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MONETARY POLICY STATEMENT (AUGUST 6~8) 2024~25

Governor's Statement

Governor's Statement*

Shaktikanta Das

This was the 50th meeting of the Monetary Policy Committee (MPC) since its inception in September 2016.¹ The flexible inflation targeting (FIT) framework will soon complete eight years of its functioning. The framework has worked well in maintaining macroeconomic stability even during times of extreme stress. Its embedded flexibility has withstood the pandemic-related stress, the spillovers from the war in Ukraine and the continuing geopolitical crisis. Today, while India's growth remains strong, inflation is broadly on a declining trajectory. Strong macroeconomic fundamentals have led to greater confidence in India's prospects.

Decisions and Deliberations of the Monetary Policy Committee (MPC)

2. The Monetary Policy Committee (MPC) met on 6th, 7th and 8th August 2024. After a detailed assessment of the evolving macroeconomic and financial conditions 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 by a majority of 4 out of 6 members to remain focused on withdrawal of accommodation to ensure that inflation progressively aligns to the target, while supporting growth.

3. I shall now briefly set out the rationale for these decisions. Headline inflation, after remaining steady at 4.8 per cent during April and May 2024, increased to 5.1 per cent in June 2024, primarily driven by the food component, which remains stubborn.² Core inflation (CPI excluding food and fuel) moderated, while the fuel group remained in deflation.³ The expected moderation in headline inflation during the second quarter of 2024-25 on account of favourable base effects is likely to reverse in the third quarter. Domestic growth, however, is holding up well on the back of steady urban consumption and improving rural consumption, coupled with strong investment demand.

4. Amidst this confluence of factors, the MPC judged that it is important for monetary policy to stay the course while maintaining a close vigil on the inflation trajectory and the risks thereof. Resilient and steady growth in GDP enables monetary policy to focus unambiguously on inflation. It must continue to be disinflationary and resolute in its commitment to aligning inflation to the target of 4.0 per cent on a durable basis. Accordingly, the MPC decided to keep the policy repo rate unchanged at 6.50 per cent in this meeting. The commitment of monetary policy to ensure price stability would strengthen the foundations for a sustained period of high growth. Hence, the MPC reiterated the need to continue with the disinflationary stance of withdrawal of accommodation to ensure that inflation progressively aligns to the target, while supporting growth.

* Governor's Statement - August 8, 2024.

¹ On June 27, 2016, the Finance Act 2016 institutionalising inflation targeting framework through amendments to the RBI Act, 1934, came into effect. On the same day, Government notified Procedure for Selection of Members of the MPC and terms and conditions of their appointment Rules, 2016 as well as the factors constituting failure to achieve inflation target. On August 5, 2016, the inflation target was notified by the Government. On September 29, 2016, the government notified constitution of the first MPC which met for the first-time during October 3-4, 2016.

² CPI food inflation at 8.4 per cent in June firmed up from 7.9 per cent in May driven primarily by a sharp increase in prices of vegetables and edible oils along with a pick-up in inflation across cereals, milk, fruits and prepared meals. CPI food inflation averaged 8.0 per cent since November 2023.

³ Core (CPI excluding food and fuel) inflation at 3.1 per cent during May-June 2024, touched a new low in the current CPI series. Fuel group continued to remain in deflation, reflecting the cumulative impact of the sharp cut in LPG price in August 2023 and March 2024.

Assessment of Growth and Inflation

Global Growth

5. Global economic outlook exhibits steady though uneven expansion.⁴ Manufacturing is indicating slowdown, while services activity is holding up.⁵ Notwithstanding sticky services prices, inflation is receding grudgingly across major economies. With varying outlook for growth and inflation across countries, monetary policy is showing signs of divergence across jurisdictions. Several central banks are cautiously moving towards policy pivots through forward guidance and rate cuts; at the same time, there has been tightening by a few central banks.⁶ Global financial markets are exhibiting volatility. Bond yields and the dollar index have softened since the last meeting.

6. While the near-term outlook looks positive, there are significant challenges to medium-term global growth outlook. Demographic shifts, climate change, geopolitical tensions and fragmentations, rising public debt and new technologies, such as artificial intelligence, pose new sets of challenges. A coherent policy approach in which monetary policy is complemented by other policies to manage the policy trade-offs will be crucial to deal with such multiple challenges.

Domestic Growth

7. Domestic economic activity continues to be resilient. On the supply side, steady progress in

⁴ The International Monetary Fund (IMF) in its latest World Economic Outlook (WEO) update released on July 16, 2024, maintained the global growth forecast for 2024 at 3.2 per cent (retained as in the April 2024 WEO) and revised up the growth forecast by 10 basis points (bps) to 3.3 per cent for 2025.

⁵ Global manufacturing PMI moved into contraction in July 2024 at 49.7 from 50.8 in June. Global services remained in expansion with PMI at 53.3 in July as compared to 53.1 in June.

⁶ Since the last MPC meeting, the UK, Canada, Switzerland and Czech Republic, among advanced economies (AEs) and China, Chile, Columbia, Hungary, Romania and Sri Lanka among emerging market economies (EMEs) have cut their policy rates. Japan and Russia, on the other hand, raised their benchmark rates.

south-west monsoon,⁷ higher cumulative *kharif* sowing,⁸ and improving reservoir levels⁹ augur well for the *kharif* output. The likelihood of *La Niña* conditions developing during the second half of the monsoon season is likely to have a bearing on agricultural production in 2024-25.¹⁰

8. Manufacturing activity continues to gain ground on the back of improving domestic demand. The index of industrial production (IIP) growth accelerated in May 2024. Purchasing managers' index (PMI) for manufacturing at 58.1 in July remained elevated. Services sector maintained buoyancy as evidenced by the available high frequency indicators.¹¹ PMI services stood strong at 60.3 in July 2024, and is above 60 for seven consecutive months, indicating robust expansion.

9. On the demand side, household consumption is supported by a turnaround in rural demand¹² and

⁷ After the pause from June 12, the Southwest Monsoon (SWM) picked up pace since June 28 and covered the entire country six days before the normal date (July 08). During the current SWM season so far (June 1-August 7), the cumulative rainfall has been 7 per cent above the Long Period Average (LPA), compared to 2 per cent above LPA during the corresponding period last year.

⁸ The total area sown under *kharif* crops at 904.6 lakh hectares was 2.9 per cent higher than a year ago as on August 2, 2024. The area under paddy, pulses, coarse cereals, oilseeds and sugarcane remained higher over last year, while it decreased under cotton.

⁹ At the all-India level, the water storage level in 150 major reservoirs stood at 51 per cent of total capacity as of August 1, 2024. The water storage, as percentage of total capacity, surpassed the decadal average.

¹⁰ Rainfall progress, however, needs to be cautiously watched as the *La Niña* events are also often associated with excess rainfall, which could lead to flooding and waterlogging and impact crop harvest in some regions.

¹¹ E-way bills increased by 16.3 per cent in June 2024, GST revenues at Rs. 1.82 lakh crore rose by 10.3 per cent and toll collections expanded by 9.4 per cent during July. Domestic air cargo and port cargo posted a healthy growth of 10.3 per cent 6.8 per cent, respectively, in June 2024. Aggregate bank credit posted a growth of 15.1 per cent as on July 26, 2024.

¹² Consumer non-durables rose by 2.3 per cent in May 2024, while two-wheeler sales expanded by 21.3 per cent in June. The demand under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) declined by 21.7 per cent in June 2024 and 19.4 per cent in July, reflecting improvement in farm sector employment. Tractor sales registered a turnaround by recording 3.6 per cent growth in June.

steady discretionary spending in urban areas.¹³ Fixed investment activity remained buoyant,¹⁴ amid government's continued thrust on capex¹⁵ and other policy support.¹⁶ Private corporate investment is gaining steam¹⁷ on the back of expansion in bank credit.¹⁸ Merchandise exports expanded in June, although at a slower pace. Expansion in non-oil-non-gold imports accelerated reflecting resilience of domestic demand.¹⁹ Services exports recorded double digit growth in May 2024 before moderating in June.²⁰

10. Looking ahead, improved agricultural activity brightens the prospects of rural consumption, while sustained buoyancy in services activity would support urban consumption. The healthy balance sheets of banks and corporates; thrust on capex by the government; and visible signs of pick up in private investment would drive fixed investment activity.

¹³ Consumer durables posted a growth of 12.3 per cent in May 2024, and sales of passenger vehicles increased by 4.9 per cent in June. Domestic air passengers rose by 6.9 per cent in June 2024 and 6.0 per cent in July, on the back of a very high base as it increased by 19.2 per cent in June 2023 and 26.3 per cent in July 2023.

¹⁴ Steel consumption rose sharply by 14.6 per cent in July 2024. Cement production increased modestly by 1.9 per cent in June 2024. Imports of capital goods expanded by 11.6 per cent during June 2024, while capital goods production increased by 2.5 per cent in May 2024.

¹⁵ Capital expenditure as per the Budget Estimates (BE) for 2024-25 increased to ₹11.1 lakh crore (3.4 per cent of GDP), an increase of 17.1 per cent over ₹9.5 lakh crore in the provisional accounts (PA) of 2023-24 and 11.0 per cent over ₹10.0 lakh crore in BE 2023-24.

¹⁶ Government schemes such as Production Linked Incentive (PLI) scheme, Pradhan Mantri Awas Yojana (PMAY) [expanded to construct 3 crore additional houses] and Pradhan Mantri Gram Sadak Yojana (PMGSY) [launching of phase IV] would provide impetus to capital formation.

¹⁷ Capacity utilisation in manufacturing sector at 76.8 per cent in Q4:2023-24 is the highest in 11 years.

¹⁸ For the fortnight ending July 26, 2024, bank credit expanded by 15.1 per cent year-on-year. Bank credit to food processing, textiles, chemicals, base metal, and engineering goods increased y-o-y by 10.8 per cent, 6.2 per cent, 11.7 per cent, 11.7 per cent, and 8.8 per cent respectively in June 2024. Among infrastructure sectors, bank credit expanded by 3.3 per cent, 8.8 per cent and 7.0 per cent, respectively, in power, roads, and telecommunication during June 2024.

¹⁹ India's merchandise exports expanded by 2.5 per cent (y-o-y) to US\$ 35.2 billion, and imports registered an expansion of 5.0 per cent to US\$ 56.2 billion in June 2024. Merchandise trade deficit stood at US\$ 21.0 billion in June 2024 as compared with US\$ 19.2 billion in June 2023.

²⁰ While services exports grew by 3.7 per cent, services imports contracted by 3.8 per cent, in June 2024.

Improving prospects of global trade are expected to aid external demand.²¹ The spillovers from protracted geopolitical tensions, volatility in international financial markets and geoeconomic fragmentation, however, pose risks on the downside. Taking all these factors into consideration, real GDP growth for 2024-25 is projected at 7.2 per cent, with Q1 at 7.1 per cent; Q2 at 7.2 per cent; Q3 at 7.3 per cent; and Q4 at 7.2 per cent. Real GDP growth for Q1:2025-26 is projected at 7.2 per cent. The risks are evenly balanced. It may be seen that we have slightly moderated the growth projection for Q1 of the current year in relation to the June 2024 projection. This is primarily due to updated information on certain high frequency indicators which show lower than anticipated corporate profitability, general government expenditure and core industries output.²²

Inflation

11. Headline CPI inflation edged up to 5.1 per cent in June 2024 due to higher-than-expected food inflation. Fuel remained in deflation for the tenth consecutive month. Core inflation moderated to a historic low in May and June.²³

12. Food inflation, with a weight of around 46 per cent in the CPI basket, contributed to more than 75 per

²¹ According to the IMF World Economic Outlook (July 2024 update), global trade volume (goods and services) is expected to grow by 3.1 per cent in 2024 as compared with a growth of 0.8 per cent in 2023. According to the World Trade Organisation, global merchandise trade volume is expected to grow by 2.6 per cent in 2024 as against a contraction of 1.2 per cent in 2023.

²² The results of 483 listed private manufacturing companies available so far indicate that their gross profits grew by a modest 4.7 per cent in Q1: 2024-25 as against 7.0 per cent in Q4:2023-24. Capital expenditure of central and state governments contracted by 35.0 per cent and 22.1 per cent, respectively, during Q1:2024-25. Revenue expenditure net of interest payments and subsidies of central and state governments contracted by 1.5 per cent and 0.2 per cent, respectively, during the quarter. Index of eight core industries expanded by 4.0 per cent year-on-year (y-o-y) in June 2024 compared to 6.4 per cent in May 2024.

²³ Headline inflation which was at 4.8 per cent in April-May increased to 5.1 per cent in June. Food inflation surged to 8.4 per cent in June from 7.9 per cent in April-May. Deflation in fuel is (-) 3.7 per cent in June. CPI excluding food and fuel moderated from 3.2 per cent in April to 3.1 per cent in May-June 2024, a new low in the current CPI series.

cent of headline inflation in May and June.²⁴ Vegetable prices increased sharply and contributed about 35 per cent to inflation in June.²⁵ High inflation pressures persisted across other major food items also.²⁶ On the other hand, the softening in core inflation continues to be broad-based, with core services inflation touching a new low in the current CPI series during May-June 2024.²⁷

13. The high food price momentum is likely to have continued in July.²⁸ Large favourable base effects may, however, push headline inflation downwards in July.²⁹ The impact of the revision in milk prices³⁰ and mobile tariffs needs to be watched.³¹

14. A degree of relief in food inflation is expected from the pick-up in the south-west monsoon and healthy progress in sowing. Buffer stocks of cereals continue to be above the norms. Global food prices showed signs of easing in July, after registering increases since March 2024.³² Assuming a normal monsoon, and taking into account the 4.9 per cent

²⁴ Contribution of food to headline inflation increased from 74.7 per cent in April to 75.2 per cent in May and 76.3 per cent in June. The contribution of food was 44.8 per cent in June 2023.

²⁵ CPI tomatoes increased by 48.7 per cent (m-o-m) in June, CPI onion by 24.2 per cent (m-o-m) and potatoes by 12.2 per cent (m-o-m), resulting in a year-on-year inflation of 29.3 per cent for vegetables. Overall, vegetables with a weight of 6.0 per cent in CPI basket contributed 34.9 per cent to inflation in June.

²⁶ Cereals inflation increased to 8.8 per cent in June from 8.6 per cent in April. Fruit inflation increased to 7.2 per cent in June from 5.2 per cent April. Pulses inflation at 16.1 per cent in June, recorded 13 consecutive months in double digits.

²⁷ In CPI excluding food and fuel, core goods inflation was at 3.5 per cent in June compared to 3.6 per cent in April. Core services inflation moderated to 2.7 per cent in June from 2.8 per cent in April.

²⁸ High frequency food price data from Department of Consumer Affairs (DCA) points to a month on month increase in tomato prices by 62.1 per cent in July, onion prices by 22.6 per cent and potato prices by 18.0 per cent. Prices of key pulses also increased in the range of 0.4 to 4.3 per cent in July.

²⁹ CPI headline inflation would experience a favourable base effect of 2.9 percentage points in July.

³⁰ Milk has a high weight of 6.4 per cent in CPI basket. Milk prices have been increased by Rs.2 per litre in early June 2024 by a few major dairies.

³¹ Mobile tariffs were increased in range of 10-22 per cent by the major companies in early July.

³² The FAO food price index, after registering an increase during March-June 2024, declined in July, with a month-over-month change of (-) 0.18 per cent.

inflation print in Q1, CPI inflation for 2024-25 is projected at 4.5 per cent, with Q2 at 4.4 per cent; Q3 at 4.7 per cent; and Q4 at 4.3 per cent.³³ CPI inflation for Q1:2025-26 is projected at 4.4 per cent. The risks are evenly balanced.

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

15. As I stated earlier, continuing food price shocks slowed the process of disinflation in Q1:2024-25. There is also considerable divergence between headline and core inflation.³⁴ This has brought to the fore the issue of how much importance should the MPC give to food inflation. Let me dwell upon this in some detail.

16. First and foremost is the fact that our target is the headline inflation wherein food inflation has a weight of about 46 per cent. With this high share of food in the consumption basket, food inflation pressures cannot be ignored. Further, the public at large understands inflation more in terms of food inflation than the other components of headline inflation. Therefore, we cannot and should not become complacent merely because core inflation has fallen considerably.

17. Second and equally important is the reality that high food inflation adversely affects household inflation expectations, which have a significant impact on future trajectory of inflation. Household inflation expectations, after witnessing a moderating trend between May 2022 and September 2023, have edged up on the back of high food inflation since November 2023.³⁵ Persistently high food

³³ Food inflation pressures could see a significant abatement in Q4:2024-25 as the good run of the monsoon may continue to progress during the rest of the season. La Nina conditions may lead to higher moisture content conducive for a good rabi sowing. Good reservoir level would also further ease risk to food production.

³⁴ The divergence between headline and core inflation increased to 2 percentage points in June 2024 from 1.6 percentage points in April and 0.3 percentage points a year ago.

³⁵ The 3-month and 1-year ahead household inflation expectations declined by 170 bps and 120 bps, respectively between May 2022 and September 2023. Food inflation averaged around 8 per cent during November 2023-June 2024. Since November 2023, the decline in inflation expectations has halted. 3-month and one year ahead inflations rose by 20 bps each in the July 2024 round of the survey over the previous survey round (May 2024).

inflation and unanchored inflation expectations – if they materialise – could lead to spillovers to core inflation through pick-up in wages on cost-of-living considerations. This, in turn, could be passed on by firms in the form of higher prices for services as well as goods, especially in a scenario of strong aggregate demand. Third, these behavioural changes can then result in overall inflation becoming sticky, even after food inflation recedes.

18. The MPC may look through high food inflation if it is transitory; but in an environment of persisting high food inflation, as we are experiencing now, the MPC cannot afford to do so. It has to remain vigilant to prevent spillovers or second round effects from persistent food inflation and preserve the gains made so far in monetary policy credibility.

Liquidity and Financial Market Conditions

19. System liquidity transited from deficit in June to surplus conditions in July.³⁶ In tune with the changing liquidity conditions, the Reserve Bank conducted two-way operations under the LAF³⁷ to ensure that the inter-bank overnight rate remained closely aligned to the policy repo rate.³⁸

³⁶ System liquidity, as measured by the net position under the liquidity adjustment facility (net LAF) was, on an average, in deficit of about ₹0.45 lakh crore during June but turned into surplus of about ₹1.1 lakh crore during July. Thereafter, it continued to be in surplus of about ₹2.7 lakh crore in August (up to August 6). The transition from surplus in early June to deficit conditions during the latter half of the month was on account of liquidity leakage from the banking system due to advance tax payments and goods and services tax (GST) related outflows. With the increase in government spending at the month-end, system liquidity again turned into surplus beginning June 28.

³⁷ Liquidity Adjustment Facility.

³⁸ As liquidity conditions tightened, the Reserve Bank injected liquidity through variable rate repo (VRR) operations during the second half of June but mopped up surplus liquidity through variable rate reverse repo (VRRR) auctions as liquidity conditions eased in July. During June 10-28, one main and 4 fine-tuning VRR auctions (3 to 6 days maturity) injected liquidity cumulatively amounting to ₹3.5 lakh crore, while 2 main and 23 fine-tuning VRRR operations (1 to 7 days maturity) absorbed liquidity to the extent of ₹7.1 lakh crore during July-August (up to August 6). A 3-day VRR auction was conducted instead of the main 14-day operation on June 28 as liquidity conditions were expected to improve imminently with the usual increase in government spending at the month end.

20. Mirroring the liquidity dynamics, the weighted average call rate (WACR), on an average, remained close to the middle of the LAF corridor.³⁹ Across the term money market segment, the yields on certificates of deposit (CDs) and 3-month treasury bills (T-bills) eased, while the yields on commercial papers (CPs) remained stable.⁴⁰ The 10-year G-Sec yield softened in June-July and in August so far.⁴¹ The term premium has remained steady in recent months.⁴² Transmission in the credit market remains ongoing.⁴³

21. Going forward, the Reserve Bank will continue to be nimble and flexible in its liquidity management operations keeping in view the evolving liquidity conditions to ensure that money market interest rates evolve in an orderly manner.

22. During 2024-25 (up to August 7), the Indian rupee (INR) remained largely range-bound.⁴⁴ The

³⁹ The standing deposit facility (SDF) rate at 6.25 per cent (25 bps below the repo rate) and the marginal standing facility (MSF) rate at 6.75 per cent (25 bps above the repo rate) provide a corridor around the repo rate at 6.50 per cent. The weighted average call rate (WACR) averaged 6.54 per cent during June – August (up to August 6) as against 6.58 per cent during April – May. Rates in the collateralised segment – the triparty and market repo rates – although relatively softer, moved in tandem with the WACR.

⁴⁰ Average yields on CDs and T-bills moderated from 7.34 per cent and 6.90 per cent, respectively, in April-May to 7.13 per cent and 6.76 per cent, respectively, during June – August (up to August 6), while that on CPs marginally increased from 7.75 per cent to 7.76 per cent during the same period.

⁴¹ The 10-year G-Sec yield averaged 6.97 per cent during June – August (up to August 6) as compared to 7.08 per cent during April – May 2024.

⁴² The term premium is calculated as the difference between the yield on 10-year G-Sec and 91-day T Bills. On an average, the term premium was 22 bps during June-August (up to August 6) as compared to 18 bps during April-May.

⁴³ 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 181 bps and 119 bps, respectively, during May 2022 to June 2024, while the weighted average domestic term deposit rate (WADTDR) on fresh and outstanding deposits of SCBs increased by 243 bps and 188 bps, respectively, during the same period. With credit growth outpacing deposit growth, banks have raised their term deposit rates in addition to mobilising funds through higher issuances of CDs. In 2024-25 (up to July), CD issuances amounted to ₹3.2 lakh crore as compared to ₹1.9 lakh crore in the corresponding period of 2023-24.

⁴⁴ On a financial year basis (up to August 7), the Indian rupee (INR) registered lower depreciation (-0.7 per cent) against the US dollar as compared to the depreciation of some of its emerging market peers like Mexican peso, Brazilian real, Argentine peso, Turkish lira, Philippine peso, Vietnamese dong and Indonesian rupiah. During 2024-25 (up to August 7), the INR was the least volatile (in terms of coefficient of variation) amongst peer EME currencies, including - Chinese yuan, Vietnamese dong, Indonesian rupiah, Thailand baht and Turkish lira.

lower volatility of the INR bears testimony to India's macroeconomic and financial stability, and an improving external sector outlook.

23. In the last few days, global financial markets have seen turmoil on concerns of growth slowdown in a major economy, flare up in geopolitical tensions in the Middle East and the unwinding of the carry trade. These developments have implications for emerging market economies. In this context, it would be important for market participants to keep in mind the strength of India's macroeconomic fundamentals, which remain robust. India has built strong buffers that impart resilience to the domestic economy from such global spillovers. The Reserve Bank remains committed to ensure orderly evolution of financial markets in its regulatory domain.

Financial Stability

24. The Indian financial system remains resilient and is gaining strength from broader macroeconomic stability. Its well-capitalised and unclogged balance sheet is reflective of higher risk absorption capacity.⁴⁵ The NBFC sector and the Urban Cooperative Banks also continue to show improvements.⁴⁶

25. Even in such stable financial sector conditions, the emphasis cannot shift away from proactive identification of potential risks and challenges, if any. In the current context, there are four issues which

⁴⁵ The capital-to-risk-weighted assets ratio (CRAR) and the common equity tier 1 (CET1) ratio of scheduled commercial banks (SCBs) at 16.8 per cent and 13.9 per cent, respectively, at end-March 2024 are well above the regulatory thresholds. On the other hand, SCBs' gross non-performing assets (GNPA) and net non-performing assets (NNPA) ratios have dipped to 2.8 per cent and 0.6 per cent, respectively, at end-March 2024. Resultantly, the SCBs ratio of NNPA with total equity has dipped to an all-time low of 4.1 per cent in March 2024 from the peak of 43.9 per cent in March 2018. The macro stress tests done by the Reserve Bank also reveal that the banking sector will continue to remain resilient even under stress scenarios (Financial Stability Report, June 2024).

⁴⁶ Non-Banking Financial Companies (NBFCs) remain healthy, with CRAR at 26.6 per cent, GNPA ratio at 4.0 per cent and Return on Assets (RoA) at 3.3 per cent at end-March 2024. Excluding NBFCs under resolution, the GNPA ratio for NBFCs is below 3 per cent. The capital position of UCBs has been continuously improving in the post-pandemic period [CRAR was 17.5 per cent as on March 31, 2024].

I would like to highlight. First, it is observed that alternative investment avenues are becoming more attractive to retail customers and banks are facing challenges on the funding front with bank deposits trailing loan growth. As a result, banks are taking greater recourse to short-term non-retail deposits and other instruments of liability to meet the incremental credit demand. This, as I emphasised elsewhere, may potentially expose the banking system to structural liquidity issues. Banks may, therefore, focus more on mobilisation of household financial savings through innovative products and service offerings and by leveraging fully on their vast branch network.

26. Second, it is observed that the sectors in which pre-emptive regulatory measures were announced by the Reserve Bank in November last year have shown moderation in credit growth.⁴⁷ However, certain segments of personal loans continue to witness high growth.⁴⁸ Excess leverage through retail loans, mostly for consumption purposes, needs careful monitoring from macro-prudential point of view. It calls for careful assessment and calibration of underwriting standards, as may be required, as well as post-sanction monitoring of such loans.

27. The third issue that is attracting our attention is home equity loans, or top-up housing loans as they are called in India, which have been growing at a brisk pace. Banks and NBFCs have also been offering top-up loans on other collateralised loans like gold loans. It is noticed that the regulatory prescriptions relating to loan to value (LTV) ratio, risk weights and monitoring of end use of funds are not being strictly adhered

⁴⁷ The Reserve Bank increased risk weights on unsecured consumer credit and bank credit to NBFCs on November 16, 2023 to pre-empt build-up of any potential risk in these segments. Consequently, the total consumer loan growth in the sectors where risk weights were increased moderated from 23.3 per cent in November 2023 to 13.9 per cent in June 2024. In parallel, bank credit to NBFCs declined from 18.5 per cent to 8.2 per cent during the same period.

⁴⁸ Credit growth in unsecured personal loans such as 'credit card outstanding' though declining, remained high at 23.3 per cent in June 2024 as compared to 34.2 per cent in November 2023.

to by certain entities. I repeat certain entities. Such practices may lead to loaned funds being deployed in unproductive segments or for speculative purposes. Banks and NBFCs would, therefore, be well-advised to review such practices and take remedial action.

28. Fourth, recently there was an unprecedented IT outage globally, which affected businesses in many countries. The outage demonstrated how a minor technical change, if it goes haywire, can wreak havoc on a global scale. It also showed the fast-growing dependence on big-techs and third-party technology solution providers. In this background, it is necessary that banks and financial institutions build appropriate risk management frameworks in their IT, Cyber security and third-party outsourcing arrangements to maintain operational resilience. The Reserve Bank has time and again emphasised the importance of robust business continuity plans (BCP) to deal with such incidents.

External Sector

29. India's current account deficit (CAD) moderated to 0.7 per cent of GDP in 2023-24 from 2.0 per cent of GDP in 2022-23 due to a lower trade deficit and robust services and remittances receipts. In Q1:2024-25, merchandise trade deficit widened as imports grew faster than exports. Buoyancy in services exports⁴⁹ and strong remittance receipts are expected to keep CAD within sustainable level in Q1:2024-25. We expect CAD to remain eminently manageable during the current financial year.

30. On the external financing side, foreign portfolio investors turned net buyers in the domestic market from June 2024 with net inflows of US\$ 9.7 billion during June-August (till August 6) after witnessing outflows of US\$ 4.2 billion in April and May. Foreign direct investment (FDI) flows picked up in 2024-25

⁴⁹ As per provisional figures, India's services exports grew by 10.4 per cent during April-June 2024-25, while services imports rose by 6.5 per cent during the same period. Net services exports grew by 15.4 per cent during the same period.

as gross FDI rose by more than 20 per cent during April-May 2024, while net FDI flows doubled during this period compared to the corresponding period of the previous year.⁵⁰ External commercial borrowings moderated during April-June 2024-25, while non-resident deposits recorded higher net inflows during April-May compared to the previous year.⁵¹ India's foreign exchange reserves reached a historical high of US\$ 675 billion as of August 2, 2024.⁵² Overall, India's external sector remains resilient as key indicators continue to improve.⁵³ We remain confident of meeting our external financing requirements comfortably.

Additional Measures

31. I shall now announce certain additional measures.

Public Repository of Digital Lending Apps

32. The Reserve Bank has taken several measures⁵⁴ for the orderly development of the digital lending ecosystem in India. As a further measure in this direction and to address the problems arising from unauthorised digital lending apps (DLAs), the Reserve Bank proposes to create a public repository of DLAs deployed by its regulated entities. The regulated entities (REs) will report and update information about their DLAs in this repository. This measure will help the consumers to identify the unauthorised lending apps.

⁵⁰ Gross foreign direct investment (FDI) flows rose sharply by 22.8 per cent to US\$ 15.2 billion in April-May 2024-25 from US\$ 12.3 billion during the same period a year ago. Net FDI flows increased twofold to US\$ 7.1 billion in April-May 2024-25 from US\$ 3.4 billion a year ago due to lower repatriation.

⁵¹ External commercial borrowings to India moderated to US\$ 1.8 billion during April-June 2024-25 as compared with an inflow of US\$ 5.7 billion a year ago. Non-resident deposits recorded a higher net inflow of US\$ 2.7 billion in April-May 2024-25 than US\$ 0.6 billion a year ago.

⁵² As on August 2, 2024, India's foreign exchange reserves stood at US\$ 674.92 billion.

⁵³ India's CAD/GDP ratio moderated to 0.7 per cent in 2023-24 from 2.0 per cent during 2022-23. India's external debt to GDP ratio declined to 18.7 per cent at end-March 2024 from 19.0 per cent at end-March 2023. The net International Investment position to GDP ratio improved from (-) 11.3 per cent to (-) 10.3 per cent during the same period.

⁵⁴ These include the guidelines on digital lending and first loss default guarantee issued in September 2022 and June 2023 respectively.

Frequency of Reporting of Credit Information to Credit Information Companies

33. The availability of accurate credit information is vital for both lenders and borrowers. At present, lenders are required to report credit information to credit information companies (CICs) on a monthly basis or at such shorter intervals as may be agreed between the lenders and the CICs. It is proposed to increase the frequency of reporting of credit information to a fortnightly basis or at shorter intervals. Consequently, borrowers will benefit from faster updation of their credit information, especially when they repay their loans. The lenders, on their part, will be able to make better risk assessment of borrowers.

Enhancing Transaction Limit for Tax Payments through UPI

34. Currently, the transaction limit for UPI is ₹1 lakh except for certain category of payments which have higher transaction limits. It has now been decided to enhance the limit for tax payments through UPI from ₹1 lakh to ₹5 lakh per transaction. This will further ease tax payments by consumers through UPI.

Introduction of 'Delegated Payments' through UPI

35. It is proposed to introduce a facility of "Delegated Payments" in UPI. This would enable an individual (primary user) to allow another individual (secondary user) to make UPI transactions up to a limit from the primary user's bank account without the need for the secondary user to have a separate bank account linked to UPI. This will further deepen the reach and usage of digital payments.

Continuous Clearing of Cheques

36. At present, cheque clearing through Cheque Truncation System (CTS) operates in a batch processing mode and has a clearing cycle of up to two working days. It is proposed to reduce the clearing cycle by introducing continuous clearing with 'on-realisation-settlement' in CTS. This means that cheques will be cleared within a few hours on the day of presentation. This will speed up cheque payments and benefit both the payer and the payee.

Conclusion

37. Under the current monetary policy setting, inflation and growth are evolving in a balanced manner and overall macroeconomic conditions are stable. Growth remains resilient, inflation has been trending downward and we have made progress in achieving price stability; but we have more distance to cover. The progress towards our goal of price stability has been uneven due to large and persistent supply side shocks, especially in food items. We, therefore, need to remain vigilant to ensure that inflation moves sustainably towards the target, while supporting growth. This approach would be net positive for sustained high growth.

38. We recognise the challenges along the way, but we have to be patient to finish the job at hand. In the current context, the following words of Mahatma Gandhi are highly relevant: "*The slightest error of judgment, a hasty action or a hasty word may put back the hands of the clock of progress. Policies have, therefore, to be cautiously evolved...*"⁵⁵

Thank you. Namaskar.

⁵⁵ Mahatma Gandhi, Collected Works, Vol. 67 and Harijan, August 17, 1935.

MONETARY POLICY STATEMENT (AUGUST 6~8) 2024~25

Resolution of the Monetary Policy Committee (MPC)
August 6-8, 2024

Monetary Policy Statement, 2024-25 Resolution of the Monetary Policy Committee (MPC) August 6-8, 2024*

On the basis of an assessment of the current and evolving macroeconomic situation, the Monetary Policy Committee (MPC) at its meeting today (August 8, 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 remain focused on withdrawal of accommodation to ensure that inflation progressively aligns to 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.

Assessment and Outlook

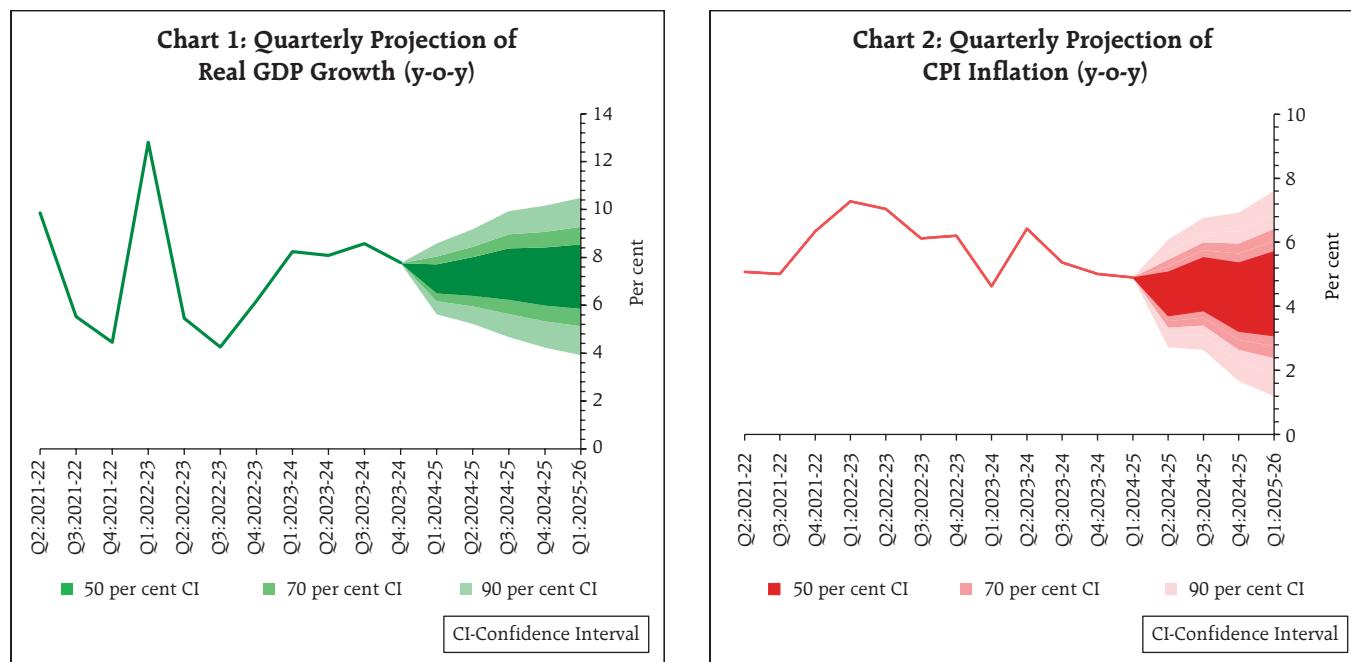
2. The global economic outlook remains resilient although with some moderation in pace. Inflation is retreating in major economies but services price inflation persists. International prices of food, energy and base metals have eased since the last policy meeting. With varying growth-inflation prospects, central banks are diverging in their policy paths. This is creating volatility in financial markets. Amidst recent global sell offs in equities, the dollar index has

weakened, sovereign bond yields have eased sharply and gold prices have soared to record highs.

3. Domestic economic activity continues to sustain its momentum. After a weak and delayed start, the cumulative southwest monsoon rainfall has picked up with improving spatial spread. By August 7, 2024, it was 7 per cent above the long period average. This has supported *kharif* sowing, with total area sown as on August 2, being 2.9 per cent higher than a year ago. Industrial output registered an expansion of 5.9 per cent (y-o-y) in May 2024. Core industries rose by 4.0 per cent in June, against 6.4 per cent in May. Other high frequency indicators released during June-July 2024 indicate expansion of services sector activity, ongoing revival of private consumption, and signs of pickup in private investment activity. Merchandise exports, non-oil non-gold imports, services exports and imports expanded during April-June.

4. Going forward, the Indian Meteorological Department's (IMD) projection of above normal southwest monsoon and healthy *kharif* sowing will support improving rural demand. The sustained momentum in manufacturing and services suggests steady urban demand. High frequency indicators of investment activity as evident in strong expansion in steel consumption, high capacity utilisation, healthy balance sheets of banks and corporates, and the Government's continued thrust on infrastructure spending, point to a robust outlook. Improving world trade prospects could support external demand. Headwinds from geopolitical tensions, volatility in international commodity prices and geoeconomic fragmentation, however, pose risks to the outlook. Taking all these factors into consideration, real GDP growth for 2024-25 is projected at 7.2 per cent with Q1 at 7.1 per cent; Q2 at 7.2 per cent; Q3 at 7.3 per cent; and Q4 at 7.2 per cent. Real GDP growth for Q1:2025-26 is projected at 7.2 per cent (Chart 1). The risks are evenly balanced.

* Released on August 8, 2024.



5. Headline inflation increased to 5.1 per cent in June 2024 after remaining steady at 4.8 per cent during April-May 2024. Worsening of food inflation pressures – driven primarily by a sharp increase in prices of vegetables, pulses and edible oils along with a pick-up in inflation across cereals, milk, fruits and prepared meals – pushed up headline inflation. The fuel group remained in deflation, reflecting the cumulative impact of the sharp cuts in LPG price in August 2023 and March 2024. Core (CPI excluding food and fuel) inflation at 3.1 per cent in May-June touched a new low in the current CPI series, with core services inflation also at its lowest in the series.

6. Headline inflation has moderated from its peak but unevenly. Looking ahead, food price momentum has remained elevated in July. In Q2:2024-25, though favourable base effects are large, the sharper uptick in price momentum relative to earlier expectations is likely to result in a shallower softening of CPI headline inflation. Inflation is expected to edge up in Q3 as favourable base effects taper off. The steady progress in monsoon, pick-up in *kharif* sowing,

adequate buffer stocks of foodgrains and easing global food prices are positives for containing food price pressures. Adverse climate events remain an upside risk to food inflation. Crude oil prices continue to be volatile on demand concerns and geopolitical tensions. The revision in mobile tariff rates is likely to lead to an increase in core inflation. Manufacturing, services and infrastructure firms surveyed by the Reserve Bank expect a pickup in selling prices in the second half of this year. Households' inflation expectations have also gone up and consumer confidence has weakened. Assuming a normal monsoon, CPI inflation for 2024-25 is projected at 4.5 per cent with Q2 at 4.4 per cent; Q3 at 4.7 per cent; and Q4 at 4.3 per cent. CPI inflation for Q1:2025-26 is projected at 4.4 per cent (Chart 2). The risks are evenly balanced.

7. The MPC expects domestic growth to hold up on the strength of investment demand, steady urban consumption and rising rural consumption. Risks from volatile and elevated food prices remain high, which may adversely impact inflation expectations and result in spillovers to core inflation. There are

also indications of core inflation bottoming out. Accordingly, the MPC decided to remain watchful on how these forces play out, going forward. The MPC stays resolute in its commitment to aligning inflation to the 4 per cent target on a durable basis. In these circumstances, the MPC decided to keep the policy repo rate unchanged at 6.50 per cent in this meeting. The MPC reiterates the need to continue with the disinflationary stance, until a durable alignment of the headline CPI inflation with the target is achieved. Enduring price stability sets strong foundations for a sustained period of high growth. Hence the MPC also considers it appropriate to continue with the disinflationary stance of withdrawal of accommodation to ensure that inflation progressively aligns to the target, while supporting growth.

8. Dr. Shashanka Bhide, 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. Ashima Goyal and Prof. Jayanth R. Varma voted to reduce the policy repo rate by 25 basis points.
9. Dr. Shashanka Bhide, Dr. Rajiv Ranjan, Dr. Michael Debabrata Patra and Shri Shaktikanta Das voted to remain focused on withdrawal of accommodation to ensure that inflation progressively aligns to the target, while supporting growth. Dr. Ashima Goyal and Prof. Jayanth R. Varma voted for a change in stance to neutral.
10. The minutes of the MPC's meeting will be published on August 22, 2024.
11. The next meeting of the MPC is scheduled during October 7 to 9, 2024.

**MONETARY POLICY STATEMENT
(AUGUST 6~8) 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) Regulations; and (ii) Payment Systems.

I. Regulations

1. Public Repository of Digital Lending Apps

Guidelines on Digital Lending addressing protection of customers interest, data privacy, concerns on interest rates and recovery practices, mis-selling, etc. were issued on September 02, 2022. However, media reports have highlighted continued presence of unscrupulous players in digital lending who falsely claim their association with RBI regulated entities (REs). Accordingly, to aid the customers in verifying the claim of Digital Lending App's (DLAs) association with REs, Reserve Bank is creating a public repository of DLAs deployed by the REs which will be available on RBI's website. The repository will be based on data submitted by the REs (without any intervention by RBI) directly to the repository and will get updated as and when the REs report the details, i.e., addition of new DLAs or deletion of any existing DLA. Detailed instructions in this regard shall be issued shortly.

2. Frequency of Reporting of Credit Information to Credit Information Companies

At present credit institutions (CIs) are required to report the credit information of their borrowers to credit information companies (CICs) at monthly or such shorter intervals as mutually agreed between the CI and CIC. With a view to provide a more up-to-date picture of a borrower's indebtedness, it has been decided to increase the frequency of reporting of credit information to CICs from monthly intervals to fortnightly basis or at such shorter intervals as mutually agreed between the CI and CIC. The

fortnightly reporting frequency would ensure that credit information reports provided by CICs reflect a more recent information. This will be beneficial to both borrowers and lenders (CIs). Borrowers will have the benefit of faster updation of information, especially when they have repaid the loans. Lenders will be able to make better risk assessment of borrowers and also reduce the risk of over-leveraging by borrowers. Necessary instructions will be issued shortly.

II. Payment Systems

3. Enhancing Transaction Limits for Tax Payments through UPI

UPI has become the most-preferred mode of payments, due to its seamless features. Currently, the transaction limit for UPI is capped at ₹1 lakh. Based on the various use-cases, the Reserve Bank has periodically reviewed and enhanced the limits for a few categories like capital markets, IPO subscriptions, loan collections, insurance, medical and educational services etc.

As direct and indirect tax payments are common, regular and high value, it has been decided to enhance the limit for tax payments through UPI from ₹1 lakh to ₹5 lakh per transaction. Necessary instructions will be issued separately.

4. Introduction of Delegated Payments through UPI

The Unified Payments Interface (UPI) has a very large user base of 424 million individuals. There is, however, potential for further expansion of the user base.

It is proposed to introduce "Delegated Payments" in UPI. "Delegated Payments" would allow an individual (primary user) to set a UPI transaction limit for another individual (secondary user) on the primary user's bank account. This product is expected to add to the reach and usage of digital payments across the country. Detailed instructions will be issued shortly.

5. Continuous Clearing of Cheques under Cheque Truncation System (CTS)

Cheque Truncation System (CTS) currently processes cheques with a clearing cycle of up to two working days. To improve the efficiency of cheque clearing and reduce settlement risk for participants, and to enhance customer experience, it is proposed

to transition CTS from the current approach of batch processing to continuous clearing with 'on-realisation-settlement'. Cheques will be scanned, presented, and passed in a few hours and on a continuous basis during business hours. The clearing cycle will reduce from the present T+1 days to a few hours. Detailed guidelines in this regard shall be issued shortly.

SPEECHES

Current Issues in the Indian Banking and Financial Sector
Shri Shaktikanta Das

Navigating Emerging Challenges for Deposit Insurers and
Fortifying Crisis Preparedness
Michael Debabrata Patra

Climate Change – The Emerging Challenge
Shri M. Rajeshwar Rao

Role of Assurance Functions in Navigating Growth and Risk
Shri M. Rajeshwar Rao

Financial Stability in the Emerging Technology Landscape
Shri Swaminathan J.

*Current Issues in the Indian Banking and Financial Sector**

Shri Shaktikanta Das

I am happy to be back at the Financial Express Modern BFSI Summit. I remember having participated in the June 2022 edition of this summit where I had spoken on 'Disruptions & Opportunities in the Financial Sector'. The macroeconomic conditions back then were very different and challenging to say the least, as we were grappling with overlapping shocks from the war in Ukraine and the surge in inflation at a time when the world was still recovering from the Covid-19 pandemic. Since then, we have come a long way. Amidst global challenges and uncertainties, India stands out as a fast growing major economy with stronger macroeconomic fundamentals and a healthy and resilient financial sector.

The theme for today's summit "Decoding Inclusive Growth" aptly captures our combined aspirations for high growth with inclusiveness during the next decade and beyond. The financial sector is a key enabler for the realisation of this aspiration. With India's strong macroeconomic configuration, favorable demographics and significant pace of digitalisation, the Indian financial sector is poised to scale new heights. The recent annual financial results of banks and NBFCs indicate that the financial system remains sound and resilient.¹ Further, macro stress tests² done by the Reserve Bank reveal that the banking sector will continue to remain resilient even under stress scenarios.

* Inaugural Address by Shri Shaktikanta Das, Governor, Reserve Bank of India at the Financial Express Modern BFSI Summit, Mumbai, July 19, 2024.

¹ Backed by improvement in asset quality, enhanced provisioning for bad loans, sustained capital adequacy and rise in profitability. Notably, the gross non-performing assets (GNPAs) of scheduled commercial banks is now at a multi-year low of 2.8 per cent and that of NBFCs is below 4 per cent as at end of March 2024. Excluding NBFCs under resolution, the GNPA ratio for NBFCs is below 3 per cent.

² Financial Stability Report (RBI), June 2024

In terms of market dynamics, the financial landscape in India is undergoing a structural transformation, driven by factors like innovations in technology, financial deepening, and changing savings and investment patterns, etc. Each of these shifts has a bearing on how financial entities carry out their business and adapt to the emerging risks.

New and emerging technologies have reshaped the financial services industry by bringing in innovative solutions and personalised products. The demand-side factors such as rising customer expectations for digital services and the supply-side factors relating to regulatory support and emergence of Fintechs have converged to deliver a frictionless customer experience. The Reserve Bank has also been actively fostering innovation by envisaging mechanisms like the United Payment Interface (UPI), regulatory sandbox, co-lending models, account aggregator framework, etc. With the synergies provided by mobile phone penetration, internet availability, reoriented payment systems and the multitude of customer data points, lending institutions as well as financial markets have been able to leverage upon such mechanisms to amplify their reach to the target segments and also carry forward the agenda of a more inclusive financial sector.

Overall, there has been a transformation in the banking and financial landscape in the last decade driven by technological innovations, changing consumer preferences and emergence of alternative business models. While these have fostered competition and collaboration, they also have implications for consumer trust and regulatory oversight. Such structural changes also create opportunities as well as challenges. Financial institutions like banks, NBFCs and others need to carefully assess the impact of these changes on their business models, resilience and sustainability.

As Walter Bagehot said: "*Adventure is the life of commerce, but caution,...,is the life of banking*"³. These words are relevant even today. As I have stressed in various fora, good times often sow the seeds of complacency and vulnerability. In my address today, I would like to present my perspective on some of the contemporary issues and emerging risks that banks and other financial entities need to address. There are nine issues which I wish to highlight.

I. Loan and Deposit Growth

Let me first touch upon the current divergence between loan and deposit growth rates. It goes without saying that there will always be some gap between the two, but credit growth should not run ahead of deposit growth by miles. More so, when banks are required to maintain CRR, SLR, LCR, etc. It is, of course, recognised that almost every loan creates a new deposit in the borrower's name or adds to his or her account balance. In other words, money begets money in the banking system. But the fundamental point is that there has to be a reasonable balance between credit and deposit growth.

As I just mentioned, deposit mobilisation has been lagging credit growth for some time now. This may potentially expose the system to structural liquidity issues. While there could be a debate regarding 'deposits funding loans' *vis-à-vis* 'loans funding deposits', the current regulatory concern stems from the fact that there could be structural changes happening which banks need to recognise and, accordingly, devise their strategies. Households and consumers who traditionally leaned on banks for parking or investing their savings are increasingly turning to capital markets and other financial intermediaries. While bank deposits continue to remain dominant as a percentage of financial assets owned by households, their share has been declining with households increasingly allocating their savings

³ Lombard Street: A Description of the Money Market by Walter Bagehot, 3rd edition, 1873, the Online Library of Liberty.

to mutual funds, insurance funds and pension funds. To be precise, households are increasingly turning to other avenues for deploying their savings instead of banks.

On their part, banks have sought to fill the credit-deposit gap by increasing their reliance on other sources like short term borrowings, Certificates of Deposit, etc. This increases their sensitivity to interest rate movements and poses challenges to liquidity risk management. The shift in deposit preferences from current account and savings account (CASA) deposits⁴ has various implications which banks need to keep in mind. With credit growth remaining strong, banks need to continuously focus on improving and refining their credit underwriting standards and pricing of risks.

II. Management of Liquidity and Interest Rate Risks

The 2023 banking crises in certain advanced jurisdictions have brought to focus the risks to banking stability from certain business models and their inherent vulnerabilities.

These incidents have also triggered debates and rethink at the global level⁵ about design and calibration of the Basel III liquidity standards, deposit insurance and resolution tools. Hence, it is imperative that our banks put in place prudent liquidity management measures proactively. It has to be borne in mind that incorrect valuation of liquid assets can give a false sense of short-term liquidity resiliency, which is not desirable. The Reserve Bank, on its part, is reviewing the Liquidity Coverage Ratio (LCR) framework to address the emerging issues. This will be done after detailed public and stakeholder consultations.

Interest rate risk is inherent to the business of banking. Last year's banking crises in certain countries have also shown the importance of managing Interest

⁴ The share of CASA in overall deposits of SCBs have declined from 43.66 per cent in March 2022 to 39 per cent in March 2024.

⁵ 'Report on the 2023 banking turmoil', Basel Committee on Banking Supervision (BCBS), October 2023 and 'Bank Failures Preliminary lessons learnt for resolution', Financial Stability Board (FSB), October 2023.

Rate Risk in the banking book⁶. The books of banks are highly sensitive to interest rate fluctuations. It goes without saying that banks need to manage their interest rate risk exposures using processes and systems commensurate with their business models, risk profile, earnings and capital levels, complexity, and scope of operations.

III. Cybersecurity and IT Related Risks

In an era of increasing technological footprint and rapid digitalisation, it is critical that due emphasis is placed on managing cybersecurity and IT risks. Globally, there are growing incidences of cyber attacks on the IT systems of banks and financial institutions. This necessitates highest level of vigil and strengthening of the IT systems by banks and other financial institutions. The Reserve Bank's supervisory assessments continue to stress on the importance of improving Information Technology governance arrangements; making the technology systems, processes and infrastructure more resilient; and mitigating third-party risks. Banks and other financial entities need to continuously invest in technology while also developing the right kind of capabilities to successfully tackle these challenges.

IV. Digital Frauds

Another area of concern is the rise in digital frauds. Though many of such frauds are due to various social engineering attacks on customers, there is also a rapid increase in use of mule bank accounts to perpetrate such frauds. This exposes the banks not only to serious financial and operational risks but also to reputational risks. Banks, therefore, need to strengthen their

⁶ Banking book includes all financial instruments, except instruments that are part of trading book on account of their classification as "Held for Trading". The interest rate risk in trading book is capitalized as part of market risk framework which is much nuanced by design *vis-à-vis* the interest rate risk in banking book which attracts a different treatment. While there is a prudential rationale for the differential treatments, the banking turmoil last year has revealed how mismanagement of interest rate risk played a significant role in the failure of a particular bank due to its alleged failure to manage rising interest rate risk on its the long-term fixed interest rate securities classified under Held to Maturity category.

customer onboarding and transaction monitoring systems to monitor unscrupulous activities, including suspicious and unusual transactions. This also requires effective co-ordination with the Law Enforcement Agencies so that the concerns occurring at a systemic level are detected and curbed in time.

The Reserve Bank is working with banks and Law Enforcement Agencies to strengthen transaction monitoring systems and ensure sharing of best practices for control of mule accounts and prevention of digital frauds. I would again impress upon banks to ensure that necessary measures are taken, including for customer education and awareness, to maintain public confidence in use of digital banking channels.

V. Third Party Risks

In the current business environment, it has become necessary for banks and other financial institutions to outsource certain functions to third parties. While doing so, it is necessary to exercise strong oversight and monitoring of such outsourced activities. Regulations clearly provide that outsourcing of any activity by a regulated entity does not diminish its own obligations. Banks and NBFCs also need to consider whether cost optimisation strategies are leading to over-dependence on third-party vendors even for critical functions without commensurate oversight. We have seen a few instances of this and have dealt with it. Strong governance and oversight mechanisms with regard to third party relationships for both IT and non-IT services are essential components of resilience for any financial institution. The protocol with the outsourced agency should clearly define the roles and responsibilities of both the parties in such relationships. The Reserve Bank has already issued guidelines on IT outsourcing⁷ and draft directions on managing risks and code of conduct in outsourcing of financial services⁸.

⁷ Master Direction on Outsourcing of Information Technology Services, April 2023.

⁸ Draft Master Directions on Managing Risks and Code of Conduct in Outsourcing of Financial Services, October 2023.

VI. Issues in Unsecured Retail Credit

The rise in share of retail portfolio within overall bank credit is a recent system-wide trend. As you may be aware, the Reserve Bank has taken certain pre-emptive measures in November, 2023 to ensure that growth in these segments does not lead to potentially excessive risk build-up. These measures appear to have led to a certain degree of moderation in the targeted segments, as observed in our recent Financial Stability Report. It needs to be emphasised that the delinquency levels and leverage in small ticket consumer loans warrant enhanced vigil. Matters such as fixing limits on unsecured exposures are left to the Boards of banks and NBFCs. It has, however, been observed by our supervisory teams that some entities have fixed very high ceilings, even where they already have a high exposure. While it is not our intention to be prescriptive on such matters, banks and NBFCs are expected to show prudence and avoid exuberance.

VII. Conduct Related Issues

Fair conduct is not just a regulatory requirement; it is a core business requirement. I am emphasising on this issue of fair conduct because conduct risks may arise even when the going is good, as it prevails now. Conduct risk needs to be seen together with risk culture. Fair conduct and practices foster consumer confidence and public trust in financial institutions and strengthen their stability. The Reserve Bank has issued regulations from time to time to ensure fair and responsible conduct by the regulated entities. In the recent past, guidelines have been issued on Key Facts Statement (KFS); penal charges in loan accounts; reset of floating interest rate in EMI based personal loans; and release of movable or immovable property documents on repayment or settlement of loan accounts. We still come across instances of regulatory entities resorting to high-handed recovery practices; framing non-transparent loan contracts with inadequate disclosures of important terms or non-disclosure of charges; levying excessive interest

rates, especially in micro finance loans, etc. Let me emphasise that overall there has been considerable improvement in governance, quality of assurance functions and adherence to fair conduct guidelines in recent years. The concerns I have highlighted here pertain to some of the Regulated Entities of the Reserve Bank. These are not system-wide issues but are essentially outlier cases.

Critical issues relating to conduct sometimes get sidestepped in the pursuit of short-term gains. For instance, charging of very high interest rates by certain regulated entities for micro finance loans is not in order. I would like to reiterate what I said in my monetary policy statement on June 7, 2024: regulated entities should use their regulatory freedom responsibly to maintain fair and transparent pricing of small value loans. Unfair or usurious practices under micro finance loans would compel us to have a re-look at the revised regulatory framework for microfinance loans issued in March 2022.

VIII. Transition Financing

Climate change poses a growing threat to economic growth, and it needs immediate and sustained action on all fronts. Recent extreme weather events globally and in India such as heat waves, droughts, floods and wildfires are stark reminders that we have to take decisive actions.

The Reserve Bank has initiated steps to address the risks posed by climate change to the financial system. Since we commenced this journey, several initiatives have been undertaken, which inter alia include issuance of framework for Sovereign Green Bonds; acceptance of green deposits; and issuance of draft disclosure framework for climate-related financial risks⁹. Going forward, our overarching approach would be to consider 'sustainability aspects' as a focal point of the entire credit ecosystem. The onus of spearheading sustainability initiatives

⁹ Draft Disclosure framework on Climate-related Financial Risks, 2024.

will, however, reside with the regulated entities eventually. These entities have a crucial role to play in climate action by taking steps to provide climate finance. They need to explore innovative transition financing models. At the same time, they should also be mindful of associated risks and greenwashing concerns. In addition, the regulated entities may undertake "transition planning"¹⁰ to prepare for risks and potential changes in business models of their borrowers who may undertake such transition.

