814.44
2 Rate of Interest (per cent)	6.95-7.70	7.02-7.56	7.11-7.83	6.96-7.75	6.93-7.65

No. 28: Commercial Paper

Item	2023		2024			
	Oct. 31		Sep. 15	Sep. 30	Oct. 15	Oct. 31
	1	2	3	4	5	
1 Amount Outstanding (₹ Crore)	413685.30	440945.45	397590.45	438134.20	445104.90	
1.1 Reported during the fortnight (₹ Crore)	50039.65	78418.60	48447.90	48517.65	66159.85	
2 Rate of Interest (per cent)	7.00-11.89	7.09-12.88	7.07-14.72	6.95-12.60	6.99-12.53	

No. 29: Average Daily Turnover in Select Financial Markets

(₹ Crore)

Item	2023-24	2023		2024				
		Oct. 27	Sep. 20	Sep. 27	Oct. 4	Oct. 11	Oct. 18	Oct. 25
		1	2	3	4	5	6	7
1 Call Money	17761	16651	11343	18628	14262	15954	15675	16926
2 Notice Money	2550	336	5874	208	5246	912	4919	252
3 Term Money	871	935	281	805	1625	424	1287	723
4 Triparty Repo	601363	568927	605817	678781	727994	616134	761709	682726
5 Market Repo	574534	483808	486193	548987	645890	498845	589584	497243
6 Repo in Corporate Bond	1817	1096	2839	5566	5622	4519	3892	4146
7 Forex (US \$ million)	95115	84618	126154	140598	98443	105600	104189	110857
8 Govt. of India Dated Securities	90992	51094	168177	156651	151917	187506	103217	116577
9 State Govt. Securities	6102	2423	8231	11412	9122	9820	8944	7471
10 Treasury Bills								
10.1 91-Day	5378	4968	900	2522	10153	4170	4250	3130
10.2 182-Day	6079	5373	2727	5341	5057	2871	4966	4174
10.3 364-Day	4307	1837	4404	4387	9976	4695	3875	3138
10.4 Cash Management Bills			0	0	0	0	0	0
11 Total Govt. Securities (8+9+10)	112858	65694	184439	180314	186226	209062	125251	134490
11.1 RBI	492	713	788	586	187	22	216	7

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

(Amount in ₹ Crore)

Security & Type of Issue	2023-24		2023-24 (Apr.-Oct.)		2024-25 (Apr.-Oct.) *		Oct. 2023		Oct. 2024 *	
	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	339	80942	181	36446	302	121633	34	5288	47	35653
1A Premium	328	76319	172	34120	287	100410	34	5058	45	35077
1.1 Public	272	65832	139	30058	215	109257	30	5158	29	34983
1.1.1 Premium	272	62791	139	28923	215	89670	30	4957	29	34662
1.2 Rights	67	15110	42	6388	87	12376	4	130	18	670
1.2.1 Premium	56	13527	33	5198	72	10740	4	100	16	415
2 Preference Shares	-	-	-	-	-	-	-	-	-	-
2.1 Public	-	-	-	-	-	-	-	-	-	-
2.2 Rights	-	-	-	-	-	-	-	-	-	-
3 Bonds & Debentures	44	16342	25	10654	25	5526	5	2972	4	670
3.1 Convertible	-	-	-	-	-	-	-	-	-	-
3.1.1 Public	-	-	-	-	-	-	-	-	-	-
3.1.2 Rights	-	-	-	-	-	-	-	-	-	-
3.2 Non-Convertible	44	16342	25	10654	25	5526	5	2972	4	670
3.2.1 Public	44	16342	25	10654	25	5526	5	2972	4	670
3.2.2 Rights	-	-	-	-	-	-	-	-	-	-
4 Total (1+2+3)	383	97284	206	47100	327	127159	39	8260	51	36323
4.1 Public	316	82174	164	40712	240	114783	35	8130	33	35653
4.2 Rights	67	15110	42	6388	87	12376	4	130	18	670

Note : 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.

Source : Securities and Exchange Board of India.

* : Data is Provisional

External Sector

No. 31: Foreign Trade

Item	Unit	2023-24		2024				
		2023		2024			Sep.	Oct.
		Oct.	Jun.	Jul.	Aug.			
1	2	3	4	5	6	7		
1 Exports	₹ Crore	3618952	278285	293508	282611	290042	289627	329333
	US \$ Million	437072	33434	35163	33807	34572	34558	39193
1.1 Oil	₹ Crore	696850	48981	45824	43227	48456	39522	38518
	US \$ Million	84157	5885	5490	5171	5776	4716	4584
1.2 Non-oil	₹ Crore	2922102	229304	247684	239384	241586	250105	290815
	US \$ Million	352915	27549	29673	28636	28796	29843	34609
2 Imports	₹ Crore	5616042	531559	473149	480405	539789	463567	556140
	US \$ Million	678215	63862	56684	57468	64340	55313	66184
2.1 Oil	₹ Crore	1480232	134366	125581	115934	92408	104676	153725
	US \$ Million	178733	16143	15045	13869	11015	12490	18294
2.2 Non-oil	₹ Crore	4135810	397193	347569	364471	447381	358891	402415
	US \$ Million	499482	47719	41640	43600	53325	42823	47890
3 Trade Balance	₹ Crore	-1997090	-253274	-179641	-197794	-249747	-173940	-226807
	US \$ Million	-241143	-30429	-21521	-23661	-29769	-20755	-26991
3.1 Oil	₹ Crore	-783382	-85385	-79757	-72707	-43952	-65155	-115207
	US \$ Million	-94576	-10258	-9555	-8698	-5239	-7774	-13710
3.2 Non-oil	₹ Crore	-1213708	-167889	-99884	-125087	-205794	-108785	-111600
	US \$ Million	-146567	-20170	-11966	-14963	-24530	-12980	-13281

Note: Data in the table are provisional.

Source: Directorate General of Commercial Intelligence and Statistics.

No. 32: Foreign Exchange Reserves

Item	Unit	2023		2024				
		Dec. 01	Oct. 25	Nov. 01	Nov. 08	Nov. 15	Nov. 22	Nov. 29
		1	2	3	4	5	6	7
1 Total Reserves	₹ Crore	5031468	5757912	5735915	5700945	5552871	5545695	5560661
	US \$ Million	604042	684805	682130	675653	657892	656582	658091
1.1 Foreign Currency Assets	₹ Crore	4444765	4992326	4959943	4939271	4809631	4787282	4806616
	US \$ Million	533610	593751	589849	585383	569835	566791	568852
1.2 Gold	₹ Crore	394231	576181	586521	572194	554921	570744	565949
	US \$ Million	47329	68527	69751	67814	65746	67573	66979
1.3 SDRs	Volume (Metric Tonnes)	803.58	866.85	867.79	870.59	874.32	876.18	876.18
	SDRs Million	13688	13702	13702	13702	13705	13705	13705
	₹ Crore	152019	153190	153198	153217	152470	151906	152152
	US \$ Million	18250	18219	18219	18159	18064	17985	18007
1.4 Reserve Tranche Position in IMF	₹ Crore	40452	36215	36254	36263	35849	35763	35945
	US \$ Million	4853	4307	4311	4298	4247	4232	4254

*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 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.

No. 33: Non-Resident Deposits

(US \$ Million)

Scheme	Outstanding				Flows	
	2023-24	2023		2024		2023-24
		Oct.	Sep.	Oct. (P)		Apr.-Oct.
		1	2	3	4	5
1 NRI Deposits	151879	143481	161623	162693	6112	11897
1.1 FCNR(B)	25733	21427	31080	31871	2064	6138
1.2 NR(E)RA	98624	96566	100924	100873	1950	3090
1.3 NRO	27522	25487	29619	29949	2099	2669

P: Provisional.