IX. Private Credit Markets

Private credit as a preferred alternative mode of capital mobilisation is growing rapidly. It is emerging as an attractive investment avenue for investors with high-risk appetite. While these markets may carry economic benefits by providing a greater pool of financing outside of the regulated financial markets and institutions, and their risks appear contained at present, it is important to bear in mind that vulnerabilities and interconnectedness in

these markets can amplify negative shocks and pose financial stability concerns. We continue to remain watchful of such developments and would welcome ideas and thoughts in this regard.

Conclusion

In conclusion, I would like to emphasise that banks and financial institutions have a critical role in taking India to the next phase of economic growth. Regulated Entities of the Reserve Bank like Banks and NBFCs are well positioned in terms of capital, asset quality and profitability to contribute to the economic acceleration. Embracing technology and innovation, while remaining focused on governance and risk management, can ensure sustained capacity and resilience of the financial sector and enable it to meet the needs of our growing economy. While much has been achieved, there is still more to accomplish.

With these words, I thank the organisers for giving me this opportunity and wish the Summit all success.

Thank You.

¹⁰ This refers to the internal strategic planning and risk management processes undertaken by a financial institution.

*Navigating Emerging Challenges for Deposit Insurers and Fortifying Crisis Preparedness**

Michael Debabrata Patra

Mr. Alejandro Lopez, President, International Association of Deposit Insurers (IADI), Dr. Eva Hupkes, Secretary General, IADI, Mr. M. Rajeshwar Rao, Deputy Governor, Reserve Bank of India (RBI), distinguished representatives of the IADI and the Asia Pacific Regional Committee (APRC) Secretariat, chief executive officers (CEOs) and officials of deposit insurance agencies, delegates from central banks, eminent speakers and panellists, invitees representing banks in India, and my colleagues from the Deposit Insurance and Credit Guarantee Corporation (DICGC) and the Reserve Bank of India (RBI), good morning to you all.

On behalf of the IADI APRC, it is my privilege to welcome each one of you to Jaipur and to this Conference being hosted by the DICGC after a gap of nearly 13 years - the last one was held in November 2011 at Jodhpur, a city not far from here. Founded in 1727 by Maharaja Sawai Jai Singh (the second) II, Jaipur is unique for its historic significance and is renowned worldwide for its architecture, culture, history, and art. It is famously known as the Pink City due to the distinctive colour of its buildings, which were painted pink to welcome the Prince of Wales in 1876. Jaipur is home to several UNESCO World Heritage sites. It is also one of India's first planned cities.

Over the next two days, our DICGC team has designed sessions with topically relevant themes that we hope will capture your interest and engage your involved participation. We shall crystal gaze into the outlook for deposit insurance in the context of newer financial technologies, including central bank digital currencies (CBDCs) and tokenised deposits. We shall also delve into climate-related financial risks and the imperative of putting in place crisis preparedness and business continuity management procedures and policy frameworks. We believe these discussions are timely as they would enable us to make deposit insurance more resilient and future ready. I am sure that the ideas, knowledge and experiences shared during the conference will shine light on the path that lies ahead for practitioners in this increasingly multi-faceted field.

It is globally accepted that the deposit insurance function is critical to the design and effective functioning of a robust financial safety net in an economy. It operates in conjunction with and enhances the efficacy of the functions of prudential regulation, supervision, lender of last resort (LOLR)/emergency liquidity assistance (ELA) and resolution. Together, they instil public confidence in the financial system and anchor financial stability on an enduring basis. This assumes critical relevance in the context of the hurtling pace at which the financial landscape is evolving across many dimensions. Let me begin with deposit insurance crossing over the virtual frontier.

2. Digitalisation of Finance

The digitalisation of financial services brings a variety of opportunities for deposit insurers to fulfil their mandate in more efficient and effective ways, including modernisation in reimbursement, supervision, resolution and in communication. Digitalisation also goes hand in hand with significant economies of scale. Yet as the experience with banking sector stress in some jurisdictions in March 2023 showed, it could also amplify and accelerate the materialisation of financial stability risks in the

* Keynote Address delivered by Michael Debabrata Patra, Deputy Governor, Reserve Bank of India (RBI) at the International Association of Deposit Insurers (IADI) Asia Pacific Regional Committee (APRC) International Conference hosted by Deposit Insurance and Credit Guarantee Corporation (DICGC) on August 13, 2024 at Jaipur Rajasthan, India. Valuable comments received from Anup Kumar, Kirtan Singh Ningwal, Dhaval Sanghvi, Ishan Katyal, Prithviraj Harish, Shobhit Agarwal, Arun Vishnu Kumar and editorial help from Vineet Kumar Srivastava are gratefully acknowledged.

form of episodes of extreme volatility induced by the interaction of online banking and individual depositors coordinating through social media to fuel deposit outflows. In fact, digital financial products and services are confronting deposit insurers with fundamental questions regarding the fulfilment of their mandate – the potential coverage of new financial products; assessing and pricing associated risks; the increased relevance of beneficiary accounts through e-money issuers; and the involvement of third parties. Moreover, new business models give rise to new risks or may increase the relevance of existing risks. Digitalisation also entails cybersecurity risk. The unavailability of essential technical infrastructure or unscrupulous activity against such infrastructure has the potential to significantly impair deposit insurers' business continuity.

Two digital innovations in currencies and payment systems merit special attention as both have implications for deposit insurance. The first one is central bank digital currency (CBDC) – legal tender or fiat currency issued by a central bank in a digital form. The major advantages of CBDCs are the finality of transactions (settlement risks is eliminated as there is no bank intermediation), and real-time and cost effective globalisation of payment systems. In the medium term, adoption of CBDCs by unbanked people could enhance financial inclusion. As an increasing number of central banks face the risk of large-scale use by the public of private or digital instruments that may not be backed by or denominated in the domestic currency, CBDCs may assist in mitigating this risk by being a central bank liability and a form of digital cash. To the public, they would be an alternative to central bank issued cash and – to a certain extent – to private money, such as bank deposits.

The impact of CBDC on deposits and hence deposit insurance is largely unknown as of today. The operating models and design features of each individual jurisdiction's CBDC will be a crucial factor in expanding our understanding of the balance of risks.

For deposit insurers, factors of key interest would be the degree of replacement of bank deposits by CBDC, the division of labour between central and commercial banks and the degree of privacy attached to CBDC usage. They also need to contend with the possibility that during crises triggering depositor panic, CBDCs could be perceived as a safe haven, thus rendering bank deposits, particularly uninsured deposits, more prone to withdrawal and hence the risk of bank runs. Given the inherent links between such systems and the objectives and operations of deposit insurers, it is expected that the topic of CBDC will continue to grow in relevance for deposit insurers and the IADI, warranting the need to keep abreast of developments and policy deliberations as they emerge.

Second, the digital payments space is undergoing a silent revolution. In over 70 countries today, domestic payments reach their destination in seconds at near-zero cost to the sender or the recipient with the growing availability of instant payment systems (IPS).¹ Deposit insurers are having to re-evaluate operational risks posed to depositors and member banks from the emergence of these 24/7 payment systems. While digital innovations can ease cross-border supply of financial services, they can also increase the likelihood of deposit insurers exposed to member banks with a significant share of non-domestic depositors and additional challenges in the case of a payout following bank default. In fact, the increasing ambit of cross-border banking activities makes cross-jurisdiction cooperation between deposit insurers and other financial safety net participants all the more relevant.

3. Tokenised Deposits

The growing adoption and utilisation of blockchains and distributed ledger technology has given traction to tokenised deposits or digital representations of traditional bank deposits hosted

¹. <https://www.bis.org/about/bisih/topics/fmis/nexus.htm>

on a secure blockchain. Tokenisation and unified ledgers are also central to the Bank for International Settlement's (BIS's) vision for "Finternet"². Deposit tokens can be of two types: 1) bearer-like instruments which are transferable; and 2) non-transferable claims which are settled in central bank money or wholesale CBDC. From the user's perspective, tokenised deposits should be inter-operable with different systems, provide the same level of trust and confidence as other forms of money and should also comply with the "singleness of money"³ – the same value as other forms of money. Tokenised deposits may have various use cases across domestic and cross-border payments, trading and settlement, and for cash collaterals. In fact, by being programmable, they can be used seamlessly in smart contracts, merging payment information and payment value to provide "atomic" settlement⁴. Overall, tokenised deposits may provide benefits of increased liquidity, cost effectiveness, improved accessibility (24×7), fractional ownership and quick settlements. The BIS's Project Agora⁵ (Greek for "marketplace") will explore how tokenisation can enhance the function of the monetary system.

Regulatory and financial stability issues associated with tokenisation include the potential to amplify bank runs in times of stress; the legal architecture required to ensure that tokenised deposits are treated as traditional deposits for various purposes, including for deposit insurance; operational risks and cyber security concerns; and technology solutions for ensuring seamless payments and resolution of troubled banks.

Deposit insurers must remain in readiness for tokenised deposits by reflecting on how to modify their mandates and coverage, considering that

tokenised deposits are essentially claims on issuing banks like other forms of deposits. Moreover, the risks posed by tokenised deposits have to be modelled for determining fund size and premium rates. They will also have a bearing on the choice of modalities for resolution and claim processing, with different banks using different technologies as also the possibility that tokenised deposits could be held by depositors who are not KYC compliant and not clients of issuing banks. Consequently, verification of the authenticity and genuineness of claims may prove to be a testing challenge.

4. Climate Change-related Financial Risks

2023 was the warmest year in recorded history and 2024 may eclipse it. Climate change is overwhelming us, imperilling humanity and the planet. Green swan events due to climate change are likely to recur with rising intensity. Threats to financial stability through physical risks and transition risks are already impacting the balance sheets and operations of banks and other financial intermediaries from the rising incidence of economic costs and financial losses from severe climate events. As economies transition towards net zero targets, banks may be even more severely impacted by transition risks from policy changes, technological developments and investor and consumer preferences influenced by environmental, social and governance (ESG) goals. It is against this backdrop that the Basel Committee on Banking Supervision (BCBS) has issued 18 principles for effective management and supervision of climate related financial risks. Some central banks and regulators are engaged in the design and conduct of climate stress tests with a view to informing the framing of monetary policy strategies and regulatory and supervisory approaches for climate-related financial risk management among regulated entities.

From the point of view of deposit insurance, climate risks are different from traditional risks in the sense that effective insurance schemes and hedging tools are not available. Furthermore, modelling these

² <https://www.bis.org/publ/work1178.htm>

³ <https://www.bis.org/publ/bisbull73.htm>

⁴ Blockchain equivalent of delivery versus payment (DvP). Tokens and assets for which payment is made are transferred simultaneously.

⁵ <https://www.bis.org/press/p240403.htm>

risks is challenging due to evolving green taxonomy and non-availability of data on greenhouse gas (GHG) emissions, particularly on emissions down the value chain or scope 3 emissions. Nonetheless, as the frequency and severity of natural disasters increase and morph into financial stability considerations, it is crucial for deposit insurers to prepare for actively assessing and addressing the potential impact of climate change on the institutions they oversee. In fact, the IADI's surveys show that the majority of deposit insurers expect the relevance of ESG to increase, with implications for net claim outflows and resolution costs. Fund management by deposit insurers may need an overhaul, incorporating climate friendly avenues such as sovereign green bonds which are increasingly gaining traction.

Some of the options that deposit insurers can explore are climate risk-based premiums, climate stress testing of funds, and building in elements of sustainability into fund management, risk monitoring and resolution plans.⁶ Additionally, collaboration and knowledge-sharing among deposit insurers, regulators and industry stakeholders can help establish best practices and enhance resilience in the face of climate risk while ensuring the stability of financial systems.

5. Enhancing Crisis Preparedness and Business Continuity Management

It is evident that in addition to traditional risks, the new risks that have been set out earlier make it imperative for deposit insurers and other financial safety net participants to put in place frameworks for crisis preparedness and management that enhance their ability to manage the failure of deposit taking institutions while mitigating potential contagion effects. Crises tend to propagate quickly and hence must include augmented provisions of emergency liquidity assistance and pre-emptive interventions in troubled institutions.

⁶. IADI Survey Brief on The Role of Climate in Deposit Insurers' Fund Management, 2023.

The IADI's Core Principle 6 on "Deposit Insurer's Role in Contingency Planning and Crisis Management" suggests contingency planning and crisis management policies and procedures to ensure effective responses to bank failures and other catastrophic events. Moreover, as pointed out therein, system-wide crisis preparedness strategies and management policies should be the joint responsibility of all safety net participants and co-ordination between them is essential. Core Principle 4 also emphasises the strengthening of relationships with other safety net participants. Core Principle 9 recommends that emergency funding arrangements for the deposit insurance system – including pre-arranged and assured sources of liquidity funding – may be explicitly set out (or permitted) in law or regulation, including market borrowing. Deposit insurers should actively implement these guidelines and formulate toolkits to address emerging risks.

6. Conclusion

In closing, I would like to address the environment in which deposit insurance operates in India in the context of these new challenges. India has started a pilot for wholesale CBDC (e₹-W) starting November 01, 2022 and retail CBDC (e₹-R) starting December 01, 2022. India is also leveraging its digital public infrastructure to be in the forefront of the digital revolution sweeping the world. The Unified Payments Interface (UPI) provides immediate money transfer through mobile devices round the clock 24*7*365 and brings access to multiple bank accounts and various financial services under a single app. India is also engaged in interlinking UPI with fast payment systems (FPS) of other countries to make cross-border payments instant and efficient. The RBI has joined the Project Nexus, a multilateral international initiative conceptualised by the Innovation Hub of the BIS to enable instant cross-border retail payments by interlinking FPSs of Malaysia, Philippines, Singapore, Thailand and India. Turning to the climate, the Government of India has announced that the net

zero target to be achieved by 2070 along with other climate goals ahead of net zero. The RBI has issued a framework for acceptance of green deposits and a disclosure framework on climate-related financial risks in 2024 which envisages climate-related disclosures. The Government of India has also been issuing sovereign green bonds.

These developments are defining milestones in the DICGC's journey of six decades. Under its "paybox plus" mandate, the Corporation is authorised to make interim payment of claims within a stipulated timeline to depositors of banks placed under restrictions on deposit withdrawals (even before liquidation or amalgamation). As on March 31, 2024 interim payments were made to 376,661 depositors amounting to ₹5359 Crores (approximately USD 640 Million). The DICGC's coverage includes 1997 banks comprising 140 commercial banks and 1,857 cooperative banks – the largest number of deposit-taking institutions covered by deposit insurance in the world, second only to the US. Currently, the deposit

insurance coverage limit (₹500,000 or approximately USD 6,000), fully protects 97.8 per cent of deposit accounts and 43.1 per cent of deposit value. In the context of the emerging challenges, the DICGC is prioritising risk management, including contingency planning and crisis management frameworks. Digital transformation of all operations is underway. Public awareness campaigns are being refashioned and stepped up. Work on ESG policy is being prioritised alongside a strong focus on climate risk.

The global financial landscape is changing rapidly. For deposit insurers and other financial safety net participants, it is a race to stay ahead of the curve amidst these tectonic shifts. I am sure that your deliberations over the next two days will enhance our collective understanding of the emerging challenges so that we adapt, prepare and remain relevant and meaningful in inspiring public confidence and preserving financial stability.

I wish the Conference all success.

Thank You.

*Climate Change – The Emerging Challenge**

Shri M. Rajeshwar Rao

Good afternoon ladies and gentlemen,

At the outset, let me thank the organisers for inviting me to deliver this address and convey my thoughts at this prestigious event. We, as central bankers, interact with various stakeholders on different occasions and diverse gatherings like this provide us an opportunity to reflect on issues which straddle not just the world of finance but also impinges on wider scheme of things. The idea is to flag issues which have wider ramifications beyond the conventional financial risks. Therefore, while I would dwell upon the Indian financial outlook, I would like to avail of this opportunity also to discuss on the issue of climate change and the role of financial entities in the transition process towards a more sustainable growth.

Indian Banking and Financial Sector Outlook

The global financial system is facing strong headwinds from various quarters, including high levels of public debt, stretched asset valuations, economic and financial fragmentation, geopolitical tensions, and risks arising from increasing cyber threats. Amidst these global challenges, the Indian economy is an outlier which shows strong macroeconomic fundamentals. Economic activity is growing steadily, supported by a financial system that looks stronger than in the past.

If we exclude post-COVID rebound in 2021-22, India's real GDP growth in 2023-24 surged to its highest since 2016-17, surpassing expectations. The period marked a shift in growth trajectory from an

average of 7 per cent pre-2020¹ to an average of 8 per cent or higher during the subsequent period, driven largely by domestic factors. Inflation is currently forecast to average around 4.5 per cent in 2024-25 and 4.1 per cent in 2025-26². These macroeconomic conditions could, therefore, lay the foundation for sustainable future growth, improve consumption conditions, strengthen the investment climate, and enhance external competitiveness.

The Indian banking sector, in particular, has demonstrated significant improvement in key metrics such as capital adequacy, asset quality, and profitability, supported by robust macroeconomic fundamentals and business confidence. There has been sustained growth in credit expansion, primarily driven by personal loans and loans to services sector. As of the end of March 2024, scheduled commercial banks (SCBs) reported a capital to risk-weighted assets ratio (CRAR) of 16.8 per cent and a common equity tier 1 (CET1) ratio of 13.9 per cent. Additionally, SCBs achieved a multi-year low in their gross non-performing assets (GNPA) ratio at 2.8 per cent and net non-performing assets (NNPA) ratio at 0.6 per cent, underscoring strong performance across various indicators. Profitability of banks also remained strong, evidenced by their Return on Equity (RoE) at 13.8 per cent and Return on Assets (RoA) at 1.3 per cent as of March 31, 2024.

At an aggregated level, Non-banking financial companies (NBFCs) also continue to maintain robust health indicators as of end-March 2024, with a CRAR of 26.6 per cent, GNPA ratio at 4.0 percent, and RoA at 3.3 per cent.

However, despite the financial system exhibiting strong performance and healthy financials, as a regulator and supervisor, we need to remain vigilant to the risks on the horizons. We have been flagging our

* Remarks delivered by Shri M. Rajeshwar Rao, Deputy Governor on July 19, 2024, at J P Morgan India Leadership Series Lecture in Mumbai. Inputs for preparing these remarks were provided by Manoj Kumar Poddar, Pradeep Kumar, Kavita Gangwal and Rupesh Kanaujiya.

¹ RBI Bulletin June 2024, State of Indian Economy

² Future Readyng India's Monetary Policy speech delivered by M D Patra, Deputy Governor on July 12, 2024

concerns on strong credit growth in certain segments of unsecured retail loans. Increase in use of technology has also increased threat of cyber risks. We have also been sensitising regulated entities on these issues during our periodic interactions. The regulatory thrust also continues on conduct related matters to enhance transparency and improve customer experience.

Climate Risks and the Leadership Challenge

But let me now focus on an area which is going to significantly impact us going forward, which is the issue of climate change and its impact on our economy and the financial system. These changes transcend segmental, geographical and ideological boundaries. As leaders you have to take a strategic view and take a long term perspective. More importantly, you must provide the necessary inspiration, conviction and guidance on the path to achieve sustainable growth outcomes while being mindful of emerging challenges. Tackling the issue of climate demands such a visionary leadership from the collective diaspora of leaders as individuals efforts are likely to fall short or may prove ineffective.

The current times present us several leadership challenges – in fact, the term 'polycrisis' has come to represent the intertwined challenges from climate, geopolitics, etc. Amongst all these issues, the issue of climate change is all pervasive and is most likely to test the leadership ability in every sphere of our lives – financial, social and global. The impacts of climate change may cause damage to lives and livelihoods for several communities and a challenge of this magnitude demands a cohesive and extraordinary response from the leaders in every field.

However, I would limit my remarks today to the financial aspects of the climate challenge and why financial community should play a major role in tackling the impact of climate change. While the obvious risks of climate change relate to the physical world, such risks have the potential to swiftly transcend from physical to financial, bringing

into focus the role of the financial sector. At times, there is a debate regarding role of financial sector regulators, especially central banks *vis-à-vis* issues on climate front. I, for one, do believe that there are clear linkages of climate events on growth and inflation – the two macro variables which most of the central banks are deeply concerned about. Since the climate events impact the real sector and by extension bank's exposure to these sectors, it has a direct bearing on risk management frameworks for banks and other financial institutions. Therefore, from both monetary policy as well as prudential policy perspectives, central banks will have a key role to play on the issues related to climate risks. As climate change has the potential to create shocks to monetary stability, growth, financial stability, and the safety and soundness of regulated entities, in a way it influences the action of central banks and regulators.

From an Indian perspective, our diverse topography, with snow-clad mountains, fertile plains, deserts and a long coastline with different temperature and precipitation patterns, generates diverse set of risks with attendant challenges for growth and inflation. The agricultural sector, heavily reliant on monsoon rains, plays a critical role in India's economy and food security. The *El Niño* event of 2023-24 exemplifies this vulnerability, leading to hotter summers, reduced productivity, inadequate monsoons affecting reservoir levels, and lower agricultural production. These factors have cascading effect on inflation due to food price fluctuations. An added element is the dependence on agriculture which has bearing on their spending patterns and resultantly impact growth of country at large. Climate-related events also adversely impact the credit quality and loan-repayment capabilities of the borrowers. They can wipe out the assets created from institutional finance thereby impacting health of financial institutions.

An important point to ponder is that the traditional ways of risk management, *viz.*, risk avoidance, risk

mitigation, risk sharing and risk transfer may not be fully effective as the financial and other risks from climate change wouldn't materialise in part or on individual basis but manifest and impact collectively in a region or industry. Traditional instruments like insurance alone may not be enough to manage the risks arising from such an all-encompassing crystallisation of risks and can overwhelm the insurers. Therefore, we have to acknowledge that risk emanating from climate change cannot be handled by one set of actors alone. It needs a buy in from all stakeholders and to ensure a successful transition to a sustainable future, we need a multi-faceted approach that involves governments, private sector entities, financial institutions, civil society organisations and the public.

Climate vs Growth - Concept of 'Just Transition'

Proposals for tackling climate change and containing global temperature sometimes give rise to contradictory views as pro-climate actions are perceived to compromise on economic growth and employment. However, the need to act is immediate and in a calibrated manner. We cannot afford to procrastinate. The rising temperatures and climate events are already inflicting huge financial costs and causing irreparable damage to ecosystem. If we start early, the cost of transitioning to a more sustainable future would be lower and spread out over a longer time horizon.

Therefore, I believe that early work on mitigating the climate risk would support the long-term growth. The investments in climate action would pay-off well in the medium and long-term. The important point here is that the short-term impacts should not be disproportionate to some countries in the sense that they should not be worse-off during the transition process. Therefore, there is a need for more channelising of climate finance to EMDEs and firm and abiding commitments on climate funds from advanced economies to help EMDEs in the transition process is very important.

Adaptation and transition are key strategies in managing climate risks. However, the transition must be swift, equitable and just, without putting undue burden on developing and underdeveloped economies. We also need to address the elephant in the room which is how to finance the transition towards a low carbon economy. Given the significant funding gaps and huge financing requirements of EMDEs (estimates range from 2.5 per cent of GDP annually in case of India and at \$2 trillion per year by 2030 for EMDEs) access to transition finance is important.

EMDEs face significant challenges in that they are not just more vulnerable to impact of climate change but they have even higher resource constraints with predominance of small enterprises and dependencies on fossil fuels. The recently released publication by the NGFS titled "Tailoring Transition Plans: Considerations for EMDEs" aptly highlights the specific challenges faced by developing countries. Though the concept of 'Just Transition' has gained prominence in climate policies of various jurisdictions it's important that we need to apply it to the transition processes.

Given the need for transition finance, the next obvious question is how to plan for it and hence a need for credible transition plans. Despite the need for banks and financial institutions to address multiplicity of objectives, the importance of transition plan in EMDEs is very important wherein the banks and financial institutions as also non-financial firms have an important role to play. Transition plans are essential for banks and financial institutions to mobilize capital and manage financial risks that may arise from climate related financial risks.

The transition plans must be strategic and top-driven while having explicit components for geographical regions as also for industry and entity levels. Further, entities need to craft detailed plans across operations, products, services, and policies to mitigate specific risks. Similarly, industry-specific

transition plans should align with sector needs by meeting regulations, adopting relevant technologies, and collaborating with stakeholders. This approach would ensure that both entities and industries contribute effectively while addressing their own set of distinct challenges.

While transitioning is crucial, we cannot overlook the immediate impacts of climate events. There is, therefore a need to look at adaptation part which is a missing link as far as climate strategies that are evolving. 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. Establishing early warning systems and disaster preparedness plans is crucial for minimizing loss and damage and therefore, adaptation financing is critical for building economic resilience and fostering sustainable development. One way to do that is by integrating the adaptation financing into resilience and disaster management frameworks.

The role of regulators becomes important as they not only set the regulations for the financial sector but also send the signals to the real sector for their future course of actions, significantly influencing them to chart their future strategies. Also, given the important role played in financing by private sources, there is a need for regulators to put in place right climate information architecture to create a conducive environment to attract private capital for climate finance. Therefore, the role of disclosure frameworks which are consistent with internationally accepted norms is crucial.

The point I wish to make is that it is possible to converge the objectives of growth and climate-protection in an optimal way. Once we are able to put in place enabling frameworks, economy would

be able to create a pipeline of the viable projects as well as evolve a set of new financial instruments like adaptation finance³, blended finance⁴ as an innovative climate financing tools. Given these building blocks the possible policy direction points to strengthening regulatory and supervisory frameworks could include-(i) disclosure requirements (ii) risk management (iii) robust network of third-party verification of green credentials and impact assessment of projects to address green washing concerns and (v) periodical stress testing as part of risk mitigation measures.

As a country, India too has made significant advancements in addressing climate change and fostering sustainable development. We have submitted our Nationally Determined Contributions (NDCs) to the UNFCCC in 2015, with updates presented at COP 26 in 2021. India also has committed to ambitious targets through its comprehensive strategy known as "Panchamrit," aiming to increase non-fossil-fuel energy capacity to 500 GW by 2030, derive 50% of energy from renewable sources, and reduce GDP carbon intensity by 45% by 2030, aiming for net zero emissions by 2070. Launching of long-term low emission development strategies (LT-LEDS) at COP27, co-founding the International Solar Alliance, launching of the National Hydrogen Mission, introduction of Mission LiFE (Lifestyle for the Environment) are some of the other steps taken by the Government of India.

RBI too has taken proactive steps like including financing renewable energy projects under priority sector loans, introducing green deposits, and drafting a disclosure framework for climate-related financial risks. In near future, we plan to release guidance notes on scenario analysis, stress testing, and effective management of climate-related financial risks based on BCBS principles. RBI's aspirational goals for

³ Adaptation finance is crucial for enhancing resilience and disaster management capacities

⁴ New instrument which can help in bridging the interests of public and private capital

RBI@100⁵ includes establishing a robust regulatory and supervisory framework to effectively manage challenges arising from climate change, enhance the resilience of payment systems against climate risks, and collaboration with the government for finalizing a comprehensive taxonomy.

Conclusion

India has achieved the highest climate change performance index (CCPI)⁶ score among G20 members in 2024, which reflects our unwavering commitment to this cause. This also shows that by aligning economic policies with climate action, we can spur green investments, enhance energy efficiency, and foster sustainable development across the sectors. By embracing the concept of "just transition" at a global level, we can chart a course towards a sustainable future - one that ensures prosperity for all while safeguarding our planet for future generations. Economic growth pursued in a sustainable way, while treating the whole world as a family and the

Earth as its only habitat, can simultaneously address the challenges of climate change. Here, it would be pertinent to quote the great vision from the Rigveda, which we propagated during our G-20 presidency:

"अयं निजं परो वेति गणना लघुचेतसाम्।
उदारचरितानां तु वसुधैव कुटुंबकम्॥"

*"This is mine, that is yours—thus calculate
the minds of narrow-hearted people.
For the magnanimous ones, however,
the whole world constitutes but a family."*

It is said that you are the creator of your own future. As the leaders in our respective organisations, let's make each decision count as it is a step towards a shared and prosperous future and our actions of today will shape the reality of tomorrow. May the deliberations and discussions during the course of event result in innovative ideas to achieve the shared objective of a climate sensitive growth.

Thank you. Namskaar!!

⁵ https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=58049

⁶ <https://ccpi.org/>

Role of Assurance Functions in Navigating Growth and Risk*

Shri M. Rajeshwar Rao

Ladies and gentlemen, a very good morning.

I am happy to be here this morning and engage with you at this forum. Keeping in view the theme of the event, I thought it would be appropriate to discuss a few issues around the risk, compliance and internal audit, collectively known as assurance functions, as they help identify and manage risks for sustainable growth of financial entities. From a regulatory and supervisory perspective too, Reserve Bank attaches utmost importance to the assurance function and therefore, to ensure that there is alignment between our perspectives and to communicate our expectations, we feel a continuing dialogue on this issue is extremely important.

Before we delve into the intricacies of assurance function, let me reflect briefly on the transformative progress and growth witnessed in the Indian financial landscape. In the recent years, we have witnessed remarkable advancements, propelled by digitalization and technological innovations. We are seeing evolving consumer demands and changing needs of a fast-growing economy that challenge the status quo. These dynamics are reshaping the way financial services are delivered, disrupt traditional paradigms and necessitate agile responses from financial industry. The scenario for financial entities thus far looks exciting in terms of opportunities but is likely to be challenging in terms of emerging risks.

In order to sustain this transformation, an enduring commitment to safeguarding financial stability, fostering economic growth, and ensuring consumer protection should remain the prime motive

for us all. The Reserve Bank, in its multifaceted role, plays a pivotal role in nurturing an ecosystem where innovation thrives, risks are contained, and consumers are empowered. From formulating monetary policy to regulating and supervising financial institutions, our mandate encompasses a wide array of responsibilities aimed at promoting the integrity and resilience of the financial sector.

One of the hallmarks of an effective regulatory approach is being ahead of the curve by building an ability to foresee potential risks emerging in the system; and pragmatically addressing them. The idea is that the regulations that are framed are proportional; forward looking; and responsive. In doing so, Reserve Bank as a regulator has always been conscious of the fact that the degree of regulation of a financial entity should be commensurate with the perception of risks posed by the entity to the financial system and the scale of its operations. The scale-based regulatory framework for NBFCs and the revised tiered regulatory framework for Urban Co-operative Banks had this premise at its core. Additionally, the regulatory approach has been guided by a combination of activity-based and entity-based regulations to ensure their effectiveness while minimizing unintended consequences. We have tried to leverage the strengths of both these approaches to achieve a more comprehensive and flexible regulatory framework.

We find this hybrid approach particularly valuable in an ever-evolving financial Sector, where innovation and new business models constantly emerge. The flexibility inherent in the hybrid approach has enabled us to adapt swiftly to the changes in the sector without sacrificing the overarching systemic risk management inherent in the entity-based regulations.

The financial ecosystem has to be seen as a reflection of the past changes and the policy choices. These choices are tested continuously for their ability to respond to the emerging challenges. How the system evolves going forward will critically depend on how the various constituents, including

* Remarks by Shri M Rajeshwar Rao, Deputy Governor, delivered at BFSI Summit organized by CareEdge on July 22, 2024 in Mumbai. Inputs were provided by Pradeep Kumar for preparation of these remarks.

the regulatory frameworks, adapt to the changing business environment. In the current milieu, our role as regulator demands that we support the entities in their quest for growth while being mindful of the risks.

Keeping this as a context, let me first share a few thoughts on two key emerging challenges and role of assurance functions in handling these issues. Later, I wish to leave a few thoughts with you on devising a combined assurance framework to bolster the conventional three lines of defence model.

Third Party Dependencies and Operational Risks

The first issue that I would like to discuss is the issue of third-party dependence and outsourcing arrangements in regulated entities. Third-party dependencies and digital outsourcing have become integral to the operations and with rapidly evolving technology. Regulated entities are increasingly relying on third-party agencies and outsourcing of their operations to enhance efficiency, reduce costs, and improve customer experience.

However, while third-party dependencies offer several benefits, they also pose certain risks and challenges. One of the primary concerns is selection of the outsourcing partner or in case of digital lending operations, the lending service providers (LSPs). Regulated entities need to assess the reliability, security, and regulatory compliance of their third parties to ensure that they meet the required standards. For example, while digital lending guidelines mandate that REs should ensure that LSPs engaged by them have suitable grievance redressal mechanism on their website or apps, a recent study undertaken by us have found that not all LSPs or apps have that. Poorly managed third-party relationships can expose regulated entities to not only customer dissatisfaction and reputational damage, but may also invite regulatory and supervisory actions.

Cybersecurity is another critical area where regulated entities needs to assess the preparedness

of third-party service providers to protect their digital assets and customer information. With the increasing frequency and sophistication of cyber-attacks, it is essential for entities to ensure that robust cybersecurity measures are deployed by the service providers to safeguard against threats. Moreover, dependency on third parties can also create vendor lock-in situations, where regulated entities become reliant on a single vendor for critical services. This lack of vendor diversification can increase dependency risks and limit the flexibility of entities to adapt to changing market conditions or technological advancements.

A related aspect here is the operational risk inherent in the entity concerned. Given that operational risk is a factor in all financial products, activities, processes, and systems, the frameworks adopted by the entities has to address the concerns upfront. For this purpose, it needs to be built on three pillars viz. 'Prepare and Protect', 'Build Resilience' and 'Learn and Adapt'. I would urge all of you to evaluate the processes and systems in your organisations vis-à-vis a 'Guidance Note on Operational Risk Management and Operational Resilience' issued by RBI which has this three pillar framework at its core.

Customer Conduct & Transparency in Operations

The second issue which I would like to flag is of the customer conduct and transparency in operations of regulated entities. Despite continuous supervisory and regulatory focus, this is one area where the actions on ground by the entities have fallen short of expectations. Certainly, we all understand that poor customer service can have significant repercussions on customers' trust and satisfaction. However, we continue to observe instances of slow response times to customer queries and complaints, lengthy wait times on customer service hotlines and delayed email responses, contributing to customer dissatisfaction.

Some entities continue to face criticism for their lack of transparency regarding fees, charges, and penal provisions associated with their products

and services. Customers are often surprised by hidden fees or unclear terms, leading to disputes and complaints. Obviously when such practices have come to our notice, we have acted proactively. The recent instructions on fixation of EMIs or providing a Key Fact Statement (KFS) along with Annual Percentage Rate (APR) are examples where probably transparency at the level of industry would have taken care of the issue itself without the regulator having to step in.

We also continue to receive increased volume of complaints regarding misleading sales practices to attract customers including misrepresentation of product features, false promises of benefits, or aggressive sales tactics that pressure customers into purchasing products they do not need or understand. One unique set of complaints relates to customers encountering difficulties when attempting to close accounts or terminate services. Lengthy and cumbersome account closure procedures, coupled with unclear requirements and documentation, frustrate customers, and prolong their association with the entity against their wishes.

These examples highlight the importance of prioritising and implementing robust mechanisms to address customer concerns promptly, transparently, and effectively. While automation can help in faster response to the complaints, there is an underlying need for an experienced man in the middle to ensure the human touch and understanding in dealing with customer grievances. The Reserve Bank attaches highest importance to these issues and this is an area of regulatory focus. I would urge to all regulated entities also to treat customer complaints with a due gravitas and use it as a feedback mechanism to improve their processes and products.

From Three Lines of Defense to a Combined Assurance Model

If one must choose a single expression that epitomises banking business, it has to be 'risk management'. This is in view of multiple factors

including bank's fiduciary role in respect of depositors, their critical interaction with real economy and financial stability. This critical role is why banking ends up as one of the most regulated sectors. Similarly, the NBFCs and other RBI regulated entities who operate in the financial services segment too are subjected to a calibrated regulatory approach with respect to risk management and assurance functions. A strong risk management system along with an effective oversight by the Board and the senior management provides a substantial degree of regulatory comfort.

Conventionally, the risk management program falls under a broad umbrella of GRC (Governance, Risk, Compliance) providers which include internal audit, compliance, risk, and legal functions. While assurance function is often used synonymously with the internal / external audit, the concept of independent internal controls and the evolving changes in the risk landscape have significantly expanded its meaning.

The Reserve Bank has also issued guidelines on supervisory expectations which asks of the regulated entities to provide sufficient authority, resources and independence to these functions. The Boards are expected to take an active role in identifying/approving the head of control and assurance functions. Clear lines of communication between the board and heads of control and assurance functions are also mandated to ensure that information exchange happens regularly, and areas of concern and probable remediation can be identified well within time.

For operationalizing risk management programs, the guidance of Institute of Internal Auditors (IIA) in 2013 known as "Three Lines of Defense" model has been widely used as a foundation. It defined the roles and responsibilities in different assurance branches and their inter-relationships. However, somehow, we often come across these functions operating in silos and eventually this has an impact on the business lines, affecting their productivity.

In a classic three lines of defence mode, the governance framework set out by the Board should ensure that the three lines of defence do the job as expected – much like in the game of football, where the forwards, the midfielder and the defenders should collectively keep the ball in play and ensure that the goalkeeper is not engaged. However, often in large entities, different units start assessing the risks independently, sometimes coming out with separate and often contradictory assessments. Such disparities only increases compliance cost, confusion and paperwork and the story of the risk is lost amidst this. Such a situation fails to provide decision useful inputs to the Board and ends up compromising on the quality of compliance and regulatory outcomes.

Therefore, in today's dynamic and integrated world, where the business of banking is becoming complex and banks are engaging with several external parties to carry out different functions, a Combined Assurance Model (CAM) which transcends functional and geographical silos may better serve the financial institutions. Such a combined assurance model should integrate assurance processes, strengthen governance oversight and optimize control efficiencies while presenting a coherent story and assessment of risks embedded in the products or processes.

Successful implementation this framework would not only give a more holistic, organised, and accurate view of risk, but could also prove to be more cost-effective and efficient by eliminating duplicative controls and blind spots, through a common risk universe, risk taxonomy and risk ranking. However, it is not easy to implement a combined approach to assurance. One of the key challenges when implementing it is aligning the different activities, scoring and rating methodologies, definitions and coordination among multiple stakeholders. Moreover, mapping of multiple requirements across different assurance activities as well as framing of common risk criteria would pose its own complexities. However, in

my view the long-term benefits emanating from such an exercise would far outweigh the costs.

Going forward, the design principles for future assurance functions should include addressing the business risk proactively rather than focusing only on regulatory compliance; ensuring a strong and demonstrative commitment towards risk culture objectives by the senior management; and involving assurance functions in decision process without compromising their independence. The combined objective of assurance function should be business enabling, insights-driven and above all, time-efficient. This also requires an upskilling of resources, to stay in step with these changes and to become *ex-ante* rather than *ex-post* focused.

Conclusion

In conclusion, I would like to say that it has taken a lot of regulatory initiatives, supervisory rigour, and industry efforts to nurture the confidence and trust of the stakeholders which is reflected in the robust growth of the financial sector in India. Therefore, it has to be our collective responsibility that we continue to nurture this confidence. Further, to continue supporting the India growth story and the credit needs of a developed nation, regulated entities would need huge financial resources. For that, we need to prepare and plan in advance so that we are not caught off-guard when this need arises. To enable a robust and sustainable growth, the silos within the assurance function of the organization should give way to a holistic and single pane risk view.

While RBI will continue to focus on customer-centric regulations to promoting a safe, fair, and transparent financial ecosystem, it bears repetition that enhancing consumer protection, strengthening grievance redressal mechanisms, and promoting transparency should be a collective endeavour of both the regulator and regulated entities.

Thank you. Namskaar!!

*Financial Stability in the Emerging Technology Landscape**

Shri Swaminathan J.

Distinguished Guests, Deputy Governor Dr Michael D Patra, Deputy Governor Shri M R Rao, Board of Directors of DICGC, colleagues from DICGC and RBI, ladies, and gentlemen. A very good morning to all of you.

It is, indeed, an honour to address this distinguished gathering of global deposit insurers. Deposit insurers, as vital pillars of the financial safety-net system, play a crucial role in bolstering public confidence in the banking sector and fostering overall financial stability. My compliments to the organizers of this Conference—the International Association of Deposit Insurers (IADI), which has excelled as a global standard-setter, the Asia Pacific Regional Committee (APRC), and the Deposit Insurance and Credit Guarantee Corporation (DICGC)—for their exemplary efforts in bringing this event to fruition.

The theme of this Conference—"Navigating the Evolving Financial Landscape: Emerging Challenges for Deposit Insurers and the Importance of Crisis Preparedness"—is especially relevant considering the significant structural changes occurring in the global financial sector. These transformations, driven by technological innovations, the deepening of financial markets through digital payment systems, and shifting patterns in savings and investment behaviours, are reshaping how financial institutions operate and respond to emerging risks. Accordingly, I will take this opportunity to discuss Financial Stability in the context of the Evolving Technology Landscape.

* Speech by Shri Swaminathan J, Deputy Governor at the International Conference of the International Association of Deposit Insurers- Asia Pacific Regional Committee (IADI-APRC) hosted by the Deposit Insurance Credit Guarantee Corporation (DICGC) held in Jaipur on August 14, 2024.

Emerging risks from the technology landscape

In an era where digital transformation is reshaping every facet of banking and finance, the integration of advanced technologies into financial sector, brings both unparalleled opportunities and significant risks.

In fact, technology-induced systemic risk has become one of the key areas of concern for the financial sector, which requires close attention. It may indeed be one of the only few truly global risks, that threaten the entire financial system across the world, as digital and online technology blur the boundaries between nations, industries and make the world into one entity. This growing web of interdependencies means that a disruption in one area can rapidly propagate through the system, affecting numerous entities and jurisdictions simultaneously. Therefore, understanding the full scope of these interconnections has become essential for managing systemic risk. As the intensity and frequency of such events—such as cyberattacks or critical vendor disruptions—continue to rise, the importance of forward-looking risk management, adequate policy intervention and backup plans cannot be overstated.

Let me highlight four key facets of technology risks we need to be cognizant of and address.

Cybersecurity risks

The financial sector is a prime target of frequent cyberattacks due to the vast amounts of sensitive data and capital it handles. Significant cyber incidents can cause micro-prudential risks for individual financial institutions, namely solvency, liquidity, market, operational and reputational risks. Even at the macro level, the financial system performs a number of key activities that support the real economy such as lending and payments which can be disrupted by cyber incidents.

Therefore, protecting critical infrastructure from breaches is of paramount importance, and it requires

not only advanced technical defences but also a robust culture of cybersecurity awareness across all levels of the organization. Financial institutions therefore need to have robust business continuity preparedness by testing their systems periodically encompassing possible adverse combinations.

Digital Payments

Secondly, today, a significant portion of banking transactions and services are conducted through digital channels. The expansion and widespread adoption of digital payment systems has enabled rapid, low-cost transactions and easy withdrawals via online banking and mobile apps. However, this shift increases the risk to operational stability and resilience, necessitating ongoing investments in IT systems and technology to manage peak loads effectively. Additionally, the 24/7 availability of online and mobile banking can heighten vulnerabilities, potentially accelerating bank runs and liquidity crises during periods of stress, as customers may withdraw funds even outside of traditional banking hours and without having to visit a Bank branch. Further, this behaviour is amplified with the emergence of digital sources of influence, such as social media platforms, that have proved their ability to drive, disseminate financial information, adverse or otherwise, and trigger a coordinated financial behaviour.

These developments underscore the need for financial institutions to reassess and update their crisis preparedness to ensure they are equipped to address and mitigate the fast-evolving risks introduced by technological advancements. They should regularly assess their capability and effectiveness in accessing contingency funding within specified timeframes, depending on the type of funding needs. The events of 2023 in US revealed that some of the affected banks were either unprepared to use the existing "Federal discount window" as a source of liquidity or had not included it as one of the funding sources¹.

¹ <https://som.yale.edu/story/2023/lessons-discount-window-march-2023-bank-failures>

Dependence on third parties

This brings me to my next point, which is the risks from the increasing dependence on third parties. The digital transformation in banking has also led to a multitude of distinct third-party entities getting involved in the provision of a single product or service, creating a complex web of technical and operational dependencies. However, the impact of failure in any link in this chain can often be catastrophic as was seen in a global IT services outage incident last month. Further, third parties could be points of intrusion for ransomware and other cyber threats.

Financial institutions have the primary responsibility to preserve the Confidentiality, Integrity, and Availability of data, whether stored, processed or in transit within themselves or at third-party vendors' end. Therefore, they must exercise effective oversight of third parties and safeguard against potential vulnerabilities while taking other measures such as maintaining regular backups of their critical data to ensure operational resilience.

Fintech and entry of entities outside the regulatory and supervisory envelope

Fourthly, the rise of fintech companies and the entry of entities that operate outside the traditional regulatory and supervisory framework introduce new dimensions of risk to the financial sector. While fintech innovations have greatly enhanced financial inclusion, efficiency, and customer experience, they also present challenges related to data security, consumer protection, and regulatory compliance.

With the rapid pace of innovation, it is often observed that regulatory gaps, if any, can be exploited, either intentionally or unintentionally, by entities that may not be subject to the same stringent standards as regulated financial institutions. This situation creates an uneven playing field and increases systemic risk, as failures or misconduct in these unregulated areas can have far-reaching consequences across the financial system.

To mitigate these risks, regulators must adopt a more agile and forward-looking approach, developing regulatory sandboxes, fostering collaboration with fintech innovators, and ensuring that new entrants are integrated into the regulatory framework in a manner that preserves the stability and integrity of the financial system.

Way forward for Deposit Insurers

In the context of deposit insurers, addressing these technology risks requires a tailored approach that reflects the unique role they play in maintaining financial stability. Deposit insurers must be vigilant in adapting to the evolving risk landscape, ensuring that their strategies, policies, and frameworks are robust enough to withstand the challenges posed by technological advancements. I would like to delve on a few thoughts in this regard covering the aspects of strengthening regulatory oversight, risk-based premiums, supervisory rating assessments, investing in technology and crisis preparedness.

Strengthening Regulatory Oversight

As the financial sector becomes more digitized, deposit insurers must work closely with regulators and supervisors to strengthen oversight mechanisms. This includes regularly updating regulatory frameworks to incorporate emerging risks associated with digital payments, cybersecurity, and fintech innovations. By adopting a proactive stance, deposit insurers can help ensure that financial institutions under their purview are adequately prepared to manage these risks, thereby safeguarding depositor confidence.

Adopting Risk-Based Premiums

The implementation of risk-based premium for deposit insurance merits consideration. By tying insurance premiums to the level of risk posed by individual financial institutions, deposit insurers can incentivize banks to adopt stronger risk management practices. This approach not only enhances the overall

stability of the financial system but also ensures that institutions with higher risk profiles contribute more to the insurance fund.

Relying on Supervisory Rating Assessments

Deposit insurers can further mitigate technology risks by relying on supervisory rating assessments that incorporate evaluation of a financial institution's technological and operational resilience. By using these assessments as a basis for setting insurance premiums or determining intervention strategies, deposit insurers can ensure that their actions are informed by a comprehensive understanding of each institution's risk profile.

Deposit insurers in collaboration with supervisors need to develop advanced risk assessment tools that can effectively identify and quantify the impact of technology-induced risks on financial institutions. This includes integrating cybersecurity risk assessments into their overall evaluation of financial institutions' health, as well as monitoring the operational resilience of banks' digital payment systems.

Investing in Technology and Expertise to accelerate the Claim Settlement Process

To stay ahead of emerging threats, deposit insurers must invest in cutting-edge technologies and build internal expertise. Continuous training in areas such as cybersecurity, fintech, and digital payments ensures that deposit insurer teams are equipped to respond swiftly and effectively to crises. Establishing industry-wide forums for information sharing can help build a collective defence against potential threats.

The use of technology can also significantly improve the speed and efficiency of claim settlement processes. By integrating digital tools and automated systems, deposit insurers can reduce the time required to process claims, ensuring that depositors receive timely compensation in the event of a bank

failure. These technologies can also aid detection of fraudulent claims, thereby ensuring pay-outs are made to legitimate claimants. Faster claim settlements not only enhance depositor confidence but also reinforce the credibility and reliability of the deposit insurance system.

Ensuring Crisis Preparedness

Finally, deposit insurers must prioritize crisis preparedness, developing comprehensive contingency plans that account for technology-induced disruptions. This includes conducting regular stress tests and simulations to assess the potential impact of cyber incidents or fintech failures on financial institutions and the broader financial system. By being well-prepared, deposit insurers can ensure that they are ready to act swiftly and effectively in the event of a crisis, minimizing potential harm to depositors and maintaining public confidence in the financial system.

Conclusion

To conclude, deposit insurance stands as a key pillar of the financial safety-net system, playing a crucial role in maintaining financial stability. Alongside prudential regulation, supervision,

resolution frameworks, and lender-of-last-resort arrangements, deposit insurance helps prevent bank runs that could escalate into broader financial crises. By assuring depositors that their funds up to the coverage limit are protected, deposit insurance fosters confidence and stability within the banking sector.

The evolving technological landscape presents both significant challenges and opportunities for deposit insurers. By adopting a proactive, risk-based approach—including enhanced oversight, risk-based premiums, reliance on supervisory ratings, faster claim settlements, and industry collaboration—deposit insurers can effectively manage these risks.

Conferences such as these provide a vital forum for standard setters, regulators, supervisors, and insurers to come together, discuss these challenges, and explore innovative solutions. I hope you take back valuable insights and actionable strategies that will strengthen our collective efforts in addressing these evolving risks. I would also like to extend my heartfelt thanks to the organizers for their exceptional efforts in arranging this insightful event and creating an environment conducive to meaningful dialogue. Thank you.

ARTICLES

State of the Economy

Are Food Prices Spilling Over?

Union Budget 2024-25: An Assessment

Estimate of Spare Capacity for India's Services Sector

Evolution of FinTech and Central Banks: A Text Mining-Based Survey

Private Corporate Investment: Growth in 2023-24 and Outlook for 2024-25

Measuring Progress in Sustainable Development Goals (SDGs): An Application of Natural Language Processing (NLP) on Budget Documents

*State of the Economy**

Persistent geopolitical tensions, rekindled fears of a potential recession in key economies and financial market volatility in response to monetary policy divergence cast a shadow on global economic prospects even as inflation moderated grudgingly across countries. In India, aggregate demand conditions are gathering momentum with revival in rural consumption on the back of growing incomes. This stimulus to demand is expected to reinvigorate the hitherto subdued participation of the private sector in total investment. Headline inflation moderated from its spike in June to 3.5 per cent in July, but this was primarily due to the downward statistical pull of base effects.

Introduction

August 2024 arrived at the end of a defining week for central banks and for the global economy. Monetary policy divergence finally materialised to sum up the varied trade-offs facing the sentinels of stability. In the week ended August 2, the Bank of England (BoE) cut interest rates for the first time since 2020, joining the European Central Bank (ECB) which had reduced rates in June. The decision to cut rates with inflation on target made sense, while cautioning against expectations of consecutive cuts and echoing the ECB's guidance given earlier that its September meeting was "wide open".¹ The day before, the US Federal Reserve held rates for the eighth time since September 2023 but signalled it is on the cusp of making its first cut - "We're getting closer to the point at which it'll be appropriate to reduce our policy rate"². The Fed's preferred measure of inflation – the

personal consumption expenditure (PCE) deflator – was at 2.5 per cent in June, but unemployment, credit card delinquencies and jobless claims have risen under the pressure of elevated interest rates. On the previous day, the Bank of Japan (BoJ) responded to a weak yen and raised rates firmly into positive territory - for only the second time since 2007 – having ended eight years of negative interest rates and other remnants of its unorthodox policy in March. In that fateful week, the central banks of Brazil, Chile and Australia maintained *status quo* while those of the Czech Republic and Romania reduced policy rates.

On Monday the week after, a bloodbath ensued in global financial markets, reminiscent of Black Monday of 1987. The rout began in Asia, with Japan's Nikkei tumbling 12 per cent alongside a surging yen, following the rate decision of the week before. It was the worst single day drop since Black Monday. Incoming data sparking fears of imminent recession in the US sent gold prices to a record high and stoked a widespread sell-off, unleashing a global unwinding of high risk trade. The tech-heavy Nasdaq led the way, and equity prices slumped across the world. The Financial Times reported that Warren Buffett's Berkshire Hathaway had sold half of its Apple shares. Prices of crude oil, other precious metals and bitcoin fell sharply while Wall Street's fear gauge – the CBOE Volatility Index or VIX – jumped more than 50 per cent, its highest level since 2020, as set out in greater detail in Section II. Elsewhere too, VIXs soared. Benchmark yields ended lower than their previous week's close and the mighty US dollar wobbled *albeit* with little relief for other currencies. The unwinding of the world's biggest carry trade – borrowing in yen to fund investments in assets elsewhere that offer higher returns - severely jolted markets. The size of the trade is difficult to estimate because of its extensive use across hedge funds, companies and households. Built up since

* This article has been prepared by Michael Debabrata Patra, G. V. Nadhanael, Rajni Dahiya, Durga G. Arpita Agarwal, Bajrangi Lal Gupta, Ramesh Kumar Gupta, Harendra Behera, K M Neelima, Gautam, Love Kumar Shandilya, Madhuresh Kumar, Harshita Yadav, Ettem Abhignu Yadav, Shivam, Sritama Ray, Rashika Arora, Sumit Roy, Anirban Sanyal, Agamani Saha, Dilpreet Sharma, Khushi Sinha, Shreya Gupta, Sai Dheeraj Vayugundla Chenchu, Vikas Anand, Himani Shekhar, Asish Thomas George, Samir Ranjan Behera, Vineet Kumar Srivastava, and Rekha Misra.

¹ Christine Lagarde, President of the ECB, Monetary Policy Statement Press Conference, July 18, 2024.

² Jerome Powell, Chair of the Federal Reserve of the United States, Press Conference July 31, 2024.

2011, rough guesstimates place it at US\$ 500 billion of which about two-fifths was liquidated.³ Even ahead of the unwind, commodity prices from copper to corn had been tumbling on flagging Chinese demand. The sell-off in copper, a bellwether for the global economy because of its wide-ranging use, has been particularly stark.

On Tuesday (August 6), stock markets rebounded in a broad-based recovery on dovish guidance from the BoJ, suggesting that Monday's events may have been a one-off although bearish sentiment has continued to prevail. The VIX dropped 23.7 points. Bond markets regained calm and companies of various credit ratings began issuing debt. Crude prices increased as tensions ran high in the Middle East. With US jobless claims coming in lower than expected, the US dollar rose along with US yields. Market views range from believing that the majority of the speculative bets have been liquidated to a more sombre opinion that there is still some way to go. On August 8, US equities surged, European stocks pared losses and equity prices in Asia were mixed. US treasuries hit their highest levels of the week as recession fears subsided and investors moved back to riskier assets. The yen weakened further against the US dollar.

Just days before, the International Monetary Fund (IMF) presented a cautiously optimistic outlook for the global economy. In its view as explained in the following section, varied momentum of activity in 2024 is narrowing divergences across economies. As cyclical factors wane, output is getting better aligned with its potential. World trade is firming up; the growth of global trade is expected to align with the pace of global growth in 2024-25, thus keeping the trade/gross domestic product (GDP) ratio stable over the medium-term. At the same time, however, cross-border trade restrictions have increased and retailers are pulling forward overseas orders to get ahead

of deepening shipping disruptions. Notably, rising shipping costs are not deterring US importers even though they face the risk of excess inventories ahead of the peak shopping season.

The momentum of global disinflation is slowing, however, warranting caution in easing monetary policy. Financial conditions have been accommodative despite the upward drift in longer-term yields. The forecast for global growth for 2024 was maintained at the April 2024 assessment (of 3.2 per cent) while for 2025 it was raised by 10 basis points (to 3.3 per cent). For advanced economies (AEs), the projections remained broadly unchanged while for emerging market economies (EMEs) it was revised slightly upwards. Risks to the outlook were judged to be balanced although in the near-term, stickiness in inflation could destabilise the return to price stability. This, in turn, increases external, fiscal and financial risks due to higher for longer interest rates. Over the medium-term, productivity differentials warrant labour boosting reforms that better integrate women and immigrants. Domestically oriented inward-looking policies, including trade-distorting measures, could compromise the ability to tackle global challenges such as climate change. Accordingly, multilateral cooperation assumes crucial importance.

On August 1, the World Bank warned of the gravitational pull of the middle-income trap as the prospects of over a 100 middle income countries – including India and other BRICS economies – face serious obstacles that could hinder their efforts to become high-income countries in the next few decades: rapidly aging populations; rising protectionism in AEs; and the need to speed up the energy transition. These countries are home to six billion people or 75 per cent of the global population and two out of every three people living in extreme poverty reside in them. The World Bank recommends that a fresh approach is needed: "first focus on investment; then add an emphasis on infusion of new technologies from

³ The Financial Times, August 8, 2024.

abroad; and, finally, adopt a three-pronged strategy that balances investment, infusion, and innovation.”⁴ In its view, with growing demographic, ecological and geopolitical pressures, there is no room for error.

In July, the United Nations drew attention to the evolving global demographic landscape. There is an 80 per cent probability that the world’s population will continue growing for another 50 or 60 years, reaching a peak of around 10.3 billion people in the mid-2080s, up from 8.2 billion in 2024. Rapid fertility declines in populous countries are likely to cause the global population to start declining thereafter, gradually falling to 10.2 billion people by the end of the century. One in four people globally lives in a country whose population has already peaked in size. In 63 countries containing 28 per cent of the world’s population in 2024, the size of the population has already peaked. In 48 countries and areas with 10 per cent of the world’s population in 2024, population size is projected to peak between 2025 and 2054. In the remaining 126 countries and areas, the population is likely to continue growing through 2054, potentially reaching a peak later in the century or beyond 2100.

The number of women at ages 15–49 is projected to grow from nearly 2 billion in 2024 to a peak of around 2.2 billion in the late 2050s, driving continued growth even if the number of births per woman falls to the replacement level. Women today bear one child fewer, on average, than they did around 1990. Currently, the global fertility rate stands at 2.3 live births per woman, down from 3.3 births in 1990. More than half of all countries and areas globally have fertility below 2.1 births per woman, the level required for a population to maintain a constant size in the long run without migration. Early childbearing has harmful effects on young mothers and their children. In 2024, 4.7 million babies or about 3.5 per cent of the total worldwide, were born to mothers under age 18

and some 340,000 to girls under age 15 with serious consequences for the health and well-being of both the young mothers and their children. Investing in the education of youth, especially girls, and increasing the ages at marriage and first childbearing in countries where these milestone events tend to occur early will have positive effects on women’s health, educational attainment and labour force participation.

Following the COVID-19 pandemic, global life expectancy is rising once again, having reached 73.3 years in 2024, an increase of 8.4 years since 1995. Since 2022, life expectancy has returned to pre-COVID-19 levels in nearly all countries and areas. Further reductions in mortality are projected to result in an average longevity of around 77.4 years globally in 2054. The main driver of global population increase up to the mid-century peak will be the momentum created by growth in the past.

Today’s youthful age structure will account for 79 per cent of the population increase through 2054, adding about 1.4 billion people. Countries with youthful populations and declining fertility have a limited time to benefit economically from an increasing concentration of population in the working ages. In about 100 countries or areas, the working-age population (between 20 and 64 years) will grow through 2054, offering a window of opportunity in the form of the demographic dividend. To capitalise on this opportunity, countries must invest in education, health, and infrastructure, and implement reforms to create jobs and improve efficiency.

By 2080, persons aged 65 or older is projected to reach 2.2 billion, outnumbering children under 18. By the mid-2030s, those aged 80 and over will reach 265 million and outnumber infants (1 year of age or less). Hence, countries that are at more advanced stages in the process of demographic ageing should consider the use of technology to improve productivity at all ages. They should also design more opportunities for lifelong learning and re-training.

⁴ World Development Report, 2024.

support multigenerational workforces and create opportunities to extend working lives for those who can and want to continue working.

For some populations, immigration will be the main driver of future growth. In 50 countries and areas, immigration is projected to attenuate the decline in population size due to sustained low levels of fertility and an older age structure. However, in 14 countries and areas already experiencing ultra-low fertility, emigration is likely to contribute to reducing population size through 2054.

Gender equality and women's empowerment help to counter rapid population growth or decline. Raising the legal marriage age and integrating family planning into primary health care can enhance women's education, economic participation, and reduce childbearing. In countries where populations have peaked already or are likely to peak in the next three decades, policies providing paid parental leave and flexible working arrangements, supporting affordable, high-quality childcare, providing comprehensive care for an ageing population; and encouraging an equal distribution of caregiving and household responsibilities between men and women can improve women's labour participation, support families, encourage childbearing and increase economic security for men and women at older ages.

The global average temperature for July 2024 at 16.91 degrees Celsius – the second warmest July on record after July 2023 – ended a streak of 13 monthly records.⁵ July 22 and 23 were the two hottest days on record for earth. During January-July 2024, the average temperature was 0.27 degrees higher than a year ago. Accordingly, climate scientists are warning that 2024 is on track to be the hottest year since 1901. After 15 months of consecutive records, sea surface temperatures also plateaued at high levels. This is consistent with the switch from *El Nino* to the cooling *La Nina* cycle that is expected to take over in the coming months, the implications of which for rainfall are discussed in Section III.

⁵ Copernicus Climate Change Service, July 2024.

India experienced 181 heatwave days in June, according to the India Meteorological Department (IMD), surpassing the previous high of 177 days in the year 2010.⁶ In the summer of 2024, India has undergone a total of 536 heatwave days,⁷ the highest after 2010. In its wake, cumulative precipitation in the southwest monsoon (SWM) season has achieved normalcy and is, in fact, above the long period average (LPA) since end-July, improving water storage and soil moisture. The flip side is that it has been unusually heavy in southern and central India but deficient in the east and north east.

Meanwhile *kharif* sowing acreage has been higher year-on-year (y-o-y) in almost all crops barring cotton. An influential view has pointed out that agriculture has been the key focus of India's development strategy, with the country achieving the highest annual growth rate of 5 per cent in the farm sector in the last seven years. Globally, the share of agriculture in GDP has risen from 3.2 per cent in 2006 to 4.3 per cent in recent years, saving many countries from economic collapse and bringing focus on to the issue of remunerative employment in the sector. These challenges necessitate a fresh appreciation of the role of sustainable agriculture in economic and human development in the face of threats of climate change, natural resource degradation and rising production costs.⁸ These issues also assume significance in the context of depressed conditions surrounding India's agricultural exports, which recorded only a modest expansion by 0.7 per cent (y-o-y) in the first quarter of 2024-25. Apart from constraints in the form of logistics

⁶ The IMD calculates the total number of heatwave days across 36 meteorological sub-divisions in India. As a result, the cumulative number of heatwave days can exceed the total number of days in a given month.

⁷ In India a heat wave is declared based on two criteria i) temperature threshold and ii) departure from normal. First of all, for a day to be considered as a heatwave day the temperature should reach in excess of 40°C in Plains, 37°C for coastal region and 30°C for Hilly regions. If the departure from normal temperature exceeds 4.5°C in a sub-division a heatwave day is declared. However, if the actual maximum temperature surpasses 45°C in a sub-division, it is considered a heatwave day regardless of the departure from normal temperature.

⁸ <https://www.newindianexpress.com/business/2024/Aug/03/india-achieves-highest-global-growth-rate-in-agricultural-gdp-niti-aayog>.

due to high shipping costs and air freight on account of geopolitical reasons, India's agricultural exports are facing an erosion of cost competitiveness, including due to non-tariff barriers imposed by key markets.

Turning to the manufacturing and service sectors, as set out in Section IV, early indicators of corporate performance in the first quarter of 2024-25 point to moderation in sales growth of manufacturing companies in both nominal and real terms, although excluding the petroleum sector, a better outturn emerges. Sales growth was resilient in the case of electrical machinery, automobiles, food products, pharmaceuticals and non-ferrous metals but muted in respect of iron and steel, cement, chemicals and textiles. Sales growth also remained low for information technology (IT) and non-IT service sector companies. Staff costs inched up in the manufacturing sector but debt servicing capability measured in terms of the interest coverage ratio⁹ remained stable. Against this backdrop, profit margins remained stable in both manufacturing and services sector.

Moving away from the heat and dust around the recent release of the KLEMS¹⁰ database for the period 1980-2024, it is worthwhile to focus on some important insights into the sources of gross value added (GVA)/ gross value of output (GVO) in the Indian economy. The central purpose of the KLEMS exercise is to track the contribution of multi-factor productivity in the economy across sectors and over time. With this objective in the fore, GVA/GVO has to be 'cleaned' of the contributions of the primary factors of production, *i.e.*, labour and capital, and those of intermediate inputs such as energy, materials and services to obtain a measure of total factor productivity growth. Information on primary and intermediate factors are obtained from national accounts statistics (NAS), periodic labour force survey (PLFS) and input-output transaction tables. The recent release shows that India's total factor productivity (TFP) growth has

remained higher than that of the rest of the world. In fact, TFP growth has emerged as one of the key drivers of aggregate GVA growth since 2007-08. Among the factors of production, capital contributed about 40 per cent and labour 33 per cent to GVA growth on an average during 2021-22 to 2023-24. The remaining 27 per cent of GVA growth was explained by TFP growth. In the manufacturing sector, the growth of the capital stock was the highest in industries such as electrical and optical equipment, machinery, rubber and plastic products, and chemicals. Among services, the growth of capital stock was highest in hotels and restaurants, health and social work, and education. Labour quality measured by workers' skill content has grown and sustained across all sectors, with the composition of workers shifting towards higher educated categories with more remunerative jobs. Notably, labour's contribution to gross output growth has improved in eight manufacturing industries, *i.e.*, food products, leather and textile products, wood products, non-metallic mineral products, electrical and optical equipment, transport equipment, chemical products, and miscellaneous manufacturing including recycling.

In recent years, rapid advancements in artificial intelligence (AI), including machine learning (ML), and large language models (LLMs), have unveiled the transformative potential of emerging technologies. By 2030, the global economy could witness a gain of US\$ 15.7 trillion through the integration of AI technologies in business processes, labour augmentation, and product enhancement. It is projected that out of this sum, US\$ 6.6 trillion will come from increased productivity and US\$ 9.1 trillion from consumption-side effects (PWC, 2024)¹¹. Projections for India suggest that AI could contribute around US\$1 trillion to the economy by 2035 (Niti Aayog, 2020)¹². Analysis of the AI use cases for India suggests that more than one-third relate to intelligent assistance. Another 25

⁹ Earnings before interest and taxes (EBIT) divided by interest expenses.

¹⁰ Capital, Labour, Energy, Materials and Service.

¹¹ <https://www.pwc.com/gx/en/issues/data-and-analytics/publications/artificial-intelligence-study.html>.

¹² <https://www.niti.gov.in/sites/default/files/2023-03/AIRAWAT-Establishing-an-AI-Specific-Cloud-Computing-Infrastructure-for-India.pdf>.

per cent are directed towards marketing automation using various tools enabled by text generation and multimodal capabilities such as text-to-image and text-to-video, followed by 20 per cent for document summarisation, enterprise knowledge management and search. Companies are also interested in using GenAI to develop customer-facing chatbots for service and/or improved experience, coding assistants, and automating internal processes. In 2024, there has been an upsurge of activity relating to mergers and acquisitions (M&A) deals in the Indian AI market. This is indicative of a maturing and dynamic industry, driven by heightened investor interest, technological advancements and the increasing recognition of AI's potential across various sectors. A significant portion of investments have been in early-stage companies (EY, 2024).

Aggregate demand conditions are gathering momentum after some slack in the first quarter of 2024-25. Rural consumption spending on the back of growing incomes is beginning to drive volume growth in fast moving consumer goods (FMCG), reflecting strengthening fundamentals.¹³ Utility penetration – LPG; electricity; two-wheelers - is bringing with it additional spends alongside newly adopted categories, including toilet and floor cleaners, bottled soft drinks and insecticide. Rural saving is also on the rise as evident in rising number and outstanding amounts of savings bank accounts.¹⁴ Receding of inflation pressures appear to be the most important metric in rural spending resurgence, driving a catch-up with urban consumption volumes. The average rural consumer is getting increasingly price conscious. Reflecting these forces of turnaround, FMCG companies are starting to see green shoots of revival, portending a seismic shift in their markets as price stability sets in and expectations of a better monsoon as well as higher budgetary allocations for the rural economy push up volume growth.

These factors which act as stimuli to demand are expected to reinvigorate the hitherto subdued participation of the private sector in total investment, a key accelerator of overall growth of the economy in view of higher levels of productivity and innovation. There are some lead indications already of new capacity creation in a few industries and a pick-up in investment intentions. Overall business sentiment has also shown an improvement as reflected in the rising business confidence index of the National Council of Applied Economic Research (NCAER), with an increase in the share of polled firms expecting overall economic conditions to improve in the next six months. Overseas fund raising by Indian companies is experiencing a revival, driven by international investor interest, improving liquidity conditions and reduced hedging costs. Several banks and non-banking financial companies (NBFCs) have also started diversifying funding sources by recourse to bond issuances overseas in order to cater to the upturn in demand for funding by corporates. In particular, the offshore syndicated loan route is turning lucrative for corporates on expectations of an imminent rate cutting cycle. While existing borrowers are making large size issuances, the market is also seeing debut borrowers.

The shift in fund raising to overseas markets is also reflecting the changing dynamics of domestic credit markets. Banks are preparing to raise equity funds-including through qualified institutional placements-of nearly ₹40,000 crore in the second half of the current financial year in order to reinforce balance sheets and support capital expansion.¹⁵ In the quarter ending June 2024, banks have been impelled to increase mobilisation of funds through certificates of deposit and through high value saving accounts and fixed deposits. Going forward, the low share of low-cost current and saving deposits in total deposits may curb domestic fund raising efforts of banks through high cost funding options, due to

¹³ Kantar India.

¹⁴ Basic Statistical Returns, RBI.

¹⁵ The Economic Times, July 18, 2024.

a likely squeeze on banks' net margins. This may also force banks to align loan growth more closely with deposit growth and normalise incremental credit-deposit ratios. In part, this behavioural shift may be induced by signs of stress in the unsecured loan segments, especially in personal loans and credit cards portfolios. There are reports of banks monitoring signs of over-leveraging in these segments more closely.¹⁶ As presciently pointed out, "*The Indian financial system remains resilient and is gaining strength from broader macroeconomic stability. Its well-capitalised and unclogged balance sheet is reflective of higher risk absorption capacity..... Even in such stable financial sector conditions, the emphasis cannot shift away from proactive identification of potential risks and challenges...*"¹⁷

Moreover, favourable demand-supply dynamics, comfortable liquidity and recent volatility in stocks has led to a rally in gilt prices, bringing the benchmark 10-year yield to its lowest level in two years. This, in turn, is reducing funding costs for corporates taking the bond route for raising resources. Banks too are ramping up infrastructure bond issuances at attractive coupons relative to interest rates on fixed deposits. Apart from the cost advantage, funds raised by banks through bonds are free of reserve requirements and can be fully deployed for lending activities, besides helping to manage asset-liability mismatches in view of the relatively long tenure of bonds. Infrastructure bonds offer attractive spreads and have strong appeal among long-term investors.

There are also signs of revival of net exports as a lever of India's growth. After the contraction in 2023-24, outbound shipments from India are undergoing an expansion in 2024-25 so far. Barring China, nine of the top 10 destinations accounting for about half of the total value of exports are recording growing

demand. India's export basket is also undergoing a shift towards electronics and engineering goods even as traditional products such as gems and jewellery, textiles, garments, leather products and marine products are losing competitiveness. Business services that support operations such as consulting, engineering, research and design are rapidly becoming India's export powerhouse, surpassing software and information technology. They also cover advertising, public relations, logistics, accounting, auditing, architectural and legal services. The rising demand for specialised services and the integration of services into manufacturing are forces driving this growth. Global capability centres are setting the next steps in this export drive, including in the evolution of business and knowledge process outsourcing.

Logistics are also improving as India's ports and shipping are experiencing strategic infrastructure development, technological advancements and transformation. In particular, port development is expanding cargo handling capacity and connectivity. RFID-based port access control is stepping up security and operational efficiency while public-private partnerships are helping to drive growth. Of the 166 projects initiated at major ports under Sagarmala,¹⁸ 90 have been completed resulting in capacity increase of over 230 million tonnes per annum. Access to 100 per cent foreign direct investment (FDI) and a 10-year tax holiday is also incentivising the development, maintenance and operation of ports.

As anticipated, headline consumer price index (CPI) inflation moderated from its spike in June to below the target of 4 per cent in July, but this was primarily due to the downward statistical pull of large base effects that concealed the strong price build-up in the food category. The price momentum in the food

¹⁶ Hindustan Times, August 8, 2024.

¹⁷ Shri Shaktikanta Das, Governor, Reserve Bank of India, Governor's Statement: August 8, 2024.

¹⁸ The Sagarmala Programme of the Ministry of Ports, Shipping and Waterways seeks to enhance the performance of the logistics sector by reducing logistics costs for both domestic and international trade by leveraging coastal and waterway transportation.

category in the CPI in July was much higher than long period averages. This has also propelled CPI headline momentum above trend. The vegetable price shocks that started in June 2024 continued unabated in July, reflecting the sustained impact of heat wave conditions and supply disruptions due to floods. Key food items like pulses are exhibiting double digit inflation along with elevated cereals inflation. Core inflation registered an uptick after registering a period of sustained sequential softening between June 2023 to May 2024, primarily reflecting the impact of mobile tariff revisions. These developments impart an upside to the overall inflation outlook.

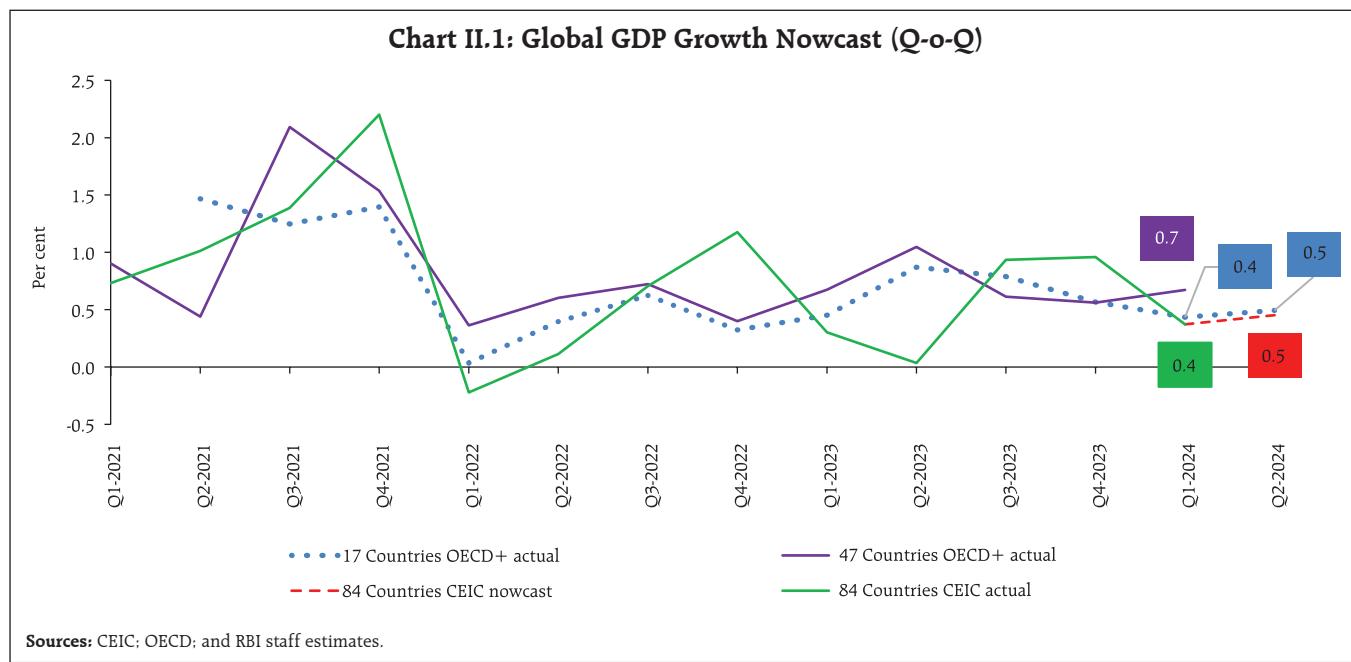
The monetary policy committee (MPC), in its latest meeting during August 06-08, 2024, retained its forecast of real GDP growth for 2024-25 at 7.2 per cent and inflation at 4.5 per cent while maintaining *status quo* on the policy rate at 6.5 per cent and the stance of withdrawal of accommodation.¹⁹ Expecting domestic growth to hold up on the strength of investment and consumption demand, the committee flagged risks from volatile and elevated food prices adversely impacting inflation expectations and potentially

spilling over to core inflation which showed indications of bottoming out. The MPC decided to stay resolute in its commitment to aligning inflation to the 4 per cent target on a durable basis. In its view, enduring price stability sets strong foundations for a sustained period of high growth.

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.

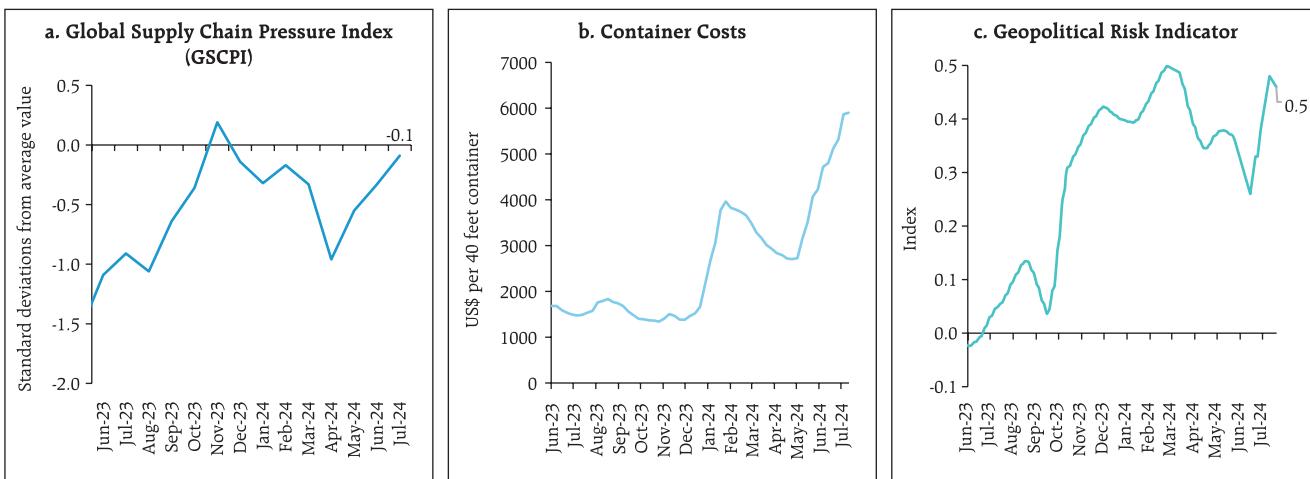
II. Global Setting

The global economic outlook remains uncertain. Persistent geopolitical tensions, rekindled fears of a potential recession on signs of weaker than expected labour market outcomes in key economies and financial market volatility in response to monetary policy divergence to cast a shadow on prospects even as inflation moderated grudgingly across countries. Our model-based nowcast points towards global growth momentum remaining stable in Q2:2024 (Chart II.1).



¹⁹ Monetary Policy Statement, 2024-25 Resolution of the Monetary Policy Committee (MPC) August 6 to 8, 2024.

Chart II.2: Trends in Global Supply Chain Pressures and Geopolitical Risks



Notes: 1. GSCPI reflects data on transportation costs and manufacturing indicators.

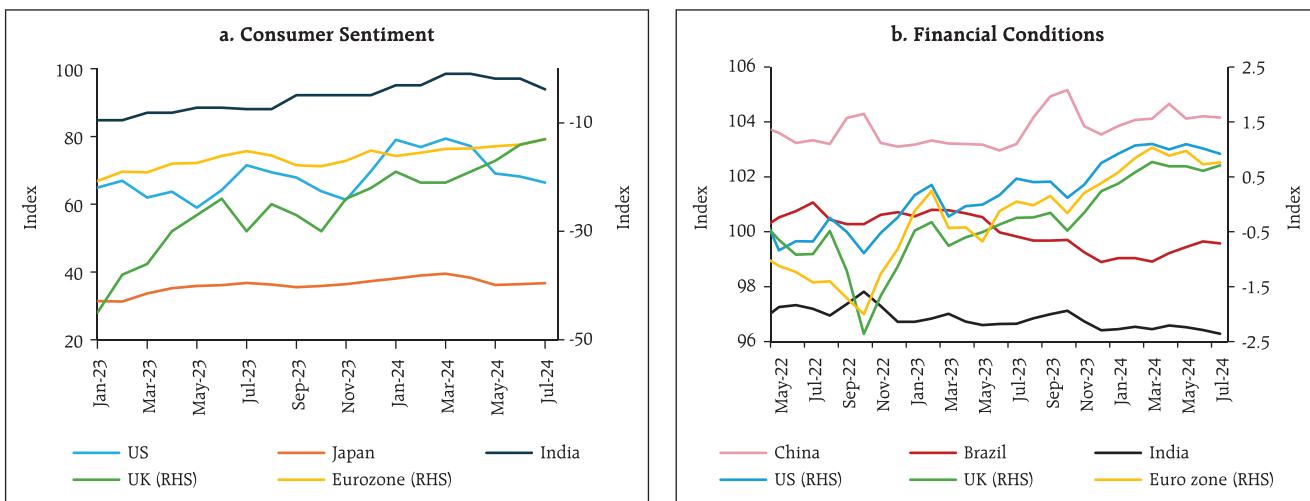
2. The WCI assessed weekly by Drewry reports actual spot container freight rates for major east west trade routes. The composite represents a weighted average of the 8 shipping routes by volume and is reported in USD per 40-foot container.

Sources: Federal Reserve Bank of New York; BlackRock Investment Institute, July 2024; and Bloomberg.

The global supply chain pressures index (GSCPI) increased in July 2024 for the third consecutive month, bringing it closer to its historical average (Chart II.2a). The global container cost index remained elevated in July 2024, indicating persisting supply chain disruptions (Chart II.2b). Geopolitical risks continue to remain significant, driven by escalating tensions in the Middle East (Chart II.2c).

In July 2024, consumer confidence in the US declined to an eight-month low whereas sentiment in the Eurozone and the United Kingdom (UK) showed signs of improvement (Chart II.3a). Financial conditions tightened in AEs like the UK and the Eurozone, while they eased in EMEs (Chart II.3b).

Chart II.3: Consumer Sentiment and Financial Conditions

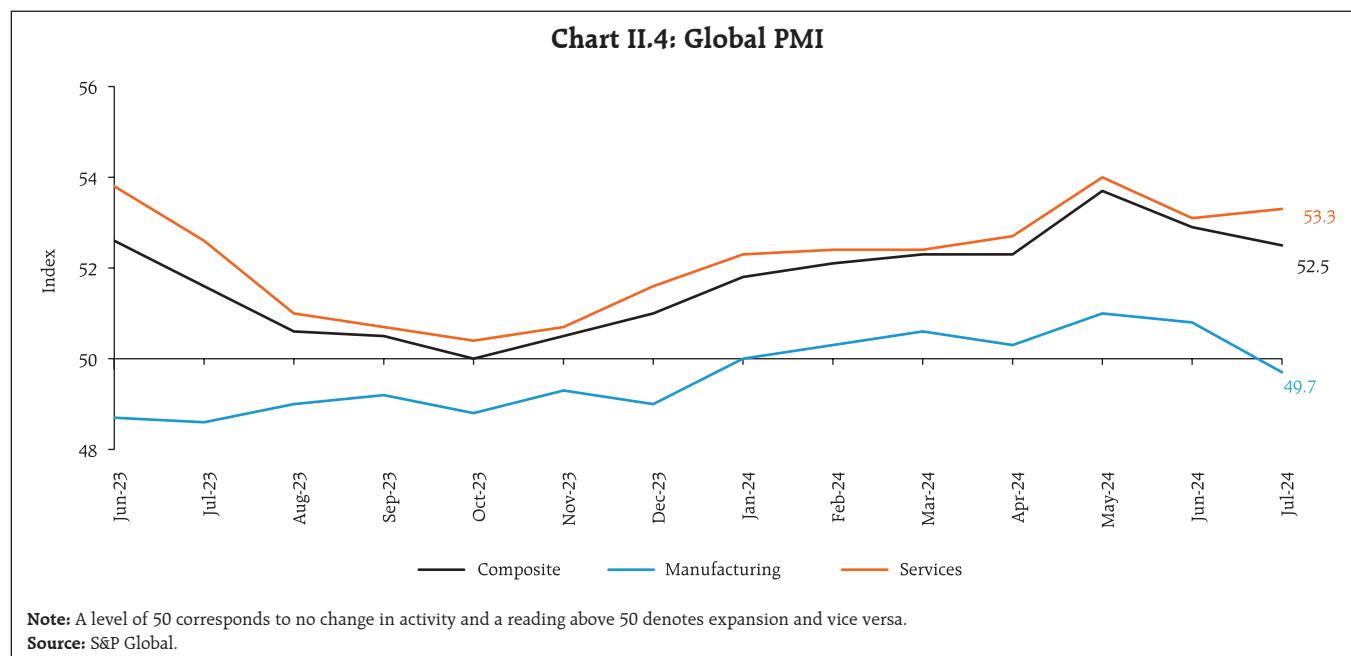


Notes: 1. Japan: A score above 50 indicates consumer optimism, below 50 shows a lack of consumer confidence and 50 indicates neutrality.

2. Eurozone and UK: -100 indicate extreme lack of confidence, 0 denotes neutrality while 100 indicates extreme confidence.

3. India and US: Higher the index value, higher is the consumer confidence.

Source: Bloomberg.



The global composite purchasing managers' index (PMI) moderated for the second month in a row although it remained in expansionary zone for the ninth consecutive month. The manufacturing PMI slipped below the neutral threshold, after remaining in expansion for five consecutive months, due to a slowdown in output growth and a decline in new orders. The services PMI, however, increased

in July as services providers saw an increase in new work intake for the ninth successive month (Chart II.4).

The composite PMI for export orders remained unchanged in July, with a slowdown in services export orders offset by a marginal increase in manufacturing export orders (Chart II.5).

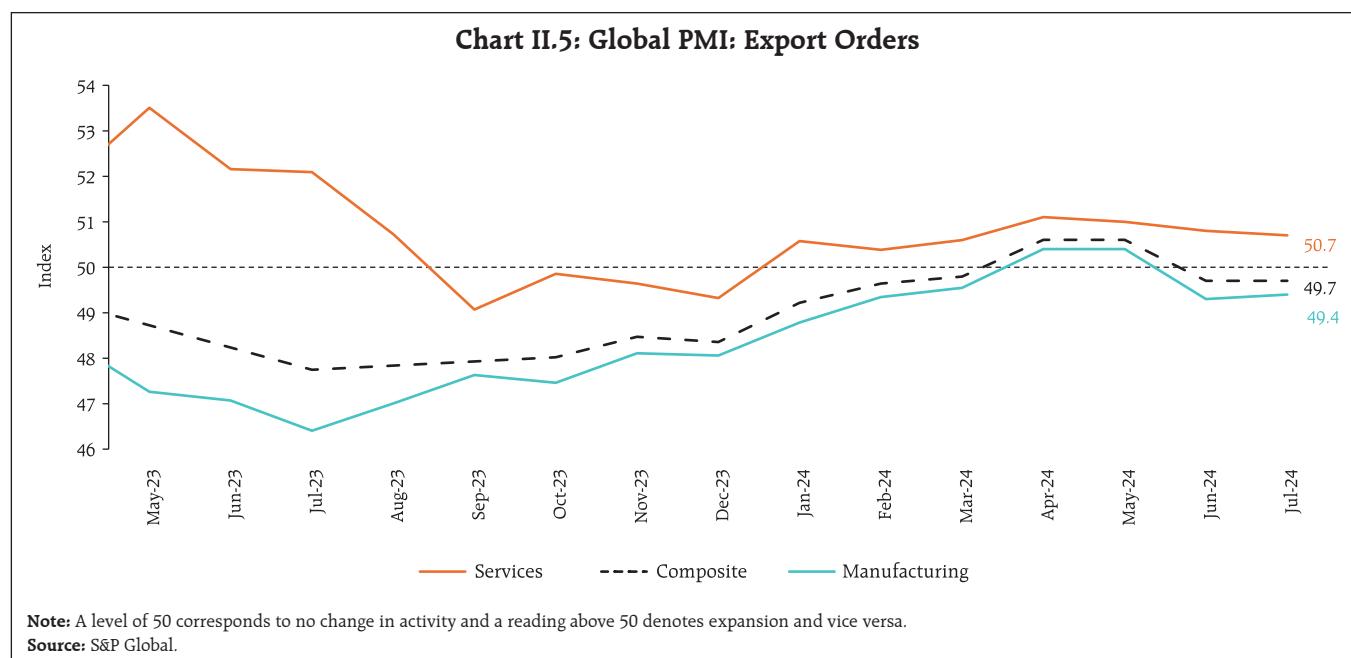
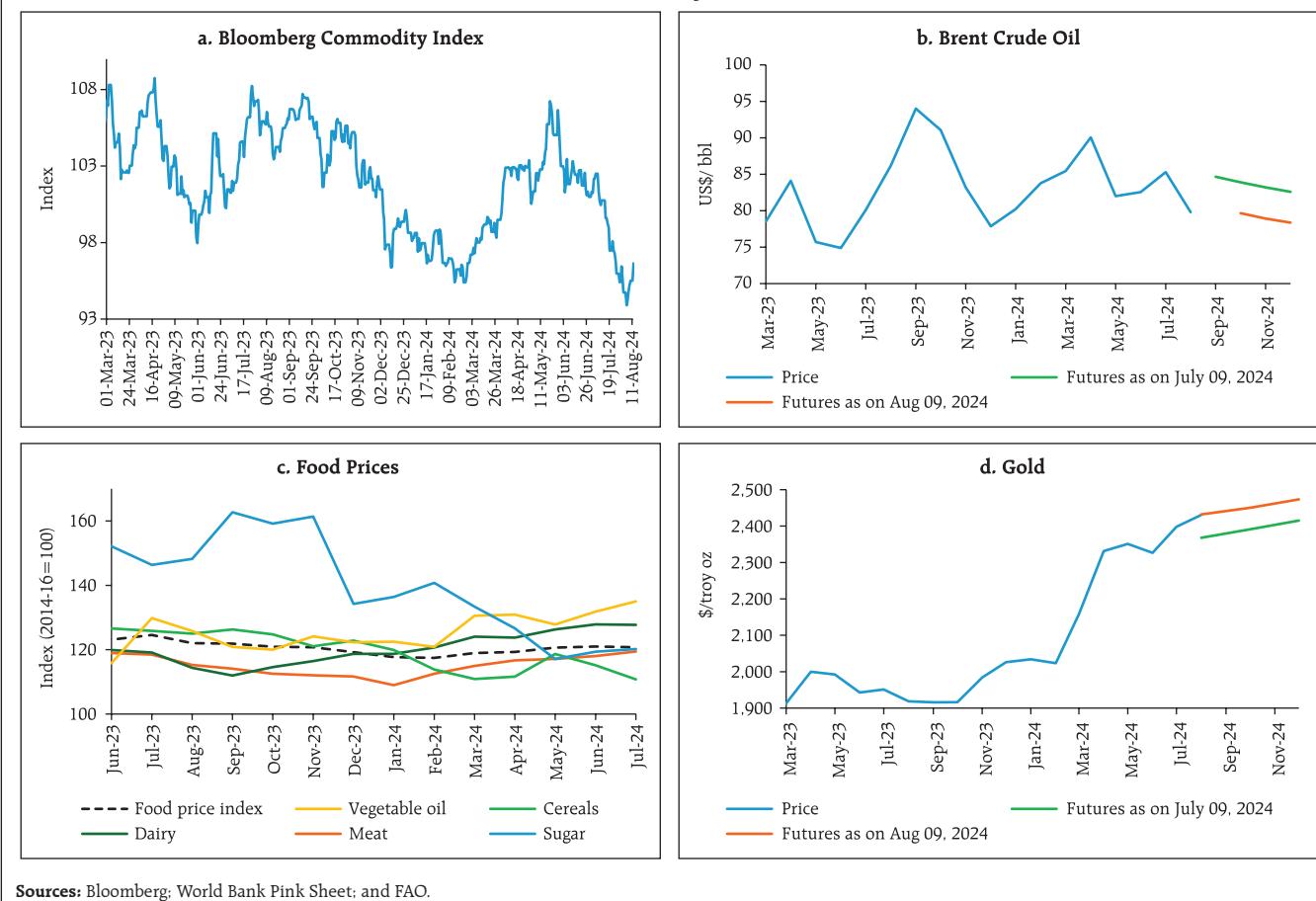
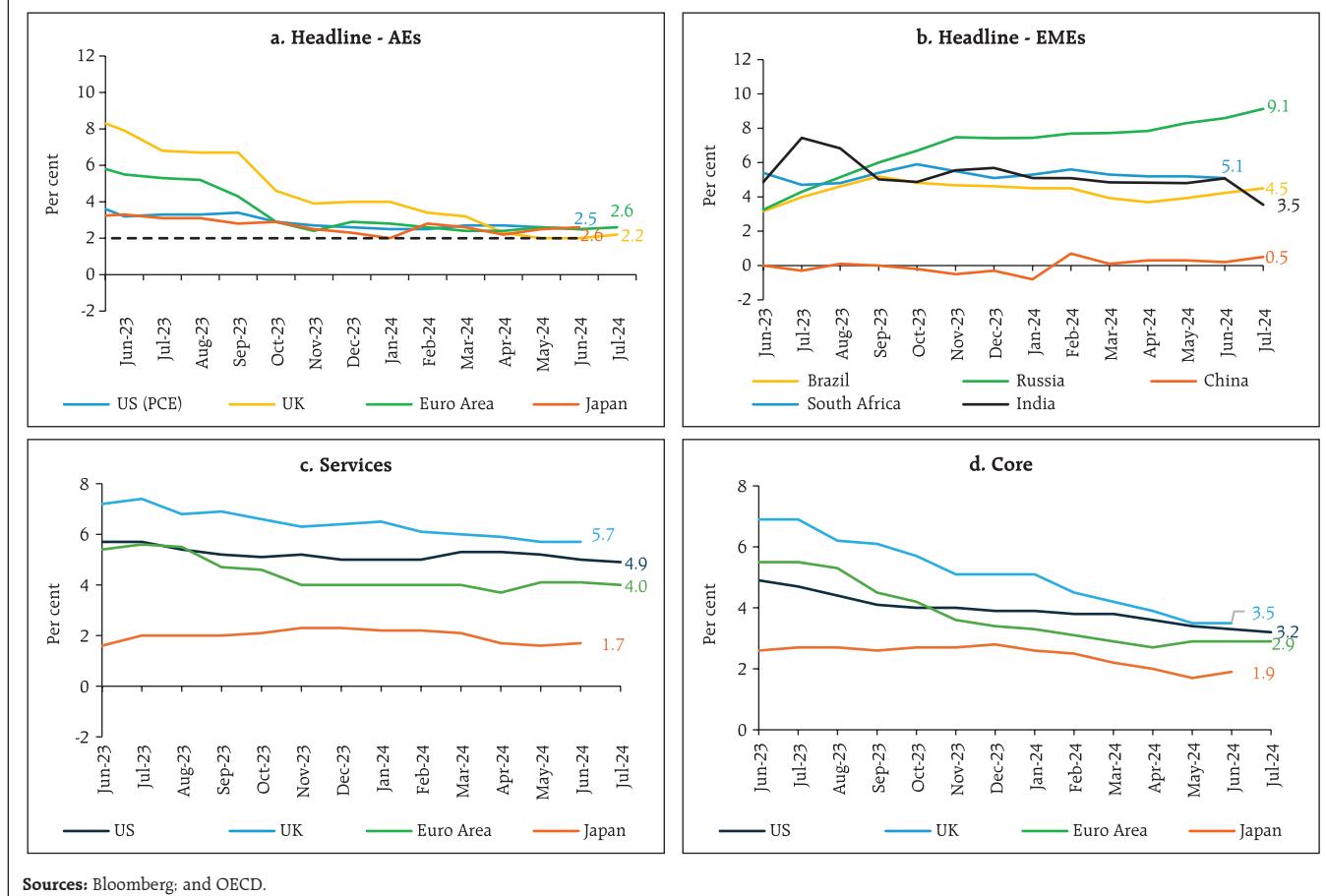


Chart II.6: Commodity and Food Prices

Global commodity prices recorded significant declines in July, driven by softening prices of base metals, agricultural products, and energy. The Bloomberg commodity index declined by 4.5 per cent (m-o-m) in July (Chart II.6a). Brent crude oil prices declined by 6.0 per cent in July over demand concerns, fuelled by lower than expected Chinese GDP data and signs of the cooling US labour market. The loss of momentum continued into the first week of August, but crude oil prices recovered in the following week, hovering around US\$ 80 per barrel (Chart II.6b). The Food and Agriculture Organization's (FAO's) food price index registered a marginal decline in July 2024 as a reduction in the price of cereals more than offset the increases in the prices of vegetable oils and dairy (Chart II.6c). Gold prices increased by 3.0 per cent in

July due to increased optimism about the US Fed's rate cuts, weakening of the US dollar, and safe haven flight in response to escalation of global geopolitical tensions (Chart II.6d).

Headline inflation continued to recede across major economies, although services inflation remained high. In the US, CPI inflation moderated to 2.9 per cent (y-o-y) in July from 3.0 per cent in June. Inflation in terms of the PCE deflator softened to 2.5 per cent in June from 2.6 per cent in May. As per flash estimates, euro area inflation edged up to 2.6 per cent in July from 2.5 per cent in June. Inflation in Japan (CPI excluding fresh food) edged up to 2.6 per cent in June, while in the UK, headline inflation rose to 2.2 per cent in July (Chart II.7a). Among

Chart II.7: Inflation - AEs and EMEs

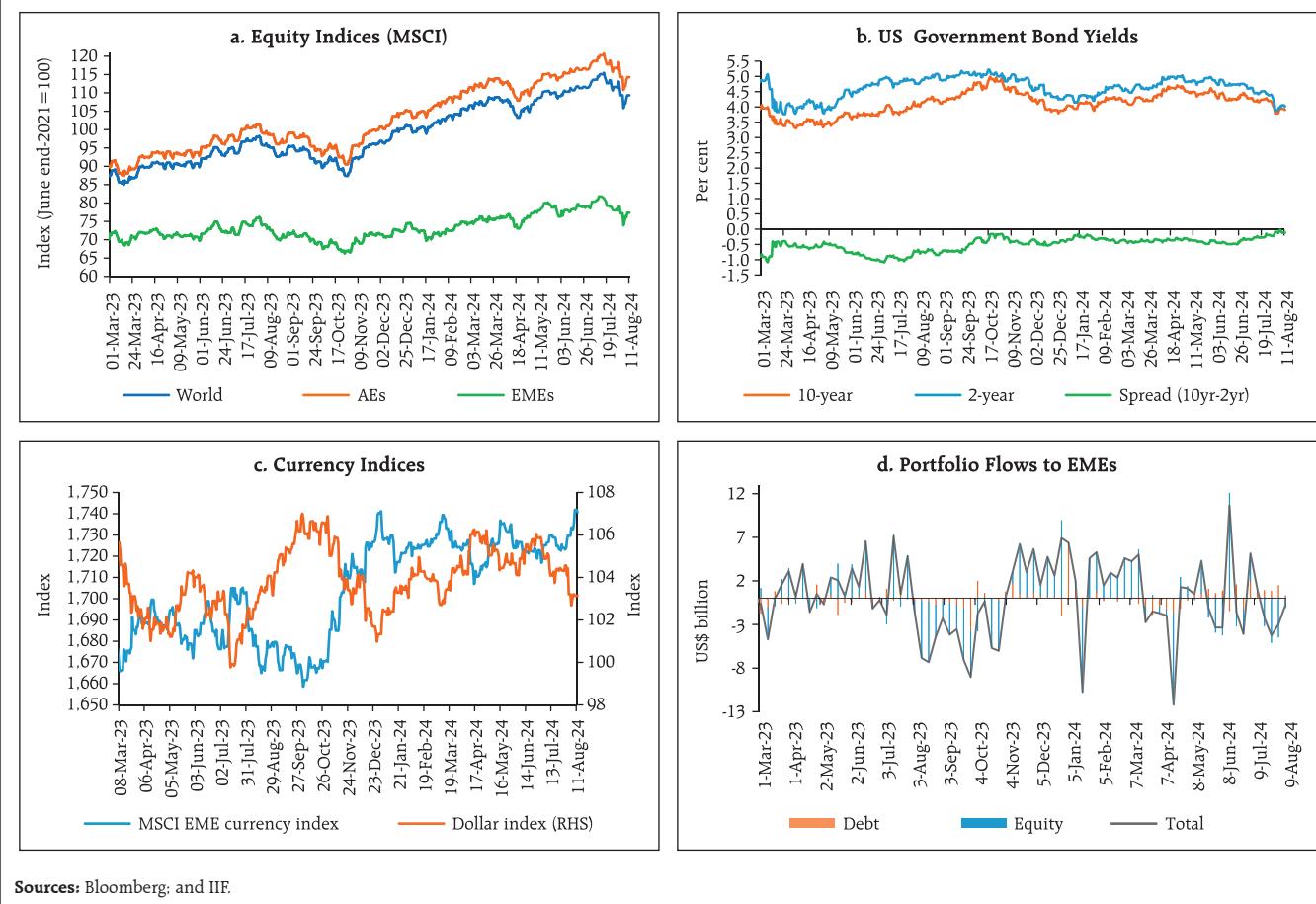
EMEs, inflation increased in China, Brazil and Russia while it softened in South Africa (Chart II.7b). Core and services inflation trended downwards in AEs although they remained higher than the headline in most of them (Chart II.7c and 7d).

Reflecting recessionary concerns in the US, global equity markets declined sharply in the first week of August. However, they recovered in the following week due to better than expected weekly jobless claims data (Chart II.8a). US government securities (G-secs) yields on both 10-year and 2-year bonds softened by 37 bps and 50 bps, respectively, in July. Yields continued to decline in the first week of August, dropping below 4 per cent for the first time in seven months in response to the release

of underwhelming employment data. However, yields showed a hardening bias in the second week due to a partial reversal of negative sentiment (Chart II.8b).

In the currency markets, the US dollar weakened by 1.7 per cent in July. On the other hand, the Morgan Stanley Capital International (MSCI) currency index for EMEs remained range bound in July due to volatile capital flows to the EMEs, mainly in the equity segment (Chart II.8c and II.8d). India's share in the MSCI emerging markets index has been increasing in recent years, driven by strong macro fundamentals and robust growth in earnings of Indian companies. This growth has elevated India's share to close to 20 per cent, narrowing the

Chart II.8: Global Financial Markets



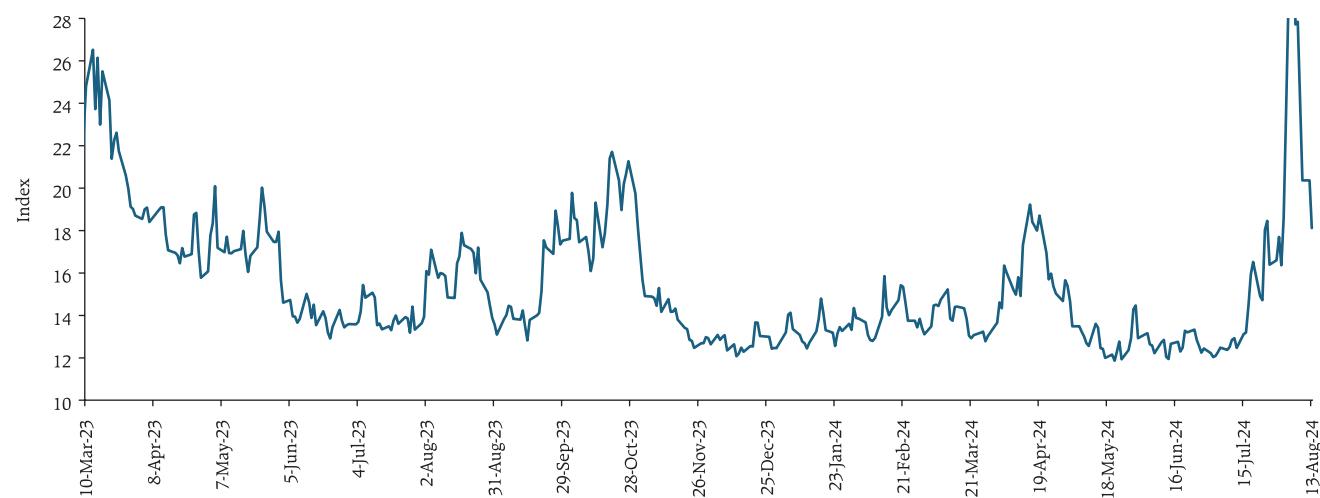
gap with China which has a weight of 24.2 per cent (Chart II.9).

Chart II.9: MSCI Emerging Market Index



The US stock market volatility index (VIX), commonly known as the Wall Street's "fear gauge" shot up in early August due to weaker employment data in the US and the disorderly unwinding of Yen carry trade after the Bank of Japan hiked its policy rate on July 31, 2024 (Chart II.10). Subsequently, markets recouped part of the losses as sentiments normalised which was also reflected in a decline in the VIX post August 5.

Among AE central banks, the US Federal Open Market Committee (FOMC) on July 31, 2024 decided to maintain the target range for the federal funds rate at 5.25 to 5.50 per cent and indicated that the Committee will carefully assess incoming data, the evolving outlook and the balance of risks while considering any future adjustments to this target

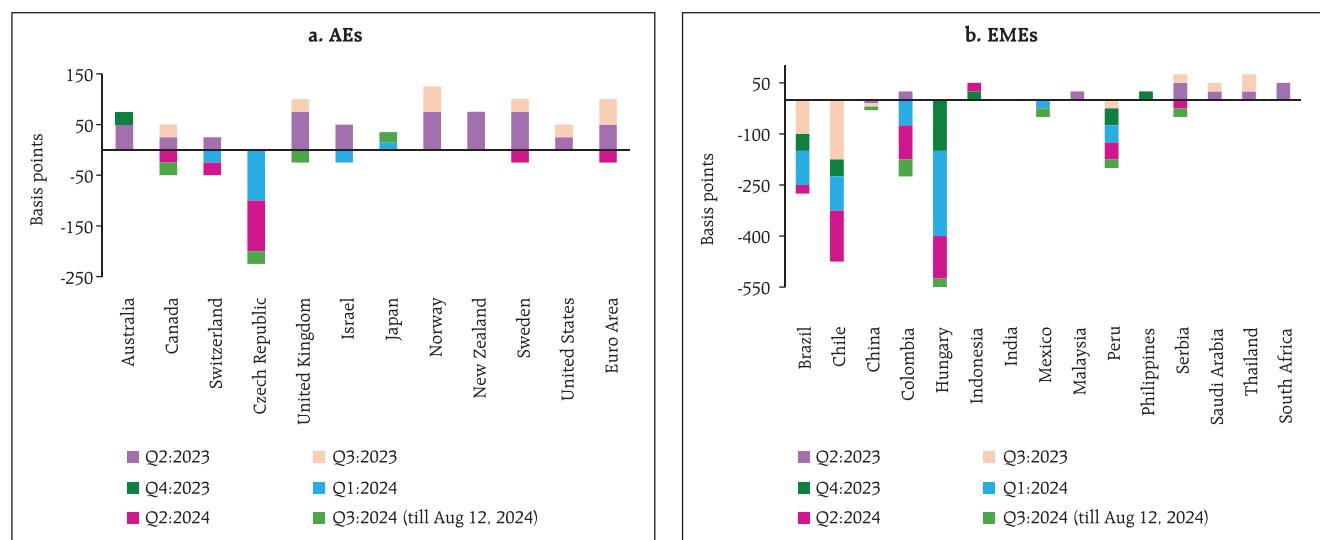
Chart II.10: VIX Index

Note: The VIX Index is a financial benchmark designed to be an up-to-the-minute market estimate of the expected volatility of the S&P 500 Index and is calculated by using the midpoint of real-time S&P 500 Index (SPX) option bid/ask quotes.

Source: Bloomberg.

range. The UK cut its benchmark rate by 25 bps to 5.0 per cent in its July meeting. Canada cut its policy rate for the second consecutive meeting by 25 bps to 4.5 per cent in July. Japan hiked its key rate to around 0.25 per cent from a range of 0.0-0.1 per cent as inflation continued to remain above the target

(Chart II.11a). In case of EME central banks, China lowered its 1-year loan prime lending rate by 10 bps to 3.35 per cent amidst an economic slowdown. In contrast, Russia hiked its benchmark rate by 200 bps to 18 per cent due to inflation level ruling well above the target (Chart II.11b).

Chart II.11 Changes in Policy Rates

Source: Bloomberg.

III. Domestic Developments

The Indian economy remained resilient despite headwinds from supply chain pressures due to the rise in global freight and container costs, and semiconductor shortages (Chart III.1a). According to the latest round of the Reserve Bank's survey of households, consumer confidence reflected a sequential moderation in expectation within the optimism zone and the assessment of the current situation remained pessimistic (Chart III.1b). Capacity utilisation (CU) in the manufacturing sector recorded an increase during Q4:2023-24, although it remained flat on a seasonally adjusted basis. There was a tempering of manufacturers' optimism on aggregate demand conditions (Annex 1). Our economic activity index (EAI), based on a range of high frequency

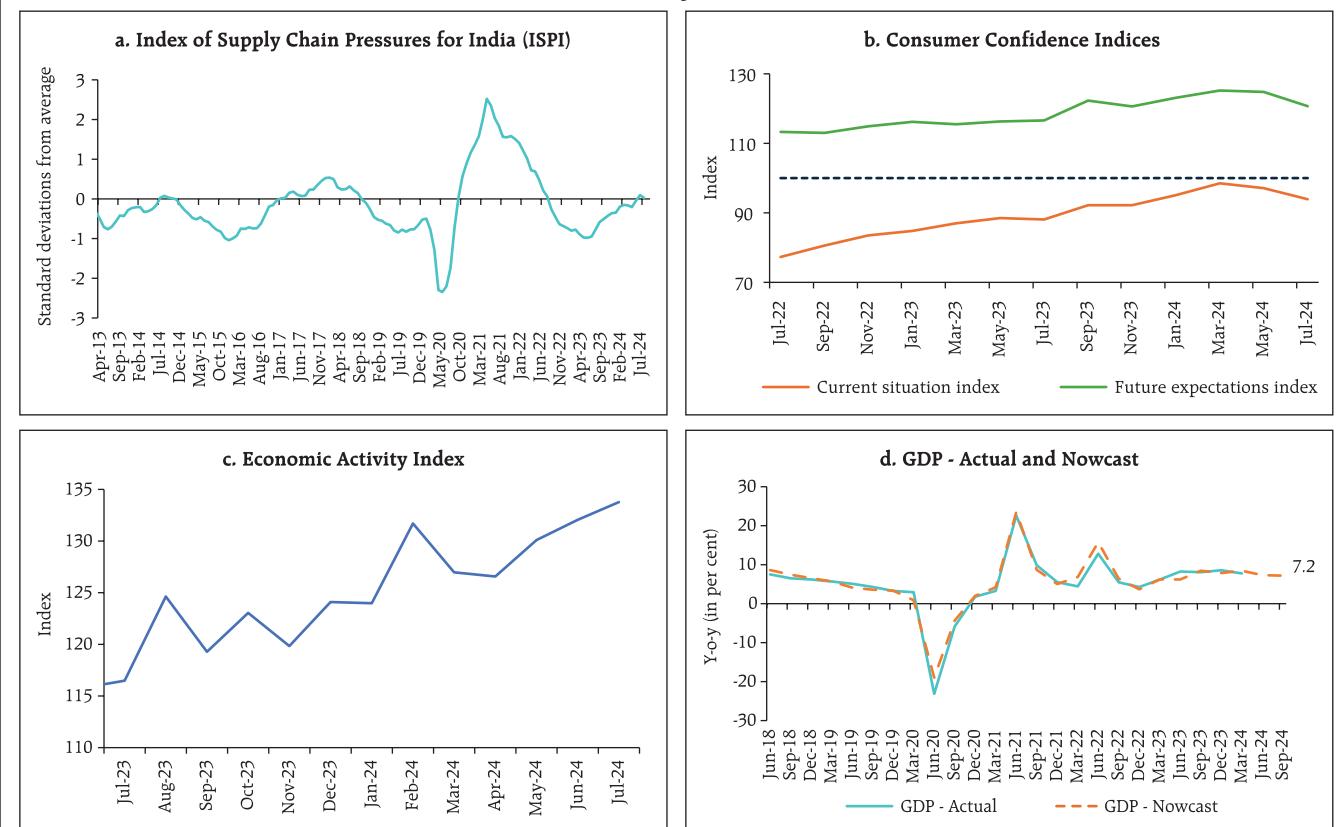
indicators, projects GDP growth of 7.2 per cent in Q2:2024-25 (Charts III.1c and III.1d).

Aggregate Demand

High frequency indicators suggested that demand conditions remained firm in July 2024 with e-way bills recording a growth of 19.2 per cent (y-o-y) [Chart III.2a]. Toll collections increased by 9.4 per cent (y-o-y) in July 2024 (Chart III.2b).