No. 34: Foreign Investment Inflows

(US \$ Million)

Item	2023-24	2023-24	2024-25 (P)	2023	2024 (P)	
		Apr.-Oct.	Apr.-Oct.	Oct.	Sep.	Oct.
	1	2	3	4	5	6
1.1 Net Foreign Direct Investment (1.1.1-1.1.2)	10129	7699	2130	3805	-3061	-1335
1.1.1 Direct Investment to India (1.1.1.1-1.1.1.2)	26807	15674	14489	5276	-1042	181
1.1.1.1 Gross Inflows/Gross Investments	71279	42103	48638	8591	5984	6536
1.1.1.1.1 Equity	45817	27602	34693	6459	4118	4344
1.1.1.1.1.1 Government (SIA/FIPB)	585	193	529	2	3	149
1.1.1.1.1.2 RBI	31826	17934	24149	2757	2487	3524
1.1.1.1.1.3 Acquisition of shares	12013	8699	9337	3578	1516	550
1.1.1.1.1.4 Equity capital of unincorporated bodies	1394	776	679	121	111	121
1.1.1.1.2 Reinvested earnings	19768	10999	11355	1718	1580	1718
1.1.1.1.3 Other capital	5694	3503	2590	414	286	474
1.1.1.2 Repatriation/Disinvestment	44472	26429	34149	3316	7026	6356
1.1.1.2.1 Equity	41334	24552	32923	2924	6934	6234
1.1.1.2.2 Other capital	3137	1877	1226	392	92	122
1.1.2 Foreign Direct Investment by India (1.1.2.1+1.1.2.2+1.1.2.3-1.1.2.4)	16678	7975	12359	1470	2019	1516
1.1.2.1 Equity capital	9111	4504	7111	956	695	624
1.1.2.2 Reinvested Earnings	5786	3375	3429	482	482	482
1.1.2.3 Other Capital	5406	2637	3696	220	1022	591
1.1.2.4 Repatriation/Disinvestment	3624	2541	1876	189	179	181
1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3-1.2.4)	44081	18936	9161	-1741	9659	-10876
1.2.1 GDRs/ADRs	-	-	-	-	-	-
1.2.2 FIIs	44626	19520	8979	-1855	9595	-10975
1.2.3 Offshore funds and others	-	-	-	-	-	-
1.2.4 Portfolio investment by India	544	584	-182	-114	-64	-99
1 Foreign Investment Inflows	54210	26635	11291	2064	6598	-12211

P: Provisional

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

(US \$ Million)

Item	2023-24	2023	2024		
		Oct.	Aug.	Sep.	Oct.
	1	2	3	4	5
1 Outward Remittances under the LRS	31735.74	2176.98	3211.54	2758.25	2408.01
1.1 Deposit	916.45	26.28	45.56	43.00	39.06
1.2 Purchase of immovable property	242.51	11.02	22.49	25.47	24.96
1.3 Investment in equity/debt	1510.89	83.86	125.30	135.08	149.34
1.4 Gift	3580.27	184.79	244.41	221.67	216.30
1.5 Donations	11.31	0.96	0.67	0.87	0.66
1.6 Travel	17006.27	1368.98	2013.30	1713.06	1454.66
1.7 Maintenance of close relatives	4611.53	206.16	315.40	281.24	283.75
1.8 Medical Treatment	79.62	8.53	7.65	7.89	8.49
1.9 Studies Abroad	3478.65	269.19	416.39	320.10	221.18
1.10 Others	298.24	17.22	20.36	9.88	9.62

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

Item	2022-23	2023-24	2023	2024	
			Nov	Oct	Nov
	1	2	3	4	5
40-Currency Basket (Base: 2015-16=100)					
1 Trade-Weighted					
1.1 NEER	91.20	90.73	90.76	90.89	91.80
1.2 REER	102.78	103.70	104.72	107.20	108.14
2 Export-Weighted					
2.1 NEER	93.01	93.11	93.19	93.45	94.23
2.2 REER	101.10	101.21	102.16	104.24	104.97
6-Currency Basket (Trade-weighted)					
1 Base : 2015-16 =100					
1.1 NEER	85.93	83.62	83.57	81.99	82.79
1.2 REER	101.80	101.66	102.86	104.35	105.29
2 Base : 2022-23 =100					
2.1 NEER	100.00	97.31	97.26	95.42	96.35
2.2 REER	100.00	99.86	101.04	102.50	103.43

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

(Amount in US \$ Million)

Item	2023-24	2023		2024	
		Oct.	Sep.	Sep.	Oct.
		1	2	3	4
1 Automatic Route					
1.1 Number	1188	90	95	135	
1.2 Amount	29461	742	3776	5029	
2 Approval Route					
2.1 Number	33	0	1	1	
2.2 Amount	19748	0	1065	470	
3 Total (1+2)					
3.1 Number	1221	90	96	136	
3.2 Amount	49209	742	4841	5499	
4 Weighted Average Maturity (in years)	5.60	13.90	4.40	6.70	
5 Interest Rate (per cent)					
5.1 Weighted Average Margin over alternative reference rate (ARR) for Floating Rate Loans@	1.66	1.98	1.36	1.58	
5.2 Interest rate range for Fixed Rate Loans	0.00-27.00	0.00-27.00	0.00-11.00	0.00-11.00	

Borrower Category

I. Corporate Manufacturing	15836	184	378	926
II. Corporate-Infrastructure	15916	351	328	2941
a.) Transport	1505	350	0	200
b.) Energy	3513	0	15	1449
c.) Water and Sanitation	33	0	0	1
d.) Communication	6309	0	0	0
e.) Social and Commercial Infrastructure	115	0	0	63
f.) Exploration,Mining and Refinery	2480	0	313	850
g.) Other Sub-Sectors	1961	1	0	378
III. Corporate Service-Sector	1526	26	437	86
IV. Other Entities	1728	0	0	0
a.) units in SEZ	1	0	0	0
b.) SIDBI	0	0	0	0
c.) Exim Bank	1727	0	0	0
V. Banks	0	0	0	0
VI. Financial Institution (Other than NBFC)	20	0	0	0
VII. NBFCs	13361	31	3578	1436
a). NBFC- IFC/AFC	7734	0	2777	285
b). NBFC-MFI	531	2	31	120
c). NBFC-Others	5096	29	770	1031
VIII. Non-Government Organization (NGO)	0	0	0	0
IX. Micro Finance Institution (MFI)	0	0	0	0
X. Others	822	150	120	110

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	Apr-Jun 2023			Apr-Jun 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance Of Payments (1+2+3)	403470	379039	24432	506715	501489	5226
1 Current Account (1.1+ 1.2)	221636	230603	-8967	241638	251403	-9765
1.1 Merchandise	104936	161637	-56701	111175	176297	-65122
1.2 Invisibles (1.2.1+1.2.2+1.2.3)	116700	68967	47734	130463	75106	55357
1.2.1 Services	80569	45449	35121	88466	48740	39725
1.2.1.1 Travel	6412	9489	-3077	7352	9171	-1819
1.2.1.2 Transportation	7408	7693	-285	8507	8609	-102
1.2.1.3 Insurance	761	591	170	903	593	310
1.2.1.4 G.n.i.e.	159	250	-91	161	309	-147
1.2.1.5 Miscellaneous	65830	27427	38404	71542	30058	41484
1.2.1.5.1 Software Services	38172	4243	33928	41926	4479	37447
1.2.1.5.2 Business Services	21831	15203	6627	23000	16625	6375
1.2.1.5.3 Financial Services	1891	1152	739	2215	1267	948
1.2.1.5.4 Communication Services	831	324	507	519	444	75
1.2.2 Transfers	27117	4279	22838	29519	3169	26350
1.2.2.1 Official	20	255	-235	18	266	-248
1.2.2.2 Private	27097	4024	23073	29502	2904	26598
1.2.3 Income	9014	19239	-10225	12478	23196	-10718
1.2.3.1 Investment Income	7187	18372	-11185	10341	22218	-11878
1.2.3.2 Compensation of Employees	1827	868	959	2137	978	1159
2 Capital Account (2.1+2.2+2.3+2.4+2.5)	181834	148018	33816	264492	250086	14406
2.1 Foreign Investment (2.1.1+2.1.2)	109054	88595	20459	183279	176019	7259
2.1.1 Foreign Direct Investment	19278	14551	4728	23435	17120	6315
2.1.1.1 In India	17790	10427	7362	22287	12171	10116
2.1.1.1.1 Equity	11266	9351	1915	16402	11673	4729
2.1.1.1.2 Reinvested Earnings	4541	0	4541	4897		4897
2.1.1.1.3 Other Capital	1983	1077	906	988	498	490
2.1.1.2 Abroad	1489	4123	-2634	1147	4949	-3801
2.1.1.2.1 Equity	1489	1864	-375	1147	2346	-1199
2.1.1.2.2 Reinvested Earnings	0	1446	-1446	0	1500	-1500
2.1.1.2.3 Other Capital	0	813	-813	0	1102	-1102
2.1.2 Portfolio Investment	89775	74045	15731	159844	158899	945
2.1.2.1 In India	88743	72654	16089	159240	158343	897
2.1.2.1.1 FIIs	88743	72654	16089	159240	158343	897
2.1.2.1.1.1 Equity	77174	63525	13649	139824	140833	-1009
2.1.2.1.1.2 Debt	11569	9129	2440	19416	17510	1906
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	1032	1391	-358	604	556	48
2.2 Loans (2.2.1+2.2.2+2.2.3)	30359	28188	2171	31905	25940	5965
2.2.1 External Assistance	3032	1603	1429	3641	2271	1371
2.2.1.1 By India	9	49	-40	8	30	-22
2.2.1.2 To India	3023	1553	1470	3634	2241	1393
2.2.2 Commercial Borrowings	15452	9721	5731	12618	10951	1667
2.2.2.1 By India	2212	2071	140	4138	4255	-117
2.2.2.2 To India	13241	7650	5591	8481	6696	1785
2.2.3 Short Term to India	11875	16864	-4989	15645	12718	2927
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	11875	14352	-2477	13572	12718	854
2.2.3.2 Suppliers' Credit up to 180 days	0	2512	-2512	2073	0	2073
2.3 Banking Capital (2.3.1+2.3.2)	33279	20339	12940	36380	33511	2870
2.3.1 Commercial Banks	33107	20339	12769	36259	33511	2749
2.3.1.1 Assets	13315	3382	9934	10705	13570	-2865
2.3.1.2 Liabilities	19792	16957	2835	25554	19941	5614
2.3.1.2.1 Non-Resident Deposits	18896	16688	2208	23426	19401	4025
2.3.2 Others	172	0	172	121	0	121
2.4 Rupee Debt Service	0	62	-62	0	61	-61
2.5 Other Capital	9143	10834	-1691	12928	14556	-1627
3 Errors & Omissions	0	418	-418	585	0	585
4 Monetary Movements (4.1+ 4.2)	0	24432	-24432	0	5226	-5226
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	24432	-24432	5226	5226	-5226