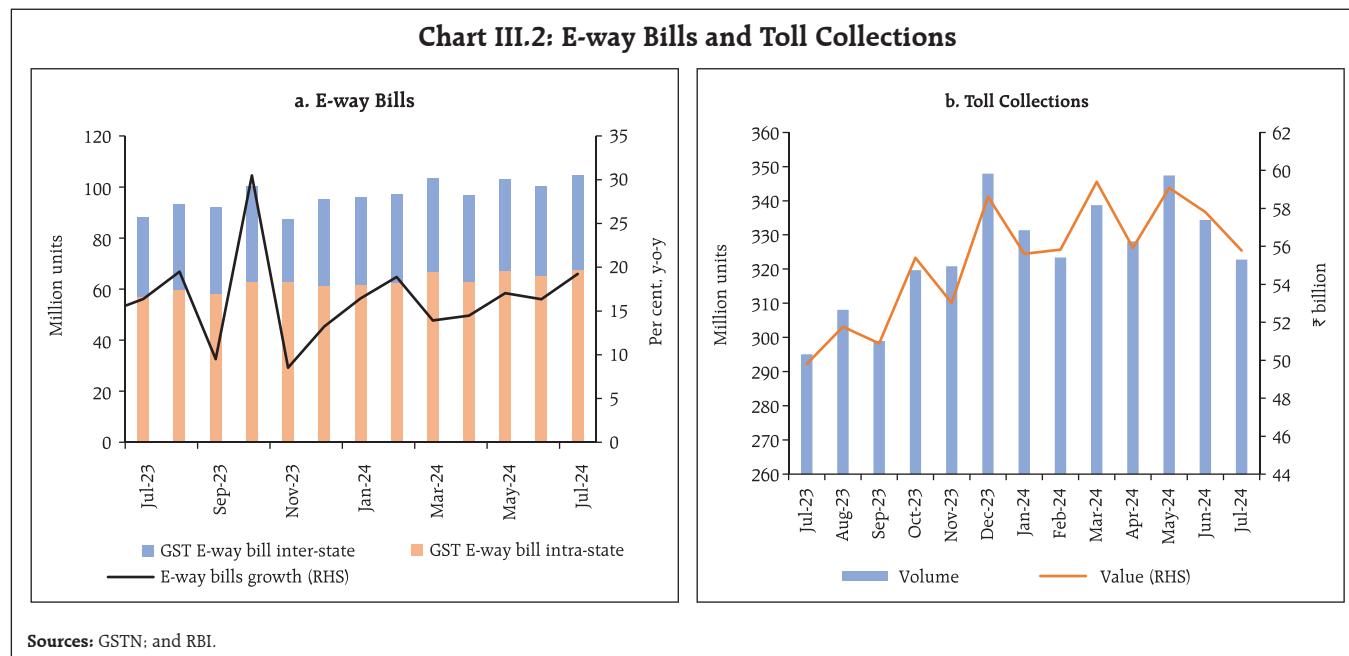
Automobile sales recorded a growth of 9.5 per cent (y-o-y) in July 2024, led by two-wheeler segment (Chart III.3a). Domestic tractor sales registered a modest rise in July (Chart III.3b). Vehicle registrations recorded robust double digit growth in July, driven by both transport and non-transport segments (Chart III.3c). Average daily petroleum consumption grew by

Chart III.1: Economic Activity and GDP Growth Nowcast



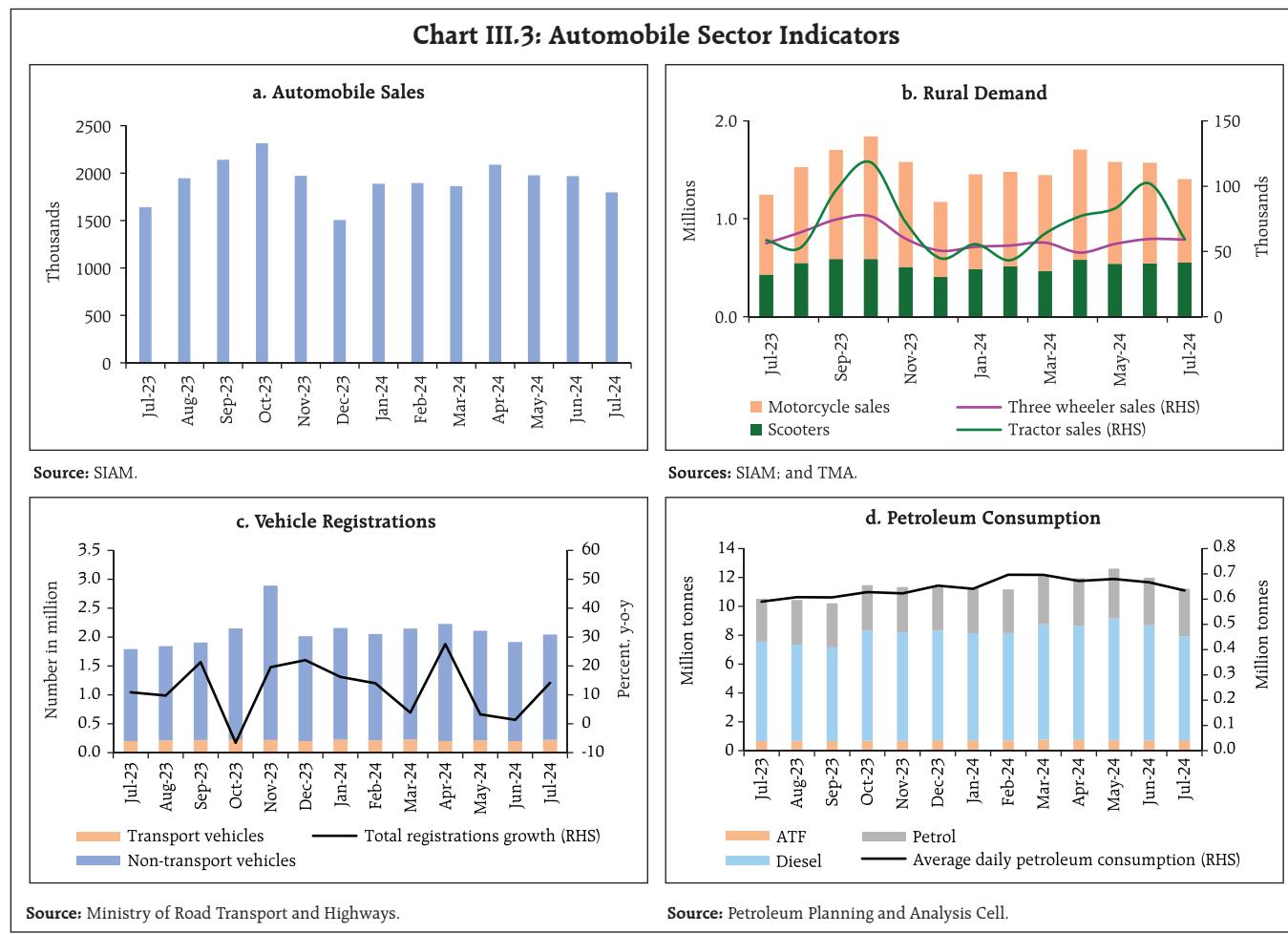
Note: The economic activity index (EAI) was constructed by extracting the common trend underlying twenty seven high frequency indicators of economic activity using a Dynamic Factor Model. EAI was scaled to 100 in February 2020 and 0 in April 2020, the worst affected month due to mobility restrictions.

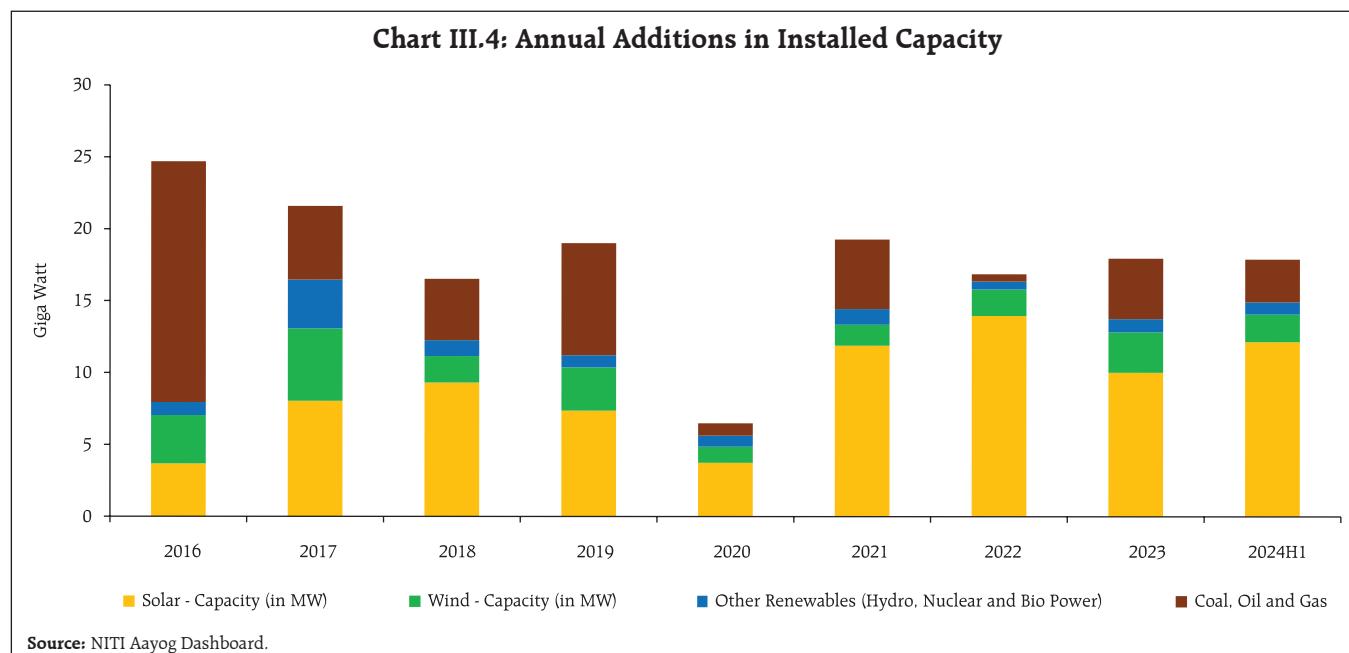
Sources: NSO; Consumer Confidence Survey(CCS); RBI; and RBI staff estimates.



7.4 per cent (y-o-y) in July 2024, driven by motor spirits (petrol) and aviation turbine fuel (ATF) [Chart III.3d].

India added 12,156 MW of solar capacity in H1:2024, which is 21 per cent higher than the entire

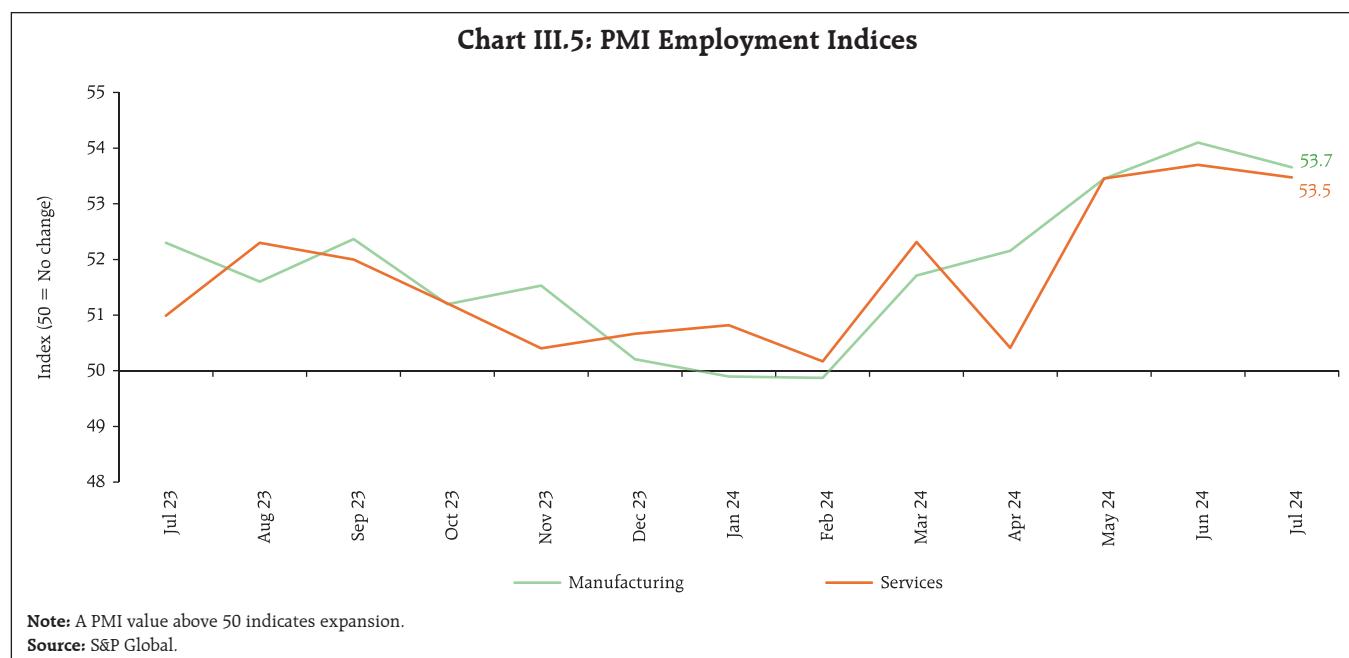


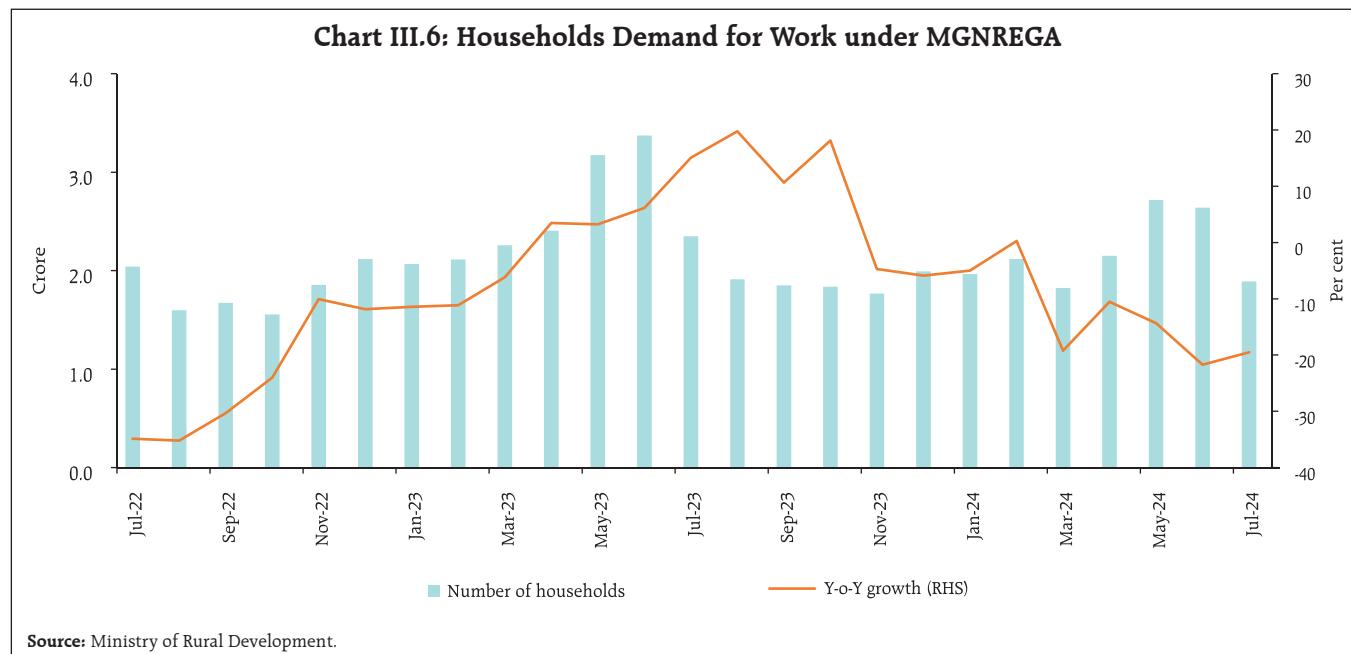


installations during the year 2023. With this, 2024 is expected to be the eighth consecutive year of renewables dominated capacity addition, with solar contributing to more than 50 per cent of the total installed capacity addition since 2020 (Chart III.4). The significant rise in solar additions is attributable to the falling cost of solar panels and exemption from the approved list of models and manufacturers (ALMM) until March 2024.

As per the PMI employment indices, organised manufacturing employment recorded its fifth consecutive month of expansion in July 2024, driven by strong demand, *albeit* with a sequential moderation from a 19 year high in June. The rate of job creation in services sector remained among the strongest in two years (Chart III.5).

Household's demand for work under the Mahatma Gandhi National Rural Employment

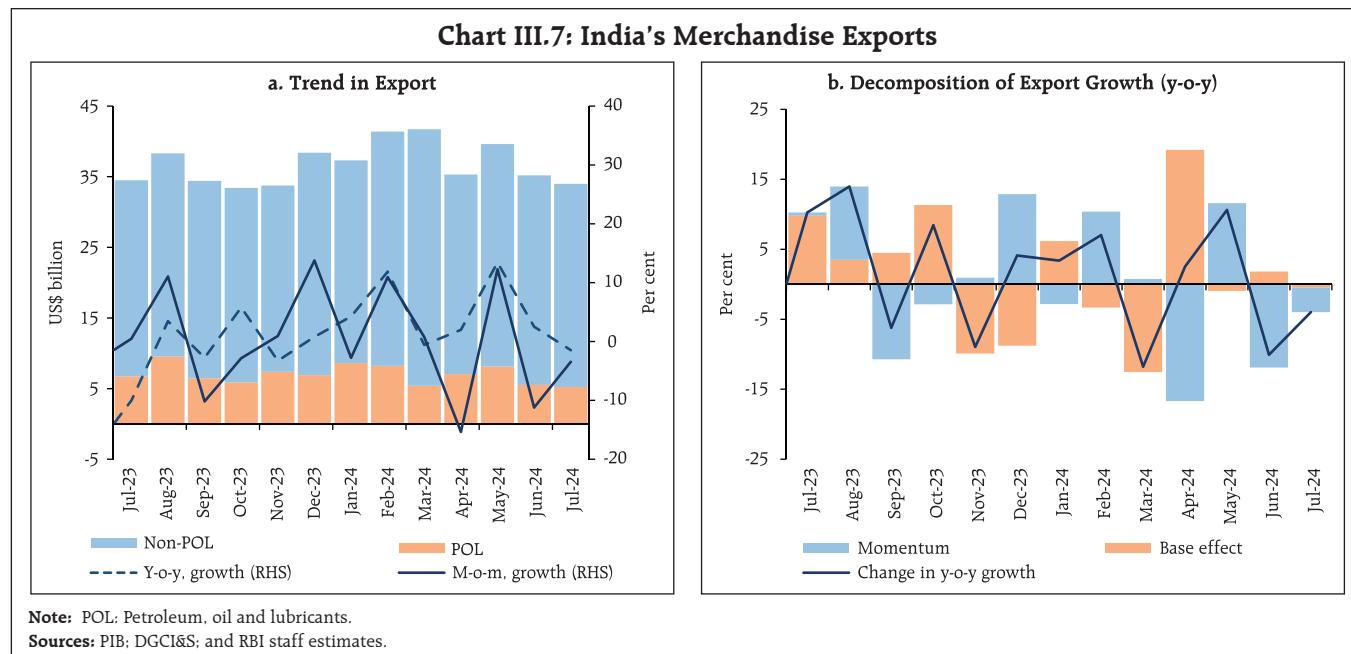




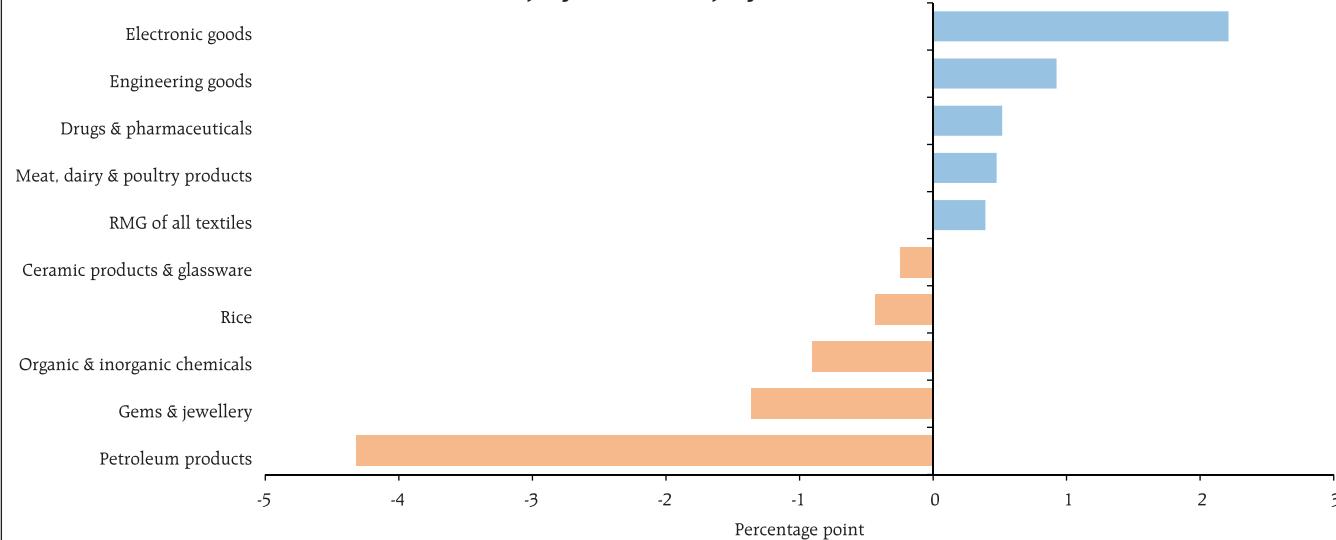
Guarantee Act (MGNREGA) declined by 28.4 per cent (m-o-m) and 19.5 per cent (y-o-y) in July, reflecting higher demand for labour for *kharif* sowing (Chart III.6).

India's merchandise exports at US\$ 34.0 billion contracted by 1.5 per cent (y-o-y) in July 2024 on account of a sequential (m-o-m) moderation by 3.4 per cent (Chart III.7).

Although the overall exports contracted, only 12 out of 30 major commodities (accounting for 42.1 per cent of export basket) witnessed a decline on a y-o-y basis. Petroleum products, gems and jewellery, chemicals, rice, ceramic products and glassware contributed to the contraction in the month of July, while electronic goods, engineering goods, drugs and pharmaceuticals, meat, dairy and poultry products, and ready-made garment (RMG) of all textiles contributed



**Chart III.8: India's Merchandise Exports – Relative Contribution
(July 2024 over July 2023)**



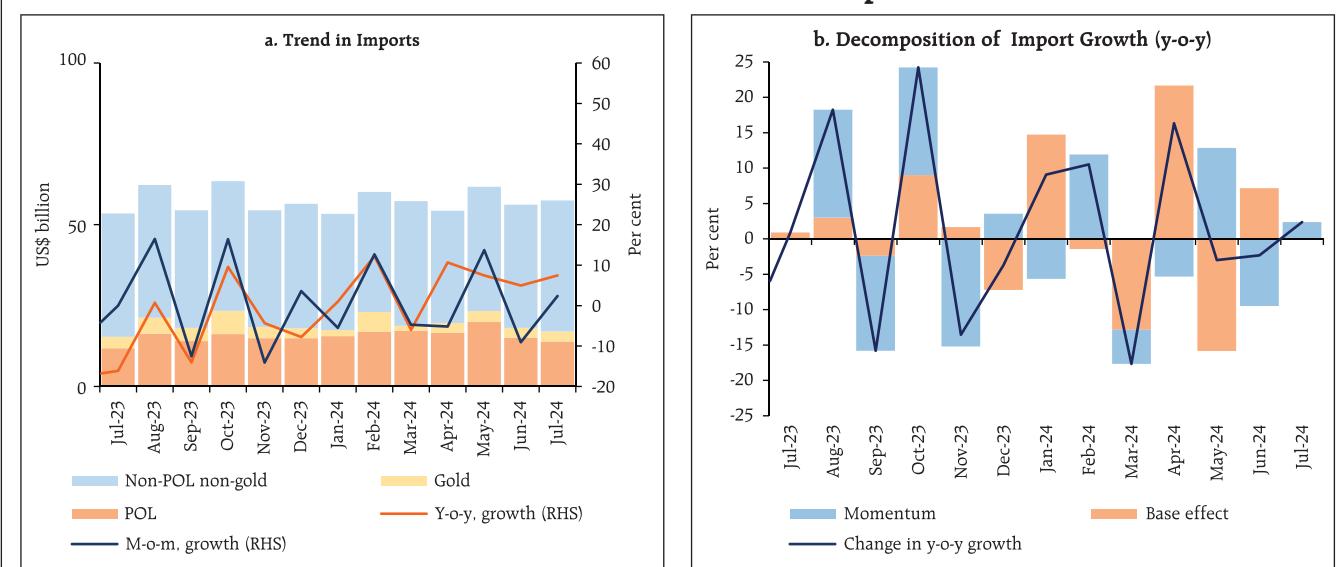
positively to export growth (Chart III.8). However, on a cumulative basis, during April-July 2024, India's merchandise exports expanded by 4.1 per cent to US\$ 144.1 billion, primarily led by electronic goods, engineering goods, drugs and pharmaceuticals, RMG of all textiles, and plastic and linoleum.

Destination wise, exports to 13 out of 20 major destinations contracted in July, although exports

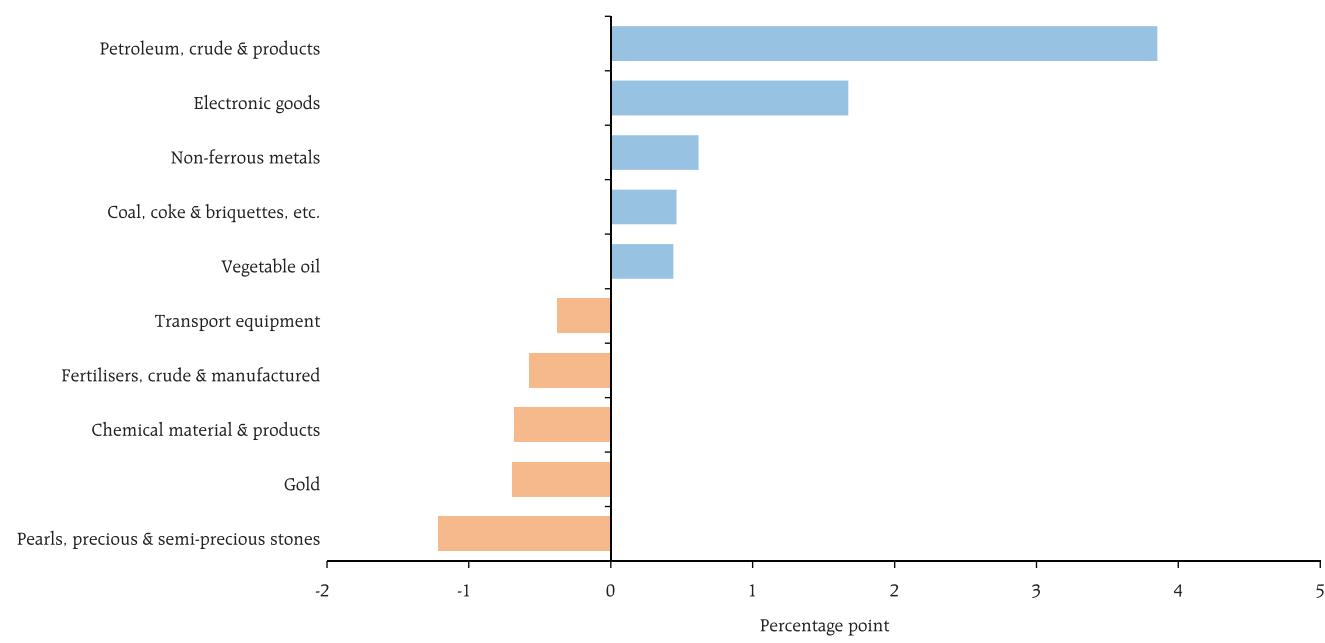
to top 3 destinations, viz., the US, the UAE and the Netherlands recorded an expansion. During 2024-25 so far (April-July), exports to 12 out of 20 major destinations witnessed an expansion.

Merchandise imports at US\$ 57.5 billion expanded by 7.5 per cent (y-o-y) in July, driven by a positive momentum (Chart III.9). Out of 30 major commodities, 19 commodities (accounting for 75.2

Chart III.9: India's Merchandise Imports



**Chart III.10: India's Merchandise Imports – Relative Contribution
(July 2024 over July 2023)**



per cent of import basket) registered growth on a y-o-y basis.

Petroleum, crude and products, electronic goods, non-ferrous metals, coal, coke and briquettes, and vegetable oil contributed positively, while pearls, precious and semi-precious stones, gold, chemical material and products, fertilisers, and transport equipment were the main drags (Chart III.10). During April-July 2024, India's merchandise imports increased by 7.6 per cent (y-o-y) to US\$ 229.7 billion, mainly led by petroleum, crude and products, electronic goods, non-ferrous metals, vegetable oil, and pulses.

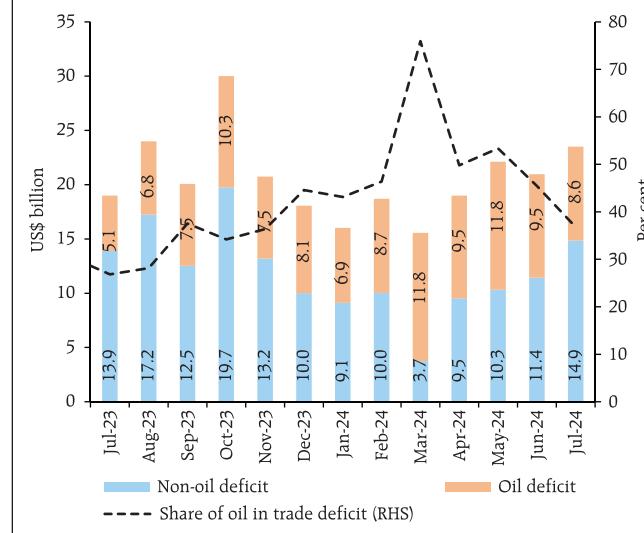
Imports from 13 out of 20 major source countries expanded in July and April-July 2024, with robust growth for top 3 source countries, viz., China, Russia, and the UAE.

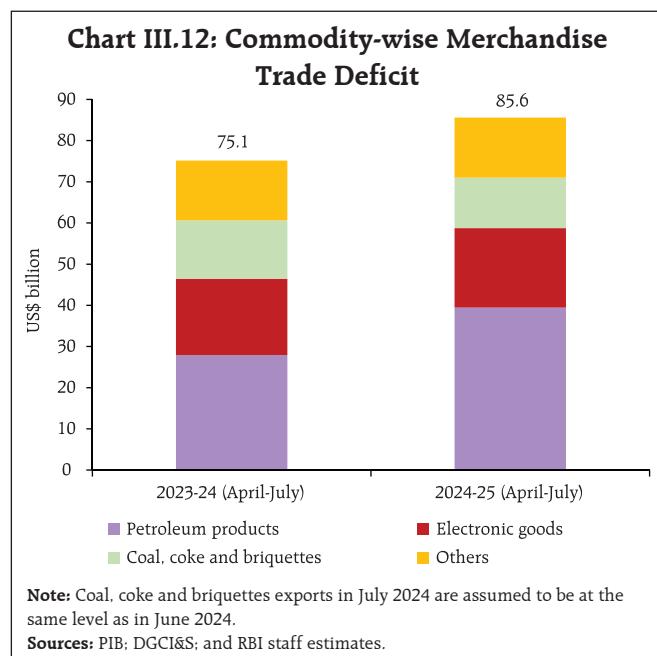
The merchandise trade deficit widened to US\$ 23.5 billion in July 2024, the highest in the last nine months, from US\$ 19.0 billion in July 2023. The share of POL in total merchandise trade deficit increased

to 36.8 per cent in July 2024 from 26.8 per cent a year ago (Chart III.11).

During April-July 2024, India's merchandise trade deficit widened to US\$ 85.6 billion from US\$ 75.1 billion a year ago. Petroleum products were the

Chart III.11: Decomposition of India's Merchandise Trade Deficit





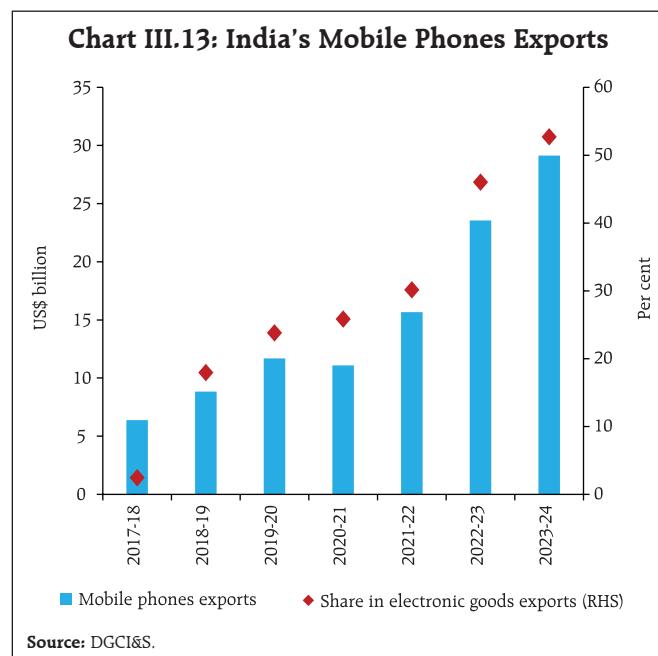
largest source of the deficit, followed by electronic goods (Chart III.12).

The Union Budget 2024-25 announced the rationalisation of customs duties to support domestic manufacturing, deepen local value addition, promote export competitiveness, and correct the inverted duty structure. The customs duties have been reduced on 52 major goods spanning multiple sectors such as aquafarming and products, critical minerals, precious metals, leather and textiles, metals, electronics, medical equipment, capital goods for petroleum exploration and the manufacture of solar cells and modules, shipping, etc. Other measures include supporting the mission for pulses and oilseeds, the development of e-commerce export hubs, reforms for the shipping industry, and trade facilitation. These measures are intended to strengthen India's logistics, reduce imports, and boost exports in emerging areas.

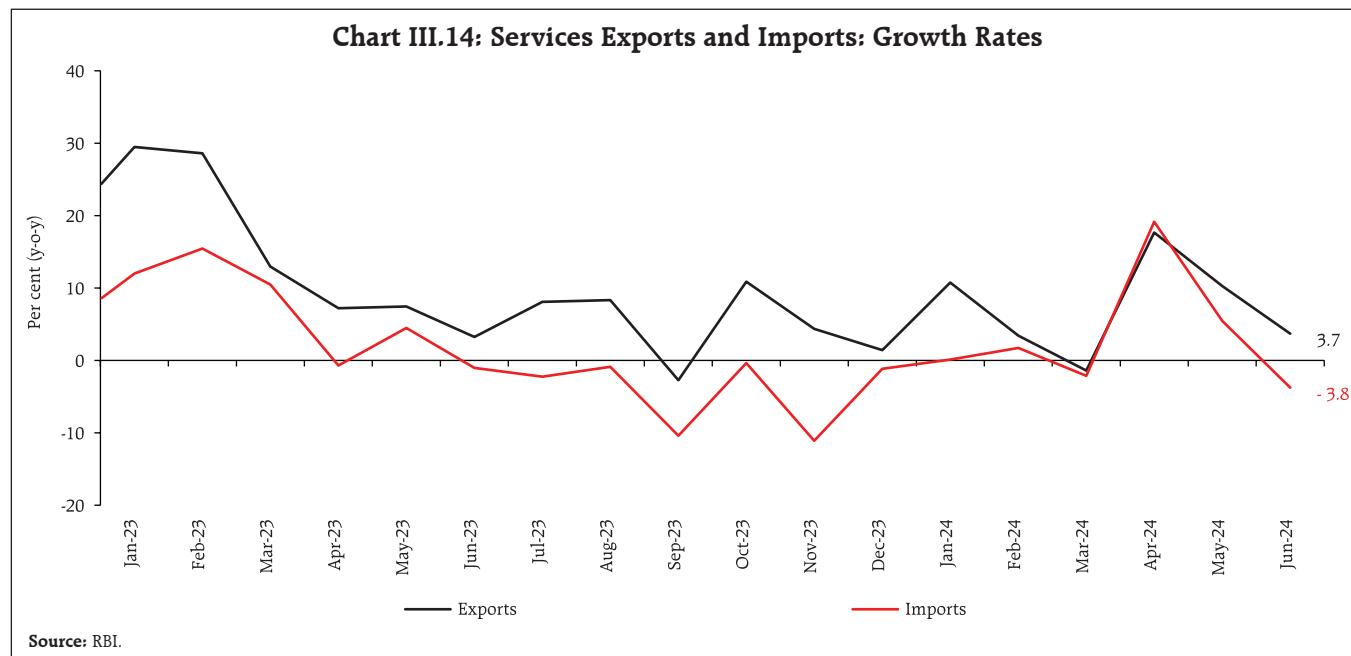
The announcement in the budget to reduce the customs duties on cellular mobile phones and certain inputs such as charger, adapter, etc., is expected to boost production and exports of

mobile phones. With the introduction of Production Linked Incentive (PLI) scheme for mobile phones and electronics manufacturing in March 2020, the share of mobile phones in electronic goods exports increased from 3.3 per cent in 2017-18 to 53.5 per cent in 2023-24 (Chart III.13). Mobile phones exports expanded by 23.6 per cent (y-o-y) to US\$ 29.1 billion in 2023-24. In 2024-25 (up to May), mobile phones exports increased by 35.4 per cent to US\$ 3.3 billion. A study by the India Cellular and Electronics Association (ICEA)²⁰ on tariff on smart phones across competing economies suggests that India continued to have the highest input tariffs, significantly higher than China and Vietnam. According to the ICEA, increasing participation in global value chains by maintaining low tariffs have proven to be effective strategies for enhancing a country's export capabilities in the electronics sector.

In June 2024, services exports at US\$ 28.8 billion grew by 3.7 per cent (y-o-y), whereas services imports declined by 3.8 per cent (y-o-y) to US\$ 15.0 billion



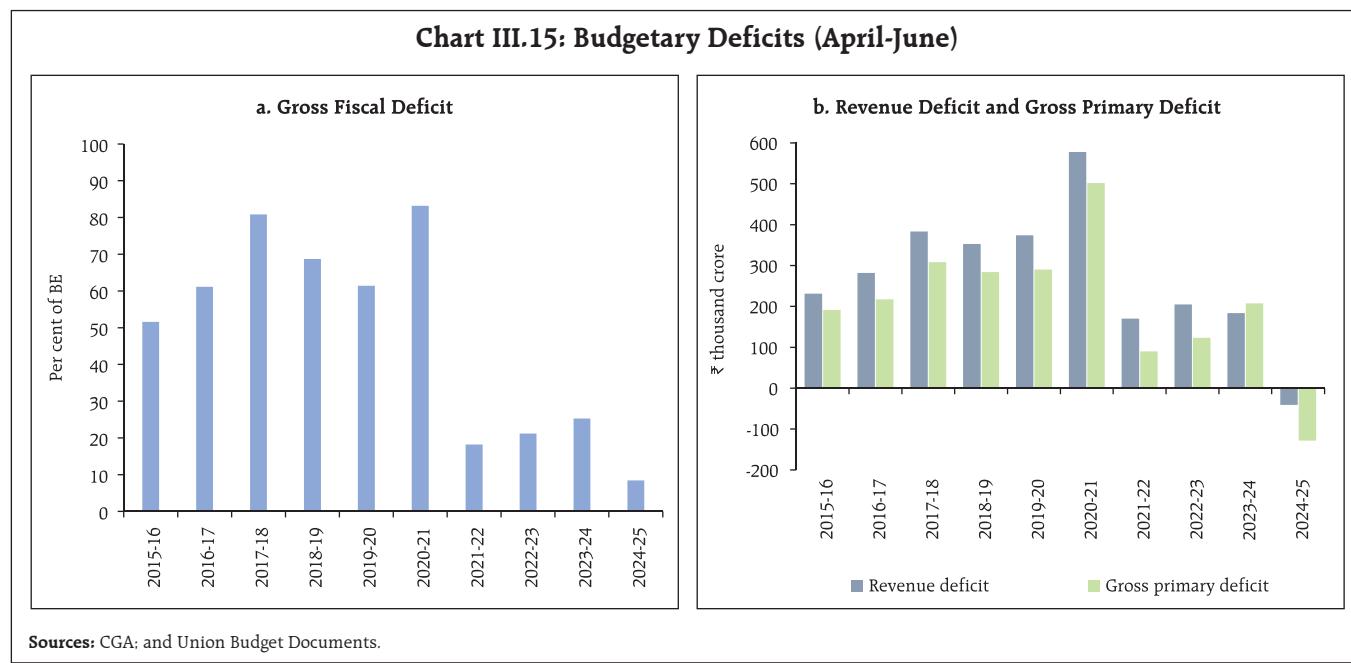
²⁰ <https://icea.org.in/blog/wp-content/uploads/2024/07/ICEA-TARIFF-4.0.pdf>.



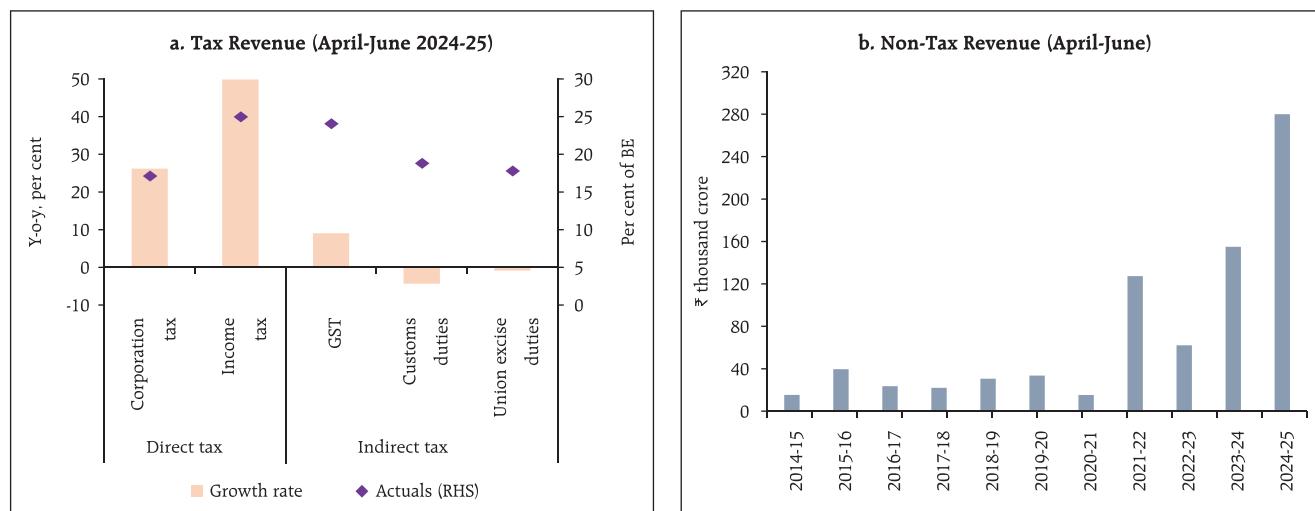
(Chart III.14). Consequently, net services export earnings grew by 13.2 per cent (y-o-y) to US\$ 13.8 billion.

All major key deficit indicators, viz., the gross fiscal deficit (GFD), the revenue deficit (RD) and the primary deficit (PD) of the Union government witnessed a moderation both in absolute terms as

well as in relation to budget estimates (BE) during Q1:2024-25 relative to the corresponding period of the previous year (*i.e.*, Q1:2023-24).²¹ The GFD was at 8.4 per cent of the BE during Q1:2024-25, the lowest in more than a decade (Chart III.15a). Moreover, revenue and primary surpluses were recorded (Chart III.15b). This improvement in the financial position occurred



²¹ As per the latest data released by the Controller General of Accounts (CGA) pertaining to the financial position of the Union government.

Chart III.16: Revenue Receipts of the Union Government

Note: The Reserve Bank changed its accounting year from July-June to April-March, starting April 1, 2021. Accordingly, since 2021-22 the Reserve Bank's surplus is transferred to the Union government in the month of May rather than in August.

Sources: CGA and Union Budget Documents.

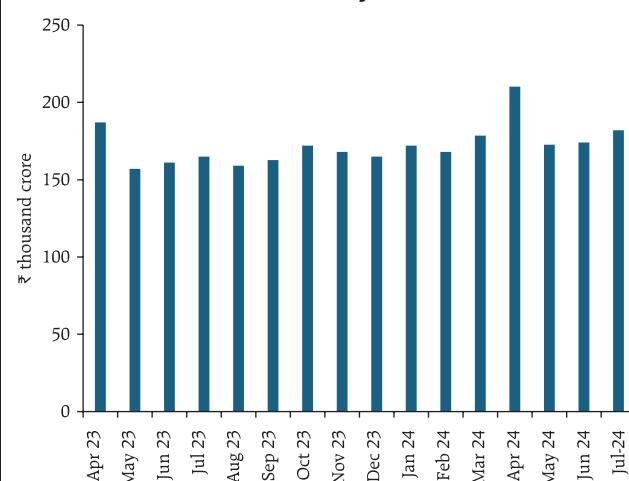
on the back of a strong and broad-based growth in the revenue receipts. The total expenditure of the Union government (at around ₹9.7 lakh crore), on the other hand, contracted by 7.7 per cent during Q1:2024-25 on a y-o-y basis.

On the receipts side, gross tax revenue recorded a growth of 23.7 per cent during Q1:2024-25, with direct and indirect taxes registering an increase of 41.5 per cent and 6.1 per cent, respectively, on a y-o-y basis. Under direct taxes, both corporation tax and income tax registered double digit growth. Under indirect taxes, GST collections recorded a growth rate of 9.1 per cent (Chart III.16a). With surplus transfer of ₹2.11 lakh crore from the Reserve Bank, non-tax revenue receipts recorded a growth of 80.7 per cent (y-o-y) [Chart III.16b]. On the other hand, the non-debt capital receipts registered a contraction of 57.8 per cent on a y-o-y basis. Overall, total receipts recorded a y-o-y growth of 39.2 per cent.

The gross GST collections (Centre *plus* States) for the month of July 2024 stood at ₹1.82 lakh crore with a growth of 10.3 per cent (y-o-y) [Chart III.17]. After accounting for refunds, net GST collections grew by

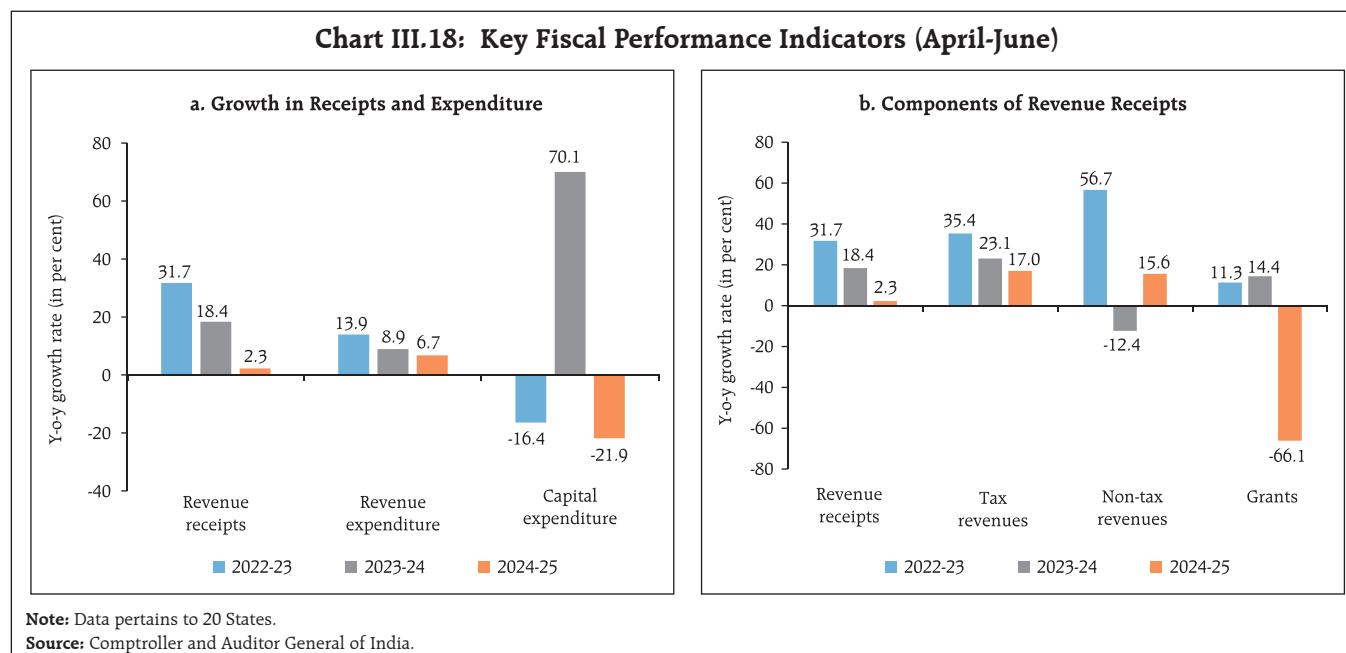
14.4 per cent on a y-o-y basis. Gross GST collections during April-July 2024 grew by 10.2 per cent (y-o-y) to ₹7.39 lakh crore.

The Union Budget 2024-25 announced on July 23, 2024 struck a balance between fiscal consolidation and macroeconomic stability. The budget continued with a thrust on capex and made proposals for boosting employment generation and skill development.

Chart III.17: Monthly GST Revenue

Note: The GST revenue data till May 2024 depicted in the chart has been sourced from press information bureau (PIB), Government of India (GoI). For June 2024 and July 2024, data has been sourced from GST website.

Sources: PIB; and GST website.

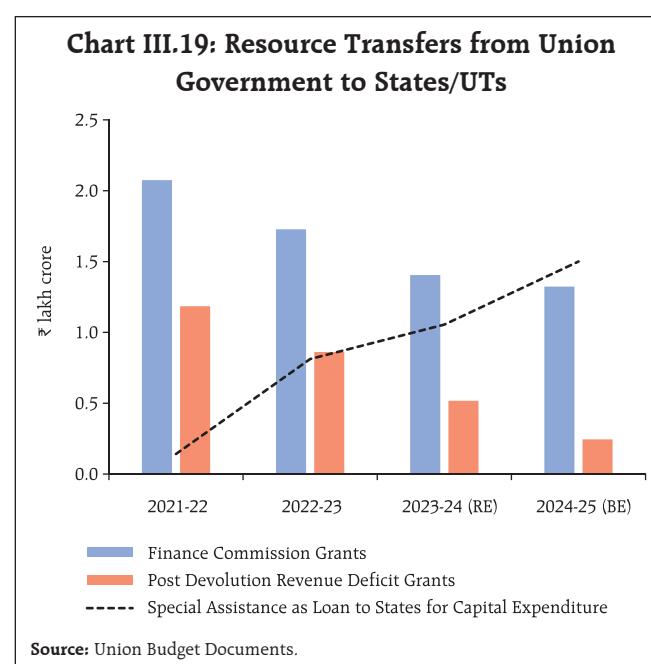


For 2024-25, non-debt receipts are budgeted to rise to 9.8 per cent of GDP from 9.4 per cent in 2023-24 (provisional accounts or PA), whereas the total expenditure is budgeted to moderate to 14.8 per cent of GDP from 15.0 per cent of the GDP a year ago. Concomitantly, the GFD is budgeted at 4.9 per cent of GDP in 2024-25, lower than 5.6 per cent recorded for 2023-24 (PA).

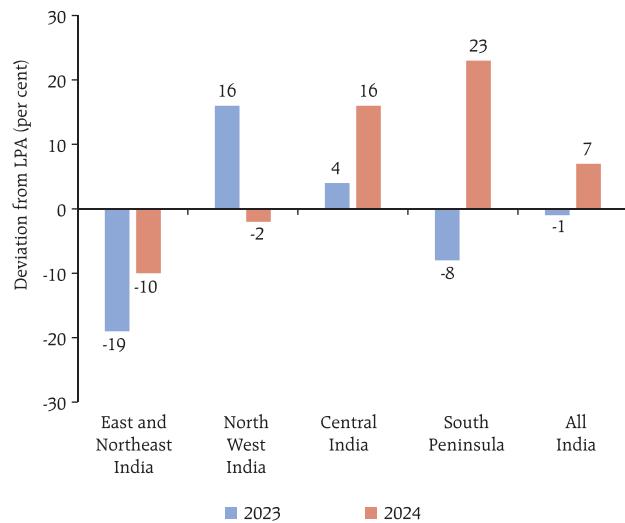
As per the data available for Q1:2024-25, growth in States' revenue receipts moderated on account of a slowdown in tax revenue growth and a contraction in grants from the Union government. Within States' own tax revenue, the growth in States' goods and services tax (SGST) and excise duties moderated, while sales tax/VAT increased over a year ago. Non-tax revenue, however, witnessed robust growth partly due to the low base effect. On the expenditure side, revenue expenditure growth decelerated in Q1:2024-25 and the growth in capital expenditure declined on a y-o-y basis (Chart III.18a and Chart III.18b).

As per the Union Budget 2024-25, gross transfers to States are budgeted to increase, primarily due to

higher tax devolution, special assistance for capital expenditure and transfers under centrally sponsored schemes. In contrast, finance commission grants are budgeted to decrease, mainly due to lower post devolution revenue deficit grants. Notably, a provision of ₹1.5 lakh crore for long-term interest-free loans has been made for 2024-25, which could assist States in boosting their capital expenditure (Chart III.19).



**Chart III.20: Cumulative SWM Rainfall
(June 01 - August 11, 2024)**



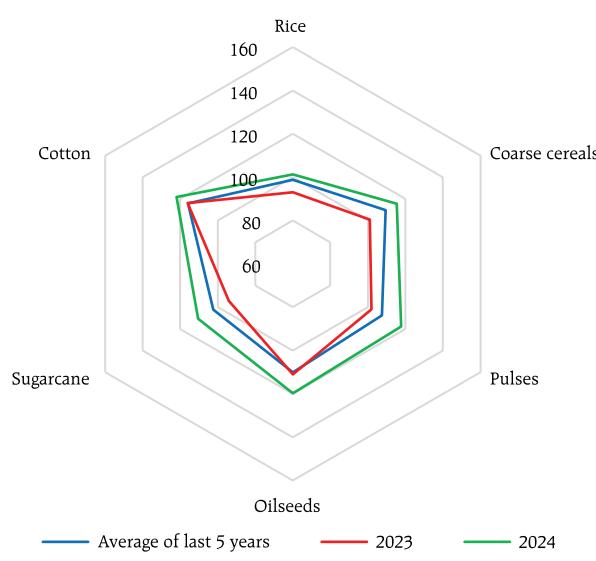
Source: India Meteorological Department.

Aggregate Supply

As on August 11, 2024, the cumulative SWM rainfall was 7 per cent above the LPA as against 1 per cent below the LPA during the same period last year (Chart III.20). The production weighted rainfall index (PRN) was at 103 per cent as on August 12, 2024 (Chart III.21).

After a lacklustre performance in June, rainfall activity picked up from early July, closing the deficit.

Chart III.22: Crop-wise PRN

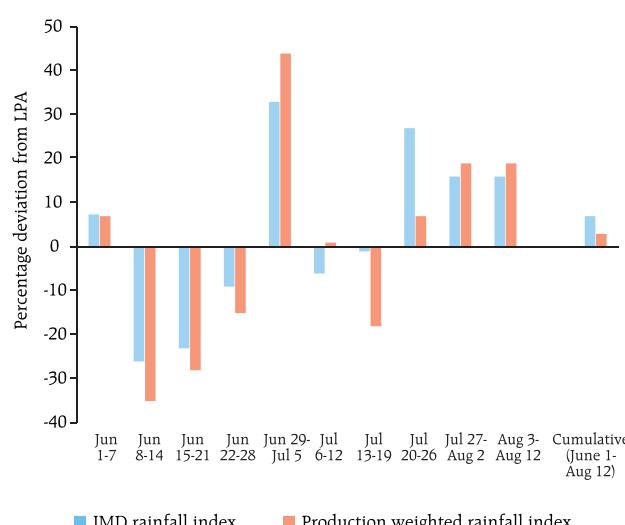


Source: RBI staff estimates.

The PRN remained in surplus (above 100) for all the major crops (Chart III.22).

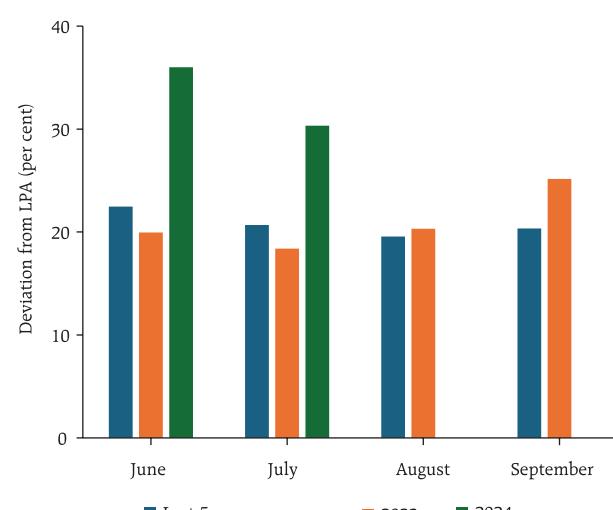
As per the IMD, out of 36 sub-divisions, 19 recorded rainfall of 5 per cent above the LPA as on August 12, 2024. The spatial dispersion of SWM rainfall was higher than in the previous year as well as for the last five years' average. The spatial dispersion, however, narrowed in July from June indicating that the pick-up in monsoon activity was broad based (Chart III.23).

Chart III.21: Weekly Progress of SWM



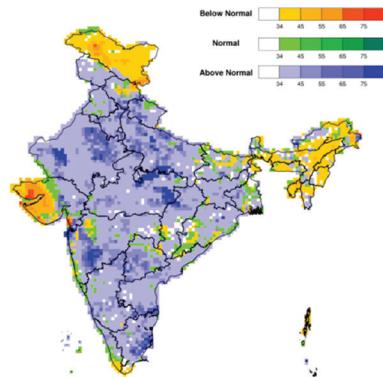
Sources: IMD; and RBI staff estimates.