Note: P: Preliminary.

No. 39: India's Overall Balance of Payments

(₹ Crore)

Item	Apr-Jun 2023			Apr-Jun 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance Of Payments (1+2+3)	3316497	3115671	200826	4227182	4183585	43597
1 Current Account (1.1+ 1.2)	1821831	1895540	-73709	2015823	2097284	-81461
1.1 Merchandise	862564	1328641	-46077	927458	1470724	-543266
1.2 Invisibles (1.2.1+1.2.2+1.2.3)	959267	566900	392367	1088365	626560	461805
1.2.1 Services	662275	373584	288691	738010	406609	331401
1.2.1.1 Travel	52702	77997	-25295	61335	76511	-15177
1.2.1.2 Transportation	60895	63237	-2342	70965	71816	-851
1.2.1.3 Insurance	6251	4854	1398	7535	4950	2585
1.2.1.4 G.n.i.e.	1305	2051	-746	1346	2575	-1229
1.2.1.5 Miscellaneous	541121	225445	315676	596830	250757	346073
1.2.1.5.1 Software Services	313769	34880	278889	349760	37363	312397
1.2.1.5.2 Business Services	179448	124971	54477	191873	138694	53178
1.2.1.5.3 Financial Services	15546	9473	6073	18478	10572	7906
1.2.1.5.4 Communication Services	6827	2663	4165	4331	3702	629
1.2.2 Transfers	222898	35170	187728	246261	26440	219821
1.2.2.1 Official	160	2094	-1934	150	2216	-2066
1.2.2.2 Private	222738	33076	189662	246112	24225	221887
1.2.3 Income	74093	158146	-84052	104093	193510	-89417
1.2.3.1 Investment Income	59076	151014	-91938	86265	185352	-99087
1.2.3.2 Compensation of Employees	15018	7132	7886	17829	8158	9670
2 Capital Account (2.1+2.2+2.3+2.4+2.5)	1494666	1216698	277968	2206479	2086302	120178
2.1 Foreign Investment (2.1.1+2.1.2)	896414	728246	168169	1528971	1468411	60560
2.1.1 Foreign Direct Investment	158467	119605	38862	195500	142821	52679
2.1.1.1 In India	146230	85713	60517	185930	101538	84392
2.1.1.1.1 Equity	92604	76861	15743	136835	97382	39453
2.1.1.1.2 Reinvested Earnings	37323	0	37323	40849	0	40849
2.1.1.1.3 Other Capital	16303	8853	7450	8246	4156	4090
2.1.1.2 Abroad	12237	33892	-21654	9570	41283	-31713
2.1.1.2.1 Equity	12237	15322	-3085	9570	19574	-10004
2.1.1.2.2 Reinvested Earnings	0	11889	-11889	0	12515	-12515
2.1.1.2.3 Other Capital	0	6681	-6681	0	9194	-9194
2.1.2 Portfolio Investment	737947	608641	129306	1333471	1325590	7881
2.1.2.1 In India	729461	597209	132252	1328434	1320949	7485
2.1.2.1.1 FIIs	729461	597209	132252	1328434	1320949	7485
2.1.2.1.1.1 Equity	634364	522169	112195	1166461	1174878	-8416
2.1.2.1.1.2 Debt	95097	75040	20058	161973	146071	15901
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	8486	11432	-2946	5037	4641	396
2.2 Loans (2.2.1+2.2.2+2.2.3)	249550	231703	17847	266160	216400	49760
2.2.1 External Assistance	24921	13173	11749	30377	18943	11433
2.2.1.1 By India	72	404	-331	64	247	-184
2.2.1.2 To India	24849	12769	12080	30313	18696	11617
2.2.2 Commercial Borrowings	127016	79909	47107	105264	91357	13907
2.2.2.1 By India	18179	17027	1153	34517	35497	-980
2.2.2.2 To India	108837	62882	45955	70747	55860	14887
2.2.3 Short Term to India	97612	138621	-41009	130519	106100	24420
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	97612	117969	-20357	113225	106100	7125
2.2.3.2 Suppliers' Credit up to 180 days	0	20652	-20652	17295	0	17295
2.3 Banking Capital (2.3.1+2.3.2)	273549	167181	106367	303498	279556	23942
2.3.1 Commercial Banks	272138	167181	104957	302487	279556	22931
2.3.1.1 Assets	109451	27797	81653	89303	113205	-23902
2.3.1.2 Liabilities	162687	139384	23304	213184	166351	46833
2.3.1.2.1 Non-Resident Deposits	155328	137175	18153	195426	161851	33575
2.3.2 Others	1410	0	1410	1011	0	1011
2.4 Rupee Debt Service	0	512	-512	0	508	-508
2.5 Other Capital	75153	89057	-13904	107850	121427	-13577
3 Errors & Omissions	0	3432	-3432	4880	0	4880
4 Monetary Movements (4.1+ 4.2)	0	200826	-200826	0	43597	-43597
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	200826	-200826	0	43597	-43597

Note: P: Preliminary.

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

Item	(US\$ Million)					
	Apr-Jun 2023			Apr-Jun 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	221635	230581	-8945	241638	251377	-9739
1.A Goods and Services (1.A.a+1.A.b)	185505	207085	-21580	199641	225037	-25396
1.A.a Goods (1.A.a.1 to 1.A.a.3)	104936	161637	-56701	111175	176297	-65122
1.A.a.1 General merchandise on a BOP basis	104497	151939	-47442	111136	166784	-55648
1.A.a.2 Net exports of goods under merchanting	438	0	438	39	0	39
1.A.a.3 Nonmonetary gold	0	9698	-9698	9512	9512	-9512
1.A.b Services (1.A.b.1 to 1.A.b.13)	80569	45449	35121	88466	48740	39725
1.A.b.1 Manufacturing services on physical inputs owned by others	481	42	439	268	22	246
1.A.b.2 Maintenance and repair services n.i.e.	47	431	-385	81	238	-157
1.A.b.3 Transport	7408	7693	-285	8507	8609	-102
1.A.b.4 Travel	6412	9489	-3077	7352	9171	-1819
1.A.b.5 Construction	870	697	174	1478	563	915
1.A.b.6 Insurance and pension services	761	591	170	903	593	310
1.A.b.7 Financial services	1891	1152	739	2215	1267	948
1.A.b.8 Charges for the use of intellectual property n.i.e.	381	3647	-3266	341	4448	-4107
1.A.b.9 Telecommunications, computer, and information services	39091	4859	34231	42541	5215	37326
1.A.b.10 Other business services	21831	15203	6627	23000	16625	6375
1.A.b.11 Personal, cultural, and recreational services	968	1279	-312	1175	1249	-74
1.A.b.12 Government goods and services n.i.e.	159	250	-91	161	309	-147
1.A.b.13 Others n.i.e.	272	116	156	444	432	12
1.B Primary Income (1.B.1 to 1.B.3)	9014	19239	-10225	12478	23196	-10718
1.B.1 Compensation of employees	1827	868	959	2137	978	1159
1.B.2 Investment income	5777	17935	-12158	8448	21594	-13146
1.B.2.1 Direct investment	2355	9950	-7595	3173	12343	-9170
1.B.2.2 Portfolio investment	208	2250	-2042	70	2411	-2341
1.B.2.3 Other investment	517	5546	-5029	1110	6620	-5510
1.B.2.4 Reserve assets	2697	189	2508	4095	220	3876
1.B.3 Other primary income	1410	436	973	1892	624	1268
1.C Secondary Income (1.C.1+1.C.2)	27116	4256	22860	29519	3144	26376
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	27097	4024	23073	29502	2904	26598
1.C.1.1 Personal transfers (Current transfers between resident and/non-resident households)	26325	2680	23645	28644	1989	26655
1.C.1.2 Other current transfers	772	1343	-571	857	914	-57
1.C.2 General government	19	232	-214	18	240	-222
2 Capital Account (2.1+2.2)	150	145	5	185	146	40
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	12	51	-39	4	45	-41
2.2 Capital transfers	138	94	44	182	101	81
3 Financial Account (3.1 to 3.5)	181685	172328	9358	264307	255192	9114
3.1 Direct Investment (3.1A+3.1B)	19278	14551	4728	23435	17120	6315
3.1.A Direct Investment in India	17790	10427	7362	22287	12171	10116
3.1.A.1 Equity and investment fund shares	15806	9351	6456	21299	11673	9626
3.1.A.1.1 Equity other than reinvestment of earnings	11266	9351	1915	16402	11673	4729
3.1.A.1.2 Reinvestment of earnings	4541	0	4541	4897	4897	
3.1.A.2 Debt instruments	1983	1077	906	988	498	490
3.1.A.2.1 Direct investor in direct investment enterprises	1983	1077	906	988	498	490
3.1.B Direct Investment by India	1489	4123	-2634	1147	4949	-3801
3.1.B.1 Equity and investment fund shares	1489	3310	-1822	1147	3847	-2699
3.1.B.1.1 Equity other than reinvestment of earnings	1489	1864	-375	1147	2346	-1199
3.1.B.1.2 Reinvestment of earnings	0	1446	-1446	0	1500	-1500
3.1.B.2 Debt instruments	0	813	-813	0	1102	-1102
3.1.B.2.1 Direct investor in direct investment enterprises	0	813	-813	0	1102	-1102
3.2 Portfolio Investment	89775	74045	15731	159844	158899	945
3.2.A Portfolio Investment in India	88743	72654	16089	159240	158343	897
3.2.1 Equity and investment fund shares	77174	63525	13649	139824	140833	-1009
3.2.2 Debt securities	11569	9129	2440	19416	17510	1906
3.2.B Portfolio Investment by India	1032	1391	-358	604	556	48
3.3 Financial derivatives (other than reserves) and employee stock options	5013	5736	-723	6053	9666	-3613
3.4 Other investment	67619	53565	14053	74976	64281	10694
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	19068	16688	2380	23547	19401	4146
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	172	0	172	121	0	121
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	18896	16688	2208	23426	19401	4025
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)	32695	14974	17720	29093	27331	1762
3.4.3.A Loans to India	30474	12854	17621	24948	23046	1901
3.4.3.B Loans by India	2220	2120	100	4145	4285	-139
3.4.4 Insurance, pension, and standardized guarantee schemes	38	168	-130	47	133	-86
3.4.5 Trade credit and advances	11875	16864	-4989	15645	12718	2927
3.4.6 Other accounts receivable/payable - other	3943	4871	-928	6643	4698	1945
3.4.7 Special drawing rights	0	0	0	0	0	0
3.5 Reserve assets	0	24432	-24432	0	5226	-5226
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	24432	-24432	0	5226	-5226
4 Total assets/liabilities	181685	172328	9358	264307	255192	9114
4.1 Equity and investment fund shares	100552	83480	17072	168975	166708	2266
4.2 Debt instruments	77190	59545	17645	88689	78560	10129
4.3 Other financial assets and liabilities	3943	29302	-25359	6643	9924	-3281
5 Net errors and omissions	0	418	-418	585	0	585

Note: P: Preliminary.

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

(₹ Crore)

Item	Apr-Jun 2023			Apr-Jun 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	1821825	1895356	-73531	2015820	2097068	-81248
1.A Goods and Services (1.A.a+1.A.b)	1524839	1702225	-177386	1665468	1877333	-211865
1.A.a Goods (1.A.a.1 to 1.A.a.3)	862564	1328641	-466077	927458	1470724	-543266
1.A.a.1 General merchandise on a BOP basis	858960	1248927	-389967	927134	1391370	-464235
1.A.a.2 Net exports of goods under merchanting	3604	0	3604	324	0	324
1.A.a.3 Nonmonetary gold	0	79714	-79714	0	79355	-79355
1.A.b Services (1.A.b.1 to 1.A.b.13)	662275	373584	288691	738010	406609	331401
1.A.b.1 Manufacturing services on physical inputs owned by others	3955	345	3610	2234	183	2051
1.A.b.2 Maintenance and repair services n.i.e.	382	3546	-3164	676	1983	-1307
1.A.b.3 Transport	60895	63237	-2342	70965	71816	-851
1.A.b.4 Travel	52702	77997	-25295	61335	76511	-15177
1.A.b.5 Construction	7153	5726	1427	12327	4693	7635
1.A.b.6 Insurance and pension services	6251	4854	1398	7535	4950	2585
1.A.b.7 Financial services	15546	9473	6073	18478	10572	7906
1.A.b.8 Charges for the use of intellectual property n.i.e.	3128	29977	-26849	2843	37103	-34261
1.A.b.9 Telecommunications, computer, and information services	321321	39942	281380	354891	43507	311384
1.A.b.10 Other business services	179448	124971	54477	191873	138694	53178
1.A.b.11 Personal, cultural, and recreational services	7953	10515	-2562	9803	10418	-615
1.A.b.12 Government goods and services n.i.e.	1305	2051	-746	1346	2575	-1229
1.A.b.13 Others n.i.e.	2235	950	1285	3706	3604	102
1.B Primary Income (1.B.1 to 1.B.3)	74093	158146	-84052	104093	193510	-89417
1.B.1 Compensation of employees	15018	7132	7886	17829	8158	9670
1.B.2 Investment income	47486	147426	-99940	70478	180146	-109668
1.B.2.1 Direct investment	19356	81790	-62434	26468	102971	-76503
1.B.2.2 Portfolio investment	1710	18491	-16781	582	20112	-19530
1.B.2.3 Other investment	4252	45590	-41337	9262	55229	-45968
1.B.2.4 Reserve assets	22167	1555	20612	34166	1833	32333
1.B.3 Other primary income	11590	3588	8002	15787	5206	10581
1.C Secondary Income (1.C.1+1.C.2)	222893	34986	187907	246259	26225	220034
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	222738	33076	189662	246112	24225	221887
1.C.1.1 Personal transfers (Current transfers between resident and/non-resident households)	216392	22033	194358	238960	16597	222364
1.C.1.2 Other current transfers	6346	11042	-4696	7151	7628	-477
1.C.2 General government	155	1910	-1755	147	2000	-1852
2 Capital Account (2.1+2.2)	1232	1188	44	1547	1214	333
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	100	418	-319	32	375	-343
2.2 Capital transfers	1132	770	362	1515	839	675
3 Financial Account (3.1 to 3.5)	1493440	1416520	76920	2204934	2128900	76035
3.1 Direct Investment (3.1A+3.1B)	158467	119605	38862	195500	142821	52679
3.1.A Direct Investment in India	146230	85713	60517	185930	101538	84392
3.1.A.1 Equity and investment fund shares	129927	76861	53067	177683	97382	80301
3.1.A.1.1 Equity other than reinvestment of earnings	92604	76861	15743	136835	97382	39453
3.1.A.1.2 Reinvestment of earnings	37323	0	37323	40849	0	40849
3.1.A.2 Debt instruments	16303	8853	7450	8246	4156	4090
3.1.A.2.1 Direct investor in direct investment enterprises	16303	8853	7450	8246	4156	4090
3.1.B Direct Investment by India	12237	33892	-21654	9570	41283	-31713
3.1.B.1 Equity and investment fund shares	12237	27211	-14974	9570	32089	-22519
3.1.B.1.1 Equity other than reinvestment of earnings	12237	15322	-3085	9570	19574	-10004
3.1.B.1.2 Reinvestment of earnings	0	11889	-11889	0	12515	-12515
3.1.B.2 Debt instruments	0	6681	-6681	0	9194	-9194
3.1.B.2.1 Direct investor in direct investment enterprises	0	6681	-6681	0	9194	-9194
3.2 Portfolio Investment	737947	608641	129306	1333471	1325590	7881
3.2.A Portfolio Investment in India	729461	597209	132252	1328434	1320949	7485
3.2.A.1 Equity and investment fund shares	634364	522169	112195	1166461	1174878	-8416
3.2.A.2 Debt securities	95097	75040	20058	161973	146071	15901
3.2.B Portfolio Investment by India	8486	11432	-2946	5037	4641	396
3.3 Financial derivatives (other than reserves) and employee stock options	41207	47148	-5941	50493	80637	-30144
3.4 Other investment	555819	440301	115518	625470	536255	89216
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	156738	137175	19563	196437	161851	34586
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	1410	0	1410	1011	0	1011
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	155328	137175	18153	195426	161851	33575
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)	268748	123088	145661	242702	228005	14697
3.4.3.A Loans to India	250497	105658	144839	208121	192261	15861
3.4.3.B Loans by India	18252	17430	821	34581	35744	-1164
3.4.4 Insurance, pension, and standardized guarantee schemes	308	1380	-1072	396	1109	-714
3.4.5 Trade credit and advances	97612	138621	-41009	130519	106100	24420
3.4.6 Other accounts receivable/payable - other	32413	40037	-7624	55416	39189	16227
3.4.7 Special drawing rights	0	0	0	0	0	0
3.5 Reserve assets	0	200826	-200826	0	43597	-43597
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	200826	-200826	0	43597	-43597
4 Total assets/liabilities	1493440	1416520	76920	2204934	2128900	76035
4.1 Equity and investment fund shares	826529	686201	140328	1409641	1390737	18904
4.2 Debt instruments	634499	489457	145042	739877	655377	84500
4.3 Other financial assets and liabilities	32413	240863	-208450	55416	82786	-27370
5 Net errors and omissions	0	3432	-3432	4880	0	4880