Chart III.23: Spatial Standard Deviation of SWM Rainfall



Source: RBI staff estimates.

Chart III.24: SWM Forecast for August-September 2024



Notes: 1. Chart denotes probability forecast of tercile categories (below normal, normal and above normal) for the rainfall over India during August-September 2024. The figures illustrates the most likely categories as well as their probabilities. Tercile categories have equal climatological probabilities of 33.33 per cent each at white shaded areas.

2. Maps are for illustrative purposes only.

Source: IMD.

The rainfall during the second half of the season (August -September) is most likely to be above normal²², with normal to above normal rainfall activity predicted over most parts of the country²³ (Chart III.24). The neutral *El Nino*-Southern Oscillation (ENSO) condition currently prevailing in the equatorial Pacific region is likely to develop into *La Niña* (which is typically associated with increased rainfall activity) towards the end of August.

The reservoir levels (as of August 08, 2024) were 65 per cent of the full reservoir level, a significant increase from 22 per cent a month ago (July 04). Currently, the reservoir levels are 6.5 per cent and 20.6 per cent higher than the level during last year and the decadal average, respectively (Chart III.25).

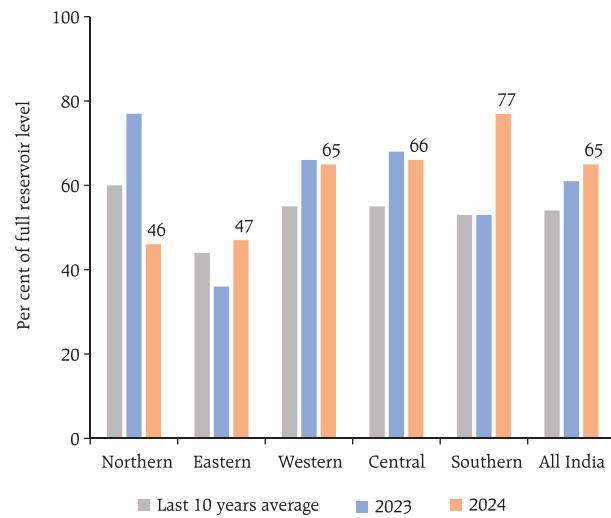
As on August 09, 2024 the total kharif sown area stood at 979.9 lakh hectares (89.4 per cent of full season normal area), which is 1.4 per cent higher than the corresponding period last year and 1.2 per cent above the normal level of sowing as on date.²⁴

²² Greater than 106 per cent of LPA.

²³ As per IMD's SWM rainfall forecast for the second half of the season and for the month of August 2024 released on August 01, 2024.

²⁴ According to the latest data released by the Ministry of Agriculture and Farmers' Welfare (MoAFW).

Chart III.25: Reservoir Level (as on August 08)

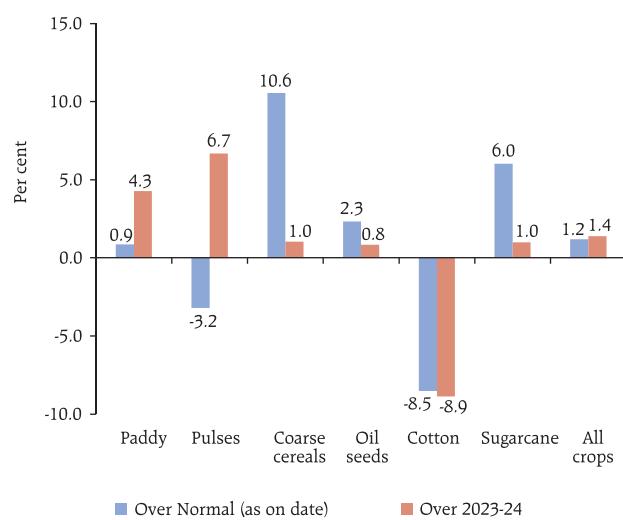


Source: Central Water Commission.

The area under all crops except cotton remained higher than last year (Chart III.26). The area sown under paddy²⁵ progressed steadily despite below LPA rainfall in some of the key producing states in the eastern region.

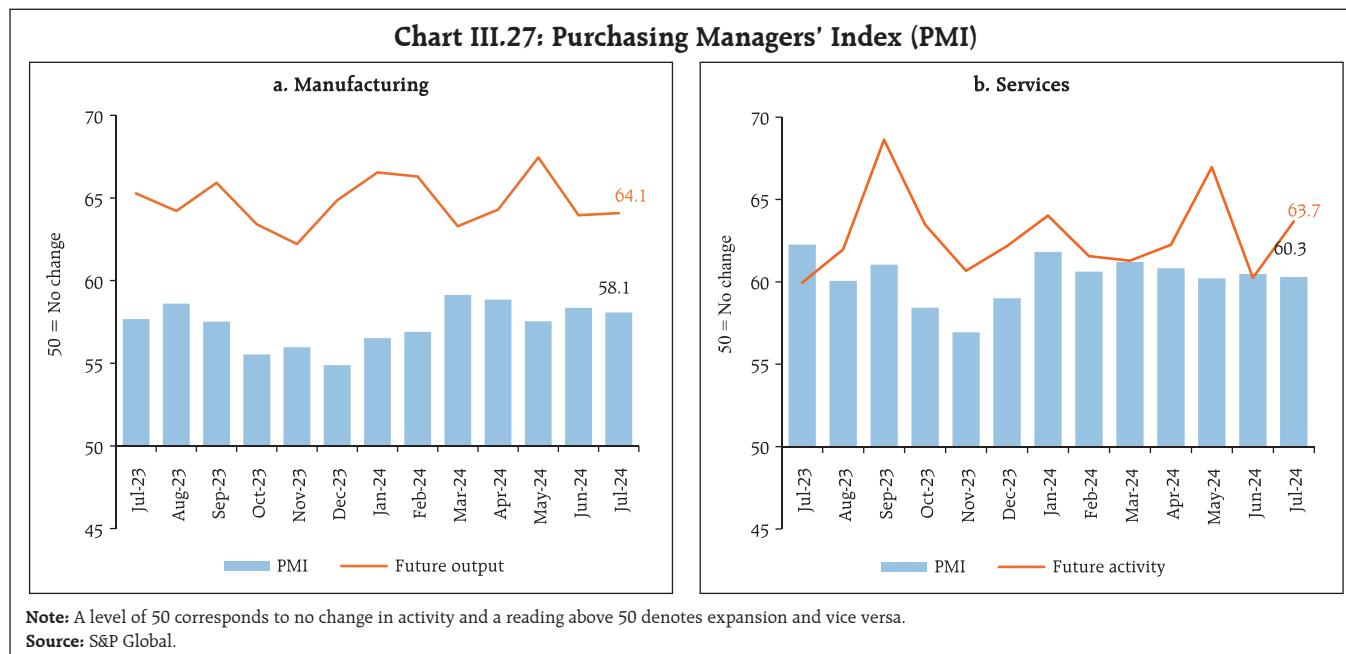
India's manufacturing PMI moderated marginally in July 2024 due to a slowdown in new orders and

Chart III.26: Kharif Acreage (As on August 09, 2024)



Source: MoAFW.

²⁵ Paddy accounts for almost 37 per cent of kharif full season normal area.

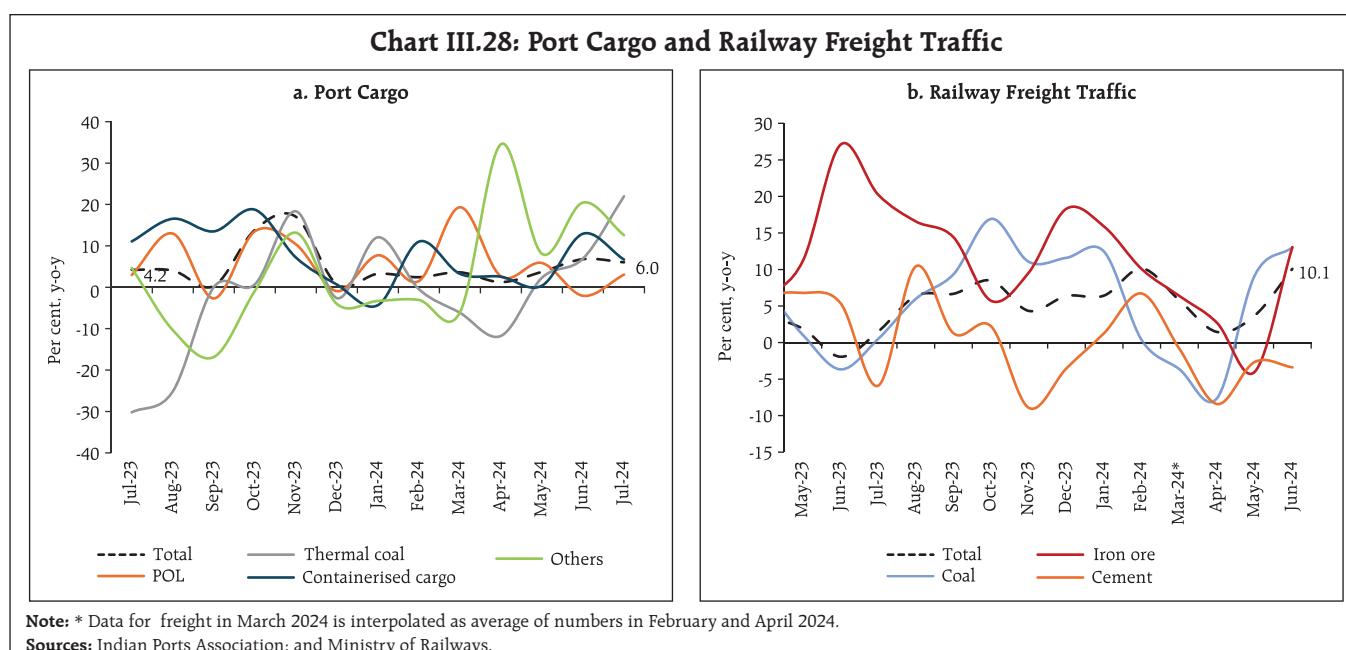


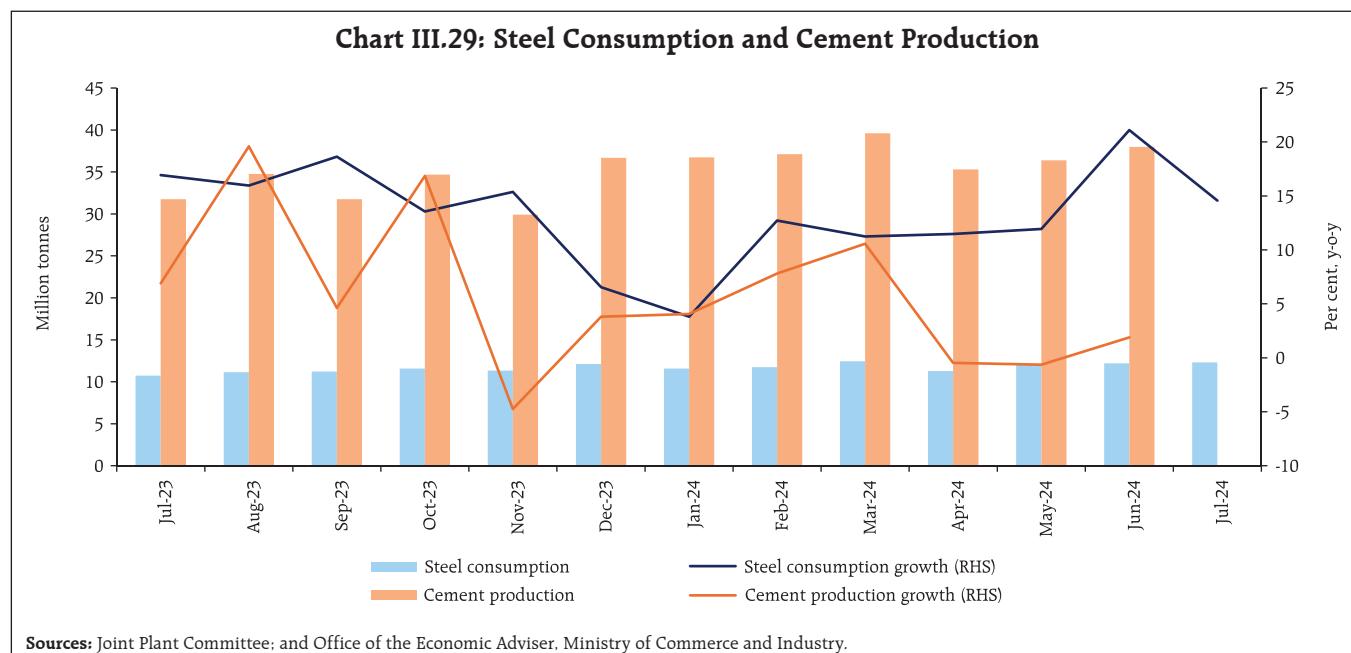
employment. However, future output in July 2024 was slightly better than in the previous month (Chart III.27a). The services sector PMI also moderated marginally in July. However, business expectations about future activity rebounded in July, driven by strong demand (Chart III.27b).

Freight transport continued its robust performance in July 2024. Port traffic increased by 6.0

per cent (y-o-y), boosted by thermal coal, container and other miscellaneous cargo (Chart III.28a). Railway freight traffic also accelerated in June led by coal and iron ore shipments (Chart III.28b).

The construction sector exhibited a mixed outlook, with steel consumption expanding by 14.6 per cent in July and cement production rising by a modest 1.9 per cent in June (Chart III.29).





Available high frequency indicators for the services sector reflect the resilience of activity in July 2024 (Table III.1).

Table III.1: High Frequency Indicators- Services

(y-o-y, per cent)

Sector	Indicator	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24
Urban demand	Passenger Vehicles Sales	17.3	4.3	3.2	13.9	5.7	8.9	1.2	4.3	4.9	-2.0
Rural demand	Two-Wheeler Sales	20.1	31.3	16.0	26.2	34.6	15.3	30.8	10.1	21.3	12.5
	Three-Wheeler Sales	42.1	30.8	30.6	9.5	8.3	4.3	14.5	14.7	12.3	5.1
	Tractor Sales	-4.3	6.4	-19.8	-15.3	-30.6	-23.1	-3.0	0.0	3.6	1.6
Trade, hotels, transport, communication	Commercial Vehicles Sales		3.2			-3.8			3.5		
	Railway Freight Traffic	8.5	4.3	6.4	6.4	10.1	8.6	1.4	3.7	10.1	
	Port Cargo Traffic	13.8	17.0	0.7	3.2	2.4	3.6	1.3	3.7	6.8	6.0
	Domestic Air Cargo Traffic*	10.6	9	8.7	10	11.5	8.7	0.3	10.3	10.3	-8.8
	International Air Cargo Traffic*	15	4.9	12.2	19.3	30.2	22.5	16.2	19.2	19.6	16.4
	Domestic Air Passenger Traffic*	10.7	8.7	8.1	5	5.8	4.7	3.8	5.9	6.9	6.0
	International Air Passenger Traffic*	17.5	19.8	18.1	17	19.3	15	16.8	19.6	11.3	9.5
	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
	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
	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
Construction	Hotel occupancy rate@	62.5	63.0	70.0	66.6	72.5	64.4	62.3	60.3	62.0	
	Average revenue per room	14.8	15.9	12.8	11.0	4.1	6.7	4.8	1.8	2.8	
	Tourist Arrivals	19.8	16.8	7.8	10.4	15.8	8.0	7.7	0.3		
PMI Index#	Steel Consumption	13.6	15.4	6.5	3.8	12.7	11.2	11.5	11.9	21.1	14.6
	Cement Production	17.0	-4.8	3.8	4.0	7.8	10.6	-0.5	-0.6	1.9	
PMI Index#	Services	58.4	56.9	59.0	61.8	60.6	61.2	60.8	60.2	60.5	60.3

<< Contraction ----- Expansion >>

Note: #: Data in levels. *: July 2024 data are based on the monthly average of daily figures. @: Data in rate, not in y-o-y rate of growth. 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 CPI²⁶, moderated sharply to 3.5 per cent in July 2024 from 5.1 per cent in June 2024 (Chart III.30). The 154 bps fall in inflation was on account of a favourable base effect of 2.9 per cent which more than offset a positive momentum of 1.4 per cent. Within overall CPI, prices increased by 2.5 per cent (m-o-m) in the food group and 0.5 per cent in the core group (*i.e.*, excluding food and fuel) whereas the fuel group recorded a 0.2 per cent decline in prices over the previous month.

Food inflation (y-o-y) declined to 5.1 per cent in July from 8.4 per cent in June, driven by a favourable base effect of 5.7 per cent which more than offset a strong momentum. In fact, the momentum of food prices at 2.5 per cent in July, over and above the momentum of 2.7 per cent recorded in June, indicates continuing build-up of underlying price pressures within the food group. In terms of sub-groups, inflation moderated in cereals, fruits, vegetables, pulses, sugar and non-alcoholic beverages but edged up in respect of meat, fish, eggs, and prepared meals.

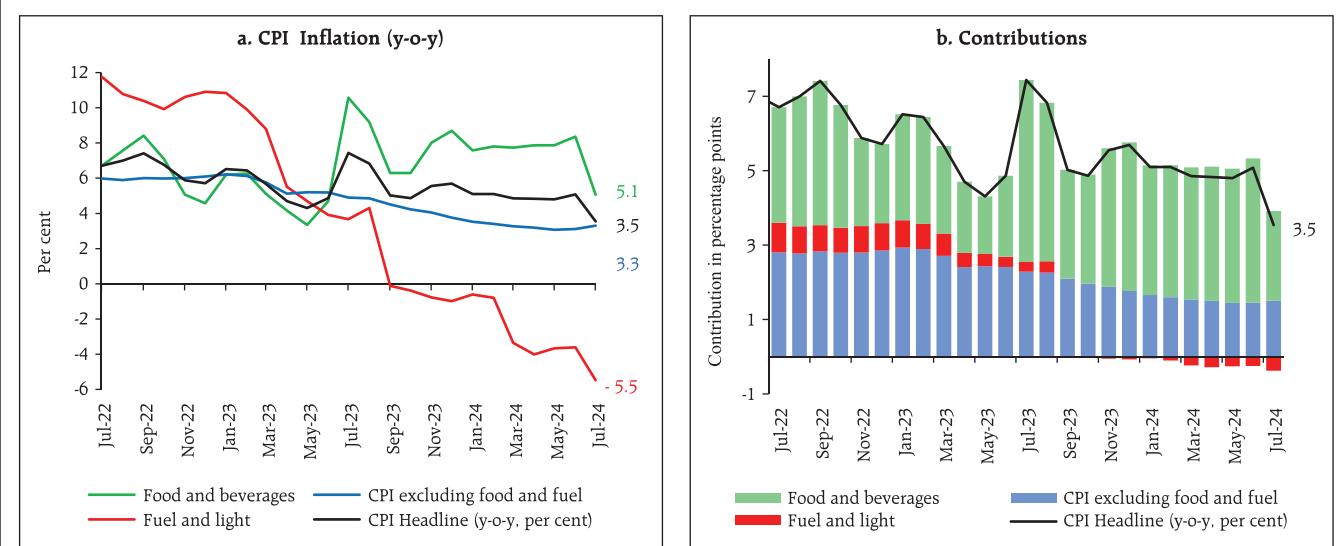
Spices prices slipped into deflation while edible oils and fats recorded a lower rate of deflation.

Vegetable prices inflation declined precipitously to 6.8 per cent in July from 29.3 per cent in June, recording its first single digit print in nine months. This was disproportionately driven by tomato prices. Despite a m-o-m price increase of 41.8 per cent in July 2024, y-o-y inflation in tomato prices plummeted on account of the base effect of the unprecedented price increase of 214.3 per cent recorded a year ago (July 2023).

Fuel and light deflation deepened to (-)5.5 per cent in July from (-)3.6 per cent in June. The CPI fuel group has been registering deflation for 11 consecutive months, reflecting the cumulative impact of sharp LPG price cuts in August 2023 and March 2024. This deflation deepened further in July due to kerosene prices slipping into deflation and a moderation in electricity and 'firewood and chips' inflation.

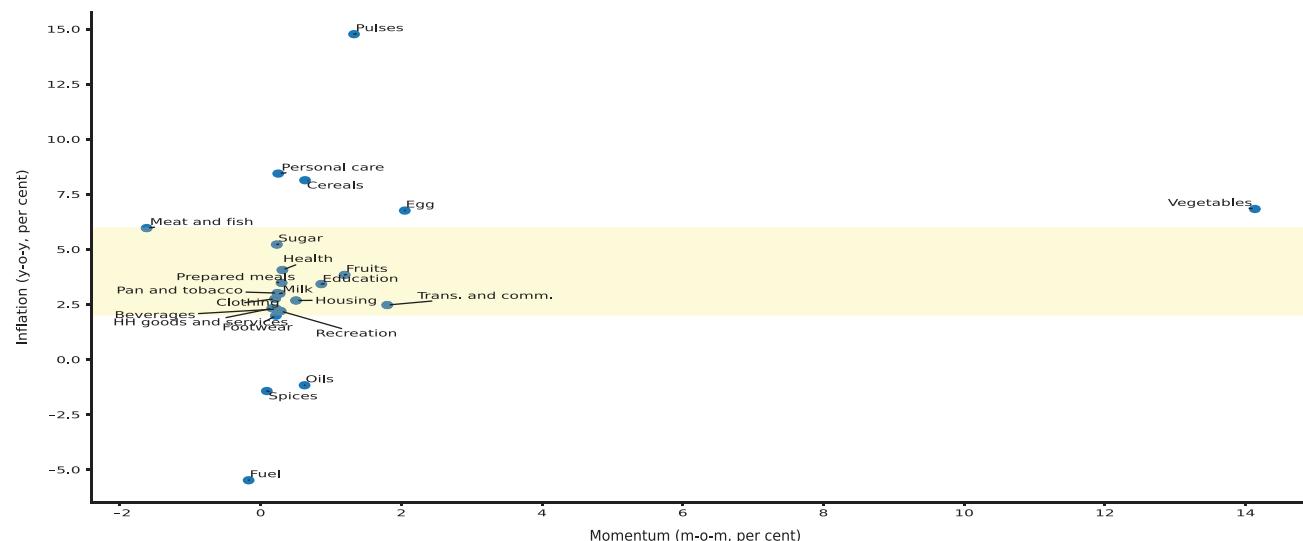
Core inflation edged up to 3.3 per cent in July 2024 from its historic low (in the current CPI (2012=100) series) of 3.1 per cent in May and June. A strong pick-up in momentum to 0.5 per cent in July from 0.1 per cent in June contributed to the

Chart III.30: Trends and Drivers of CPI Inflation



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

²⁶ As per the provisional data released by the NSO on August 12, 2024.

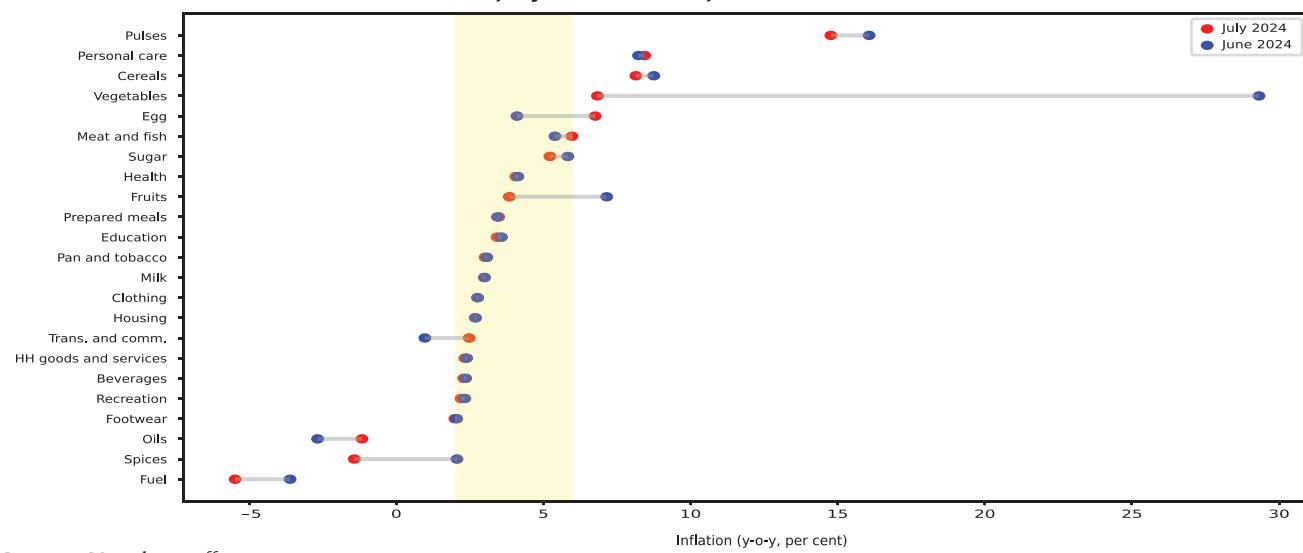
Chart III.31: Annual Inflation (y-o-y) and Momentum (m-o-m) across Sub-groups

Sources: NSO; and RBI staff estimates.

increase in core inflation. While inflation increased in the transport and communication sub-group (primarily on account of increase in mobile tariffs) and personal care and effects, it remained steady for sub-groups such as clothing and footwear, housing, and health. Pan, tobacco and intoxicants, recreation and amusement, household goods and services, and education, however, recorded a softening in inflation (Chart III.32).

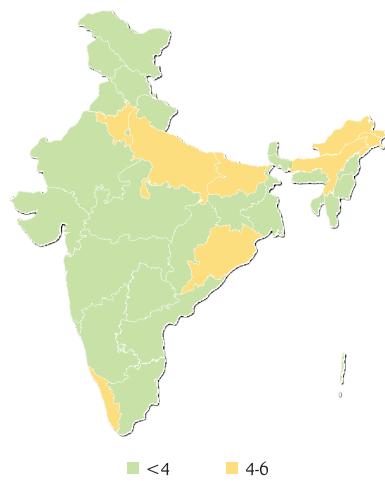
In terms of regional distribution, inflation eased in both rural and urban areas in July, with rural inflation at 4.1 per cent being higher than urban inflation at 3.0 per cent. All the states registered inflation less than 6 per cent (Chart III.33).

High frequency food price data for August so far (up to 12th) show that the price of cereals, pulses and edible oil recorded a broad-based moderation.

**Chart III.32: Annual Inflation across Sub-groups
(July 2024 versus June 2024)**

Sources: NSO; and RBI staff estimates.

Chart III.33: Spatial Distribution of Inflation: July 2024 (CPI-Combined, y-o-y, per cent)



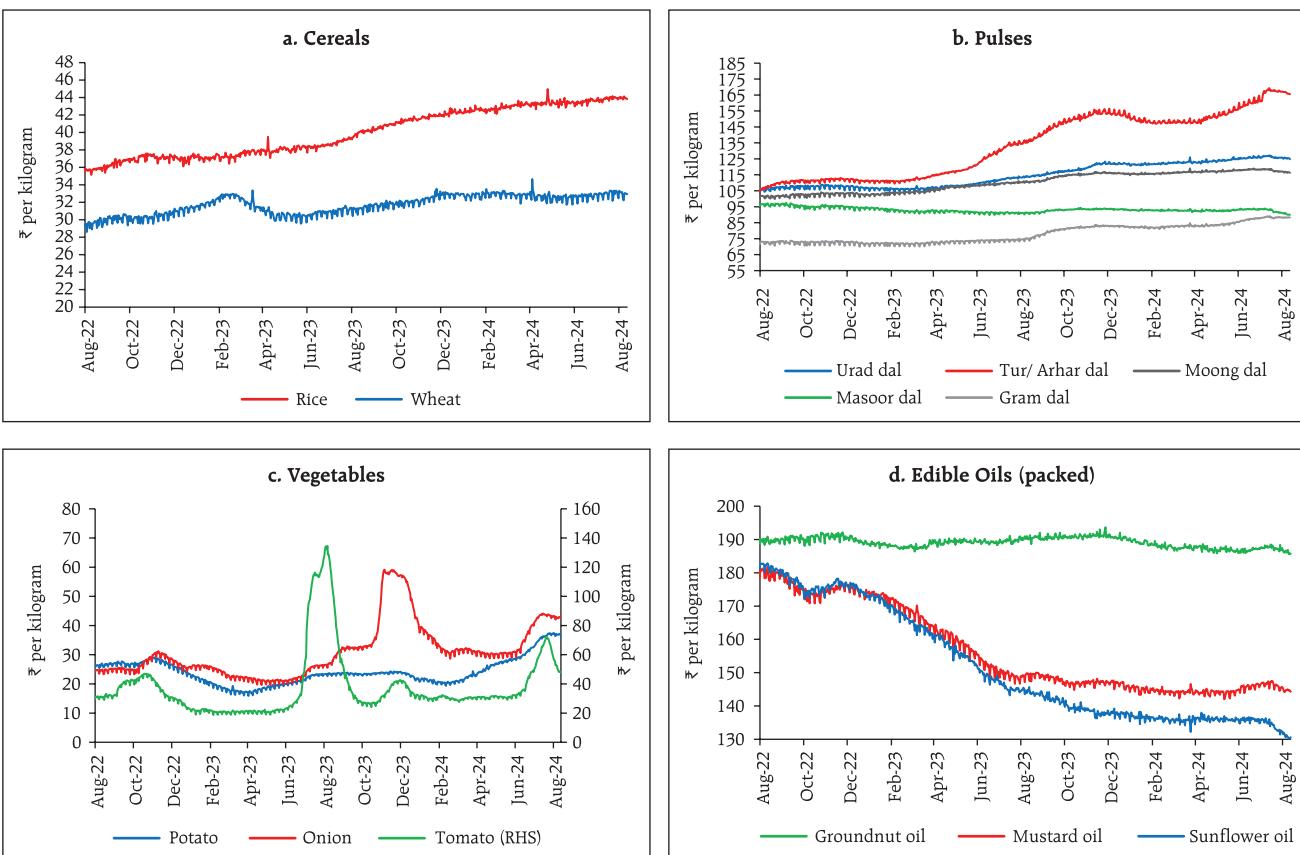
Note: Map is for illustrative purposes only.

Sources: NSO; and RBI staff estimates.

Among key vegetables, potato prices continued to edge up, while onion and tomato prices declined (Chart III.34).

Despite the moderation in headline inflation and overall food inflation, y-o-y inflation in cereal prices remains high at 8.1 per cent in July. In order to address these price pressures, the government approved the sale of wheat and rice in the open market at ₹2325/quintal and ₹2800/quintal, respectively, from August 01, 2024.²⁷ Also, the government announced that the grain-deficient states can directly purchase rice from FCI at ₹2800/quintal under the open market sale scheme (OMSS) without participating in the e-auction (w.e.f. August 01, 2024).

Chart III.34: DCA Essential Commodity Prices



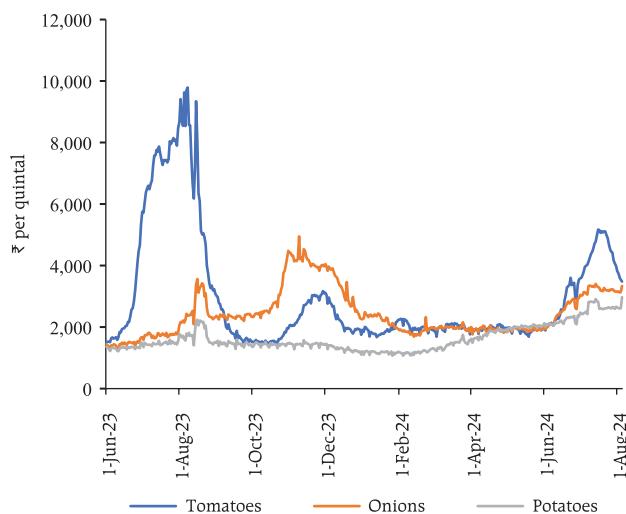
Sources: Department of Consumer Affairs, GoI; and RBI staff estimates.

²⁷ Food Corporation of India (FCI) will decide the exact quantity of grain stocks to be offloaded in consultation with the Ministry after keeping the stock for PDS and buffer norm requirements.

As on August 05, 2024 the government has procured 524 lakh tonnes of rice in the *Kharif* marketing season (KMS) 2023-24, which is 8 per cent lower than in the last season. However, the stock of rice, as on July 16, 2024 stood at 473 lakh tonnes, which was 21 per cent higher than the same period last year. Procurement of wheat at 266 lakh tonnes in the *Rabi* marketing season (RMS) 2024-25 was 2 per cent higher than last year. The stock of wheat as on July 16, 2024 stood at 276 lakh tonnes, sufficient to cover the buffer norm (Chart III.35).

These measures and easing of monsoon disrupted supply chain and logistical problems have helped ease pressure on vegetables prices in recent weeks (Chart III.36). On July 29, 2024 the government announced procurement from the major *mandis* and distribution of tomatoes at major consumption centres at a rate of ₹60 per kg. Onion mandi prices have also moderated since mid-July. In case of potatoes, however, heatwave and untimely rains caused production losses in major producing regions leading to price pressures. Supply prospects for onions, tomatoes and potatoes have been further boosted by the satisfactory progress of

Chart III.36: Daily Mandi Prices (TOP Crops)



Sources: Food Corporation of India; and Centre for Monitoring Indian Economy.

monsoon rainfall this year, which is also reflected in higher target for kharif acreage under all the three crops.

Retail selling prices of petrol and diesel were kept unchanged in August so far (up to 12th). Both kerosene and LPG prices also remained unchanged in August so far (Table III.2).

The PMIs for July 2024 indicated that input costs across both manufacturing and service firms increased

Chart III.35: Central Public Distribution System

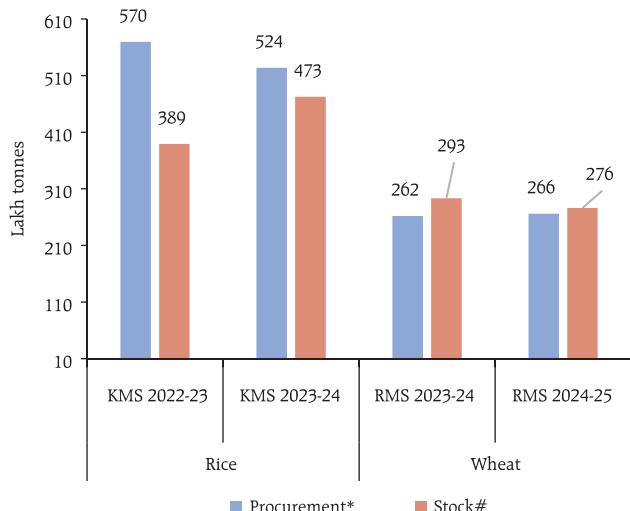


Table III.2: Petroleum Products Prices

Item	Unit	Domestic Prices			Month-over-month (per cent)	
		Aug-23	Jul-24	Aug-24^	Jul-24	Aug-24^
Petrol	₹/litre	102.92	100.97	100.97	0.1	0.0
Diesel	₹/litre	92.72	90.42	90.42	-0.3	0.0
Kerosene (subsidised)	₹/litre	47.65	46.65	46.65	0.1	0.0
LPG (non-subsidised)	₹/cylinder	913.25	813.25	813.25	0.0	0.0

^ : For the period August 1-12, 2024.

Note: Other than kerosene, prices represent the average Indian Oil Corporation Limited (IOCL) prices in four major metros (Delhi, Kolkata, Mumbai and Chennai). For kerosene, prices denote the average of the subsidised prices in Kolkata, Mumbai and Chennai.

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

Chart III.37: PMI: Input and Output Prices

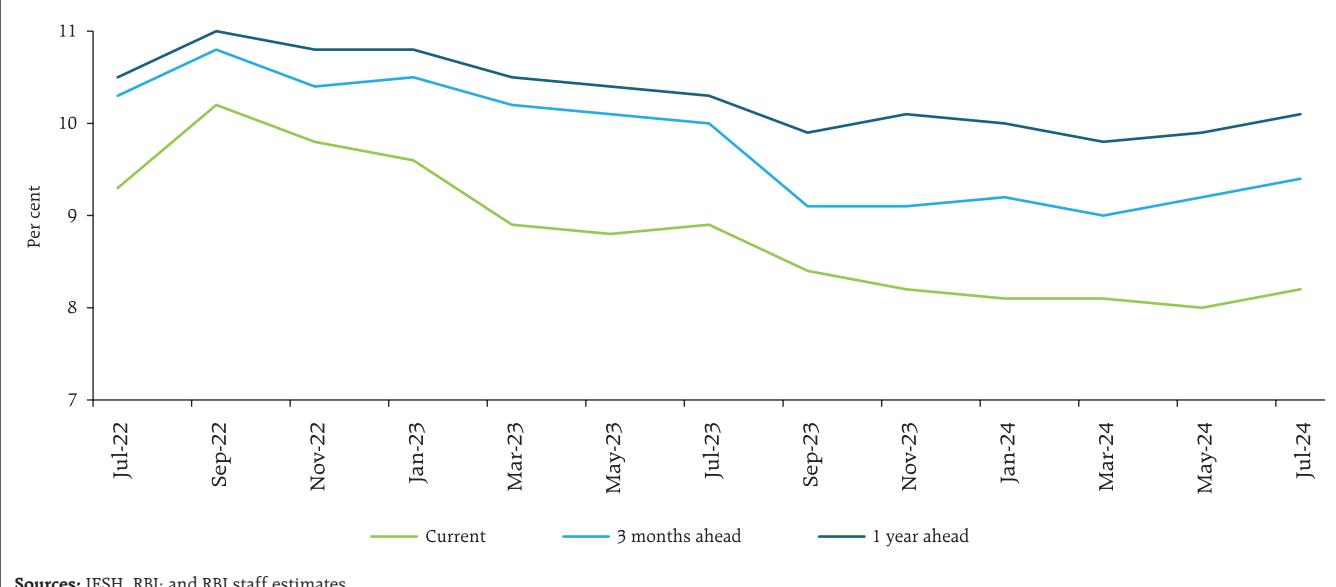
Source: S&P.

significantly. Selling prices also firmed up in both manufacturing and services, with manufacturing output prices recording the highest level in eleven years (Chart III.37).

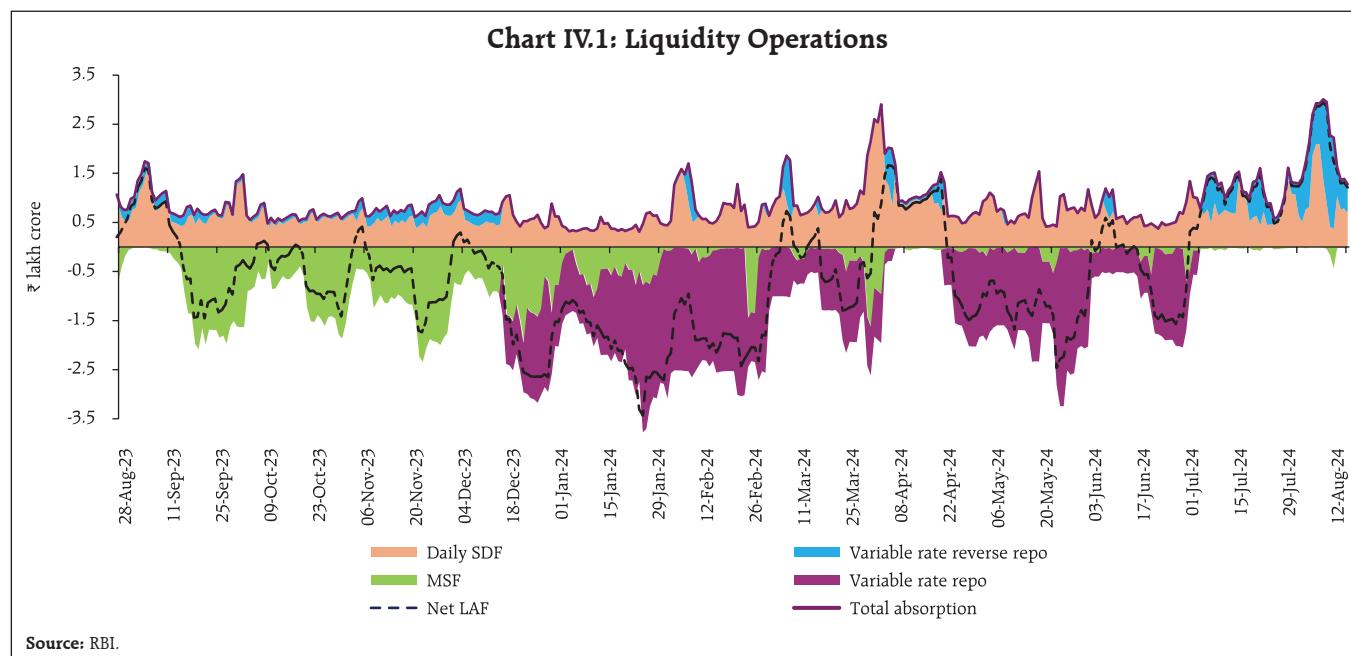
In the latest bi-monthly round of the RBI's survey, perceptions and inflation expectations of households hardened by 20 bps each for 3-month and one-year ahead horizons (Chart III.38).

IV. Financial Conditions

System liquidity remained in surplus during July and August so far on the back of increase in government spending, return of currency to the banking system and the Reserve Bank's forex operations. The average daily net absorption under the liquidity adjustment facility (LAF) increased to ₹1.52 lakh crore during July 16 to August 15, 2024

Chart III.38: Households' Median Inflation Expectations

Sources: IESH, RBI; and RBI staff estimates.



from ₹0.09 lakh crore during June 16 – July 15, 2024 (Chart IV.1). In response to the evolving liquidity conditions, the Reserve Bank conducted two main and seventeen fine-tuning variable rate reverse repo (VRRR) operations (overnight to 7 days maturity), cumulatively mopping up ₹5.54 lakh crore from the system. Additionally, open market sales through the NDS-OM²⁸ amounting to ₹0.14 lakh crore were conducted during July-August (up to August 9).

During the second half of July through August 15, 2024, average total liquidity absorption stood at ₹1.61 lakh crore. Of this, the amount absorbed through the standing deposit facility (SDF) was 52 per cent as against 76 per cent during June 16 to July 15, 2024. Given the tepid response of banks in parking surplus liquidity for longer tenors – as reflected in the lower bid-offer ratio in the main VRRR operations – more fine-tuning operations were conducted in July and August.

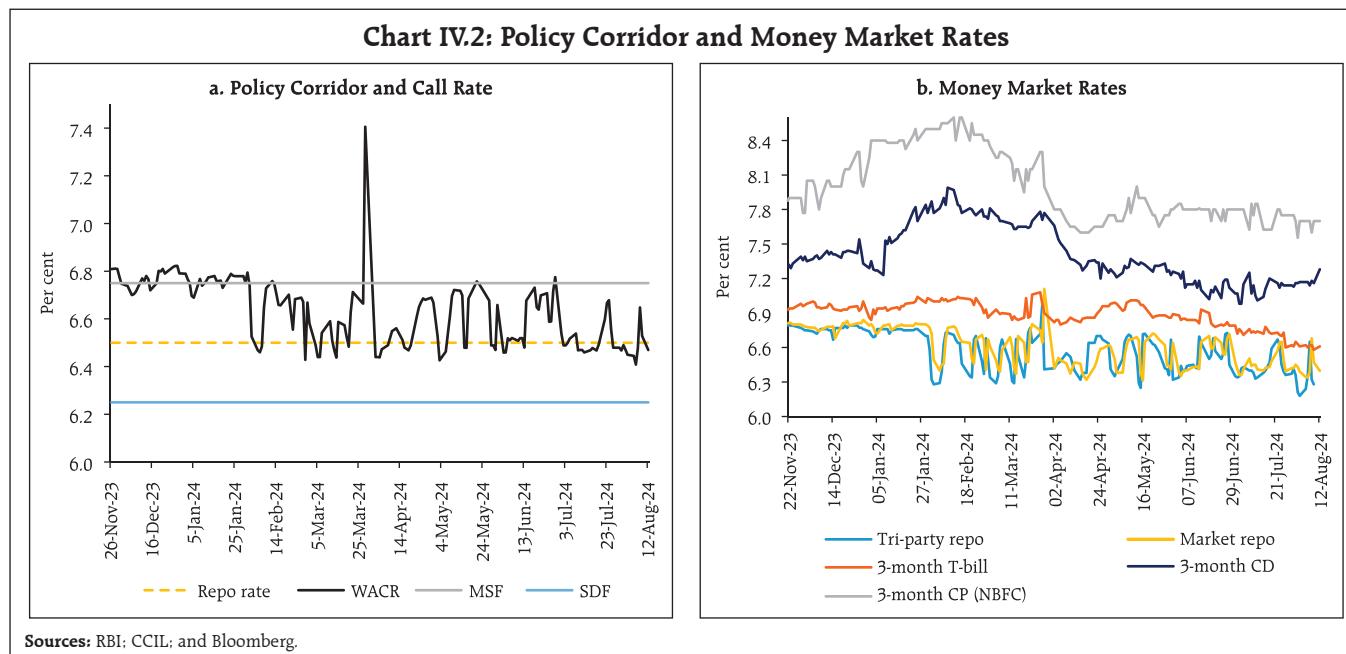
Given surplus liquidity conditions, the banking sector's reliance on the marginal standing facility (MSF) waned, with average daily borrowings declining

to ₹0.04 lakh crore during the period July 16 to August 15, 2024 as compared with ₹0.11 lakh crore during June 16 to July 15, 2024.

Reflecting the easy liquidity conditions, the weighted average call rate (WACR) – the operating target of monetary policy – softened and averaged 6.51 per cent during July 16 to August 14, 2024 as compared with 6.57 per cent during June 16 to July 15, 2024 (Chart IV.2a). Rates in the collateralised segment moved in tandem with the WACR. On an average, the triparty repo rate and market repo rate traded 10 basis points basis points (bps) and 4 bps, respectively, below the policy repo rate during July 16 to August 14, 2024 (Chart IV.2b).

In the short-term money market segment, rates on 3-month certificates of deposit (CDs) hardened while that on commercial paper (CP) for NBFCs remained broadly stable. The yields on 3-month treasury bills (T-bills) softened due to improved liquidity in the banking system amidst lower market borrowing requirements. With the moderation in the risk-free rate, the average risk premium in the money market (spread between 3-month CP and 91-day T-bill

²⁸ Negotiated Dealing System – Order Matching segment.

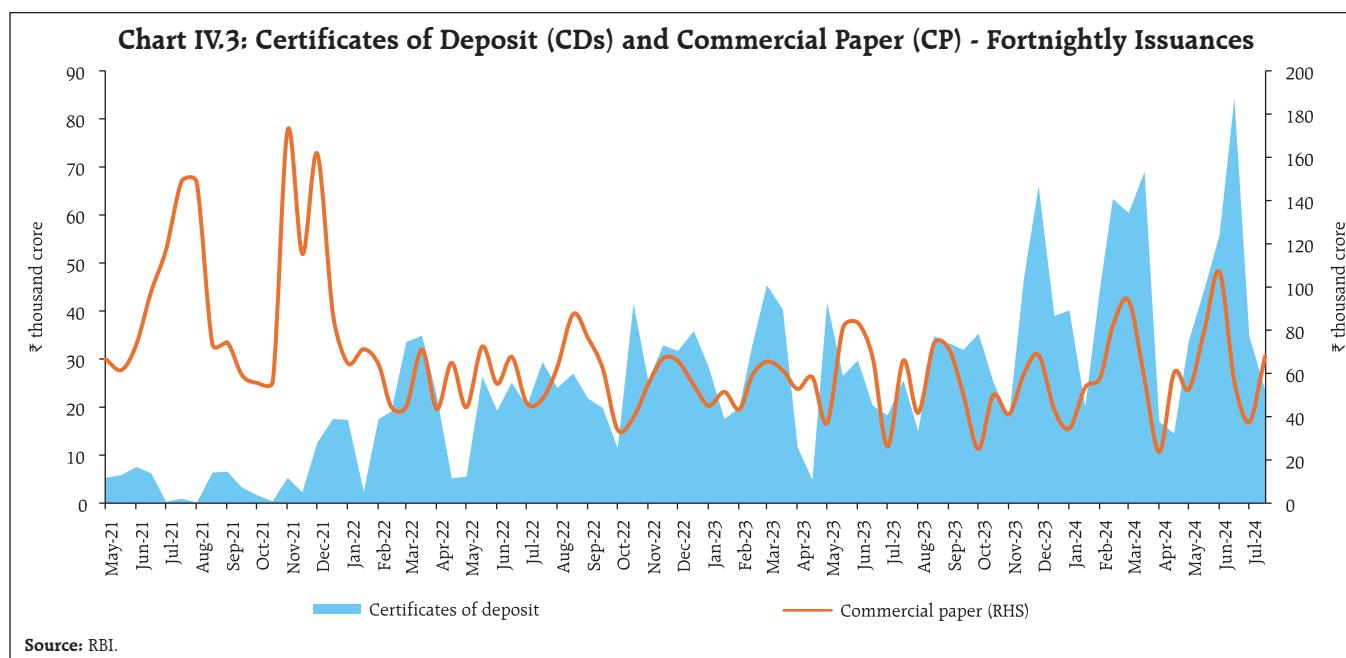


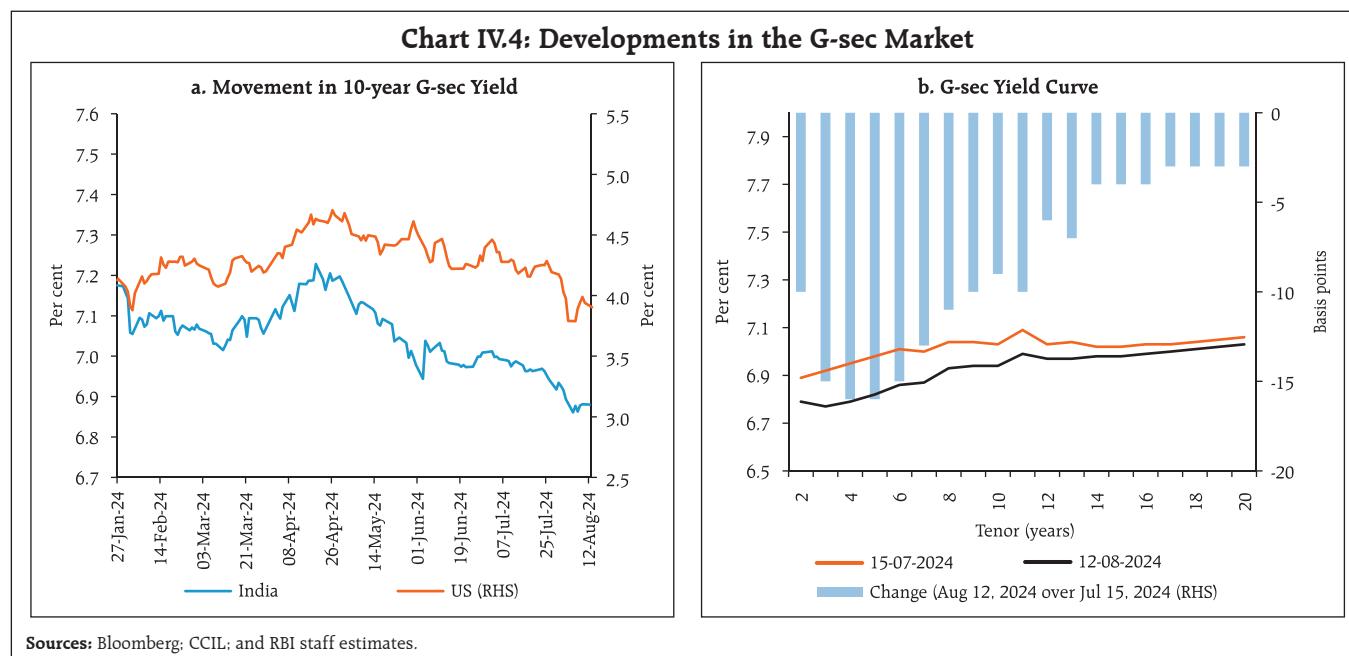
rates) increased to 103 bps during July 16 - August 14, 2024 from 100 bps in the preceding period.

In the primary market, CD issuances amounted to ₹3.49 lakh crore during 2024-25 (up to August 9), significantly higher than ₹1.89 lakh crore in the corresponding period of the previous year (Chart IV.3). This increase can be attributed to deposit growth lagging credit growth, prompting banks to

rely on alternative sources of funding. CP issuances also increased to ₹4.86 lakh crore during 2024-25 (up to July 31), surpassing ₹4.72 lakh crore in the corresponding period of the previous year, driven by NBFCs' higher borrowings in the CP market.

In the fixed income segment, domestic bond yields eased sharply, reflecting positive sentiment following the inclusion of Indian government





securities (G-sec) in the global bond index, the gross fiscal deficit - gross domestic product (GFD-GDP) ratio being budgeted lower and reduced market borrowing requirements announced in the Union Budget 2024-25. Additionally, falling US treasury yields exerted downward pressure. The yield on the 10-year Indian benchmark G-sec closed lower at 6.88 per cent on August 14, 2024 from 6.86 per cent on July 15, 2024 (Chart IV.4a).

With the easing of liquidity conditions, the yield curve shifted downward across the entire term structure, with the shift being more pronounced at

the short to mid end of the curve in comparison to the longer end (Chart IV.4b). Resultantly, the yield curve steepened with improved liquidity and reduced T-bill supply.

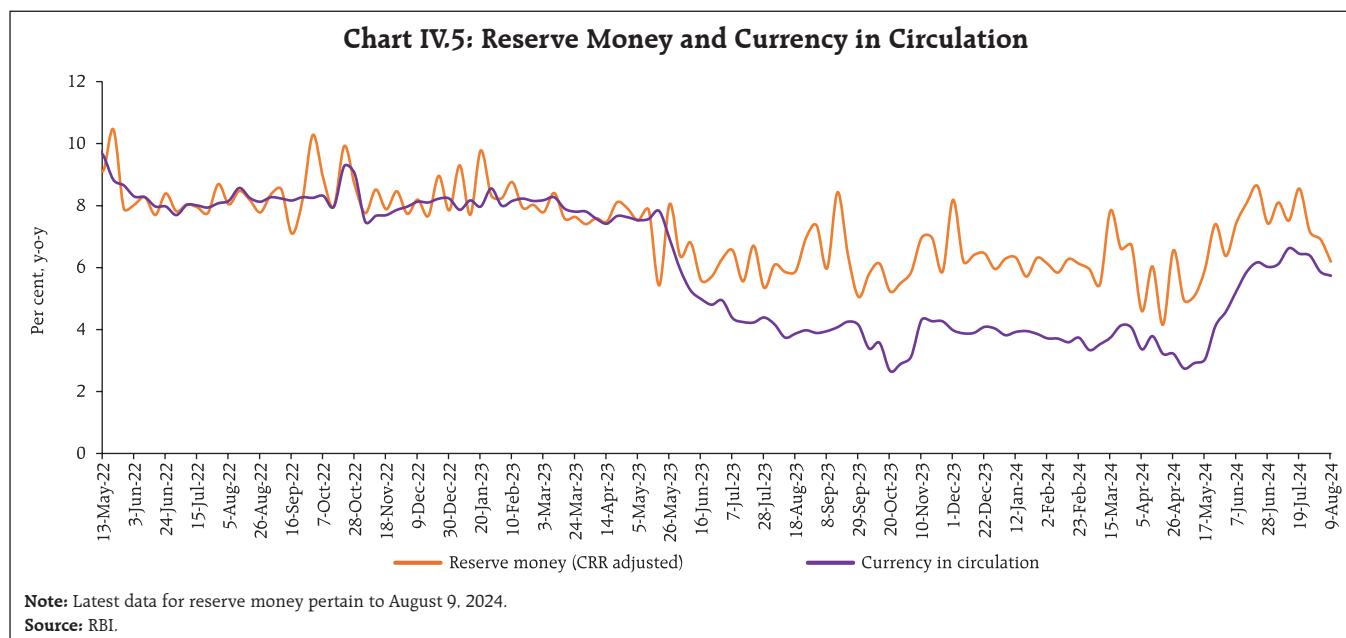
Corporate bonds yields eased across diverse ratings and issuer categories during mid-July and August so far (up to August 13), tracking the movements in G-sec yields. The risk premium in the corporate bond market declined for most tenors (Table IV.1). Overall, corporate bond issuances during 2024-25 (up to June) was lower at ₹1.58 lakh crore compared to ₹2.36 lakh crore during the same period of the previous year.

Table IV.1: Financial Markets - Rates and Spread

Instrument	Interest Rates (per cent)			Variation (4 = 3-2)	Spread (basis points)			
			Jun 18, 2024 – Jul 15, 2024		Jul 16, 2024 – Aug 13, 2024	(Over Corresponding Risk-free Rate)		
	1	2			3	5	6	
Corporate Bonds								
(i) AAA (1-year)		7.81	7.65	-15	76	75	-1	
(ii) AAA (3-year)		8.07	7.84	-23	100	88	-12	
(iii) AAA (5-year)		7.83	7.75	-8	70	77	7	
(iv) AA (3-year)		8.78	8.53	-25	170	158	-12	
(v) BBB- (3-year)		12.41	12.13	-28	533	517	-16	

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

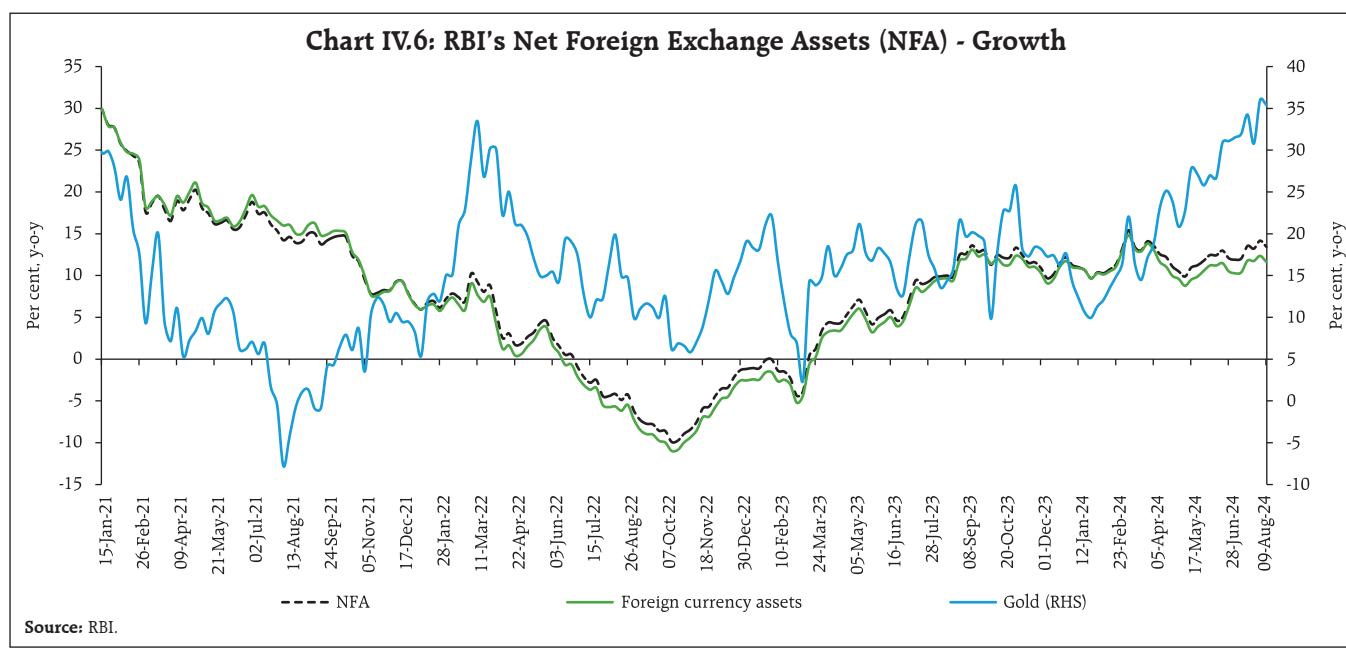
Sources: FIMMDA; and Bloomberg.



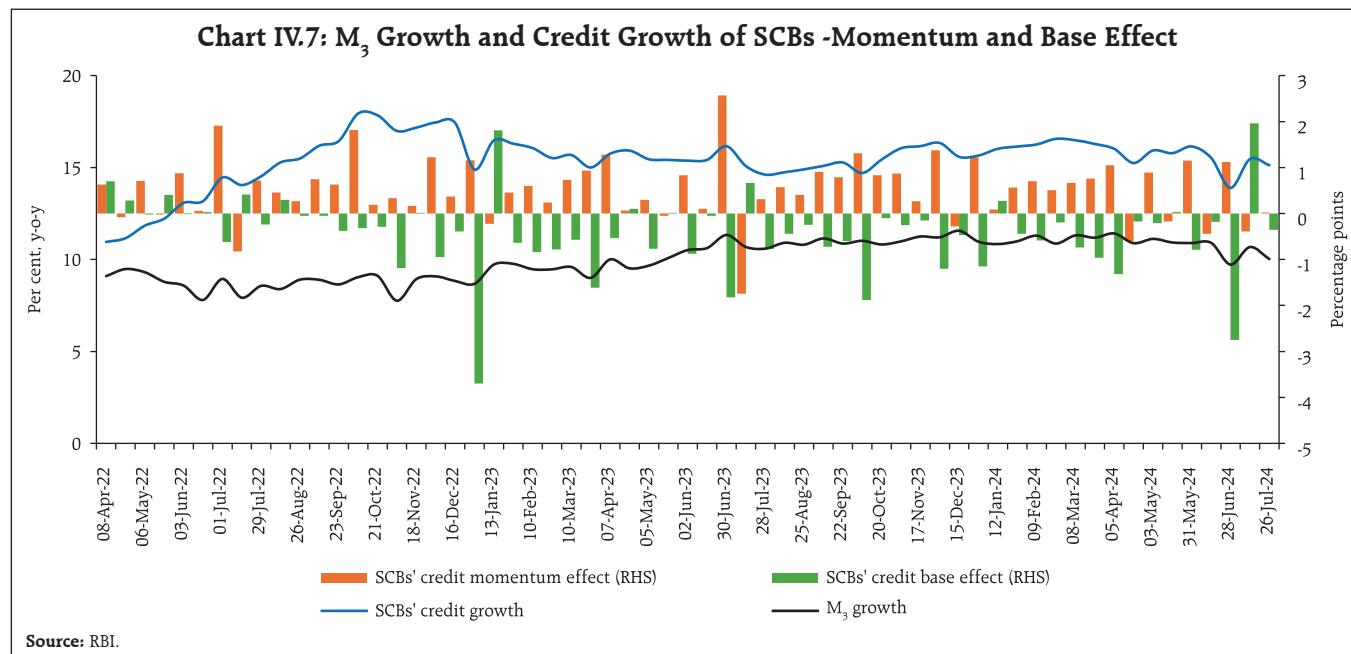
Reserve money (RM), excluding the first-round impact of changes in the cash reserve ratio (CRR), recorded a growth of 6.2 per cent (y-o-y) as on August 9, 2024 (5.9 per cent a year ago) [Chart IV.5]. Growth in currency in circulation (CiC), the largest component of RM, increased to 5.7 per cent (y-o-y) as on August 9, 2024 from 3.0 per cent as on May 17, 2024, on account of the base effect of the withdrawal of ₹2000 banknotes²⁹ – 97.92 per cent has been

returned to the banking system, mostly in the form of deposits (as on July 31, 2024).

On the sources side (assets), foreign currency assets (accounting for more than 90 per cent of NFA) recorded growth of 11.6 per cent (y-o-y) as on August 9, 2024. Gold - the other major component of NFA - continued to grow over 35 per cent (y-o-y) during August 2024, which is the highest since January 2021, mainly due to revaluation gains on gold prices (Chart IV.6).



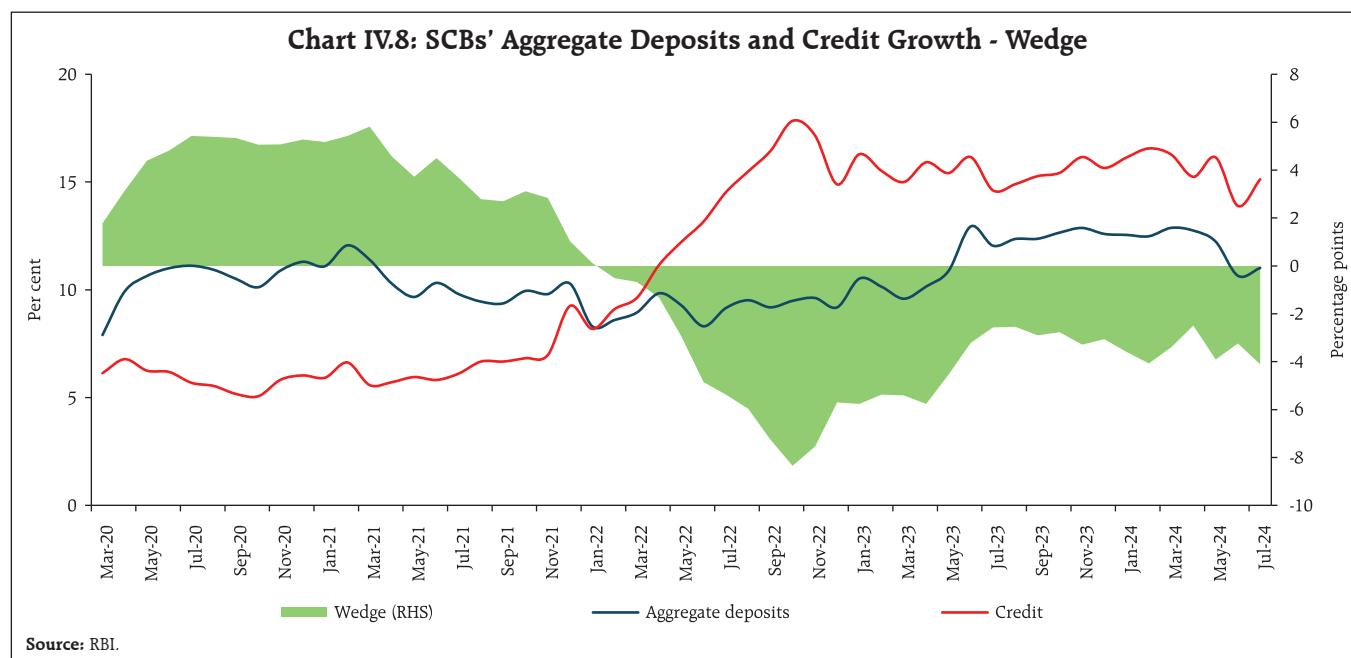
²⁹ Announced on May 19, 2023.



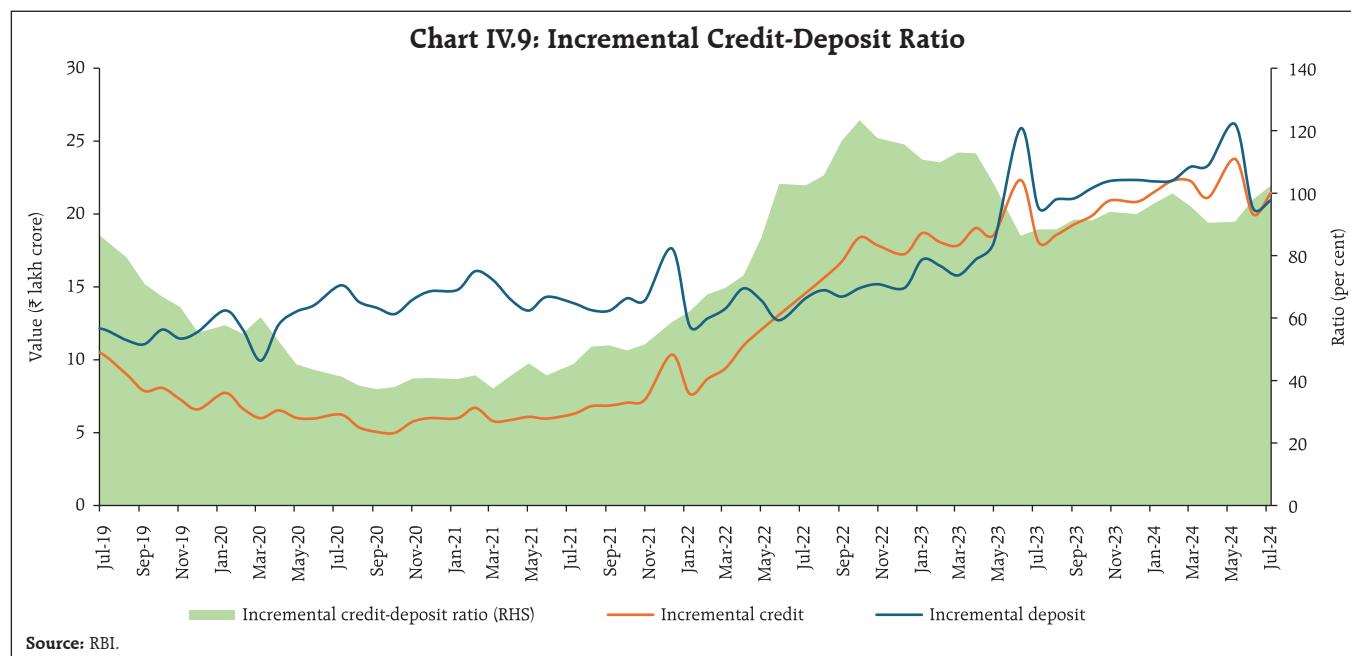
Money supply (M_3) rose by 10.0 per cent (y-o-y) as on July 26, 2024 (10.6 per cent a year ago).³⁰ Aggregate deposits with banks, the largest component of M_3 , increased by 10.5 per cent (11.5 per cent a year ago). Scheduled commercial banks' (SCBs') credit growth stood at 15.1 per cent as on July 26, 2024 (14.6 per cent a year ago) [Chart IV.7].

SCBs' deposit growth (excluding the impact of the merger), which witnessed an increase in the wake of withdrawal of ₹2000 banknotes, has remained in double digits since April 2023 (Chart IV.8).

As on July 26, 2024, SCBs' incremental credit-deposit ratio was at 102.4 per cent (Chart IV.9). With the statutory requirements for CRR and SLR at 4.5 per



³⁰ Excluding the impact of the merger of a non-bank with a bank (with effect from July 1, 2023).



cent and 18 per cent, respectively, around 77 per cent of deposits were available with the banking system for credit expansion as on July 26, 2024. Further, growth in SLR investments has accelerated while non-SLR investments have decelerated in the month of July 2024. The deposit base was supplemented by CDs issuances.

In response to the 250 bps policy rate hike since May 2022, SCBs have revised their repo-linked external benchmark-based lending rates (EBLRs) upwards by a similar magnitude. The 1-year median marginal cost of funds-based rate (MCLR) of SCBs increased by 170 bps during May 2022 to July 2024. Consequently,

weighted average lending rates (WALRs) on fresh and outstanding rupee loans increased by 181 bps and 119 bps, respectively, during May 2022 to June 2024. The weighted average domestic term deposit rates (WADTDRs), which include retail and bulk deposits, on fresh and outstanding deposits increased by 243 bps and 188 bps, respectively, during the same period (Table IV.2).

Across bank groups, the increase in lending rates on fresh and outstanding rupee loans was lower for public sector banks (PSBs) than for private banks. On the other hand, deposit rates were higher in the case of PSBs (Chart IV.10).

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

(Variation in bps)

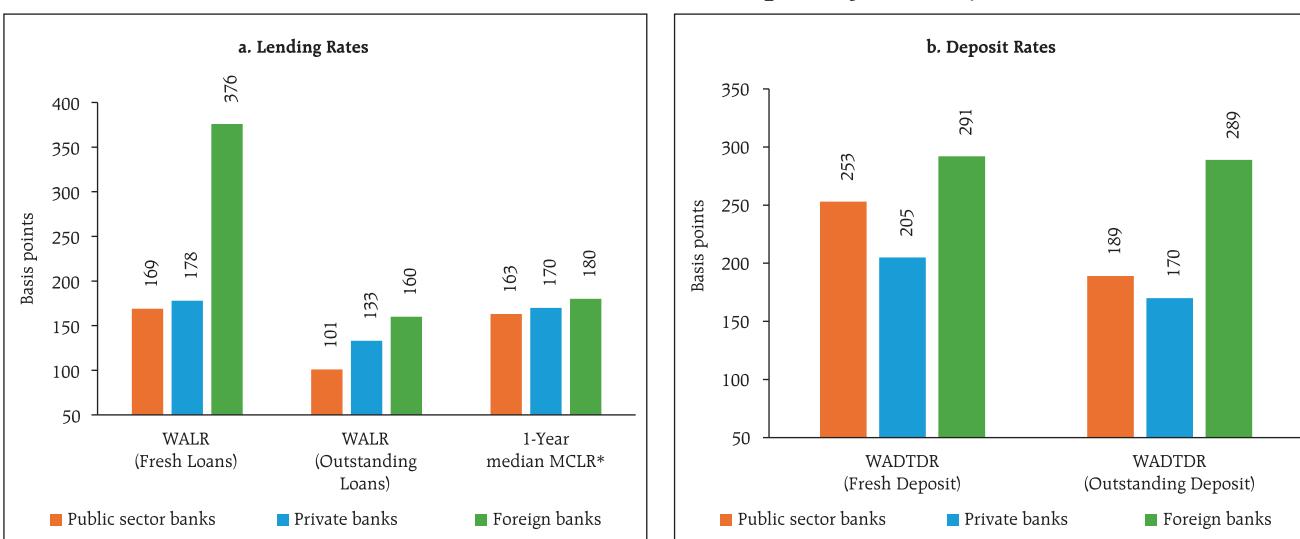
Period	Repo Rate	Term Deposit Rates		Lending Rates			
		WADTDR – Fresh Deposits	WADTDR- Outstanding Deposits	EBLR*	1-Yr. MCLR (Median)*	WALR - Fresh Rupee Loans	WALR- Outstanding Rupee Loans
May 2022 to June 2024	+250	243	188	250	170	181	119

Notes: 1. Data on EBLR pertain to 32 domestic banks.

2. *: Data on EBLR and MCLR pertain to July 2024.

3. **WALR:** Weighted Average Lending Rate. **WADTDR:** Weighted Average Domestic Term Deposit Rate; **MCLR:** Marginal Cost of Funds-based Lending Rate; **EBLR:** External Benchmark based Lending Rate.

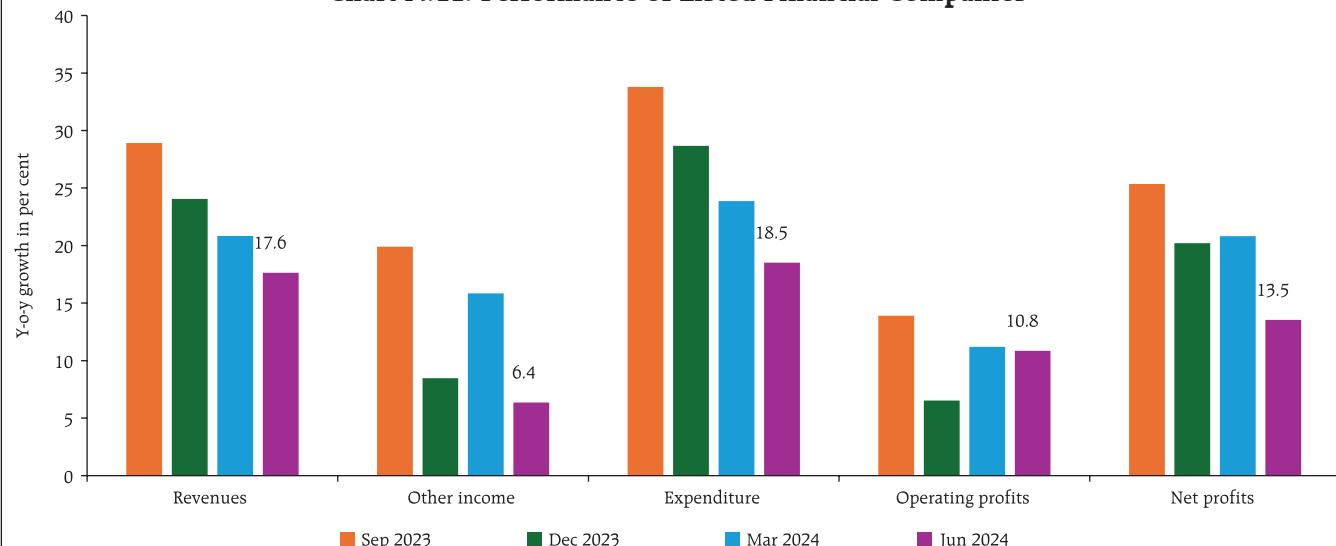
Source: RBI.

Chart IV.10: Transmission across Bank Groups (May 2022 to June 2024)

Note: *Data on 1-year median MCLR pertain to May 2022 to July 2024.
Source: RBI.

During Q1:2024-25, the listed Indian banking and financial sector companies³¹ maintained top-line and bottom-line growth (Chart IV.11). Revenues, primarily including interest income in case of banks, exhibited double digit growth, albeit with a sequential moderation. However, growth of other income, which includes income from fees, commissions, profit and

loss from investments, remained modest during the quarter. An increase in interest expenses led to expenditure growth moderately outpacing revenue growth during the quarter. However, slower growth of provisioning costs resulted in net profits growing at a faster rate than operating profits.

Chart IV.11: Performance of Listed Financial Companies

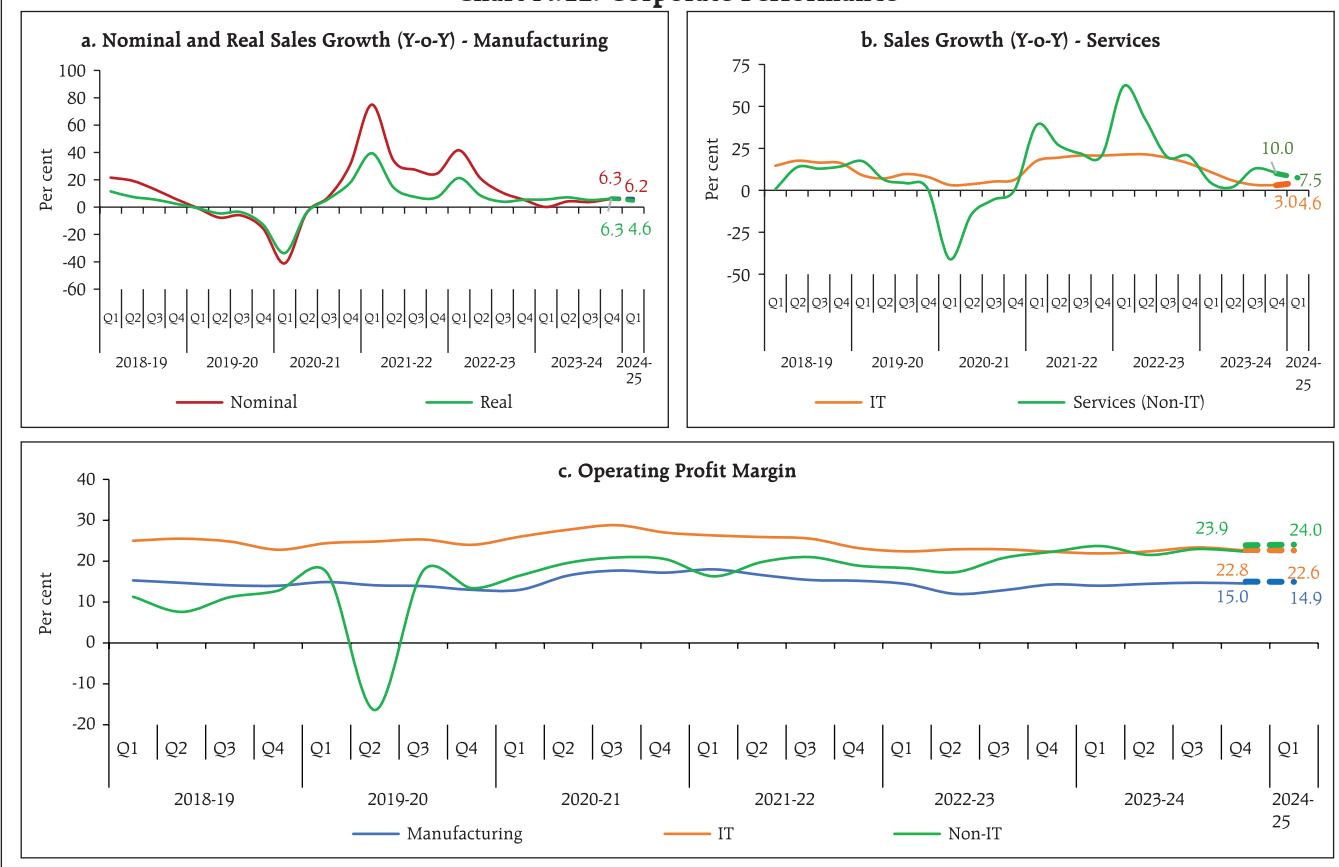
³¹ Based on a sample of 340 companies constituting around 60 per cent of the total market capitalisation of listed banking and financial sector companies.

Sales of early-reporting listed private non-financial companies³² grew by 7 per cent (y-o-y) in Q1:2024-25. In real terms, sales growth of manufacturing firms stood at 4.6 per cent (Chart IV.12a). Sales of manufacturing, information technology (IT) and non-IT service companies recorded a y-o-y growth of 6.2 per cent, 4.6 per cent and 7.5 per cent, respectively (Chart IV.12b). The operating profit margins of manufacturing, IT and non-IT service companies have been stable in recent quarters (Chart IV.12c).

The private capex outlook remains upbeat, with the total cost of projects sanctioned/assisted³³ during Q1:2024-25 of ₹ 1,01,433 crore exceeding the quarterly average total cost of projects sanctioned during 2023-24 (₹ 97,745 crore). Funds raised through initial public offerings (IPOs) that are earmarked for capex increased sequentially (q-o-q) during Q1 (Chart IV.13).

During July-August 2024 so far, Indian equity markets remained volatile, tracking global cues. The BSE Sensex increased by 1.78 per cent to close at 80,437 on August 16, 2024 (Chart IV.14). After gaining around 2 per cent in the first half of July, markets declined as higher-than-expected US jobless claims and a global technical outage that affected several businesses dented investor sentiments globally. Markets, however, recovered partially towards end July, before correcting sharply in the first week of August on concerns regarding the health of the US economy. Further, escalating geopolitical tensions and sharp swings in the Japanese markets added to overall uncertainty. Subsequently, the domestic markets picked up as global markets stabilised following robust macroeconomic data releases from the US.

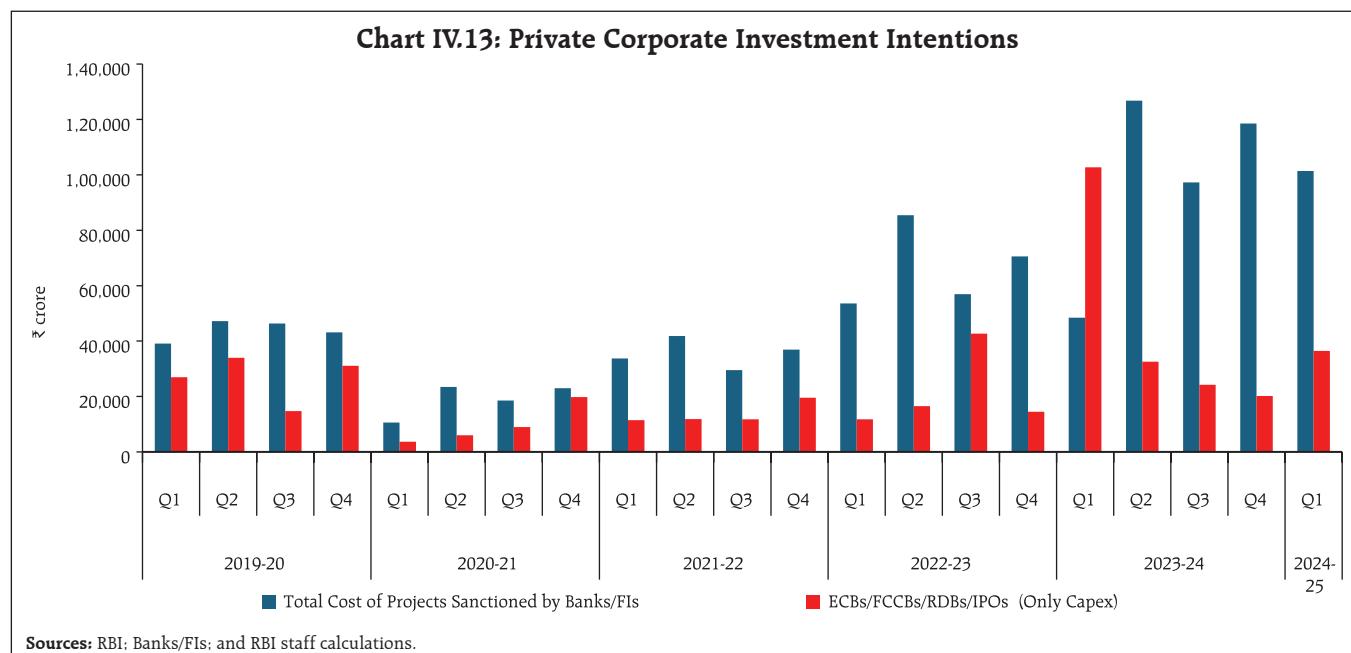
Chart IV.12: Corporate Performance



Note: *Data on 1-year median MCLR pertain to May 2022 to July 2024.
Source: RBI.

³² Based on 1795 early-reporting companies, with 91 per cent coverage in terms of sales during Q4:2023-24.

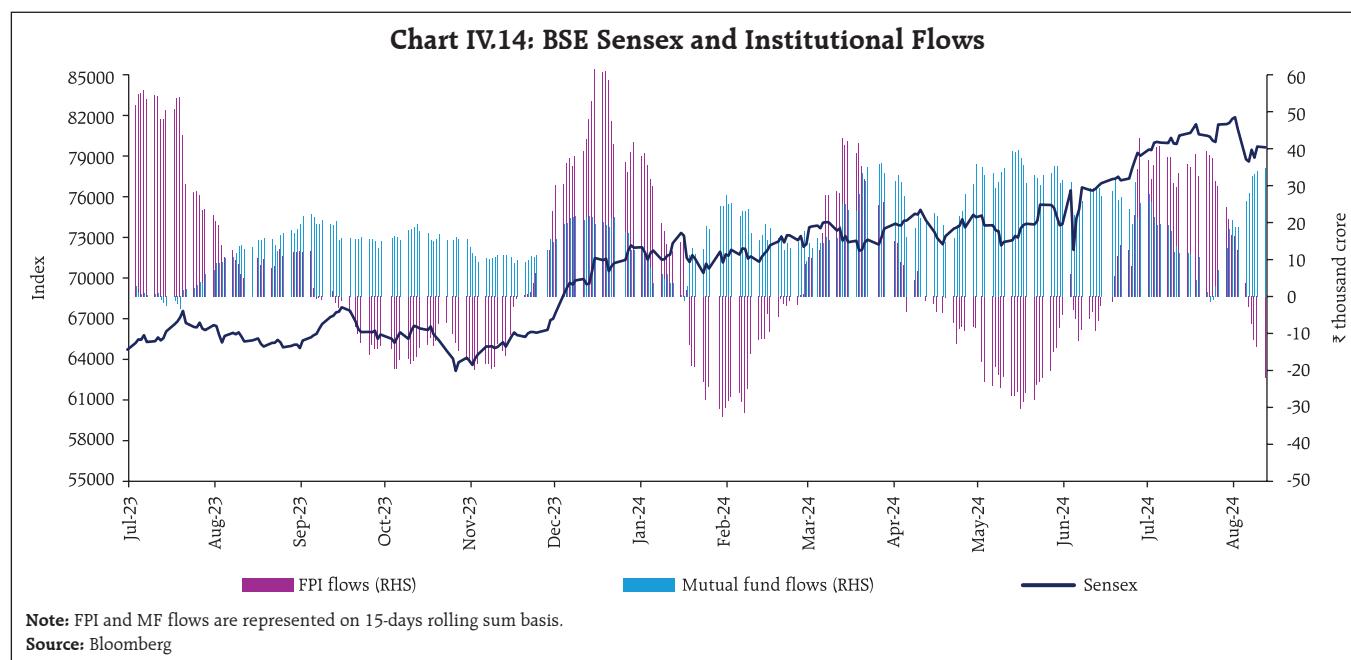
³³ by major banks and all India financial institutions (AIFIs).



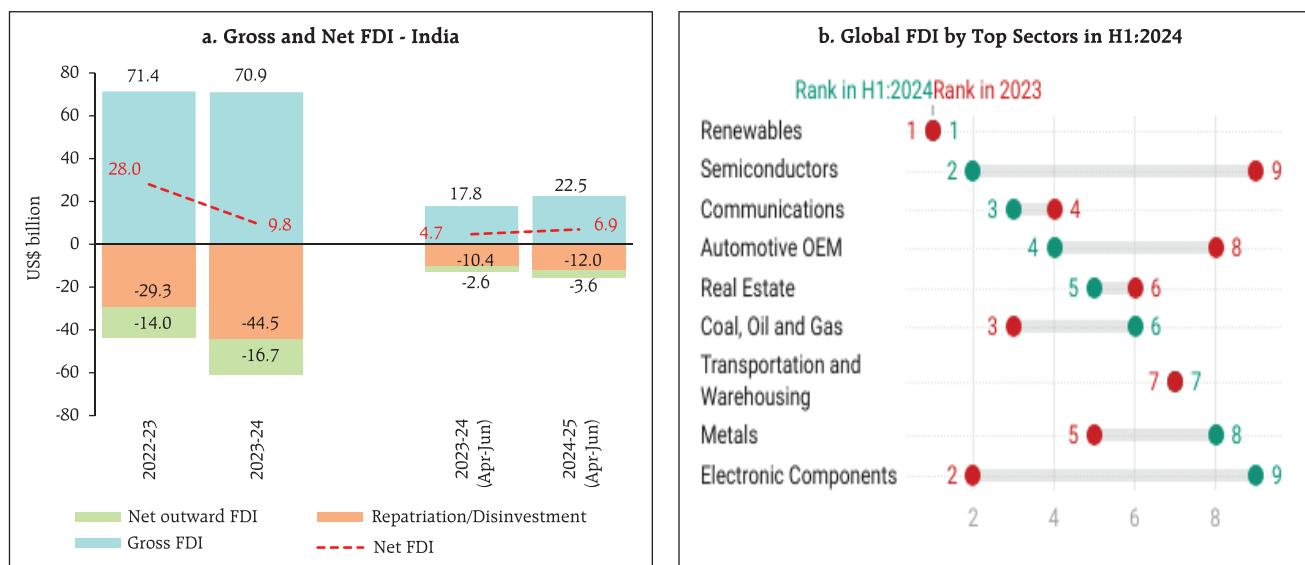
Gross inward FDI grew by 26.4 per cent (y-o-y) to US\$ 22.5 billion during Q1:2024-25 (Chart IV.15a). Manufacturing, financial services, communication services, computer services, and electricity and other energy sectors accounted for about 80 per cent of the gross FDI inflows. With around 75 per cent of the flows, the major source countries were Singapore, Mauritius, the Netherlands, the US and Belgium.

Net FDI rose to US\$ 6.9 billion during Q1:2024-25 as compared to US\$ 4.7 billion a year ago, due to an increase in gross FDI flows.

During H1:2024, over US\$635 billion worth of cross-border investment projects were announced globally, marking it the fourth-highest half-yearly global FDI since 2003, as reported by fDi Intelligence.³⁴ Energy transition and digitisation continued to



³⁴ A specialist division from the Financial Times that provides a comprehensive offering of services related to foreign direct investment.

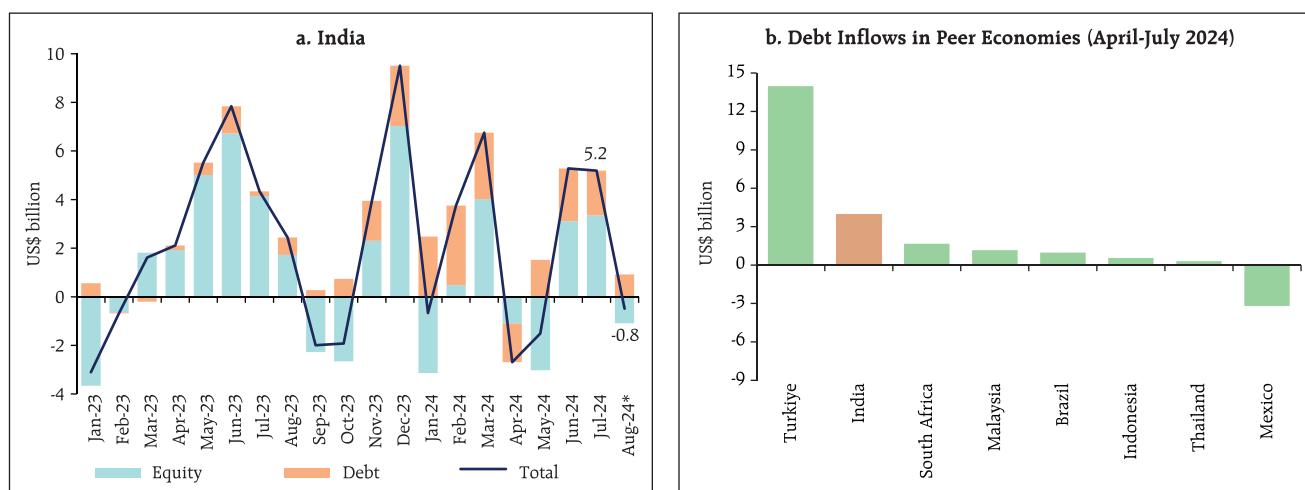
Chart IV.15: Foreign Direct Investment Flows

Sources: RBI; and fDi Intelligence.

drive the global FDI landscape during the first half of 2024, with renewables, semiconductors, and communications sectors accounting for half of the announced FDI projects (Chart IV.15b). Supported by mega projects (worth more than US\$ 1 billion), the semiconductor sector rose to the second rank during H1:2024 from the ninth position in 2023 in the global FDI ranking by sectors. On the other hand,

the electronics sector slipped from the second to ninth position, reflecting concerns over weaker-than-expected demand for electric vehicles.

Foreign portfolio investors (FPIs) were buyers in July 2024, with net inflows amounting to US\$ 5.2 billion (Chart IV.16a). Net inflows in the equity segment at US\$ 3.3 billion rose to a four-month high during the month. Among sectors, information

Chart IV.16: Net Portfolio Investments

Notes: 1. Debt includes investments under the voluntary retention route and hybrid instruments.

2. *: Data up to August 13, 2024.

3. Data for South Africa, Malaysia and Brazil are up to June 2024, while data for other countries are up to July 2024.

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

technology, metals and mining, and automobiles and auto components sectors attracted the highest FPI equity inflows during July 2024. The debt segment continued to attract FPI inflows, following the inclusion of Indian government bonds in the JP Morgan's GBI-EM index starting June 28, 2024. Indian debt has remained attractive among emerging market peers during the current financial year (Chart IV.16b). In August 2024 (up to August 13), net FPI outflows to the tune of US\$ 0.8 billion were recorded amidst concern over slowdown in the US economy and volatile Japanese market.

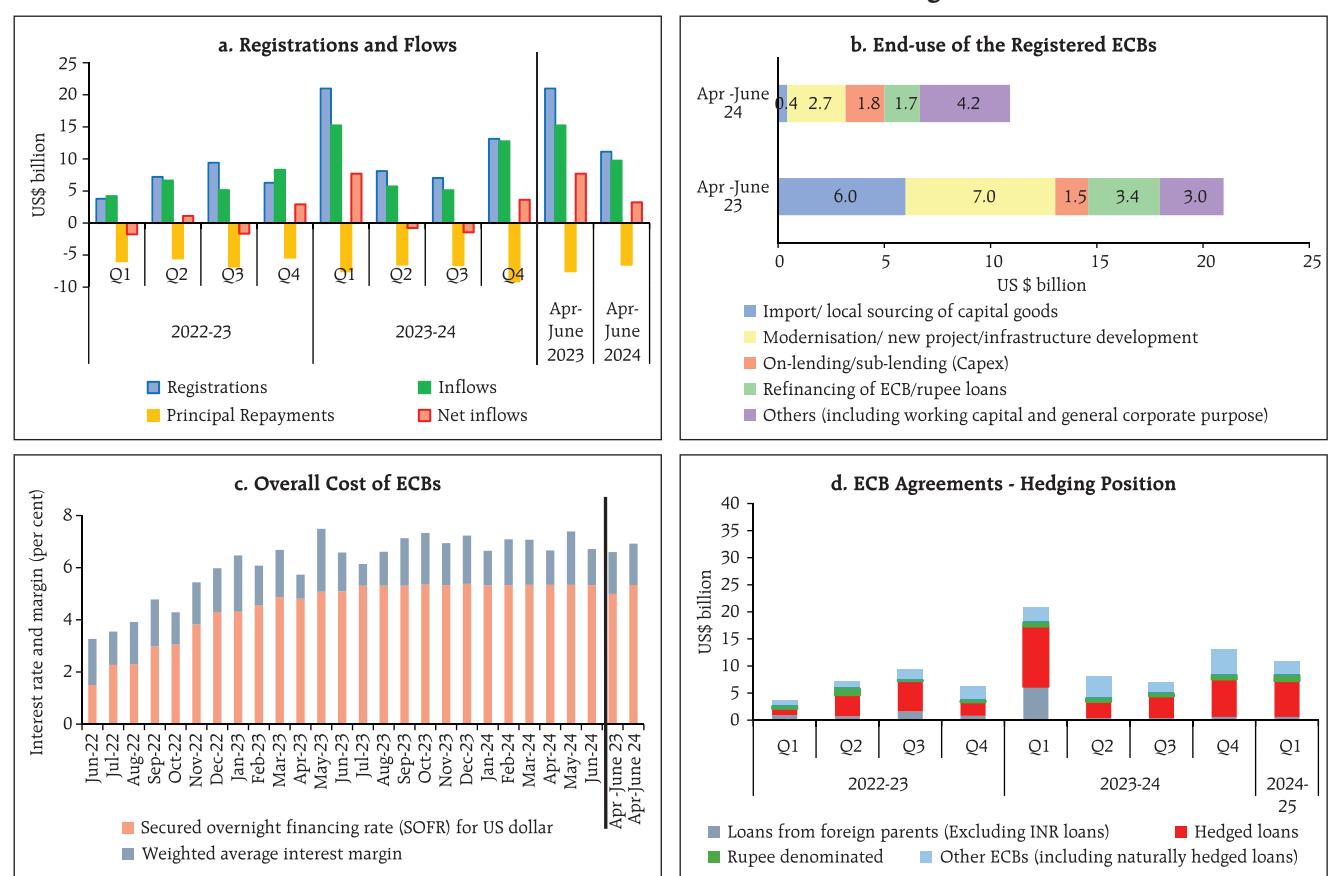
Non-resident deposits recorded net inflows of US\$ 4.0 billion during Q1:2024-25 as compared with US\$ 2.2 billion a year ago, with higher inflows in all three accounts namely, Non-Resident (External) Rupee Accounts [NR(E)RA], Non-Resident Ordinary

(NRO) and Foreign Currency Non-Resident [FCNR(B)] accounts.

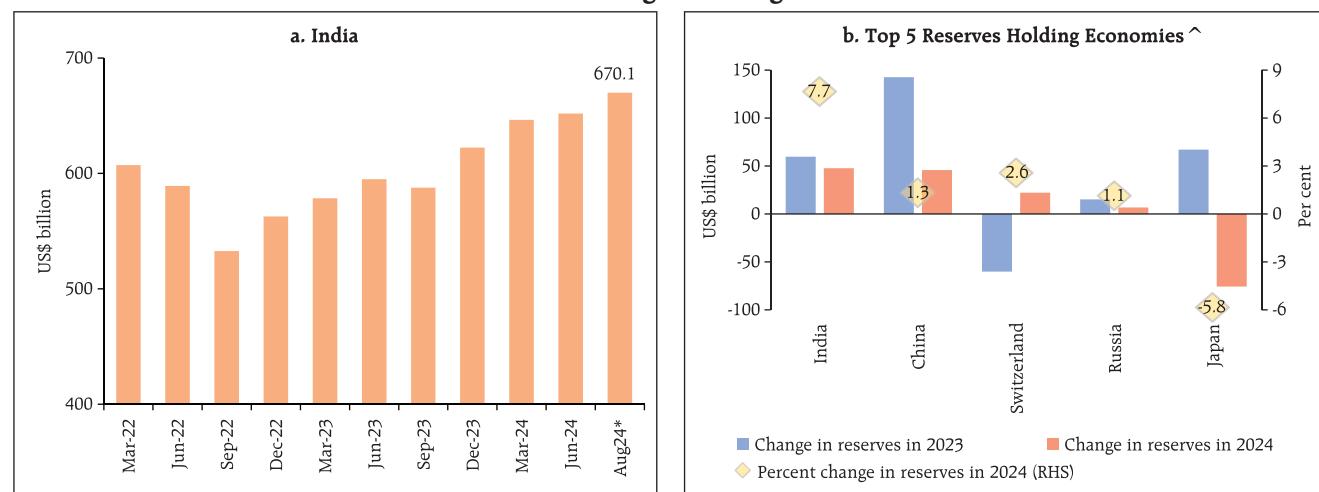
With lower participation from large firms, registrations of new external commercial borrowings (ECBs) moderated to US\$ 11.1 billion during Q1:2024-25. ECB inflows were to the tune of US\$ 9.7 billion during the first quarter of 2024-25 as compared with US\$15.2 billion in the corresponding period last year (Chart IV.17a). Net of principal repayments, ECB inflows have been positive for the second successive quarter. Of the total ECBs registered during Q1:2024-25, 46 per cent were earmarked for capital expenditure (including on-lending and sub-lending for capex) [Chart IV.17b].

The effective ECB rate remained relatively stable as there was a reduction in margins over the benchmark during Q1:2024-25, which partially offset the increase in benchmark rates (Chart IV.17c). Over

Chart IV.17: External Commercial Borrowings



Sources: Bloomberg; and Form ECB, RBI.

Chart IV.18: Foreign Exchange Reserves

Notes: 1. * : Data for August 9, 2024.

2. ^ : Countries are arranged in the decreasing order of change in reserves in 2024. Data for India and Russia are for August 9, 2024, end-July for China and Japan, and end-June for Switzerland.

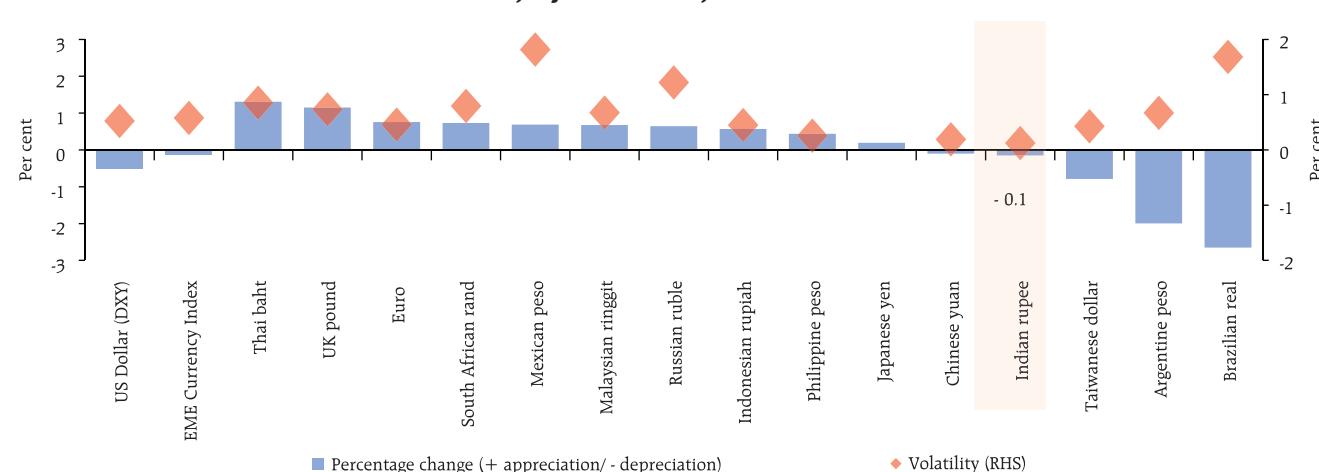
Sources: RBI; IMF; and respective central bank websites.

three-fourth of the agreements were explicitly hedged (Chart IV.17d).

India's foreign exchange reserves rose to an all-time high of US\$ 674.9 billion on August 02, 2024. As on August 09, it stood at US\$ 670.1 billion, equivalent of more than 11 months of imports for 2023-24 and more than 100 per cent of total external debt outstanding at end-March 2024 (Chart IV.18a).

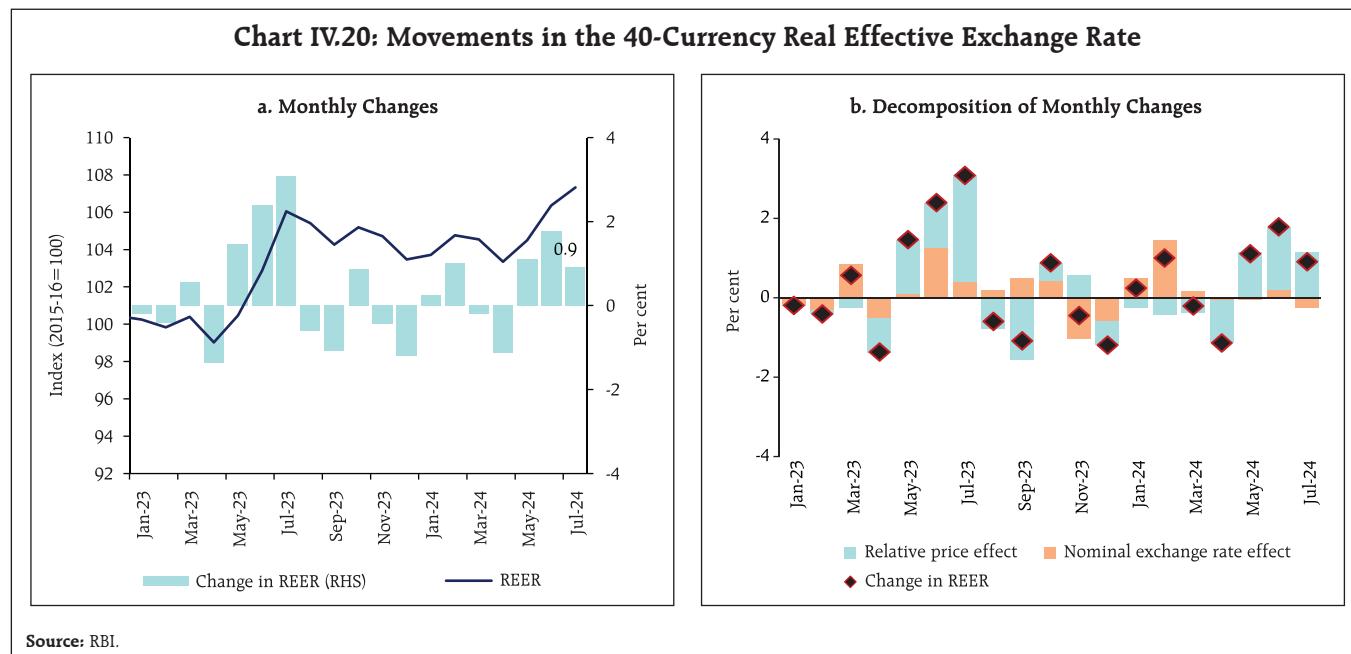
India's foreign exchange reserves increased by US\$ 47.7 billion during 2024 so far (as on August 09), the highest among major foreign exchange reserves holding countries (Chart IV.18b).

The Indian rupee (INR) exhibited the least volatility among major currencies during July 2024, depreciating by 0.1 per cent (m-o-m) *vis-à-vis* the US dollar (Chart IV.19).

Chart IV.19: Movements of the Indian Rupee and Major Currencies against the US Dollar (July 2024 over June 2024)

Note: US dollar (DXY) measures the movements of the US dollar against a basket of major currencies (Euro, Japanese yen, British pound, Canadian dollar, Swedish krona, Swiss franc).

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



The INR appreciated by 0.9 per cent (m-o-m) in July 2024 in terms of the 40-currency real effective exchange rate (REER), as positive relative price differentials more than offset the depreciation of the INR in nominal effective terms (Chart IV.20).

Digital payment system indicators across all the major categories recorded strong growth (y-o-y) in July 2024 (Table IV.3). The UPI registered the highest level of transactions in July 2024, recording over ₹20 lakh crore transactions for the third consecutive month with improved infrastructure.

Digital payments infrastructure strengthened further in June 2024, driven by steady growth (y-o-y) in the number of credit cards (17.1 per cent), point-of-sale (PoS) terminals deployed (10.8 per cent), Bharat Quick Response (QR) codes (8.4 per cent) and UPI QR codes (25.0 per cent). This was corroborated by an increase in the Reserve Bank of India – Digital Payments Index (RBI-DPI) to 445.50 in March 2024 from 418.77 in September 2023. In the case of credit cards, the volume of transactions has been growing faster than the value of transactions since February 2024, indicating that consumers

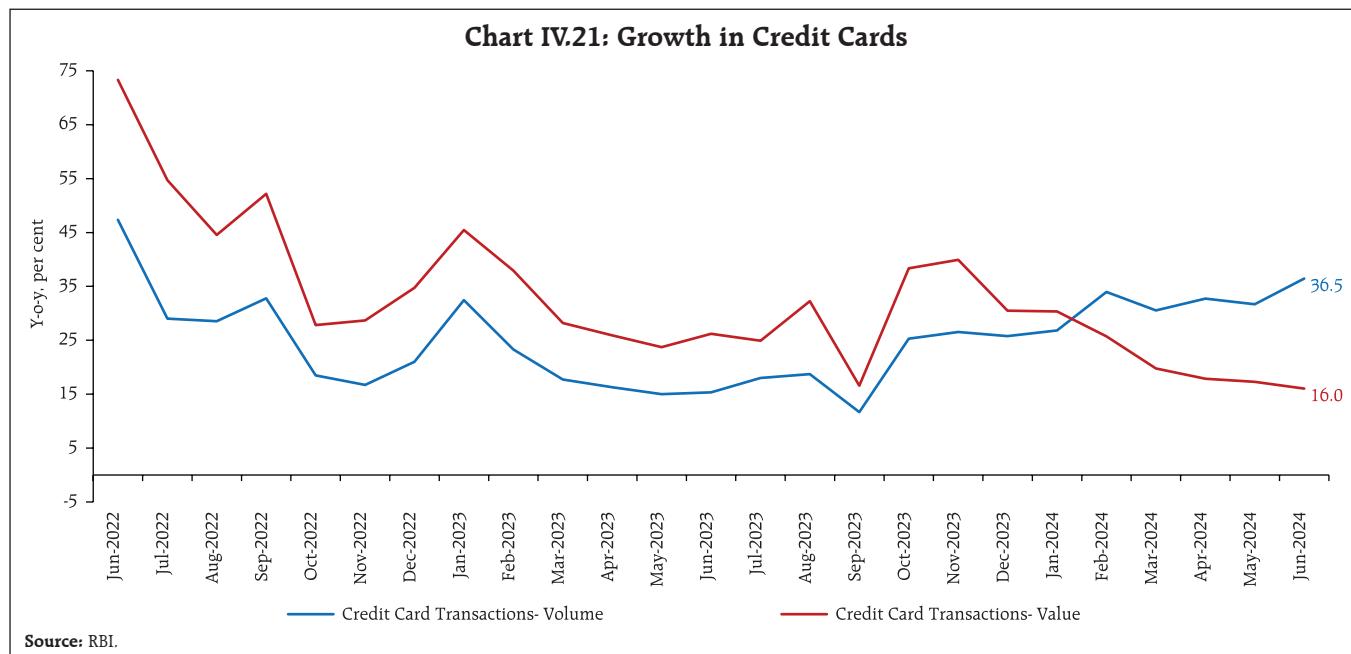
Table IV.3: Growth in Select Payment Systems

(y-o-y in per cent)

Payment System Indicators	Transaction Volume				Transaction Value			
	Jun-23	Jul-23	Jun-24	Jul-24	Jun-23	Jul-23	Jun-24	Jul-24
RTGS	9.2	12.0	9.2	16.4	16.0	13.6	11.9	21.7
NEFT	26.7	36.3	43.4	46.2	11.9	16.1	9.6	20.1
UPI	59.2	58.4	48.7	44.9	45.5	44.2	36.0	34.6
IMPS	2.7	6.3	10.4	0.1	12.8	15.2	15.4	15.8
NACH	18.8	30.3	29.5	0.9	18.7	23.3	24.1	17.5
NETC	13.7	11.3	5.8	9.4	20.8	19.7	11.2	12.0
BBPS	24.8	25.9	53.6	75.4	41.6	46.0	108.9	177.6

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.



are increasingly swiping cards for small value transactions, which is culminating in a lower credit card leverage (Chart IV.21).

In order to ensure resilience of authorised non-bank Payment System Operators (PSOs) to existing and emerging information systems and cyber security risks, the Reserve Bank issued directions³⁵ covering robust governance mechanisms for identification, assessment, monitoring and management of these risks on July 30, 2024. The Reserve Bank also released draft directions on 'Due Diligence of Aadhaar enabled Payment System (AePS) Touchpoint Operators'³⁶ to enhance the robustness of AePS, which would protect bank customers from AePS frauds and maintain trust and confidence in the safety and security of the system. Additionally, the Reserve Bank released a draft "Framework on Alternative Authentication Mechanisms for Digital Payment Transactions"³⁷ to enable adoption of alternative authentication mechanisms by the ecosystem, which will widen the choice of authentication factors available to PSOs and users.

The National Payments Corporation of India's (NPCI) wholly owned subsidiary, NPCI International Payments Ltd. (NIPL), signed an agreement³⁸ with Qatar National Bank (QNB) to launch QR code-based UPI payments enabling its acceptance in Qatar through the QNB merchant network, benefiting Indian travellers visiting and transiting through the country. Further, the NPCI announced³⁹ the rollout of 'UPI One World' wallet for inbound travellers across all⁴⁰ nations of the world, which would provide international visitors with a seamless, real-time digital payment experience. NPCI Bharat BillPay Limited (NBBL) expanded⁴¹ the scope of cross border bill payments through BBPS which is currently limited to foreign inward remittances, to foreign outward remittances. The RBI permitted all personal inward and outward non-trade bills of current account nature routed through any authorised payment system, subject to adherence to applicable rules/regulations/guidelines under Foreign Exchange Management Act (FEMA) and RBI's Master Direction-

³⁵ RBI Notifications. July 30, 2024.