Note: P: Preliminary.

No. 42: India's International Investment Position

(US\$ Million)

Item	As on Financial Year/Quarter End							
	2023-24		2023		2024			
			Jun.		Mar.		Jun.	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	1	2	3	4	5	6	7	8
1. Direct investment Abroad/in India	242271	542777	228227	532278	242271	542777	246072	552178
1.1 Equity Capital*	153343	511142	143893	501412	153343	511142	156042	520277
1.2 Other Capital	88927	31635	84334	30866	88927	31635	90029	31900
2. Portfolio investment	12162	277118	14511	258539	12162	277118	12103	277272
2.1 Equity	10644	162061	12567	152928	10644	162061	10367	160898
2.2 Debt	1517	115057	1944	105611	1517	115057	1736	116374
3. Other investment	128450	571045	105256	531184	128450	571045	141261	590312
3.1 Trade credit	33450	123659	29658	119317	33450	123659	32874	126577
3.2 Loan	13578	221886	13037	206940	13578	221886	16837	225023
3.3 Currency and Deposits	52803	154787	33117	144069	52803	154787	57032	160628
3.4 Other Assets/Liabilities	28619	48804	29443	38848	28619	48804	34518	56319
4. Reserves	646419		595051		646419		651997	
5. Total Assets/ Liabilities	1029301	1390940	943044	1322001	1029301	1390940	1051433	1419761
6. Net IIP (Assets - Liabilities)		-361639		-378956		-361639		-368329

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 2023-24	2023		2024		FY 2023-24	2023		2024	
		Oct.	Sep.	Oct.	Oct.		Oct.	Sep.	Oct.	
	1	2	3	4	5	6	7	8		
A. Settlement Systems										
Financial Market Infrastructures (FMIs)										
1 CCIL Operated Systems (1.1 to 1.3)	43.04	3.31	4.08	3.59	259206893	21422005	23840258	25730864		
1.1 Govt. Securities Clearing (1.1.1 to 1.1.3)	16.80	1.26	1.57	1.69	170464587	13902085	14750412	16664120		
1.1.1 Outright	9.51	0.66	0.99	1.04	13463848	889349	1468346	1626397		
1.1.2 Repo	4.94	0.40	0.37	0.41	76718788	5760793	6038102	6573748		
1.1.3 Tri-party Repo	2.35	0.20	0.21	0.23	80281951	7251944	7243965	8463975		
1.2 Forex Clearing	24.92	1.96	2.40	1.74	80984671	7018310	8415273	8046345		
1.3 Rupee Derivatives @	1.31	0.10	0.11	0.16	7757636	501610	674573	1020399		
B. Payment Systems										
I Financial Market Infrastructures (FMIs)										
1 Credit Transfers - RTGS (1.1 to 1.2)	2700.16	224.62	233.33	267.92	170886670	13464400	17786483	17070975		
1.1 Customer Transactions	2686.04	223.48	232.21	266.69	152406168	11899324	16027655	15418778		
1.2 Interbank Transactions	14.12	1.14	1.12	1.23	18480503	1565076	1758828	1652197		
II Retail										
2 Credit Transfers - Retail (2.1 to 2.6)	1486106.89	128356.32	166626.30	185187.17	67542859	5667254	6384754	7358283		
2.1 AePS (Fund Transfers) @	3.92	0.31	0.30	0.31	261	20	14	17		
2.2 APBS \$	25888.17	1745.79	2342.41	4021.91	390743	19666	35550	69157		
2.3 IMPS	60053.35	4928.80	4299.36	4668.23	6495652	538239	565233	629382		
2.4 NACH Cr \$	16227.27	1278.99	1657.93	1463.68	1525104	131546	122079	157479		
2.5 NEFT	72639.50	6314.53	7908.83	9183.38	39136014	3262015	3597885	4152428		
2.6 UPI @	1311294.68	114087.90	150417.47	165849.66	19995086	1715768	2063995	2349821		
2.6.1 of which USSD @	26.19	2.63	1.31	1.64	352	38	14	18		
3 Debit Transfers and Direct Debits (3.1 to 3.3)	18249.53	1499.66	1805.36	1871.73	1687658	139050	180707	189818		
3.1 BHIM Aadhaar Pay @	193.59	15.14	18.81	24.54	6112	525	568	773		
3.2 NACH Dr \$	16426.49	1348.29	1651.69	1710.21	1678769	138287	179945	188844		
3.3 NETC (linked to bank account) @	1629.45	136.23	134.86	136.98	2777	238	193	202		
4 Card Payments (4.1 to 4.2)	58469.79	5104.71	5275.26	5774.01	2423563	230670	216304	248709		
4.1 Credit Cards (4.1.1 to 4.1.2)	35610.15	3200.48	3921.62	4332.14	1831134	178569	176202	201789		
4.1.1 PoS based \$	18614.08	1596.74	1978.05	2196.73	651911	57774	60857	79293		
4.1.2 Others \$	16996.08	1603.73	1943.57	2135.41	1179223	120795	115345	122496		
4.2 Debit Cards (4.2.1 to 4.2.1)	22859.64	1904.23	1353.64	1441.87	592429	52101	40102	46920		
4.2.1 PoS based \$	16477.95	1375.28	995.07	1063.87	393589	33731	25777	32182		
4.2.2 Others \$	6381.69	528.95	358.58	378.00	198840	18370	14324	14738		
5 Prepaid Payment Instruments (5.1 to 5.2)	78775.40	6687.84	5476.69	5977.88	283048	25012	17489	20419		
5.1 Wallets	63256.69	5329.32	4054.95	4425.20	234353	20649	11889	13074		
5.2 Cards (5.2.1 to 5.2.2)	15518.71	1358.52	1421.74	1552.68	48695	4362	5600	7345		
5.2.1 PoS based \$	8429.87	735.65	721.65	718.88	11247	872	858	981		
5.2.2 Others \$	7088.84	622.87	700.09	833.81	37447	3490	4743	6365		
6 Paper-based Instruments (6.1 to 6.2)	6632.10	559.90	484.94	546.98	7212333	584454	543387	624057		
6.1 CTS (NPCI Managed)	6632.10	559.90	484.94	546.98	7212333	584454	543387	624057		
6.2 Others	0.00	-	-	-	-	-	-	-		
Total - Retail Payments (2+3+4+5+6)	1648233.71	142208.43	179668.57	199357.77	79149461	6646440	7342641	8441287		
Total Payments (1+2+3+4+5+6)	1650933.88	142433.05	179901.90	199625.69	250036131	20110841	25129124	25512262		
Total Digital Payments (1+2+3+4+5)	1644301.78	141873.15	179416.96	199078.71	242823799	19526387	24585737	24888205		