³⁶ RBI Press Release. July 31, 2024.

³⁷ RBI Press Release. July 31, 2024.

³⁸ NPCI Press Release. July 11, 2024.

³⁹ NPCI Press Release. July 22, 2024.

⁴⁰ Some countries excluded as per regulatory guidance.

⁴¹ NBBL Circular. August 06, 2024.

Know Your Customer (KYC) Direction, 2016 dated February 25, 2016.

In its statement on developmental and regulatory policies dated August 8, 2024⁴², the Reserve Bank proposed creating a public repository of Digital Lending Apps (DLAs) deployed by Regulated Entities (REs), which will be available on its website to curb the presence of unscrupulous players in digital lending. With regards to payment systems, the Reserve Bank announced three important measures - enhancing the limit for tax payments through UPI from ₹1 lakh to ₹5 lakh per transaction; introduction of "Delegated Payments" in UPI which would allow an individual (primary user) to set a UPI transaction limit for another individual (secondary user) on the primary user's bank account thereby enhancing the reach and usage of digital payments across the country; and transition of the cheque truncation system (CTS) from the current approach of batch processing to continuous clearing with 'on-realisation-settlement' in which cheques will be scanned, presented and passed in a few hours.

Conclusion

It has been pointed out recently that India stands at a momentous point in its journey, powered by significant progress in various spheres. This has ignited aspirations for securing the best living standards in the world. Capitalising on the demographic advantage, entrepreneurial talent, the expanding global footprint of the Indian diaspora, unique cultural heritage and geographical endowments, opportunities are opening up to make the 21 century India's century. This path of ambition is not without global challenges: geoeconomic and geopolitical shifts that are underway; a more unequal world; climate change and in its train extreme weather events recurring with increasing disruptive impact and intensity; new technologies creating unpredictability about the future with unknown risks. Against this backdrop, India will have to strive for a developmental strategy that balances energy security, access, affordability and sustainability;

⁴² RBI Press Release, August 08, 2024.

builds world class manufacturing, logistics and R&D capabilities and competitiveness; and makes further progress towards creating a more inclusive society that affords opportunities for all.

It is only by overcoming these challenges and harnessing these opportunities that India can hope to break out of the middle-income trap alluded to earlier in the context of the World Bank's latest World Development Report by growing annually at a rate of 7-10 per cent to strike out towards a better future. This will involve a target for annual per capita income at US\$ 18,000 by 2047; average life expectancy of around 84 years; a working age population of about 112 crore; universal literacy; very low infant mortality of 2 per 1000 live births, to name a few.⁴³

This vision of transforming India is founded on each citizen at individual productive and opportunity potential frontiers. There are milestones to be passed and work to be done, but dedication and self-belief can realise this vision. According to the distinguished British economist, Angus Maddison, who specialised in the measurement and analysis of economic growth and development, India was the largest economy of the world with the highest share in world GDP during 1 to 1000 AD. Over the next 600 years, India intermittently fell to the second position, but reclaimed the position of the world's largest economy by 1700 AD with a share of 24.4 per cent of world GDP. After that came the colonial rule and a long retrogression. Given the innate strengths...and the energies and transformation that are driving the nation to overcome its challenges and achieve its aspirational goals, it is possible to imagine Indiabecoming the largest economy (in the world) by 2060.⁴⁴ The time has come to repossess our rightful place on the world's stage.⁴⁵

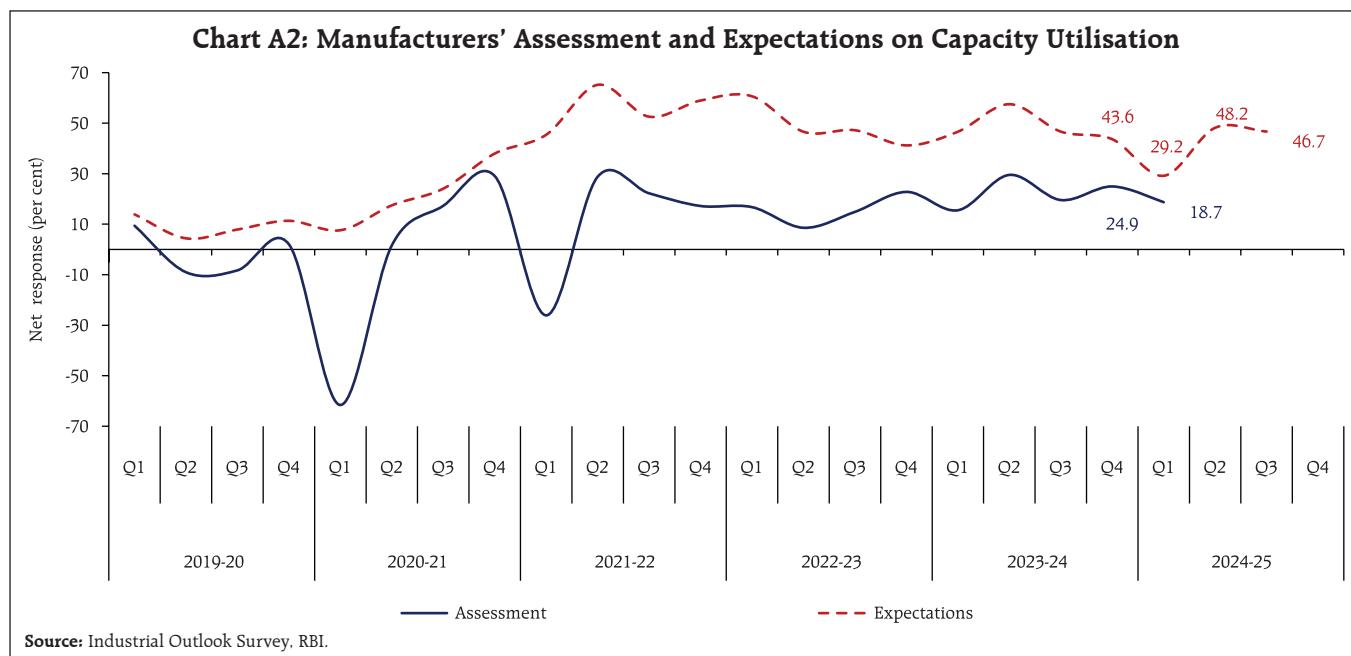
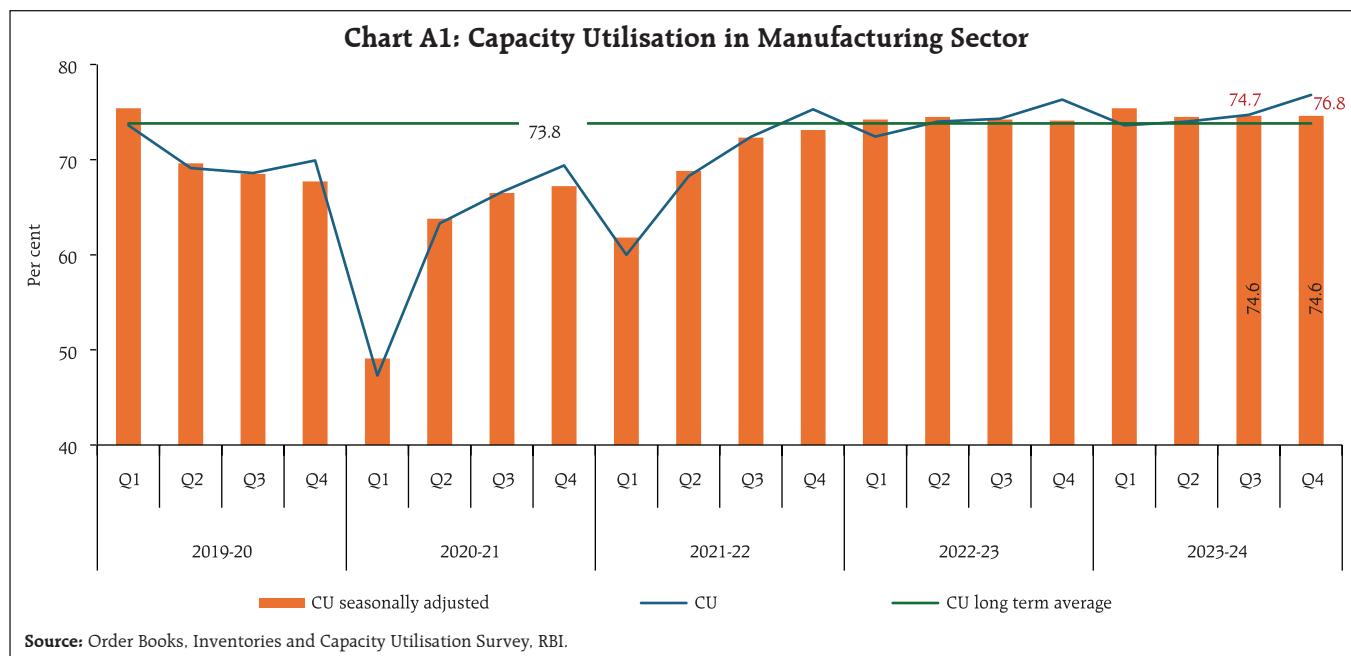
⁴³ "India should grow at 7-10% for 20-30 yrs to avoid middle income trap: NITI". Business Standard, July 29, 2024.

⁴⁴ "The Indian Economy: Opportunities and Challenges". (Keynote Address delivered by Michael Debabrata Patra, Deputy Governor, Reserve Bank of India - March 25, 2024 - at the Nomura's 40th Central Bankers Seminar at Kyoto, Japan).

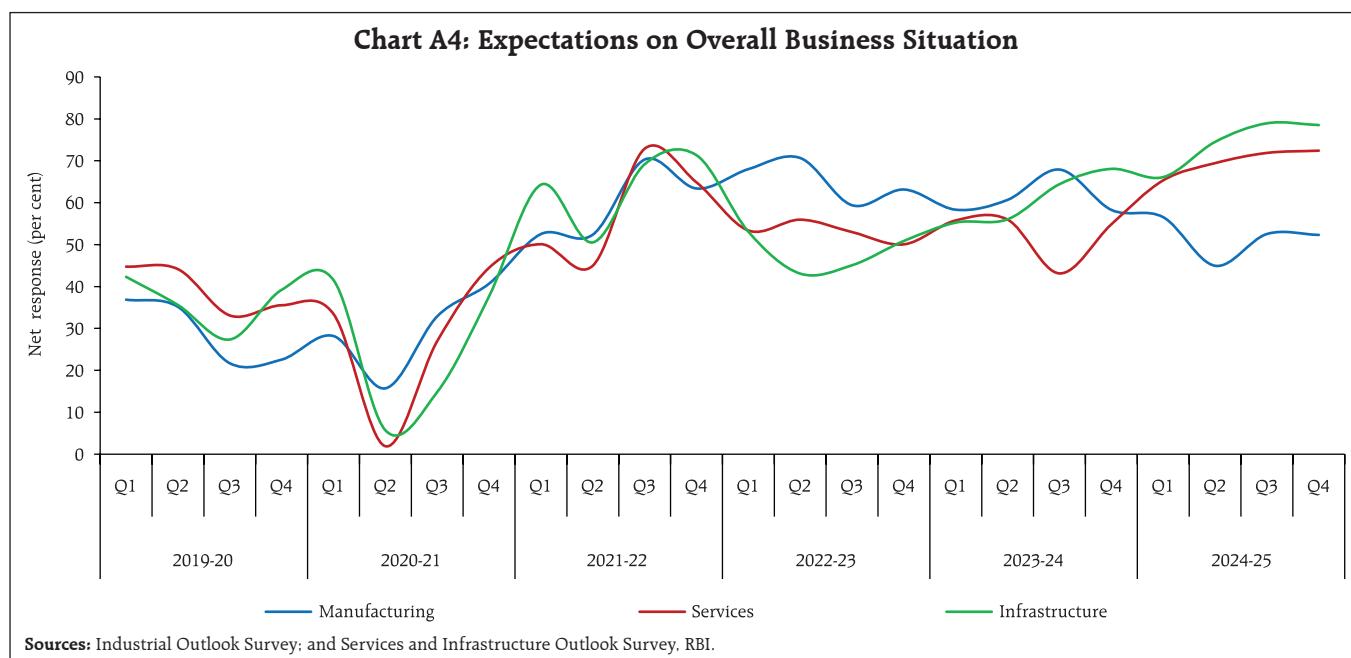
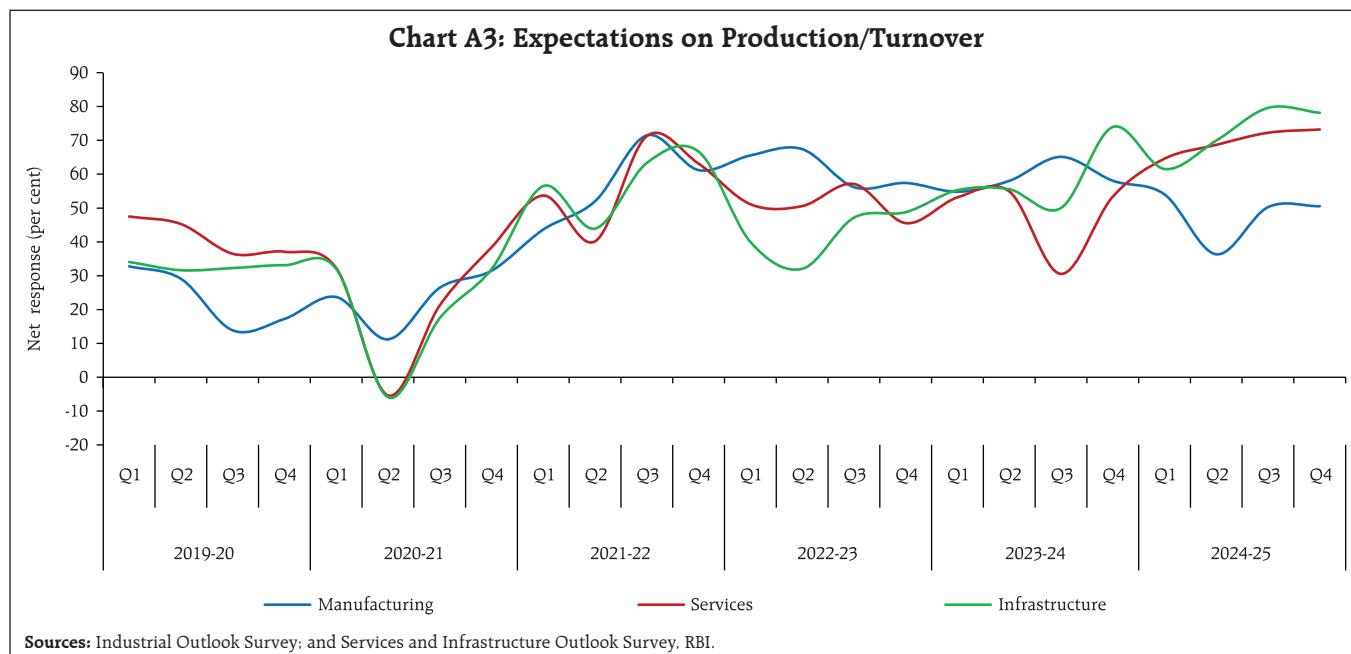
⁴⁵ INDIA@75. Speech delivered by Dr. Michael Debabrata Patra, Deputy Governor, Reserve Bank of India in an event to celebrate Azadi Ka Amrit Mohotsav organised by Reserve Bank of India - August 13, 2022, Bhubaneswar.

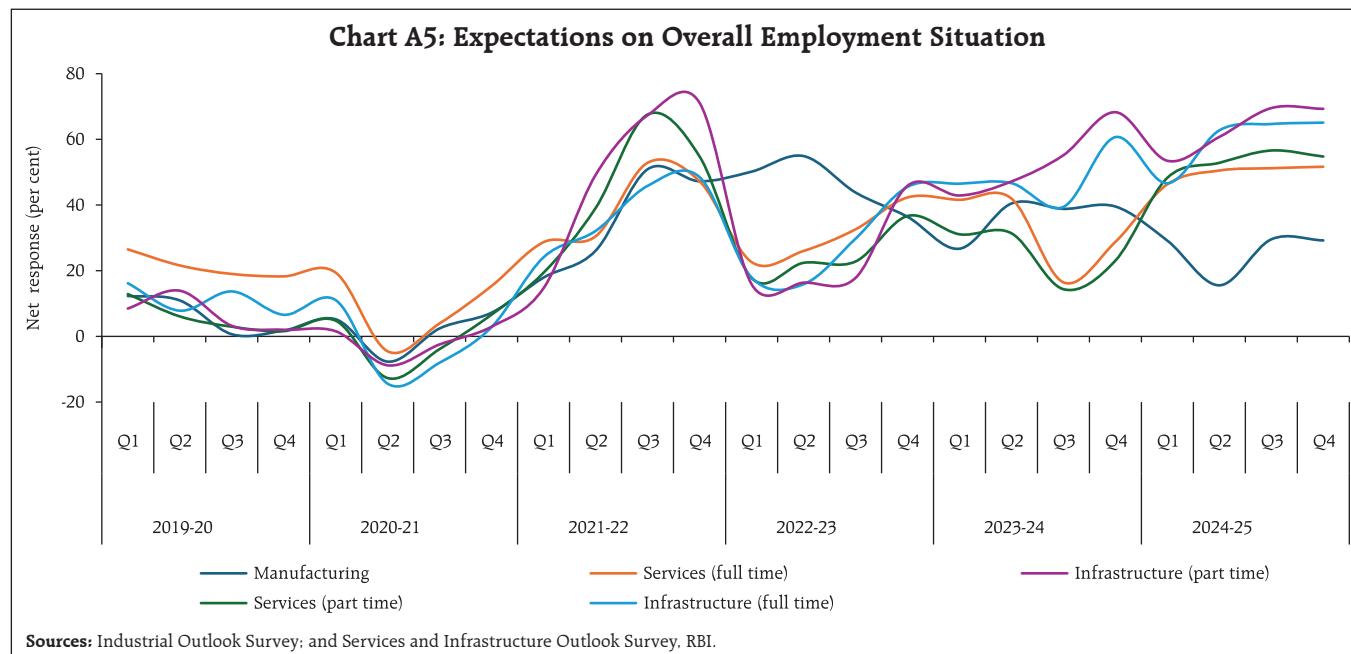
Annex 1:
Major Takeaways from the RBI's Enterprise Surveys

- Seasonally adjusted capacity utilisation (CU) in the manufacturing sector has remained stable since Q2:2023-24 (Chart A1).

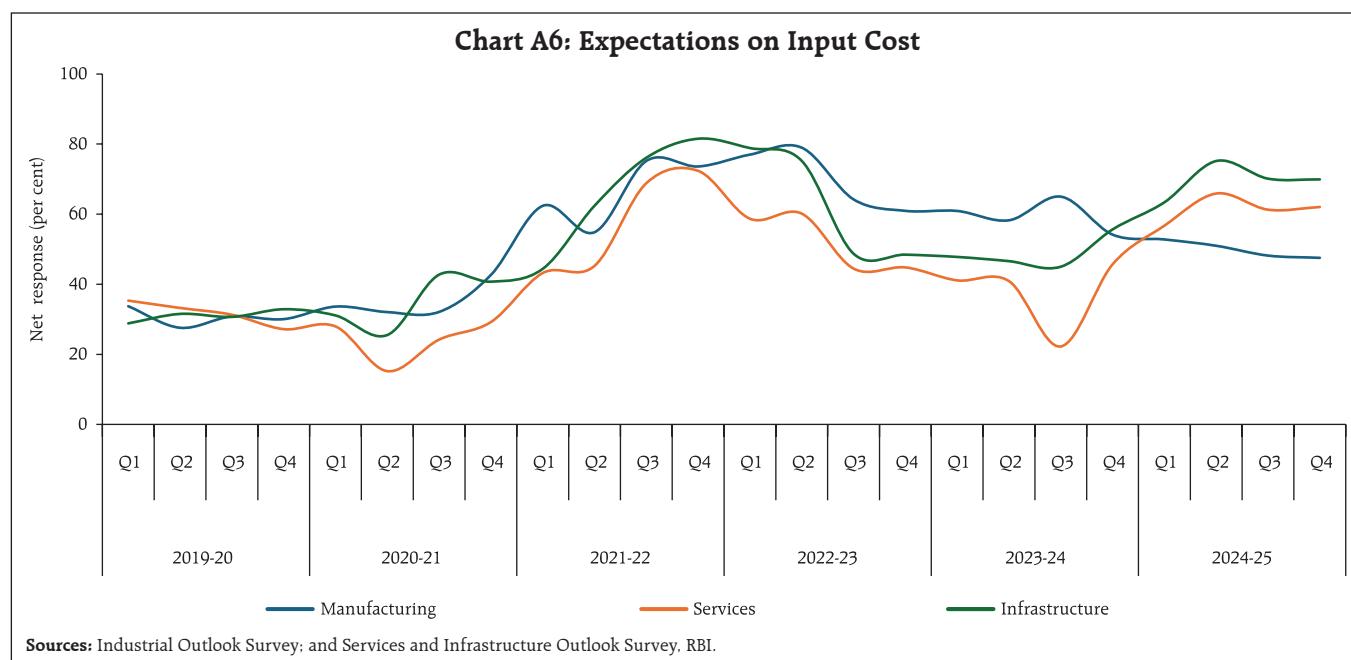


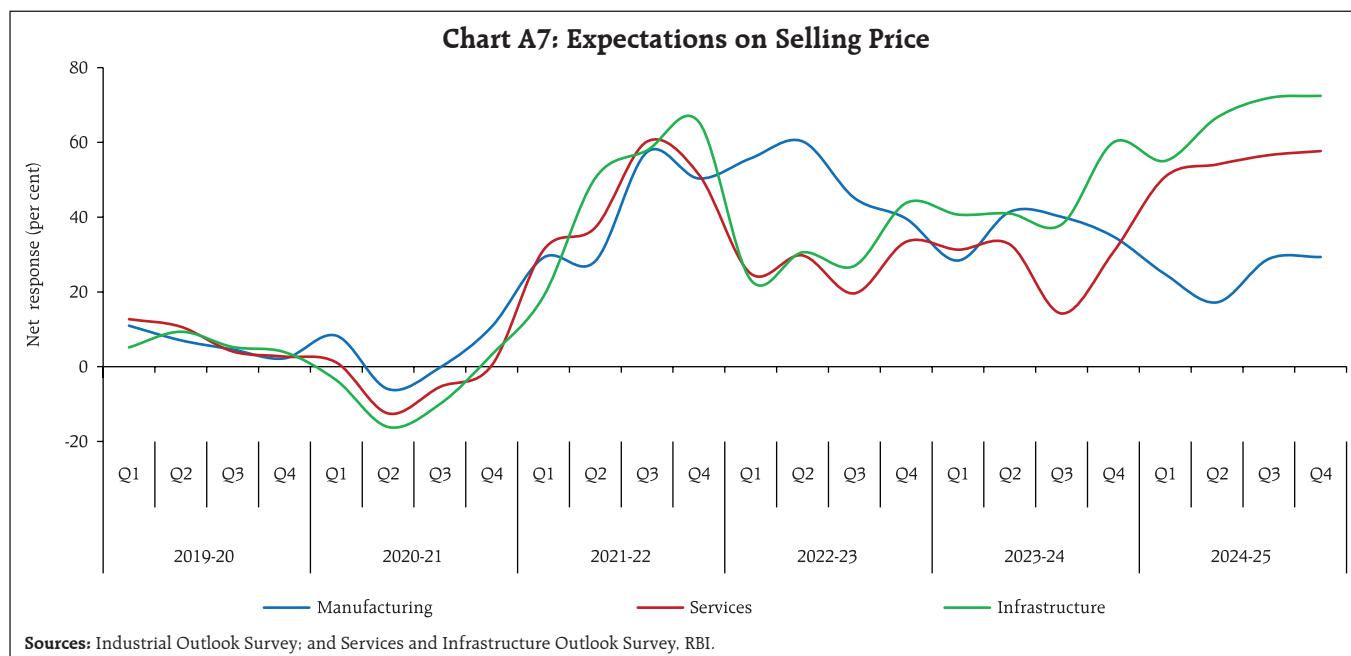
- All major sectors remain optimistic on production/ turnover, employment and the overall business situation, though the optimism of manufacturing firms tempered for Q2:2024-25 (Chart A3, A4 and A5).



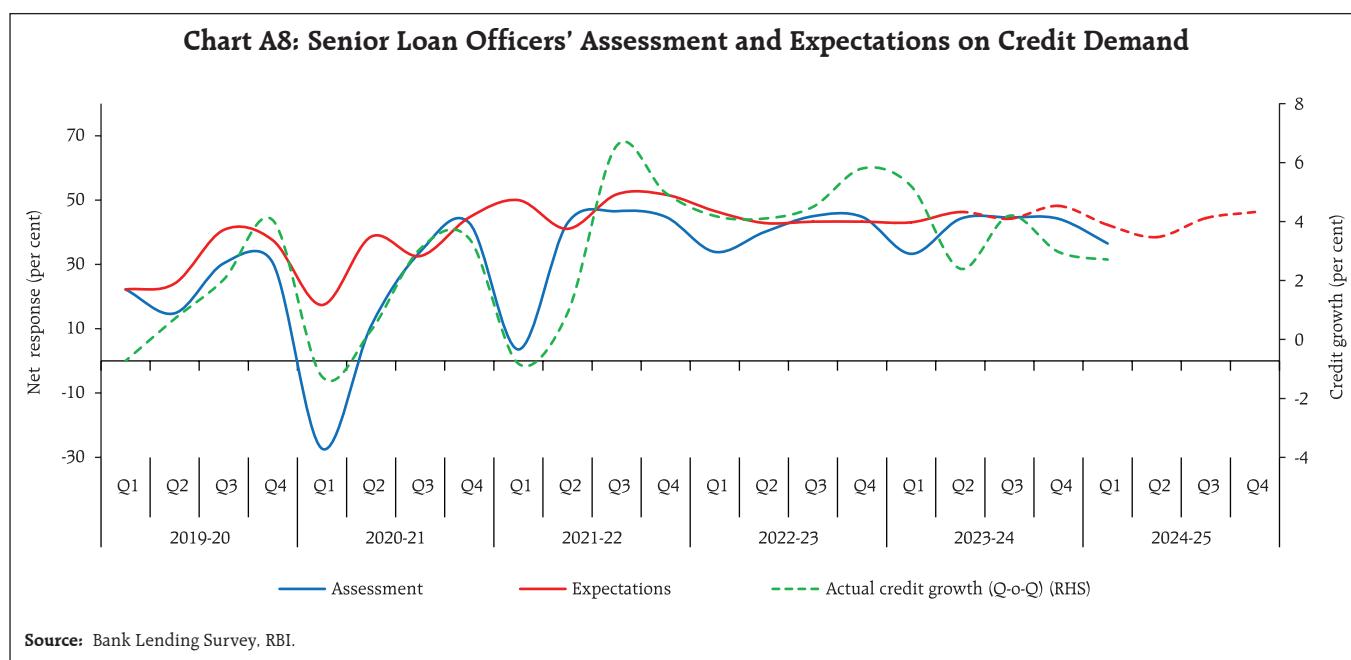


- Input cost pressures are likely to persist across sectors in the short run; selling prices are expected to harden across all major sectors (Charts A6 and Chart A7).





- Senior loan officers continue to remain optimistic on the outlook for loan demand conditions and expect continuation of easy loan terms and conditions (Chart A8).



Note: The 'net response' is calculated as the difference between the percentage of respondents reporting optimism and that reporting pessimism. The increase option (I) is an optimistic response for all parameters, except the cost related parameters, such as cost of raw materials, etc., where the decrease option (D) signifies optimism from the viewpoint of a respondent company.

Are Food Prices Spilling Over?

by Michael Debabrata Patra, Joice John
and Asish Thomas George ^

Persistence in food inflation has increased due to repeated climatic shocks of rising intensity. The increase in food inflation persistence is driven by the secular upward drift in its time varying trend, signifying rising expectations of higher food prices due to overlapping supply shocks. Empirical evidence points to spillovers to non-food components, which is being offset by disinflationary monetary policy. If high food inflation persists, however, a more cautious monetary policy approach is warranted to squelch the propagation of food inflation pressures into a more generalised inflation.

Introduction

In the January 2024 issue of this Bulletin, we asked: are food prices the 'true' core of India's inflation? (Patra et al., 2024a). In the ensuing months, food price pressures have become unrelentingly persistent even as core inflation, traditionally defined as consumer price index (CPI) excluding food and fuel, has fallen to historic lows, steered by disinflationary monetary policy. This has brought to centre stage the issue of food inflation persistence, warranting a careful assessment of its sources and propagative power. Food inflation is impeding the alignment of headline inflation with its target in India and cannot be tolerated in setting monetary policy any longer. High food inflation is seeping into households' inflation perceptions and expectations, with the potential for spillovers into non-food prices as demand for higher wages on cost of living considerations and rising input costs are eventually passed on as higher output prices, especially in a scenario of strengthening aggregate demand. As a result, there is a danger that the beneficial effects of lowering core inflation can be frittered away.

[^] The authors are from 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.

with adverse implications for the disinflation process underway and for policy credibility.

Against this backdrop, this article examines the food inflation process in terms of its persistence, its effects on expectations and the possibilities of wider spillovers. Section II evaluates the drivers of recent food price shocks and their durability or otherwise as well as possible generalisation. Section III attempts a formal decomposition of CPI food inflation into different components of persistence and stochastic shocks. Section IV analyses the impact of food price shocks on households' expectations. Section V gauges the contribution of food price shocks to core inflation in a semi-structural macroeconomic model framework. Section VI concludes the paper.

II. Why are Food Prices Sticky?

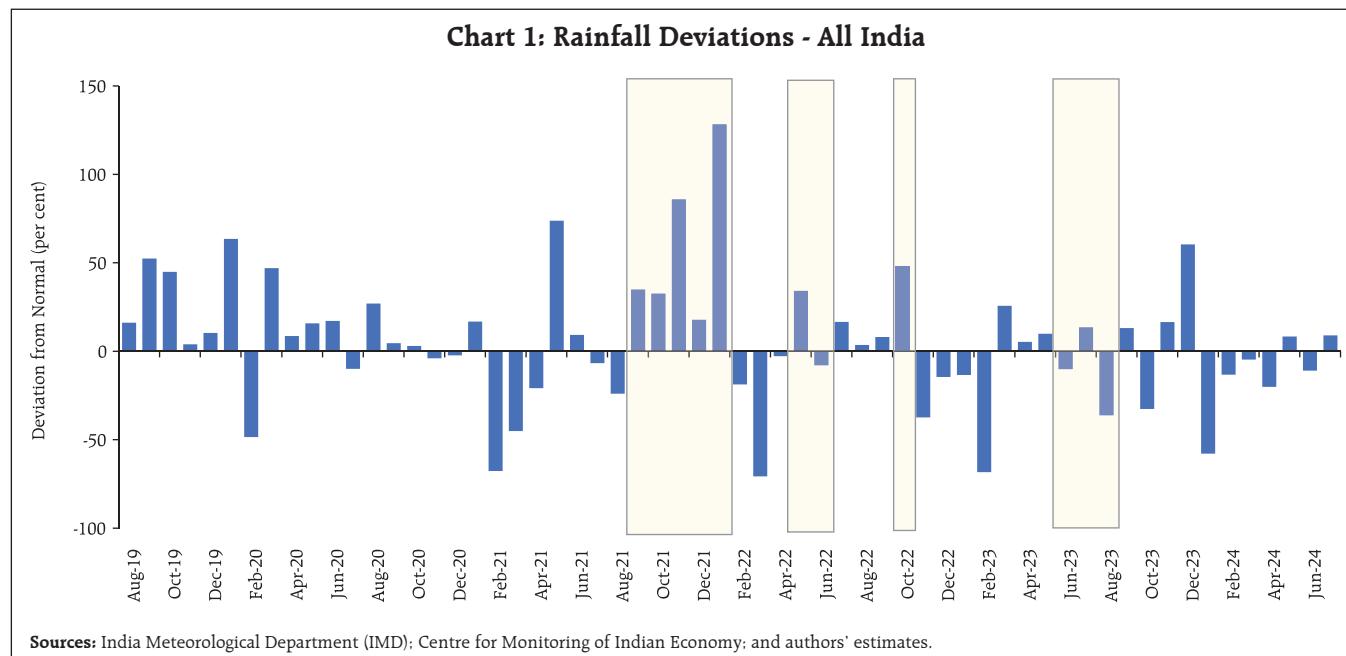
Food inflation averaging 6.3 per cent¹ during the 2020s is a stark contrast to the period 2016-2020 when it averaged just 2.9 per cent². A key distinguishing factor in this sharp divergence has been the incidence of multiple overlapping supply shocks due to climate events in the more recent period that impacted the spatial and temporal distribution of monsoons, induced sharp increases in surface temperatures and caused unseasonal rainfall. Global climate systems, including triple dip *La Niña* event and *El Niño*³ conditions seen since 2020, also played a role.

During the 2020s, monsoons have been by and large normal in terms of the average precipitation

¹ Average CPI food and beverages inflation for the period June 2020 to June 2024.

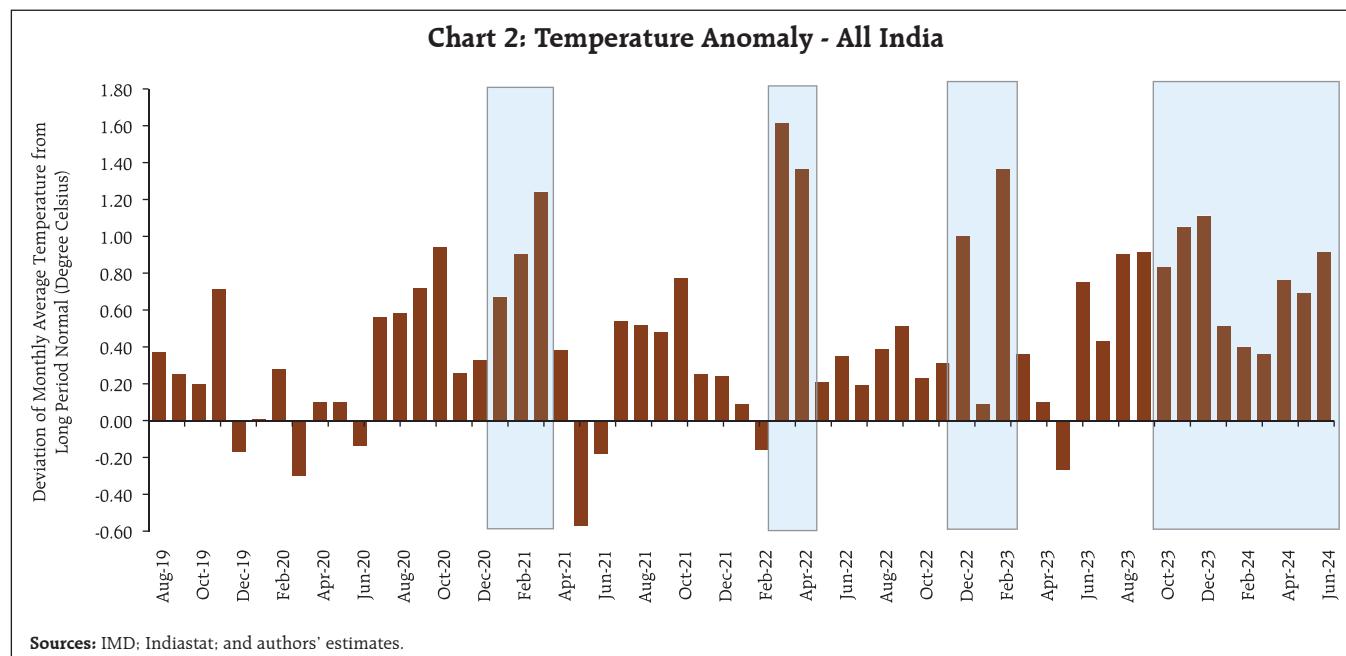
² Average CPI food and beverages inflation for the period from September 2016 to March 2020.

³ *El Niño* and *La Niña*, the oceanic component, along with the Southern Oscillation, the atmospheric component, together constitutes the term *El Niño/Southern Oscillation (ENSO)*. *El Niño* and *La Niña* which develops in the Pacific Ocean affect rainfall patterns and surface temperatures across the world. *El Niño* can last up to 18 months and *La Niña* up to three years. The first "triple dip" *La Niña* of the 21st century began in September 2020 and continued till early 2023. In general, an inverse relationship exists between monsoon and ENSO, with the warm phase of ENSO (*El Niño*) generally associated with weaker than normal monsoon and vice versa, though there is no one-to-one correspondence between the two phenomena. (Sources: <https://wmo.int/topics/el-nino-la-nina/>; <https://oceanservice.noaa.gov/facts/ninonina.html>; <https://imdpune.gov.in/faq.php>)



over the country as a whole. Their spatial and temporal distribution has, however, been highly skewed, with multiple instances of delayed onsets, dry weather conditions in peak monsoon months and in key agricultural crop production areas, and high unseasonal rainfall during harvest months, all of which have had a deleterious impact on production and yields of agricultural crops, especially during the *kharif* season (Chart 1).

Since 2021, high variations in surface temperatures have also taken their toll on agricultural activity. Winter months have been experiencing substantially higher than normal temperature, while summers and their onset have been marked by heat waves. On the back of *El Nino* conditions, surface temperatures were persistently higher than normal levels since the second half of 2023-24 (Chart 2). These climate adversities have impacted yields of *rabi* season crops.



The broad-based and persistent food inflation that has taken hold during the last four years as a result, belies the conventional notion of food inflation pressures being sector or crop-specific localized factors and transitory. In fact, a deep dive into food inflation behaviour in the 2020s shows that high food inflation has become endemic (Table 1).

This analysis reveals that in a staggering 57 per cent of months between June 2020 and June 2024, food inflation was at or above 6 per cent, with around 6 out of 12 food sub-groups experiencing 6 per cent and above inflation for 50 per cent or more of these months. This attests to the broad-based nature of high food inflation persistence. Barring sugar and confectionary, all other food sub-groups experienced high food inflation in more than one-third of the months considered. Furthermore, double digit food inflation was observed for an extended period of time in key food sub-groups. Vegetable price spikes are generally assumed to be transitory, but double digit inflation was experienced in this category in 22

out of the 49 months (in 45 per cent of the months) considered for the analysis, due to multiple and overlapping shocks. Double digit inflation has occurred for 24 months in respect of pulses and oils and fats (i.e., in 49 per cent of the months considered) and for 30 months in respect of prices of spices (in around 60 per cent of the months considered). Other key food sub-groups like cereals and eggs also experienced double digit inflation for about 15 months (in 31 per cent of the months considered). As pointed out earlier, adverse supply shocks to both *kharif* and *rabi* crops contributed to the high incidence of double digit inflation seen in these sub-groups. Extreme inflation pressures of 20 per cent or above have been observed in vegetables, oils and fats, and spices food sub-groups.

In terms of perishables (weight of around 32 per cent in the overall CPI and around 71 per cent in the CPI food group) and semi-perishables/non-perishables (weight of around 13 per cent in overall CPI and around 29 per cent in the CPI food group)⁴ inflation rates showed distinctive trajectories as well as similarities.

Table 1: Incidence and Duration of High Food Inflation since 2020s

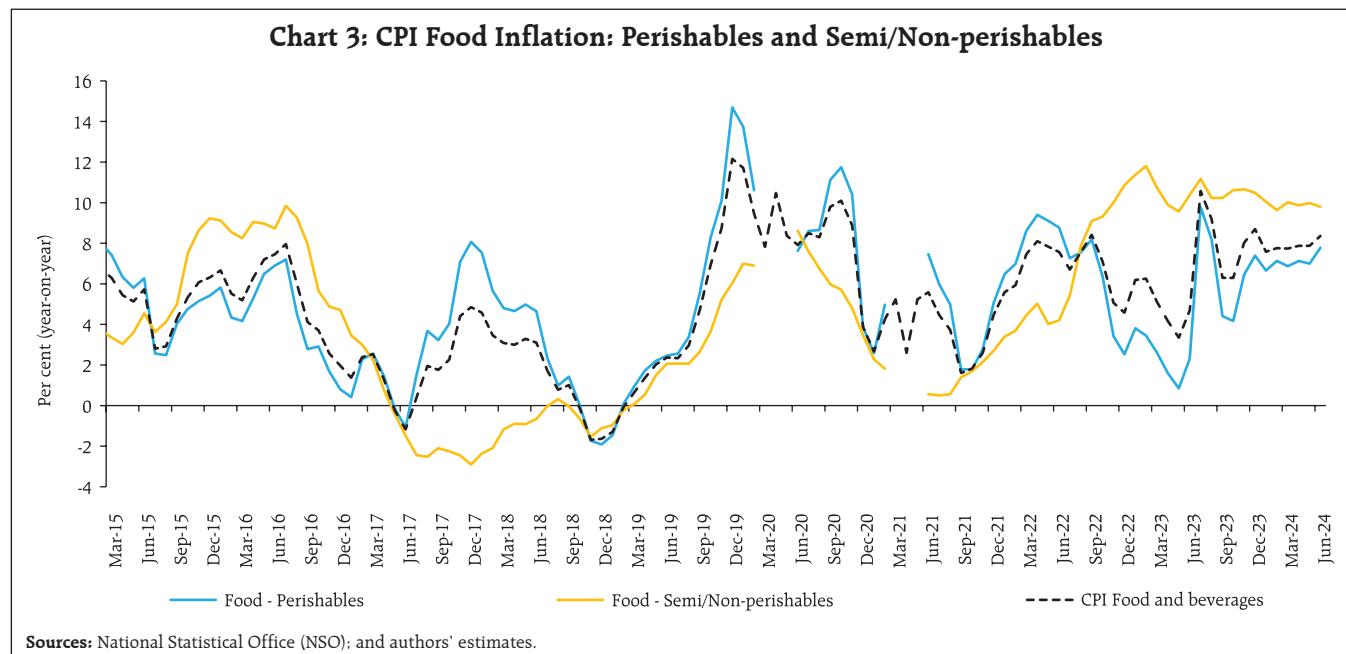
Sub-groups	Weight	Inflation ≥ 6 per cent		Inflation ≥ 10 per cent		Inflation ≥ 15 per cent		Inflation ≥ 20 per cent	
		Number of months	Per cent*	Number of months	Per cent*	Number of months	Per cent*	Number of months	Per cent*
1. Cereals and products	9.7	26	53	15	31	3	6	0	0
2. Meat and fish	3.6	25	51	11	22	9	18	0	0
3. Egg	0.4	26	53	15	31	8	16	3	6
4. Milk and products	6.6	19	39	0	0	0	0	0	0
5. Oils and fats	3.6	26	53	24	49	19	39	12	24
6. Fruits	2.9	17	35	4	8	0	0	0	0
7. Vegetables	6.0	24	49	22	45	17	35	11	22
8. Pulses and products	2.4	30	61	24	49	15	31	2	4
9. Sugar and Confectionery	1.4	7	14	0	0	0	0	0	0
10. Spices	2.5	38	78	30	61	17	35	8	16
11. Non-alcoholic beverages	1.3	17	35	12	24	2	4	0	0
12. Prepared meals, snacks, sweets etc.	5.6	24	49	0	0	0	0	0	0
Food and beverages (1 to 12)	45.9	28	57	2	4	0	0	0	0

* : Per cent of total number of months considered in the sample.

Note: Sample period is 49 months between June 2020 to June 2024

Sources: National Statistical Office (NSO); and authors' estimates.

⁴ The CPI weighting diagrams for the 2012=100 base year series are based on the modified mixed reference period (MMRP) data of the 2011-12 Consumer-Expenditure Survey. Based on this, the items in food group can be classified into perishables (frequently purchased items, or items purchased in last 7 days) - like edible oil, eggs, fish, meat, vegetables, fruits, spices, beverages, processed foods, pan, tobacco and intoxicants - and semi-perishables/non-perishables (items purchased in last 30 days) - like cereals, pulses, sugar and select processed food like jams, honey etc.



Perishables food inflation has been volatile in the 2020s, with an increase in the episodes of price spikes driven by supply shocks. Since November 2023, perishables inflation has remained persistently elevated, averaging 7.0 per cent and moving in a range of 6.5 per cent to 7.8 per cent. In case of semi/non-perishables, inflation has shown dramatic increases before becoming persistently elevated. Inflation in this category edged up from a low of 0.5 per cent in July 2021 to a high of 11.8 per cent in February 2023 and remained elevated thereafter, averaging around 10 per cent and moving in a narrow range of 9.6 per cent to 11.2 per cent (Chart 3). To sum up, by 2024 both perishables and semi/non-perishables food inflation has become sticky at highly elevated levels.

III. Decomposing Food Inflation Persistence

In these unusual circumstances, standard estimation procedures employing autoregressive univariate methods capture only the backward-looking element in inflation persistence. With the multiplicity of factors driving the food inflation process in India, however, the estimation of drivers of inflation persistence in a structural framework is necessitated (Patra *et al.* 2014). Hence, the stickiness

in food inflation is analysed in a time varying framework in which the parameters as well as the standard deviation of food price shocks are allowed to change over time (Stock and Watson, 2007; Cogley and Sbordone, 2008; Cogley *et al.*, 2010). For this purpose, food inflation is decomposed into intrinsic persistence, extrinsic persistence, time varying trend and pure shocks. Intrinsic persistence represents the dependence of inflation on its own history of past experiences or its backward-lookingness and is measured by the coefficient of the lagged food inflation term. Extrinsic persistence is the stickiness due to demand conditions encapsulated in variations in the output gap. It captures the impact of the evolution of overall macro-conditions on food prices (Altissimo *et al.*, 2006). When expectations relating to food inflation rise, this leads to their unanchoring and this pushes the trend food inflation higher. Thus, a rising food inflation trend can be treated as a measure of increasing expectations of food inflation by agents in any economy. This is somewhat different from intrinsic persistence, which is acquired solely from adaptive expectations. In this model, shocks denote pure transitory price changes due to variations in supply conditions. These shocks are essentially

deviations of food inflation that are not accounted for by intrinsic persistence, extrinsic persistence and time varying trend. Considering the varying nature of the shocks, we assume that their volatility is stochastic in nature.

$$\text{Food Inflation: } \pi_t^{food} = \underbrace{\rho_t}_{\text{intrinsic persistence}} * \pi_{t-1}^{food} + \underbrace{(1 - \rho_t)}_{\text{expectation - driven persistence}} * \pi_t^{food \text{ trend}} + \underbrace{\alpha_t}_{\text{extrinsic persistence}} * OG_t + \underbrace{\varepsilon_t^{\pi^{food}}}_{\text{shocks}}$$

Stochastic Volatility: $\varepsilon_t^{\pi^{food}} \sim N(0, \sigma_t^{\pi^{food}})$

π_t^{food} : is seasonally adjusted annualised rate of CPI food price index.

OG: is the output gap representing demand conditions.

$\pi_t^{food \text{ trend}}$: is the time varying trend in food inflation.

Logarithm of $(\sigma_t^{\pi^{food}})^2$ evolve as independent random walks.

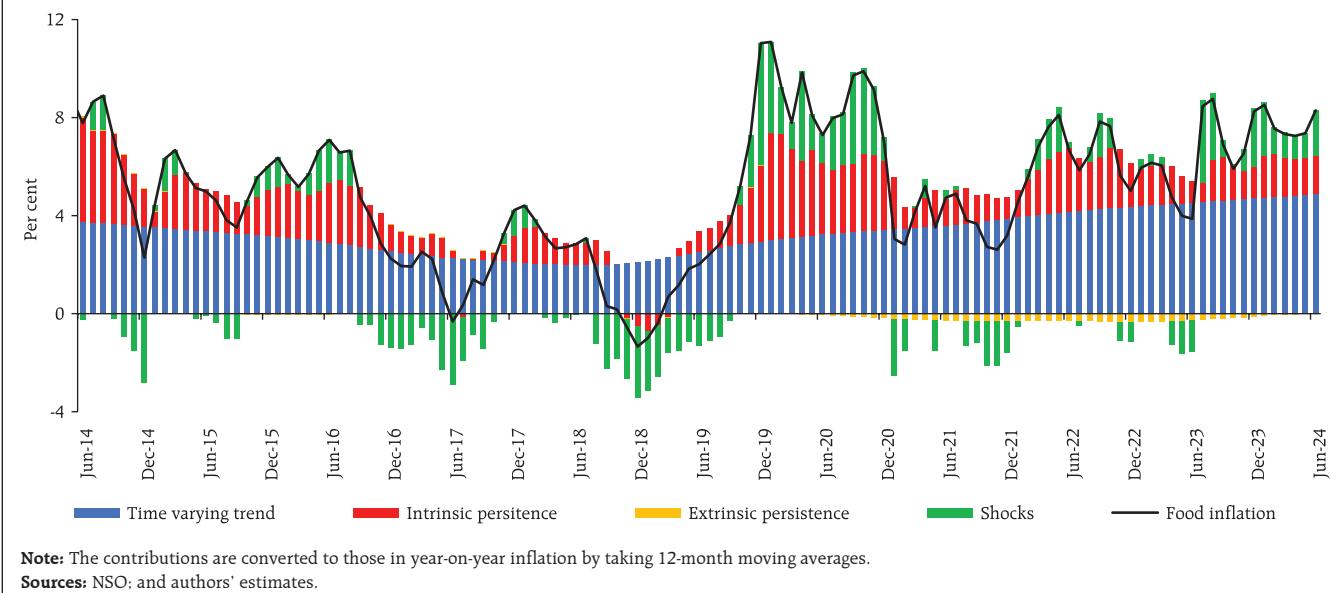
(1)

The time varying parameters are estimated by the Bayesian Markov Chain Monte Carlo (MCMC) method using the codes of Nakajima (2011)⁵ on monthly data from January 2011 to June 2024.

The results indicate that food inflation has been rising since the second half of 2019, primarily driven by its time varying trend or the secular upward drift in expectations (Chart 4). Intrinsic persistence is also found to contribute significantly to the food inflation process during this period – past food inflation developments, especially the high inflation episodes, have a bearing in shaping current food inflation movements. Extrinsic persistence or demand conditions contributed negatively to food inflation between 2020 to H1:2023. Most importantly, unfavorable supply shocks contributed significantly to elevated food inflation in 4 out of 5 years, i.e., since 2019-20, invalidating the perception of these events being transitory in nature (Table 2).

In every year since 2019-20 – except in 2021-22⁶ – the Indian economy has faced adverse supply

Chart 4: Decomposition of Food Inflation



⁵ 10,000 samples are drawn, after the initial 1000 samples are discarded. The draws look stable. The sample autocorrelations are low. The convergence diagnostics (CD) of Geweke (1992) suggest that, the null hypothesis of the convergence to the posterior distribution is not rejected.

⁶ Even though negative on an average, severe heat waves conditions in second half of AY 2021-22 had adversely impacted the output and yield of key rabi crops, driving food inflation high during H2 of the AY 2021-22.

Table 2: Contribution of Supply Shocks to Food Inflation (year-on-year): Agriculture Year Averages

Agriculture year (AY)	Average monthly supply shock
2014-15	-0.05
2015-16	0.48
2016-17	-0.88
2017-18	-0.17
2018-19	-1.80
2019-20	1.82
2020-21	0.80
2021-22	-0.16
2022-23	0.25
2023-24	1.51

Note: Since the supply side factors affecting food inflation are in focus, averages are calculated based on agriculture year (June to July).

Source: Authors' estimates.

disruptions in agricultural conditions, in contrast to the previous five years when mostly favorable conditions prevailed. During 2019-24, agriculture production and supply chains were affected by multiple heat waves due to strong *El Nino* conditions; crop production shortfalls due to uneven south-west monsoons; *La Nina* conditions impacting rainfall patterns in the post-monsoon season; unseasonal rainfall and hailstorms; and temporal monsoon variability. These repetitive climate shocks pushed up food inflation as well. Measures taken for containment of specific idiosyncratic price pressures through proactive supply management helped to minimise their unfavorable effects (Patra *et al.*, 2024b).

IV. Elevated Food Inflation and Inflation Expectations

In this section we examine how elevated food inflation affects inflation expectation (IE) formation. We use inflation expectations collected through the Reserve Bank's inflation expectation survey of households (IESH). IE is regressed on year-on-year food inflation, while also controlling for inflation target, which provides the nominal anchor for monetary policy, and the policy repo rate, *i.e.*, its operationalization, using quarterly data from 2012-13 to Q1:2024-25⁷.

⁷ All India CPI-Combined food and beverages inflation (year-on-year) data available from January 2012 onwards was used for the analysis.

Table 3: Determinants of Inflation Expectations

Dep. variable: IE	Coefficient	p-value
IE (-1)	0.44	0.000
Food Inflation	0.12	0.047
Target*	0.65	0.006
Repo	-0.31	0.097
Constant	4.00	0.000

Diagnostics

Adjusted R²: 0.740

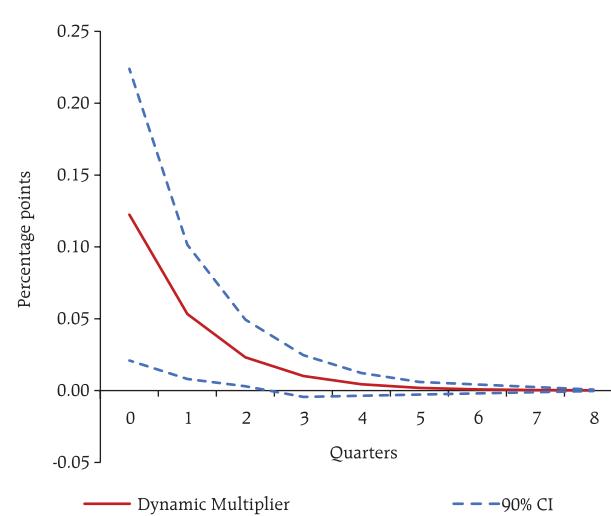
Breusch-Godfrey LM test for autocorrelation in errors p-value: 0.793

Note: *: Target is proxied using the glide path in the pre-flexible inflation targeting period (prior to Q3:2016-17) and 4 per cent thereafter.

Sources: NSO; RBI; and authors' estimates.

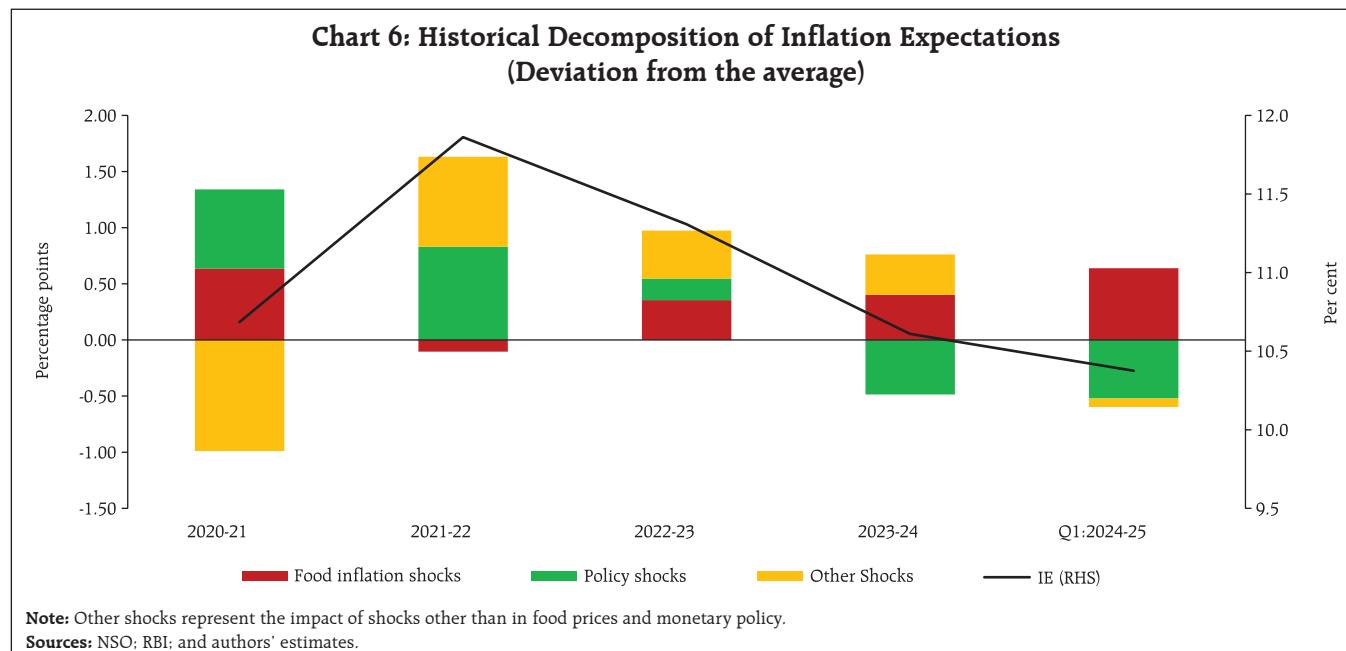
Food inflation has a statistically significant positive impact on inflation expectations, while monetary policy has a significant negative impact (Table 3). The long-run elasticity of food inflation on IE is 0.22. This shows that an increase in food inflation leads to unanchoring of IE. The dynamic multiplier⁸ suggests that an isolated food inflation shock impacts inflation expectation up to 2 quarters (Chart 5).