CURRENT STATISTICS

PART II - Payment Modes and Channels

PART II - Payment Modes and Channels

System	Volume (Lakh)				Value (₹ Crore)					
	FY 2023-24	2023		2024		FY 2023-24	2023		2024	
		Oct.	Sep.	Oct.	Oct.		Oct.	Sep.	Oct.	
1	2	3	4	5	6	7	8			
A. Other Payment Channels										
1 Mobile Payments (mobile app based) (1.1 to 1.2)	1252599.21	109334.05	143577.22	156523.15	30687088	2619086	3164355	3568090		
1.1 Intra-bank \$	83000.56	6877.68	9082.11	9560.14	5676805	474253	601793	667326		
1.2 Inter-bank \$	1169598.65	102456.37	134495.11	146963.01	25010283	2144833	2562562	2900764		
2 Internet Payments (Netbanking / Internet Browser Based) @ (2.1 to 2.2)	45034.98	3736.00	3847.73	4190.45	102117736	8464802	10092959	10129153		
2.1 Intra-bank @	12033.28	983.50	1101.62	1149.60	53247042	4400612	5123573	4971326		
2.2 Inter-bank @	33001.71	2752.51	2746.11	3040.85	48870694	4064190	4969386	5157826		
B. ATMs										
3 Cash Withdrawal at ATMs \$ (3.1 to 3.3)	66440.72	5721.32	4949.81	5545.14	3259388	277832	245223	285511		
3.1 Using Credit Cards \$	95.80	8.54	8.02	8.32	4648	413	417	444		
3.2 Using Debit Cards \$	66001.01	5683.38	4922.18	5515.33	3241538	276289	243930	284081		
3.3 Using Pre-paid Cards \$	343.90	29.40	19.62	21.49	13202	1130	876	985		
4 Cash Withdrawal at PoS \$ (4.1 to 4.2)	15.18	0.85	0.27	0.29	148	8	3	3		
4.1 Using Debit Cards \$	15.06	0.84	0.25	0.28	147	8	3	3		
4.2 Using Pre-paid Cards \$	0.12	0.01	0.01	0.01	1	0	0	0		
5 Cash Withdrawal at Micro ATMs @	11754.95	986.49	975.12	1227.30	314003	25378	23389	31480		
5.1 AePS @	11754.95	986.49	975.12	1227.30	314003	25378	23389	31480		

PART III - Payment Infrastructures (Lakh)

System	As on March 2024	2023		2024	
		Oct.	Sep.	Oct.	Oct.
	1	2	3	4	
Payment System Infrastructures					
1 Number of Cards (1.1 to 1.2)	10667.22	10748.82	10968.21	11053.03	
1.1 Credit Cards	1018.03	947.11	1061.03	1068.90	
1.2 Debit Cards	9649.19	9801.71	9907.18	9984.13	
2 Number of PPIs @ (2.1 to 2.2)	16743.63	16830.82	15339.88	15503.27	
2.1 Wallets @	13381.80	13668.03	11381.79	11439.31	
2.2 Cards @	3361.82	3162.79	3958.09	4063.95	
3 Number of ATMs (3.1 to 3.2)	2.58	2.58	2.55	2.56	
3.1 Bank owned ATMs \$	2.23	2.23	2.20	2.21	
3.2 White Label ATMs \$	0.35	0.35	0.35	0.35	
4 Number of Micro ATMs @	17.55	15.30	14.45	14.43	
5 Number of PoS Terminals	89.03	83.48	93.43	95.09	
6 Bharat QR @	62.50	59.75	64.16	64.31	
7 UPI QR *	3434.93	3017.20	6069.95	6167.67	

@: 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

Note : 1. Data is provisional.

1. ECS (Debit and Credit) has been merged with NACH with effect from January 31, 2020.

2. 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.

3. 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 –

4. Include transactions done through mobile apps of banks and UPI apps.

5. 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	2023	2024		
			Sep.	Jul.	Aug.	Sep.
			1	2	3	4
1 Small Savings						
	Receipts	232460	17908	17440	12130	11569
	Outstanding	1865029	1747246	1928913	1940611	1951745
1.1 Total Deposits						
	Receipts	161344	13376	13575	9998	9281
	Outstanding	1298795	1216325	1351214	1361210	1370491
1.1.1 Post Office Saving Bank Deposits	Receipts	17229	2879	2445	-205	810
	Outstanding	191692	211296	199223	199017	199827
1.1.2 Sukanya Samriddhi Yojna	Receipts	35174	1672	2115	2005	1878
	Outstanding	157611	99427	167150	169154	171032
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	2073	1907	1710	1222
	Outstanding	269007	258381	276451	278161	279383
1.1.6 Senior Citizen Scheme 2004	Receipts	38167	2643	2703	2436	1942
	Outstanding	175472	162188	185389	187824	189766
1.1.7 Post Office Time Deposits	Receipts	25341	1849	3494	3052	2436
	Outstanding	305776	291826	319069	322122	324558
1.1.7.1 1 year Time Deposits	Outstanding	140423	131305	149939	152099	153904
1.1.7.2 2 year Time Deposits	Outstanding	11967	10640	13188	13491	13737
1.1.7.3 3 year Time Deposits	Outstanding	8932	8255	9619	9773	9907
1.1.7.4 5 year Time Deposits	Outstanding	144454	141626	146323	146759	147010
1.1.8 Post Office Recurring Deposits	Receipts	18713	2284	935	1005	1020
	Outstanding	197134	191314	201958	202963	203983
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	-24	-25	-6	-28
	Outstanding	1754	1553	1623	1617	1589
1.1.11 PM Care for children	Receipts	16	0	1	1	1
	Outstanding	349	340	351	352	353
1.2 Saving Certificates						
	Receipts	56069	4343	3742	1788	2152
	Outstanding	418021	396508	429706	431065	432781
1.2.1 National Savings Certificate VIII issue	Receipts	16853	1176	1395	1180	768
	Outstanding	183905	173807	189081	190261	191030
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	1853	1492	-174	695
	Outstanding	220560	211987	225358	225184	225879
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	1314	855	782	689
	Outstanding	18277	11454	21761	22543	23232
1.2.8 Other Certificates	Outstanding	-4721	-740	-6494	-6923	-7360
1.3 Public Provident Fund						
	Receipts	15047	189	123	344	136
	Outstanding	148213	134413	147993	148336	148473

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)

Category	Central Government Dated Securities				
	2023		2024		
	Sep.	Dec.	Mar.	Jun.	Sep.
	1	2	3	4	5
(A) Total (in ₹. Crore)	10383607	10538792	10740389	10946860	11271589
1 Commercial Banks	37.96	37.55	37.66	37.52	37.55
2 Co-operative Banks	1.52	1.49	1.47	1.42	1.35
3 Non-Bank PDs	0.66	0.67	0.66	0.70	0.77
4 Insurance Companies	26.05	26.16	25.98	26.11	25.95
5 Mutual Funds	3.02	3.03	2.90	2.87	3.14
6 Provident Funds	4.42	4.57	4.47	4.41	4.25
7 Pension Funds	4.32	4.44	4.52	4.74	4.86
8 Financial Institutions	0.54	0.55	0.55	0.57	0.63
9 Corporates	1.21	1.33	1.35	1.44	1.60
10 Foreign Portfolio Investors	1.61	1.92	2.34	2.34	2.80
11 RBI	13.06	12.54	12.31	11.92	11.16
12 Others	5.64	5.74	5.79	5.97	5.92
12.1 State Governments	2.04	2.07	2.04	2.13	2.19

Category	State Governments Securities				
	2023		2024		
	Sep.	Dec.	Mar.	Jun.	Sep.
	1	2	3	4	5
(B) Total (in ₹. Crore)	5161642	5338587	5646219	5727482	5909490
1 Commercial Banks	33.87	33.90	34.14	33.85	34.39
2 Co-operative Banks	3.60	3.53	3.39	3.38	3.29
3 Non-Bank PDs	0.61	0.63	0.60	0.59	0.60
4 Insurance Companies	26.97	26.64	26.14	25.85	25.56
5 Mutual Funds	1.86	2.00	2.09	2.08	1.93
6 Provident Funds	21.70	22.00	22.35	22.94	23.02
7 Pension Funds	4.82	4.56	4.76	4.87	4.87
8 Financial Institutions	1.65	1.63	1.59	1.58	1.57
9 Corporates	1.87	2.03	2.02	2.03	1.95
10 Foreign Portfolio Investors	0.02	0.03	0.07	0.05	0.04
11 RBI	0.69	0.66	0.63	0.62	0.60
12 Others	2.34	2.37	2.20	2.17	2.18
12.1 State Governments	0.27	0.27	0.25	0.26	0.26

Category	Treasury Bills				
	2023		2024		
	Sep.	Dec.	Mar.	Jun.	Sep.
	1	2	3	4	5
(C) Total (in ₹. Crore)	925317	849151	871662	858193	747242
1 Commercial Banks	56.35	57.18	58.53	47.79	44.74
2 Co-operative Banks	1.20	1.28	1.67	1.49	1.58
3 Non-Bank PDs	0.54	1.70	1.66	2.69	2.28
4 Insurance Companies	5.26	5.50	5.06	5.78	5.26
5 Mutual Funds	12.74	11.21	11.89	14.50	15.06
6 Provident Funds	1.52	0.08	0.15	0.60	0.26
7 Pension Funds	0.01	0.00	0.01	0.00	0.00
8 Financial Institutions	4.10	5.34	7.16	6.56	6.36
9 Corporates	4.00	4.58	4.50	4.79	4.66
10 Foreign Portfolio Investors	0.10	0.07	0.01	0.20	0.15
11 RBI	0.00	0.00	0.00	0.00	0.00
12 Others	14.17	13.06	9.36	15.59	19.65
12.1 State Governments	11.36	9.26	5.88	11.55	14.95

Note:

The table format is revised since June 2023 issue of the bulletin.

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.

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

Item	(₹ Crore)					
	2018-19 1	2019-20 2	2020-21 3	2021-22 4	2022-23 RE 5	2023-24 BE 6
1 Total Disbursements	5040747	5410887	6353359	7098451	8376972	9045119
1.1 Developmental	2882758	3074492	3823423	4189146	5073367	5426440
1.1.1 Revenue	2224367	2446605	3150221	3255207	3838714	3836447
1.1.2 Capital	596774	588233	550358	861777	1146013	1471534
1.1.3 Loans	61617	39654	122844	72163	88639	118460
1.2 Non-Developmental	2078276	2253027	2442941	2810388	3188699	3490946
1.2.1 Revenue	1965907	2109629	2271637	2602750	2988556	3277722
1.2.1.1 Interest Payments	894520	955801	1060602	1226672	1403183	1589435
1.2.2 Capital	111029	141457	169155	175519	196688	208268
1.2.3 Loans	1340	1941	2148	32119	3455	4957
1.3 Others	79713	83368	86995	98916	114906	127733
2 Total Receipts	5023352	5734166	6397162	7156342	8258187	9149787
2.1 Revenue Receipts	3797731	3851563	3688030	4823821	5706246	6337126
2.1.1 Tax Receipts	3278947	3231582	3193390	4160414	4837048	5477428
2.1.1.1 Taxes on commodities and services	2030050	2012578	2076013	2626553	2967610	3372525
2.1.1.2 Taxes on Income and Property	1246083	1216203	1114805	1530636	1865298	2100430
2.1.1.3 Taxes of Union Territories (Without Legislature)	2814	2800	2572	3225	4140	4473
2.1.2 Non-Tax Receipts	518783	619981	494640	663407	869198	859698
2.1.2.1 Interest Receipts	36273	31137	33448	35250	37974	45199
2.2 Non-debt Capital Receipts	140287	110094	64994	44077	88273	119373
2.2.1 Recovery of Loans & Advances	44667	59515	16951	27665	25661	34501
2.2.2 Disinvestment proceeds	95621	50578	48044	16412	62611	84872
3 Gross Fiscal Deficit [1 - (2.1 + 2.2)]	1102729	1449230	2600335	2230553	2582453	2588620
3A Sources of Financing: Institution-wise						
3A.1 Domestic Financing	1097210	1440548	2530155	2194406	2558579	2566503
3A.1.1 Net Bank Credit to Government	387091	571872	890012	627255	687904	...
3A.1.1.1 Net RBI Credit to Government	325987	190241	107493	350911	529	...
3A.1.2 Non-Bank Credit to Government	710119	868676	1640143	1567151	1870675	...
3A.2 External Financing	5519	8682	70180	36147	23874	22118
3B Sources of Financing: Instrument-wise						
3B.1 Domestic Financing	1097210	1440548	2530155	2194406	2558579	2566503
3B.1.1 Market Borrowings (net)	795845	971378	1696012	1213169	1776747	1902862
3B.1.2 Small Savings (net)	88961	209232	458801	526693	403838	441189
3B.1.3 State Provident Funds (net)	51004	38280	41273	28100	36454	37114
3B.1.4 Reserve Funds	-18298	10411	4545	42153	3524	24429
3B.1.5 Deposits and Advances	66289	-14227	25682	42203	82485	58404
3B.1.6 Cash Balances	17395	-323279	-43802	-57891	118784	-104667
3B.1.7 Others	96014	548753	347643	399980	136748	207172
3B.2 External Financing	5519	8682	70180	36147	23874	22118
4 Total Disbursements as per cent of GDP	26.7	26.9	32.0	30.1	31.1	30.0
5 Total Receipts as per cent of GDP	26.6	28.5	32.2	30.3	30.6	30.3
6 Revenue Receipts as per cent of GDP	20.1	19.2	18.6	20.4	21.2	21.0
7 Tax Receipts as per cent of GDP	17.3	16.1	16.1	17.6	17.9	18.2
8 Gross Fiscal Deficit as per cent of GDP	5.8	7.2	13.1	9.5	9.6	8.6

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

Source : Budget Documents of Central and State Governments.**Note:** 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.

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

(₹ Crore)

Sr. No	State/Union Territory	During October-2024					
		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	8
1	Andhra Pradesh	5564.01	31	1983.24	23	1515.84	12
2	Arunachal Pradesh	-	-	-	-	-	-
3	Assam	94.11	2	-	-	-	-
4	Bihar	-	-	-	-	-	-
5	Chhattisgarh	297.46	3	-	-	-	-
6	Goa	-	-	-	-	-	-
7	Gujarat	-	-	-	-	-	-
8	Haryana	190.53	6	-	-	-	-
9	Himachal Pradesh	-	-	462.55	8	316.77	3
10	Jammu & Kashmir UT	-	-	651.42	1	-	-
11	Jharkhand	-	-	-	-	-	-
12	Karnataka	-	-	-	-	-	-
13	Kerala	1336.12	31	1796.00	25	321.00	8
14	Madhya Pradesh	-	-	-	-	-	-
15	Maharashtra	-	-	-	-	-	-
16	Manipur	82.21	24	123.33	15	316.21	1
17	Meghalaya	278.78	24	267.00	9	163.46	9
18	Mizoram	256.76	9	51.35	7	-	-
19	Nagaland	173.06	5	-	-	-	-
20	Odisha	-	-	-	-	-	-
21	Puducherry	-	-	-	-	-	-
22	Punjab	3958.54	31	646.55	13	-	-
23	Rajasthan	2580.47	24	2016.13	10	-	-
24	Tamil Nadu	-	-	-	-	-	-
25	Telangana	4501.71	31	1290.59	19	1630.52	2
26	Tripura	-	-	-	-	-	-
27	Uttar Pradesh	-	-	-	-	-	-
28	Uttarakhand	1304.81	21	-	-	-	-
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 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 October 2024			
		Consolidated Sinking Fund (CSF)	Guarantee Redemption Fund (GRF)	Government Securities	Auction Treasury Bills (ATBs)
1	2	3	4	5	
1	Andhra Pradesh	11343	1118	0	0
2	Arunachal Pradesh	2697	7	0	4200
3	Assam	8167	89	0	0
4	Bihar	12232	-	0	18000
5	Chhattisgarh	7651	479	0	8887
6	Goa	1029	449	0	0
7	Gujarat	14985	655	0	2000
8	Haryana	2282	1674	0	0
9	Himachal Pradesh	-	-	0	0
10	Jammu & Kashmir UT	19	18	0	0
11	Jharkhand	2357	-	0	1530
12	Karnataka	19900	736	0	68077
13	Kerala	3047	-	0	0
14	Madhya Pradesh	-	1250	0	0
15	Maharashtra	70350	1711	0	0
16	Manipur	68	137	0	0
17	Meghalaya	1248	107	0	0
18	Mizoram	450	62	0	0
19	Nagaland	1853	45	0	0
20	Odisha	17807	2007	115	10594
21	Puducherry	569	-	0	1850
22	Punjab	8969	0	0	0
23	Rajasthan	1286	-	0	8700
24	Tamil Nadu	3366	-	0	3505
25	Telangana	7743	1697	0	0
26	Tripura	1199	26	0	25
27	Uttarakhand	4921	207	0	0
28	Uttar Pradesh	10518	-	0	15000
29	West Bengal	13118	1013	239	0
	Total	229173	13486	354	142367

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

No. 49: Market Borrowings of State Governments

(₹ Crore)

Sr. No.	State	2022-23		2023-24		2024-25					Total amount raised, so far in 2024-25	
						August		September		October		
		Gross Amount Raised	Net Amount Raised	Gross								
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Andhra Pradesh	57478	45814	68400	55330	3000	2000	4000	-1000	6000	4000	50000
2	Arunachal Pradesh	559	389	902	672	-	-	-	-	-	-	-146
3	Assam	17100	16105	18500	16000	2000	1500	1750	1750	1500	1000	9250
4	Bihar	36800	27467	47612	29910	6000	6000	6000	3922	8000	3000	20000
5	Chhattisgarh	2000	-2287	32000	26213	1500	-550	2000	2000	3000	2300	6500
6	Goa	1350	500	2550	1560	150	-50	300	300	200	100	850
7	Gujarat	43000	28300	30500	11947	2500	2500	-	-1000	1500	-500	6000
8	Haryana	45158	28638	47500	28364	4500	3500	3000	1700	1500	750	21000
9	Himachal Pradesh	14000	11941	8072	5856	500	350	700	700	600	200	5200
10	Jammu & Kashmir UT	8473	5969	16337	13904	1550	1550	-	-	400	-40	9750
11	Jharkhand	4000	-155	1000	-2505	-	-	-	-	-	-	-
12	Karnataka	36000	26000	81000	63003	-	-	3000	1000	20000	18000	23000
13	Kerala	30839	15620	42438	26638	6000	4300	3753	2253	2745	1245	26998
14	Madhya Pradesh	40158	26849	38500	26264	10000	10000	5000	3950	5000	4000	20000
15	Maharashtra	72000	42815	110000	79738	24000	21600	24000	17000	3000	600	67000
16	Manipur	1422	1147	1426	1076	200	200	-	-	200	-	800
17	Meghalaya	1753	1356	1364	912	-	-	150	-258	197	197	1247
18	Mizoram	1315	1129	901	641	90	90	90	40	50	50	591
19	Nagaland	1854	1199	2551	2016	-	-	-	-	-	-	300
20	Odisha	0	-7500	0	-4658	-	-	-	-	-	-500	-1500
21	Puducherry	1200	698	1100	475	-	-	-	-200	300	300	550
22	Punjab	45500	33660	42386	29517	3200	3200	2000	1888	3150	3150	30043
23	Rajasthan	46057	30110	73624	49718	5000	3750	6000	3500	7000	5230	43500
24	Sikkim	1414	1320	1916	1701	-	-130	-	-	1000	1000	1000
25	Tamil Nadu	87000	65722	113001	75970	8000	6000	9000	7875	8000	3150	58000
26	Telangana	40150	30922	49618	39385	6000	6000	4500	2500	4500	3700	36000
27	Tripura	0	-645	0	-550	-	-	-	-	-	-	-
28	Uttar Pradesh	55612	41797	97650	85335	-	-	-	-	3000	24	3000
29	Uttarakhand	3200	1450	6300	3800	-	-	-	-	500	500	1900
30	West Bengal	63000	42500	69910	48910	5000	3500	7000	5000	3500	2000	28000
	Grand Total	758392	518829	1007058	717140	89190	75310	82243	52920	84842	53457	470479
												316728

- : 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
<i>Per cent of GDP</i>	<i>6.6</i>	<i>5.9</i>	<i>7.7</i>	<i>8.5</i>	<i>7.3</i>
I. Financial Assets	3,63,395	5,25,419	8,16,484	9,07,366	26,12,664
<i>Per cent of GDP</i>	<i>7.0</i>	<i>9.3</i>	<i>13.0</i>	<i>13.9</i>	<i>11.1</i>
<i>of which:</i>					
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
<i>of which:</i>					
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
<i>of which:</i>					
(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
<i>Per cent of GDP</i>	<i>0.4</i>	<i>3.5</i>	<i>5.3</i>	<i>5.4</i>	<i>3.8</i>
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
<i>of which:</i>					
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
<i>Per cent of GDP</i>	<i>4.5</i>	<i>4.6</i>	<i>4.3</i>	<i>6.4</i>	<i>5.0</i>
I. Financial Assets	5,79,958	6,34,471	7,50,245	9,71,526	29,36,200
<i>Per cent of GDP</i>	<i>8.9</i>	<i>9.8</i>	<i>10.9</i>	<i>13.6</i>	<i>10.9</i>
<i>of which:</i>					
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
<i>of which:</i>					
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
<i>of which:</i>					
(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
<i>Per cent of GDP</i>	<i>4.5</i>	<i>5.2</i>	<i>6.6</i>	<i>7.3</i>	<i>5.9</i>
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
<i>of which:</i>					
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 (Concl.)

(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
<i>Per cent of GDP</i>	<i>5.0</i>	<i>4.1</i>	<i>3.9</i>	<i>7.8</i>	<i>5.3</i>
I. Financial Assets	6,74,763	8,15,842	8,08,779	11,32,130	34,31,514
<i>Per cent of GDP</i>	<i>9.6</i>	<i>11.5</i>	<i>10.7</i>	<i>14.5</i>	<i>11.6</i>
<i>of which:</i>					
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)
<i>of which:</i>					
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
<i>of which:</i>					
(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
<i>Per cent of GDP</i>	<i>4.6</i>	<i>7.4</i>	<i>6.7</i>	<i>6.7</i>	<i>6.4</i>
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
<i>of which:</i>					
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
<i>Per cent of GDP</i>	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				
<i>of which:</i>				
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
<i>Per cent of GDP</i>	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
<i> of which:</i>				
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
<i> of which:</i>				
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
<i>Per cent of GDP</i>	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				
<i>of which:</i>				
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
<i>Per cent of GDP</i>	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
<i> of which:</i>				
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
<i> of which:</i>				
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 (Concl.)

(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
<i>Per cent of GDP</i>	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				
<i>of which:</i>				
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
<i>Per cent of GDP</i>	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
<i>of which:</i>				
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
<i>of which:</i>				
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

Note: 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

- NM₂ and NM₃ 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.
 L₁ and L₂ are compiled monthly and L₃ 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 & 1.1.1.1.4: 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 2021-22 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 (WLAs). WLAs are included from April 2014 onwards.

Table No. 45

(-) represents nil or negligible

The table format is revised since June 2023 issue of the bulletin.

State Government Securities include special bonds issued under Ujjwal DISCOM Assurance Yojana (UDAY).

Bank PDs are clubbed under Commercial Banks. However, they form very small fraction of total outstanding securities.

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**.

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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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6. Reserve Bank of India Occasional Papers Vol. 44, No. 1, 2023	₹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 2022-23	Issued as Supplement to RBI Bulletin January, 2024	
9. Annual Report 2023-24	Issued as Supplement to RBI Bulletin June, 2024	
10. Financial Stability Report, June 2024	Issued as Supplement to RBI Bulletin July, 2024	
11. Monetary Policy Report - April 2024	Included in RBI Bulletin April 2024	
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.
- * Concession is available for students, teachers/lecturers, academic/education institutions, public libraries and Booksellers in India provided the proof of eligibility is submitted.

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