The historical decomposition (HD) of inflation expectations (deviation from the average) derived from the regression equation suggests that the

Chart 5: Dynamic Multiplier: [Shock: Food Inflation, Response: Inflation Expectation]

Sources: NSO; RBI; and authors' estimates.

⁸ Dynamic multiplier helps to understand the effect of changes in a shock variable on its response, over a period of time.



persistent and one-sided food inflation shocks that have been experienced in recent times are positively contributing to inflation expectations, but their impact has been largely offset by the restrictive monetary policy stance and supporting rate actions (Chart 6). The counterfactual is that the impact of food inflation shocks on expectations outcomes would have been substantially higher in the absence of disinflationary monetary policy.

Table 4: Bivariate Correlations

Indicators	Food Inflation	Inflation Expectation
Manufacturing Input Price ^	0.27**	0.60*
Manufacturing Output Price ^	0.30*	0.34*
Services Input Price ^	0.14	0.24**
Services Price Charged ^	0.26**	0.25**
Less-formal Service Charges #	0.38*	0.68*

Note: The correlations are based on quarterly average data for the period from Q1:CY 2012 to Q2:CY 2024.

^: Based on Purchasing Managers Index (PMI) data for India.

#: The index is based on CPI and includes the following items from the CPI basket viz. tailor, washer man, laundry, ironing, watchman charges (other cons taxes), domestic servant/cook, sweeper, bus/tram fare, taxi, auto-rickshaw fare, school bus, van, etc. and barber, beautician, etc. CPI data for the period 2012 to 2013 has been arrived at by backcasting data from CPI 2010=100 base year series.

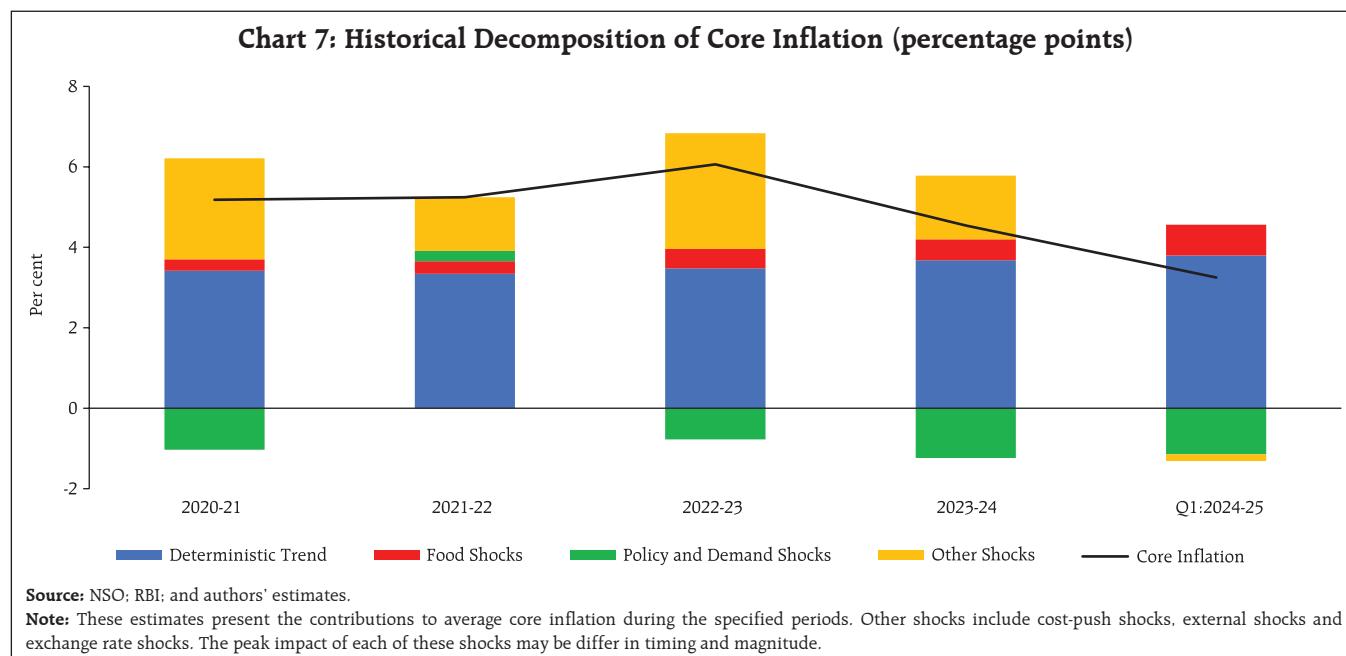
*: Significant at 5 per cent level; **: Significant at 10 per cent level.

Sources: NSO; HSBC India PMIs; and authors' estimates.

Spillovers of food price shocks to costs, service charges and output prices are evident in their statistically significant positive correlations with inflation expectations (Table 4). Positive correlation is also found between food inflation and input costs and output prices of manufacturing and services sectors embedded in purchasing managers' indices (PMIs) and an index of less-formal service charges compiled from the CPI data. Goods inflation seems to be more sensitive to the spillovers from food inflation shocks, as indicated by the significant and higher correlations of food inflation with manufacturing price expectations than with formal services sector's expectations. Less-formal sector services charges have a much higher and statistically significant correlation with inflation expectations (0.68) and food inflation (0.38) than formal sectors, indicating their vulnerability to persistent food inflation shocks and spillovers.

V. Food Price Spillovers in a Semi-structural Model

The RBI's Quarterly Projection Model (QPM) belongs in a genre of New-Keynesian open economy models and consists of six blocks viz., 1) an aggregate



demand block; 2) an aggregate supply block; 3) a monetary policy rule; 4) an exchange rate block; 5) a fiscal block; and 6) the rest of the world block. It incorporates several India-centric features. The aggregate demand block has equations on output gap and bank lending conditions. The aggregate supply block separately models different components of inflation, *viz.*, food, fuel and core. Food and fuel price spillovers to core inflation are modeled by using an expectations-augmented Phillips curve. The monetary policy interest rate function is a Taylor-type rule. The uncovered interest rate parity condition is modified to incorporate India-centric features like the effects of capital flows and the role of forex interventions (John *et al.*, 2023).

The QPM is used to estimate the HD of core inflation to evaluate the food price passthrough (Chart 7). Food price spill overs to core inflation have been increasing since 2022-23, with Q1:2024-25 registering a significant rise.

VI. Conclusion

Core inflation had been declining since 2022-23, mainly driven by monetary policy actions and stance and the waning of cost-push shocks. Food price

shocks have been imposing upside pressures on core inflation throughout these years, but this has been offset by disinflationary monetary policy. Should this disinflationary force recede, upward pressures on core and headline inflation could get magnified and may run out of control, especially with aggregate demand picking up alongside cost-push risks looming in the wake of geo-political tensions. Monetary policy is the only active disinflationary agent in the economy. Going forward, therefore, if food price pressures persist and continue to spill over, a cautious monetary policy approach is warranted. The conventional treatment of food price perturbations as transitory in the setting of monetary policy is increasingly becoming untenable. A large part of this increase in persistence is driven by the secular upward drift in food inflation expectations. Past high food inflation episodes – intrinsic persistence – have a bearing in shaping these expectations. The inelasticity of the demand for food to price shocks makes food inflation persistence all the more worrying.

With spillovers to costs, service charges and output prices, the danger of food inflation surfacing as a more generalised phenomenon has increased. Under these circumstances, the sources of food price

shocks may lie outside the realm of monetary policy but when they result in food inflation acquiring persistence and spilling over into other components of inflation and into consumer behaviour, monetary policy must be disinflationary to quell these price pressures in order to achieve its mandate of price stability and thereby retain credibility. Failing to act against persistent food inflation risks expectations getting unanchored, generalisation of price pressures and loss of control over inflation, undermining of consumer and business confidence, and erosion of external sector sustainability and competitiveness, with deleterious consequences for growth prospects.

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Union Budget 2024-25: An Assessment

by Aayushi Khandelwal, Harshita Yadav, Akash Raj, Saksham Sood, Ipsita Padhi, Bichitrananda Seth, Anoop K. Suresh, and Samir Ranjan Behera ^

The Union Budget 2024-25 aims at providing a boost to growth and job creation while pursuing fiscal consolidation. The Budget has proposed simplification of direct and indirect tax regimes and continues its thrust towards increasing capital expenditure and strengthening the quality of government spending. The Budget chalks out an agenda for next-generation economic reforms intended to improve overall factor productivity and efficiency in the factor markets, which augur well for medium-term growth prospects.

Introduction

Amidst the global economy grappling with multiple uncertainties, India's economic growth remains resilient. The Union Budget 2024-25 has laid down a medium-term roadmap for achieving 'Viksit Bharat' through nine priorities, viz., productivity and resilience in agriculture, employment and skilling, inclusive human resource development and social justice, manufacturing and services, urban development, energy security, infrastructure, innovation, research and development, and next generation reforms.

The Budget has also proposed the formulation of an 'Economic Policy Framework' towards implementing next-generation reforms with a focus on improving overall productivity and facilitating sector and market efficiency. Emphasising the principles of competitive and cooperative federalism, the Budget proposes to incentivise States for faster implementation of

[^] This article is prepared under the overall guidance of Smt. Rekha Misra. The authors are thankful to Dr. Nadhanael for his valuable comments and suggestions. The authors are from the Department of Economic and Policy Research. The views expressed in this article are those of the authors and do not necessarily represent the views of the Reserve Bank of India.

reforms by earmarking a significant portion of the 50-year interest-free loan.¹

The Budget has proposed to simplify both direct and indirect tax regimes. A comprehensive review of the customs duty rate structure is proposed to be undertaken over the next six months for facilitating ease of trade, addressing duty inversion and reducing disputes. It has also announced a comprehensive review of the Income-Tax Act, 1961, with an aim to reduce disputes and litigation, thereby providing certainty to taxpayers. On the personal income tax front, the rate structure for the new tax regime has been revised, along with increased standard deduction for salaried employees, to provide relief to taxpayers.²

On the expenditure front, acknowledging the strong multiplier effects of infrastructure development, the Budget 2024-25 has provisioned ₹11.1 lakh crore (3.4 per cent of GDP) for capital expenditure, higher than the 3.2 per cent of GDP allocated in 2023-24 (Provisional Accounts, PA). On the other hand, revenue expenditure is estimated to decline from 11.8 per cent of GDP in 2023-24 (PA) to 11.4 per cent in 2024-25 (BE).

The Union Budget 2024-25 reiterated the government's commitment towards fiscal prudence by budgeting a reduction in the gross fiscal deficit (GFD) to 4.9 per cent of GDP in 2024-25, in line with the medium-term target of GFD below 4.5 per cent of GDP by 2025-26. From 2026-27 onwards, the Budget has announced the government's intention to maintain the GFD at a level that ensures that the Union government debt as per cent of GDP will be on a declining path.

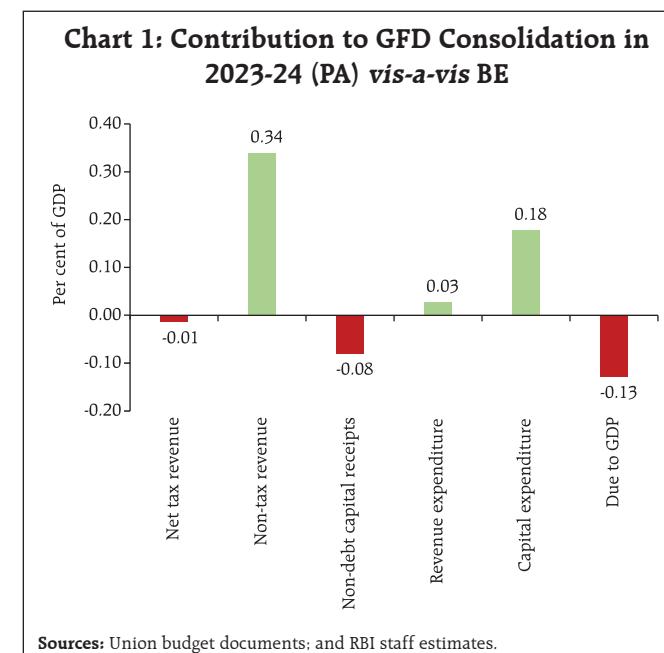
¹ The 50-year interest free loan refers to the long-term interest-free capex loan provided by Centre to States under the 'Scheme for Special Assistance to States for Capital Investment'. In each financial year, a portion of the capex assistance to States under this scheme is earmarked for providing incentives to States for carrying out citizen centric reforms. For instance, in 2023-24, a part of the capex loan under this scheme was provided to States as an incentive amount for reform centric and sector specific areas, viz., scrapping old vehicles, urban planning reforms, financing reforms in urban local bodies to make them creditworthy for municipal bonds, housing for police personnel above or as part of police stations, unity malls, 'children and adolescent' library and digital infrastructure.

² For detailed Budget proposals please refer to Annex III.

Against this backdrop, the rest of the article is divided into seven sections. Section II presents the underlying dynamics of the fiscal deficit. Sections III and IV assess the trends in receipts and expenditure, respectively, of the Union government. Section V covers the outstanding debt position of the Union government. Section VI examines the major sources of financing of the fiscal deficit whereas Section VII dwells upon the transfer of resources to States. Section VIII puts forth the concluding observations.

II. Fiscal Deficit – The Underlying Dynamics

During 2023-24, the government continued the focus on prudent fiscal management. The GFD of the Union government stood at 5.9 per cent of the GDP in 2023-24 (RE) in line with BE. As per 2023-24 (PA), the GFD stood lower at 5.6 per cent of GDP, on account of higher non-tax receipts along with lower revenue and capital expenditure resulting in consolidation of 32



basis points over 2023-24 (BE) [Chart 1]. The primary deficit stood at 2.0 per cent of GDP in 2023-24 (PA) as against the 2.3 per cent of GDP in the BE (Table 1).

Table 1: Key Indicators³

(Per cent of GDP)

	2022-23	2023-24			2024-25	
	Actuals	BE	RE	PA	BE (Interim)	BE (Final)
1	2	3	4	5	6	7
1. Fiscal Deficit	6.4	5.9	5.9	5.6	5.1	4.9
2. Primary Deficit	3.0	2.3	2.3	2.0	1.5	1.4
3. Revenue Deficit	4.0	2.9	2.8	2.6	2.0	1.8
4. Effective Revenue Deficit	2.8	1.7	1.8	1.6	0.8	0.6
5. Gross Tax Revenue	11.3	11.1	11.6	11.7	11.7	11.8
6. Non-Tax Revenue	1.1	1.0	1.3	1.4	1.2	1.7
7. Revenue Expenditure	12.8	11.6	12.0	11.8	11.2	11.4
8. Capital Expenditure <i>of which:</i>						
Capital Outlay	2.7	3.3	3.2	3.2	3.4	3.4
9. Effective Capital Expenditure	2.3	2.8	2.7	2.7	2.9	2.8
	3.9	4.5	4.3	4.2	4.6	4.6

- Notes:**
1. Effective revenue deficit is the difference between revenue deficit and grants-in-aid for creation of capital assets.
 2. Capital outlay is capital expenditure *less* loans and advances.
 3. Effective capital expenditure is capital expenditure *plus* grants-in-aid for creation of capital assets.
 4. The figures for 2023-24 (RE) might be at variance with those presented in the Union Budget, as they were computed using the latest available provisional estimates of GDP for 2023-24 released on May 31, 2024 (₹2,95,35,667 crore), rather than the first advance estimates available during the presentation of the Interim Budget on February 01, 2024.
 5. BE refers to budget estimates, RE refers to revised estimates, and PA refers to provisional accounts.

Sources: Union budget documents; and RBI staff estimates.

³ For details, please refer to Annex I.

For 2024-25, the GFD is budgeted at 4.9 per cent of GDP, lower than 5.1 per cent of GDP in the Interim Budget 2024-25⁴. The fiscal consolidation in 2024-25 (BE) over 2023-24 (PA) is sought to be achieved through containment in revenue expenditure to 11.4 per cent of GDP and robust growth in revenue receipts. The revenue deficit is budgeted to decline from 2.6 per cent of GDP in 2023-24 (PA) to 1.8 per cent in 2024-25 (BE), freeing up fiscal space to boost capital expenditure [Table 1].

Decomposition of GFD

The proportion of GFD pre-empted by revenue deficit (RD) has come down from an average of 73.7 per cent of GFD during 2018-19 to 2020-21 to 46.3 per cent in 2023-24 (PA) and further to 36.0 per cent in 2024-25 (BE). Concomitantly, the share of growth-inducing capital outlay in GFD has risen to 47.6 per cent in 2023-24 (PA) and is expected to increase further to 56.9 per cent in 2024-25 (BE) from an average of 31.3 per cent of GFD during 2018-19 to 2020-21 (Chart 2).

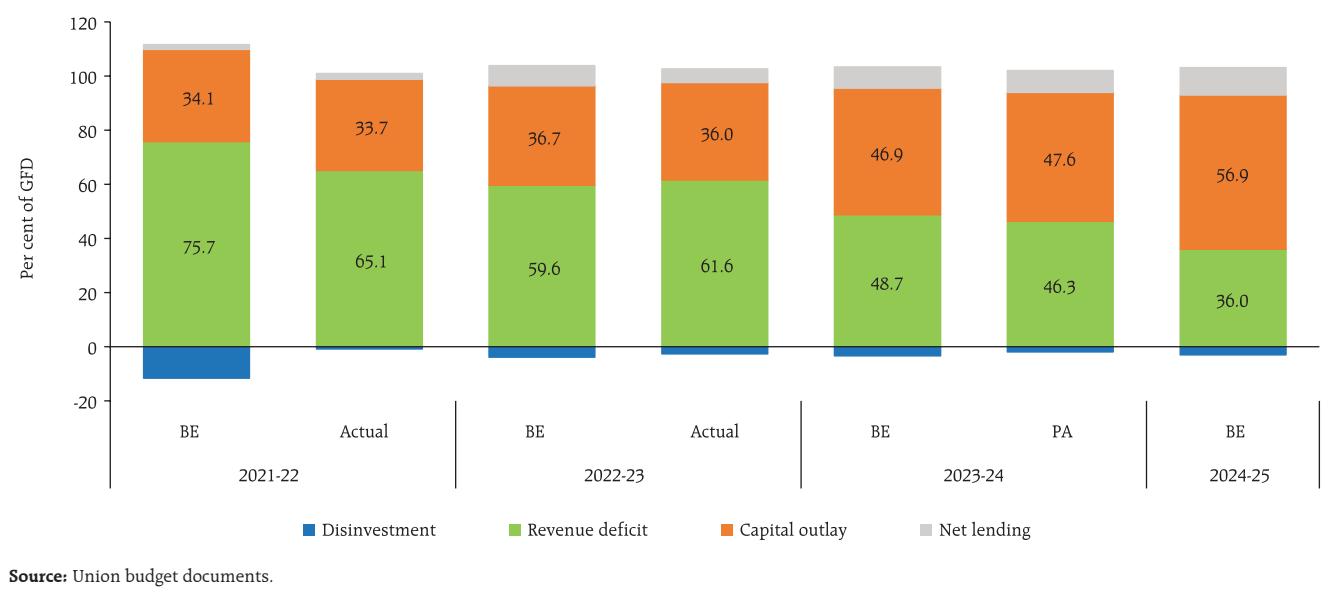
III. Receipts

In 2023-24 (PA), the total non-debt receipts (comprising of net tax revenues, non-tax revenues and non-debt capital receipts) grew by 13.6 per cent over 2022-23, primarily on account of robust growth in tax revenues supported by buoyant income tax collections and increase in non-tax revenues on account of higher-than-budgeted surplus/dividend from the Reserve Bank/nationalised banks/financial institutions. The total non-debt receipts are expected to sustain their momentum in 2024-25 (BE) with a growth of 15.0 per cent and are budgeted to rise to 9.8 per cent of GDP from 9.4 per cent in 2023-24 (PA).

Tax Revenues

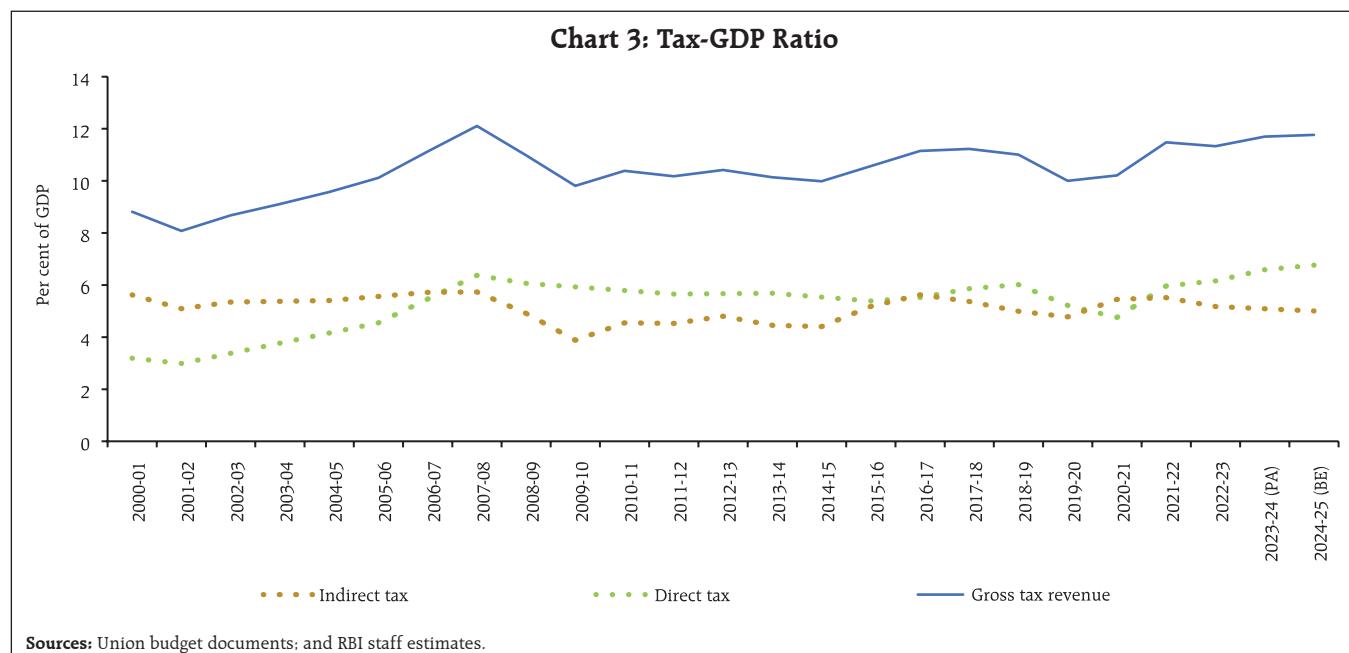
Gross tax revenues in 2023-24 (PA) exceeded the budget estimates by ₹1.04 lakh crore. Net tax revenues⁵ in 2023-24 (PA) were, however, marginally below the budgeted amount attributable to higher tax devolution to the States. For 2024-25, the gross tax revenues are budgeted to grow by 10.8 per cent over 2023-24 (PA). The tax-GDP ratio will increase to 11.8 per cent of GDP, the highest since 2007-08 (Chart 3).

Chart 2: Decomposition of Gross Fiscal Deficit



⁴ Nominal GDP for final 2024-25 (BE) announced on July 23, 2024 been projected at ₹3,26,36,912 crore assuming 10.5 per cent growth over the Provisional Estimates (PE) of GDP of 2023-24 at ₹2,95,35,667 crore released by MoSPI on May 31, 2024.

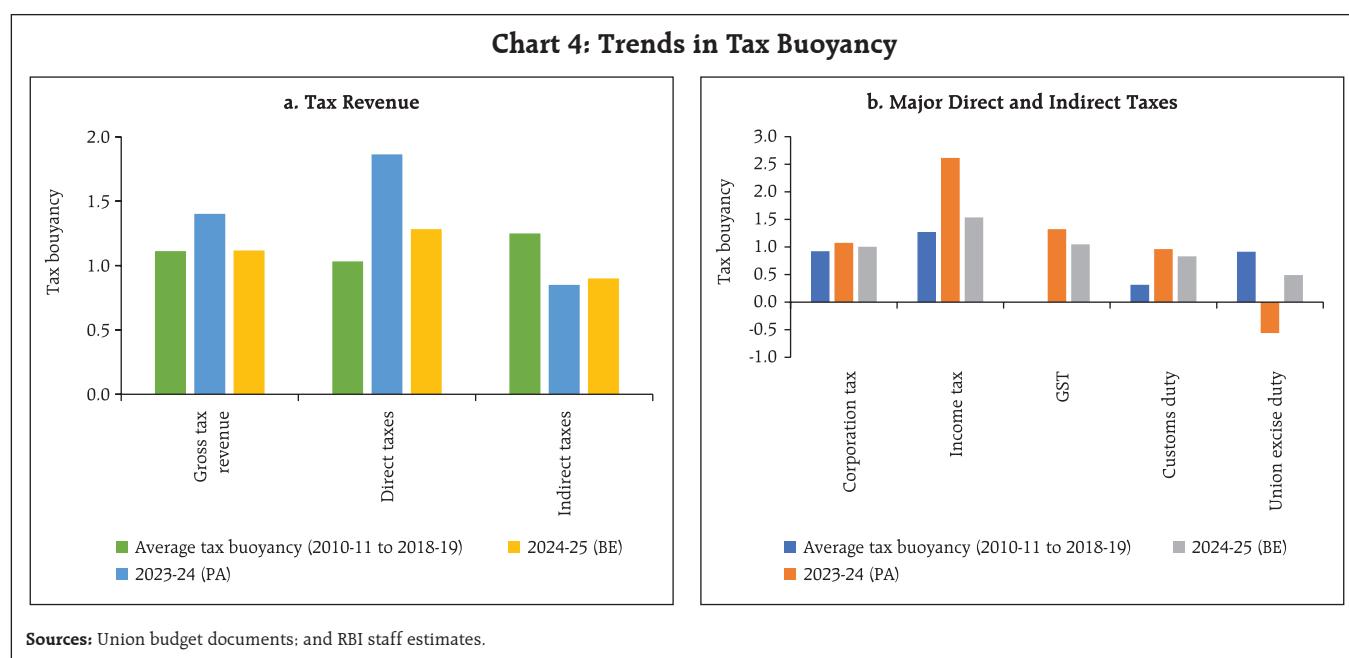
⁵ Gross tax revenues less tax devolution to the States and transfer to NCCD (National Calamity Contingent Duty) funds.

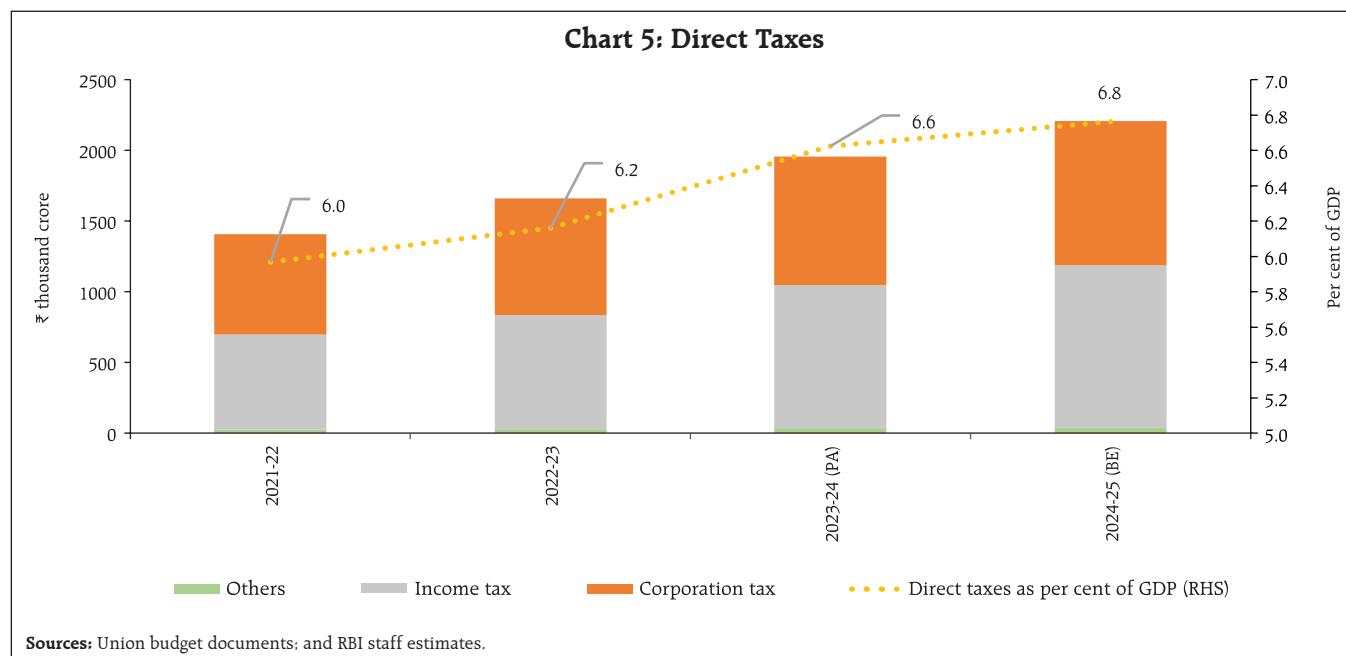


For 2024-25 (BE), the buoyancy of the gross tax revenue at 1.1 will be in line with its average during 2010-11 to 2018-19. The buoyancy of direct taxes in 2024-25 (BE) is lower compared to 2023-24 (PA), but higher than the average trend. On the other hand, the buoyancy of indirect taxes in 2024-25 (BE) will be higher compared to 2023-24 (PA), although it remains lower than the average trend (Chart 4a and b).

Direct Taxes

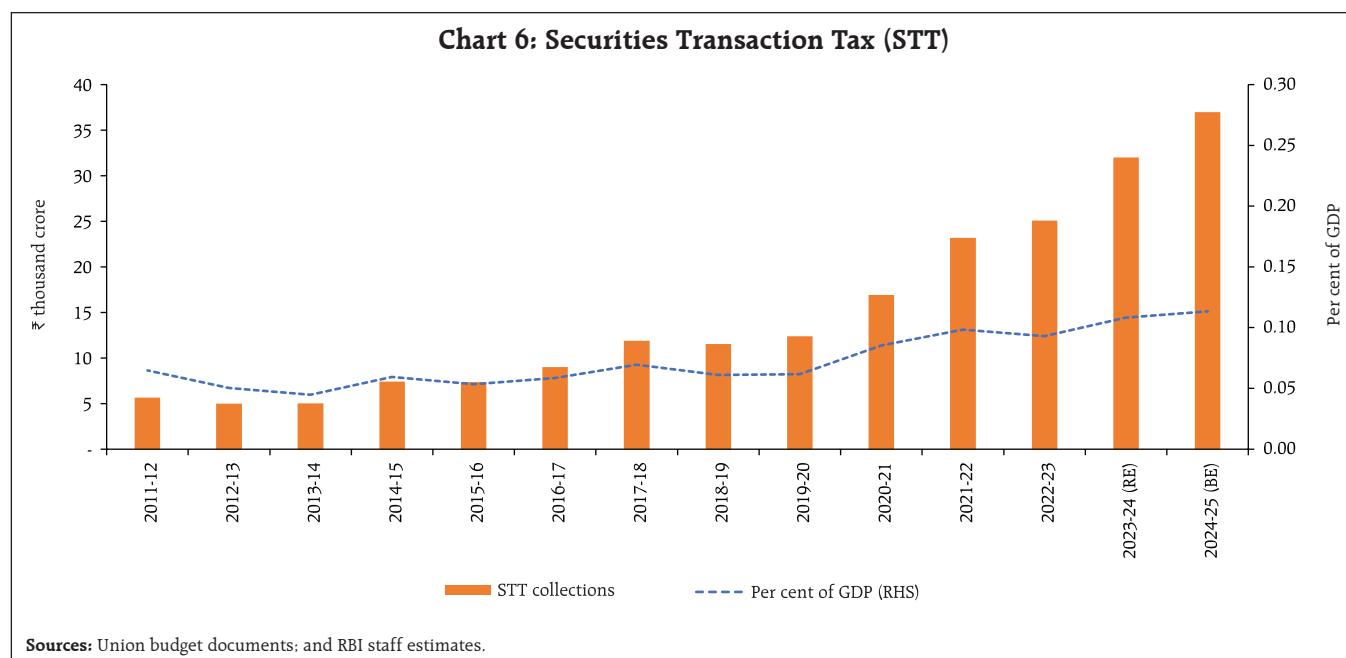
Direct taxes recorded a robust growth in 2023-24 (PA) and exceeded their budget estimates by ₹1.3 lakh crore, boosted by a growth of 25.0 per cent in income tax collections. In 2024-25, direct taxes are budgeted to grow by 12.8 per cent, with income tax and corporation tax expected to grow by 13.8 per cent and 12.0 per cent, respectively (Chart 5).





The Budget has proposed a comprehensive review of the Income-Tax Act, 1961 to improve tax certainty and reduce tax litigations along with taking steps for simplification of tax regime for charities, structure of tax deducted at source (TDS), capital gains taxation and deepening of income tax base. The corporate tax rate on foreign companies is proposed to be reduced from 40 per cent to 35 per cent. On the personal income tax front, the standard deductions for salaried

employees and family pensions for pensioners under the new tax regime have been enhanced to ₹75,000 and ₹25,000, respectively, along with revisions in the tax structure under the new tax regime; these changes are estimated to result in income tax savings up to ₹17,500 for the salaried employees. Further, the government has increased the securities transaction tax (STT) on futures and options to check the heightened activity in the market segment (Chart 6).



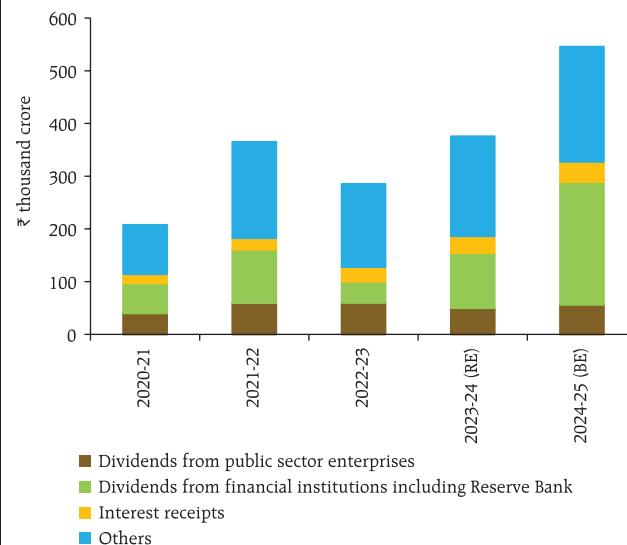
Indirect Taxes

Indirect tax revenues posted a growth of 8.2 per cent in 2023-24 (PA) and fell below the budgeted amount, primarily on account of shortfall of ₹33,670 crore in Union government's excise duty collections. In 2024-25 (BE), the growth in indirect taxes is budgeted at 8.3 per cent, led by GST collections (11.0 per cent), customs duties (2.0 per cent), and excise duty (6.1 per cent) [Chart 7]. To boost domestic production, deepen local value additions, and foster export competitiveness, the Budget proposed a reduction in customs duties on certain medical equipment, mobile phones, critical minerals, marine products, certain electronics, precious metals, certain inputs for leather and textile industry and expanded the list of the exempted capital goods for manufacturing of solar cells and panels. A comprehensive review of the customs rate structure is also proposed to be undertaken in the coming months to promote ease of trade, remove duty inversion, and reduce the incidence of disputes.

Non-Tax Revenues

Non-tax receipts posted a growth rate of 40.8 per cent in 2023-24 (PA), exceeding their BE by

Chart 8: Major Components of Non-Tax Revenue



Source: Union budget documents.

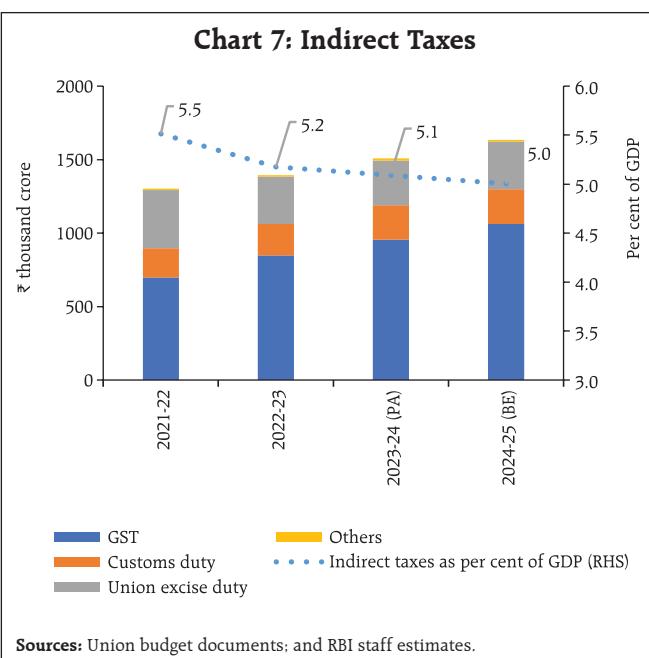
₹1.0 lakh crore, primarily due to a higher than budgeted surplus/dividend transfer by the Reserve Bank/nationalised banks/financial institutions. In 2024-25 (BE), non-tax revenues are expected to maintain their momentum and increase by 35.8 per cent, on the back of an increase in dividend and profits led by the surplus transfer by the Reserve Bank (Chart 8).

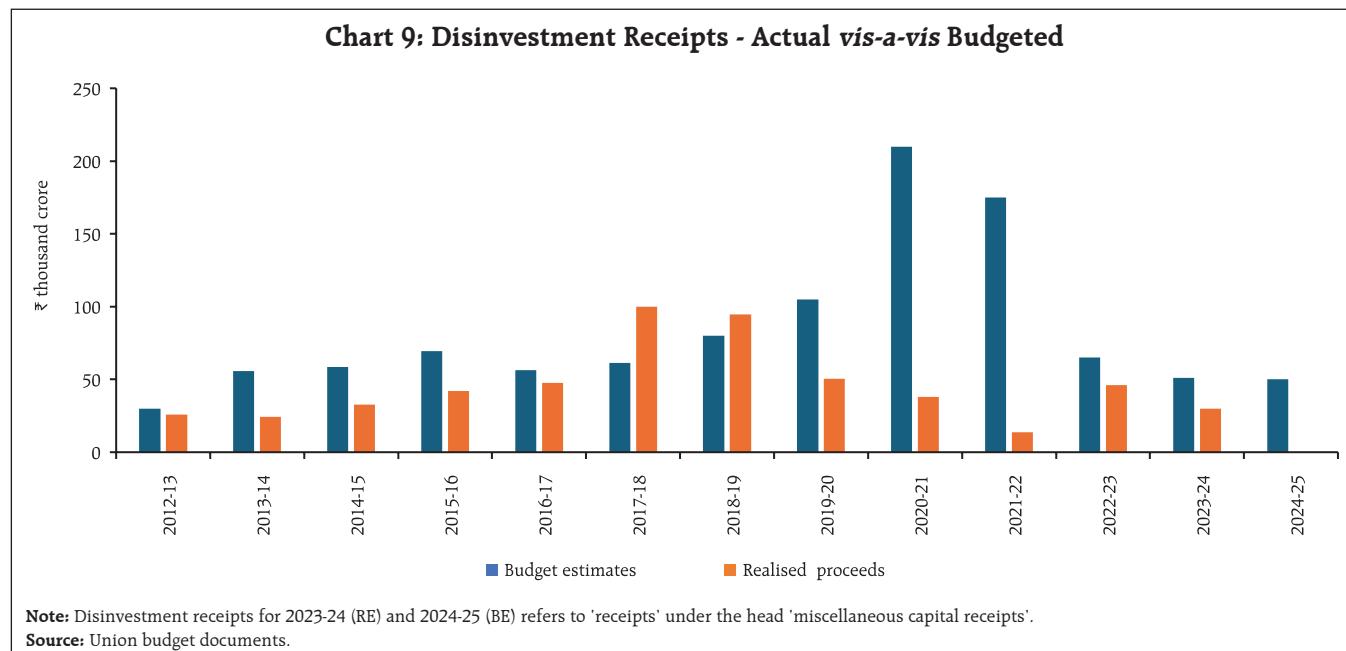
Non-Debt Capital Receipts

In 2023-24 (PA), non-debt capital receipts declined by 16.3 per cent on account of a contraction in proceeds from disinvestment. In 2024-25 (BE), the non-debt capital receipts are pegged to grow at 29.0 per cent, with the disinvestment target at ₹50,000 crore (Chart 9).

IV. Expenditure

Total expenditure is budgeted to grow by 8.5 per cent in 2024-25 (BE) over 2023-24 (PA), as against 5.9 per cent growth in 2023-24 (PA). Capital expenditure is budgeted at a two decade high of 3.4 per cent of GDP, with a provision of ₹11.1 lakh crore in 2024-25





(BE). Revenue expenditure is budgeted to grow by 6.2 per cent whereas capital expenditure growth is pegged at 17.1 per cent (Table 2). The revenue expenditure to capital outlay ratio is at an all-time low of 4.0 as per 2024-25 (BE), indicative of improvement in

the quality of expenditure. The outlay for the 'Scheme for Special Assistance to States for Capital Investments' has been enhanced to ₹1.5 lakh crore in 2024-25 (BE) from ₹1.1 lakh crore in 2023-24 (RE) [Chart 10a and b].

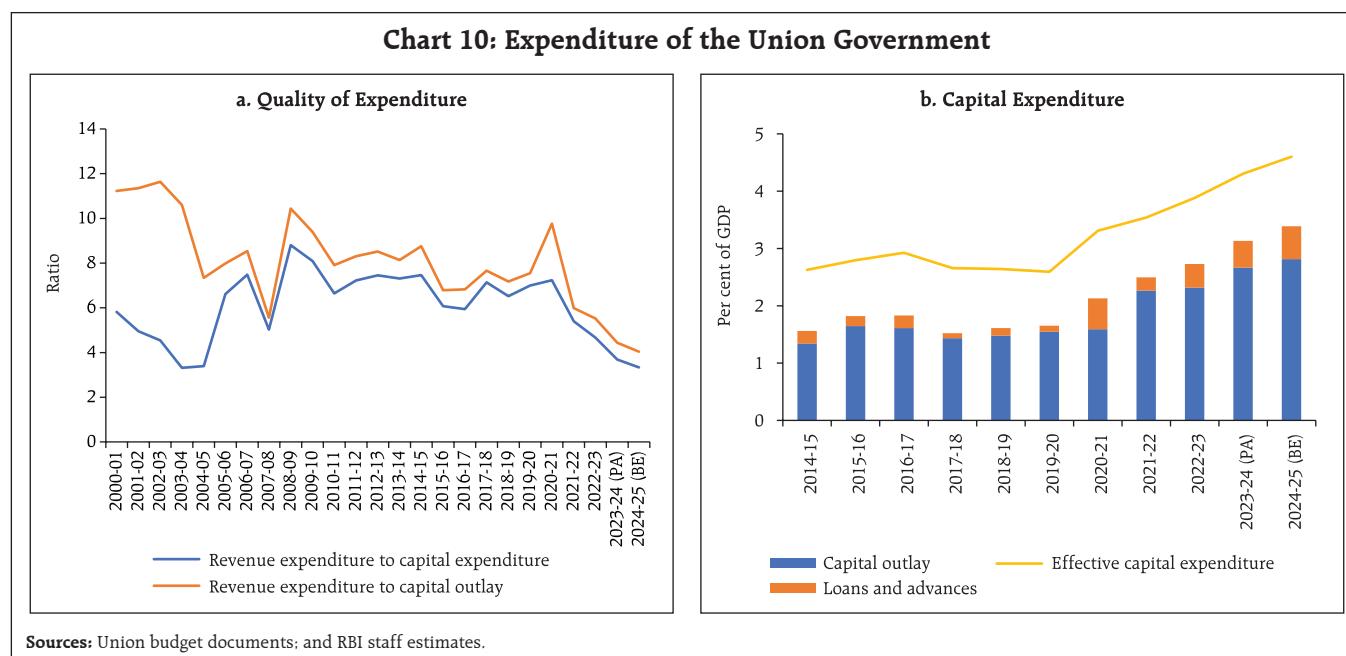


Table 2: Expenditure of Union Government

Item	₹ Thousand crore				Growth rate (per cent)			
	2022-23	2023-24 (RE)	2023-24 (PA)	2024-25 (BE)	2023-24 (RE) over 2022-23	2023-24 (PA) over 2022-23	2024-25 (BE) over 2023-24 (RE)	2024-25 (BE) over 2023-24 (PA)
1	2	3	4	5	6	7	8	9
1. Total Expenditure	4,193	4,490	4,443	4,821	7.1	5.9	7.3	8.5
2. Revenue Expenditure (<i>of which</i>)	3,453	3,540	3,494	3,709	2.5	1.2	4.8	6.2
(i) Interest Payments	929	1,055	1,064	1,163	13.7	14.6	10.2	9.3
(ii) Total Subsidies	578	441	NA	428	-23.8	NA	-2.7	NA
Food	273	212	212	205	-22.2	-22.4	-3.3	-3.1
Fertiliser	251	189	189	164	-24.8	-24.6	-13.2	-13.5
Petroleum	7	12	12	12	79.5	79.5	-2.6	-2.6
(iii) MGNREGS	91	86	NA	86	-5.3	NA	0.0	NA
(iv) PM-KISAN	58	60	NA	60	3.0	NA	0.0	NA
(v) PM-Awas (Rural)	45	32	NA	55	-28.8	NA	70.3	NA
(vi) PM-Awas (Urban)	29	22	NA	30	-22.9	NA	36.5	NA
(vii) Samagra Shiksha	33	33	NA	38	1.5	NA	13.6	NA
(viii) Defence (Revenue)	256	299	NA	283	16.6	NA	-5.3	NA
3. Capital Expenditure	740	950	949	1,111	28.4	28.2	16.9	17.1
4. Effective Capital Expenditure	1,046	1,271	1,252	1,502	21.5	19.7	18.1	19.9

NA: Not Available.

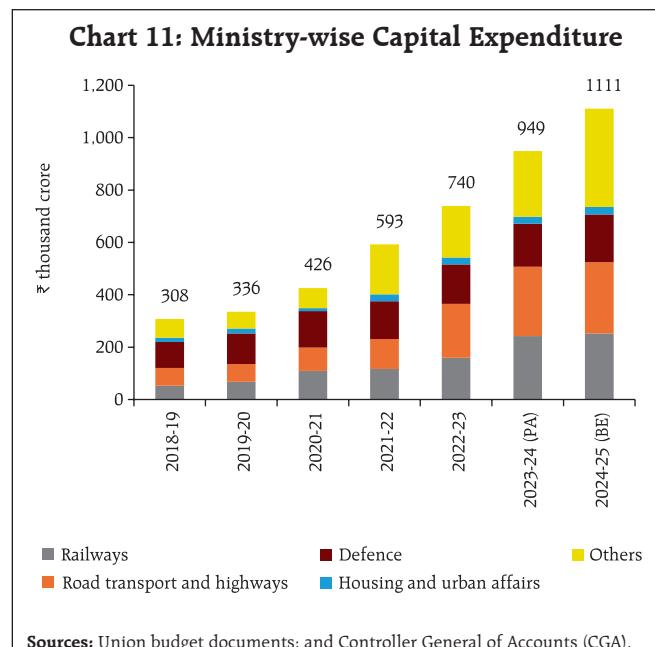
Source: Union budget documents.

Among the major schemes, PM Awas Yojana (Rural), PM Awas Yojana (Urban), National Health Mission⁶, road works and Samagra Shiksha have witnessed increased allocation in 2024-25 (BE) over 2023-24 (RE) [Table 2].

The combined capex of the Union government and the central public sector enterprises (CPSEs) has witnessed an increase from 2021-22 onwards, though there has been a reversal in the financing pattern of CPSEs, with the share of the budgetary support to finance capex of CPSEs rising and that of the internal resources and extra budgetary resources moderating (Box A).

The Ministry of Railways and Road Transport and Highways account for almost half of the budgeted capital expenditure for 2024-25 (Chart 11). The total allocation towards new and renewable energy is budgeted to increase from 0.03 per cent

of GDP in 2023-24 (PA) to 0.06 per cent in 2024-25 (BE), driven by solar power projects (grid) and PM



⁶ National Health Mission includes allocation for the Flexible Pool for Reproductive and Child Health (RCH) and Health System Strengthening, National Health Programme and National Urban Health Mission.

Box A: Capital Expenditure - The Role of CPSEs

Central Public Sector Enterprises (CPSEs)⁷ have played a crucial role in India's industrial development by advancing critical sectors such as heavy industry, transport, energy, telecommunications, and defence.⁸ CPSEs have aided in strengthening domestic physical infrastructure (Roy and Das, 2023). CPSEs finance their capex from (i) Internal and Extra Budgetary Resources (IEBR)⁹ and (ii) the budget support received from the Union government. Financing capex through IEBR facilitates the deployment of government's scarce resources for other competing productive purposes, although the financing of CPSEs capex by the government through budgetary support helps in reducing the overall cost of borrowing as the government can borrow at a lower cost than CPSEs.

There has been a significant increase in the capex of the Union government from an average of 1.7 per cent of GDP during 2008-20 to 3.0 per cent of GDP during 2021-25

with the twin objective of strengthening the domestic infrastructure and crowding in private investment (GoI, 2023). Key infrastructure sectors such as roads and railways, with large multiplier effects on the economy, have been prioritised. The increase in expenditure is reflected both in the Union government's capex as well as the budget support provided to CPSEs. However, the IEBR of CPSEs has declined from an average of 2.3 per cent of GDP during 2016-20 in the pre-COVID period to 1.2 per cent in the post-COVID period (2021-25).¹⁰ With the increase in the budget support provided to CPSEs and a reduction in their IEBR, the share of IEBR in the total capex of CPSEs has declined from an average of 69.9 per cent in the pre-COVID period to 46.0 per cent in the post-COVID period. Overall, the total capex of the Union government and CPSEs increased from an average of 4.0 per cent of GDP in the pre-COVID period to 4.2 per cent of GDP in the post-COVID period (Chart A.1).

Chart A.1: Capital Expenditure by Union Government and CPSEs



Source: Union budget documents.

References:

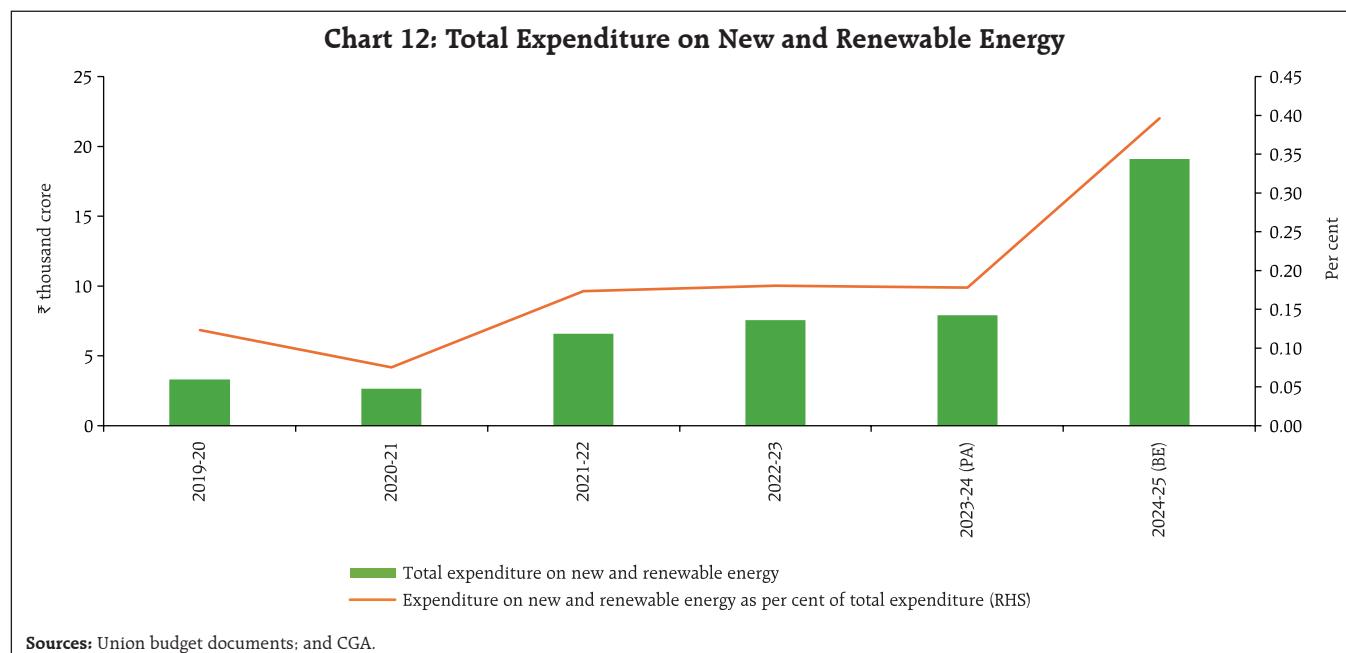
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⁷ CPSEs are companies incorporated under the Companies Act, 2013 or under any previous company law, or institutions formed in pursuance of an Act of Parliament, in which not less than fifty-one per cent of the share capital is held by the Union government or by any other CPSEs, or partly by the Union government and partly by one or more CPSEs (GoI, 2022).

⁸ As per the latest Public Enterprises Survey of 2022-23, there are 402 CPSEs out of which 254 are operating.

⁹ IEBR comprises of Internal Resources (comprising of retained profits-net of dividend to Government, depreciation provision and carry forward of reserves and surpluses) and Extra Budgetary Resources (consisting of receipts from issue of bonds, debentures, external commercial borrowing, suppliers' credit, deposit receipts and term loans from financial institutions). Budgetary support and IEBR together finance the capital expenditure of CPSEs.

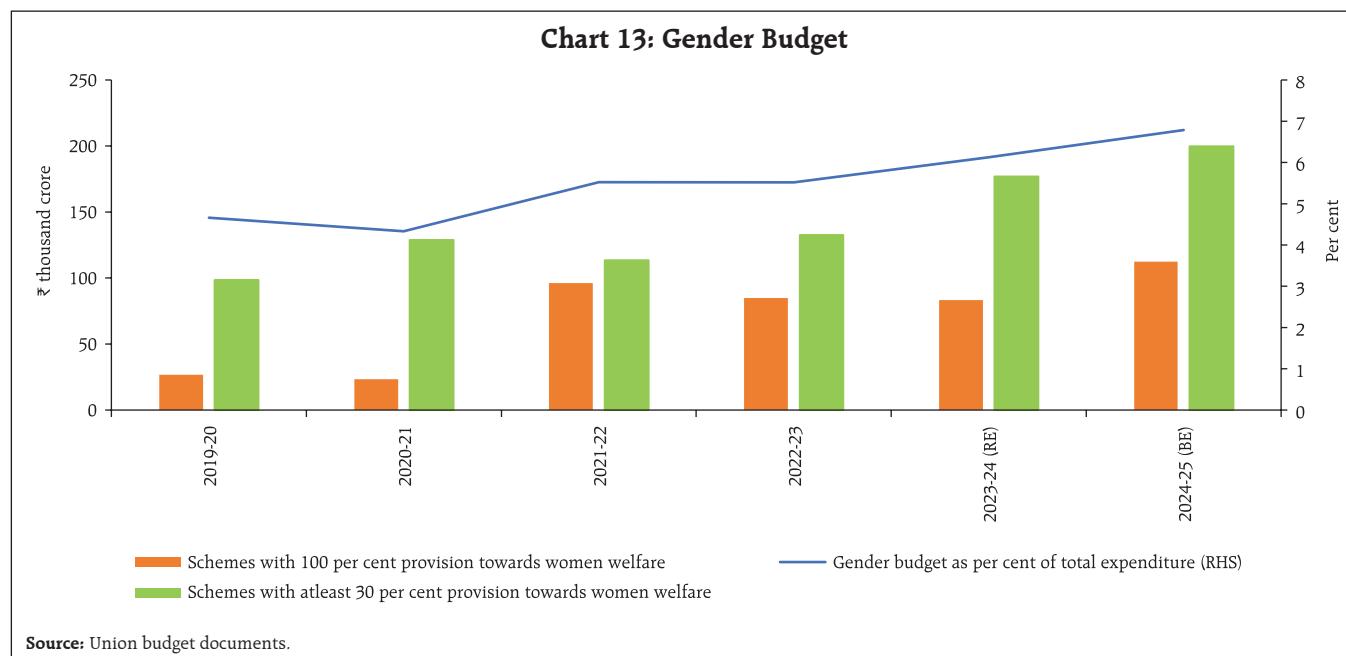
¹⁰ The Food Corporation of India is excluded from this analysis as majority of the expenditure incurred is for purchasing of food grains for the Public Distribution System.



*Surya Ghar Muft Bijli Yojana*¹¹ (Chart 12). The Budget has emphasised on enhancing the role of women in the economy as one of the four pillars of inclusive growth, reflected in a growth of 18.9 per cent in the gender budget allocations for 2024-25 (BE). More than half of the total increment has been allocated towards

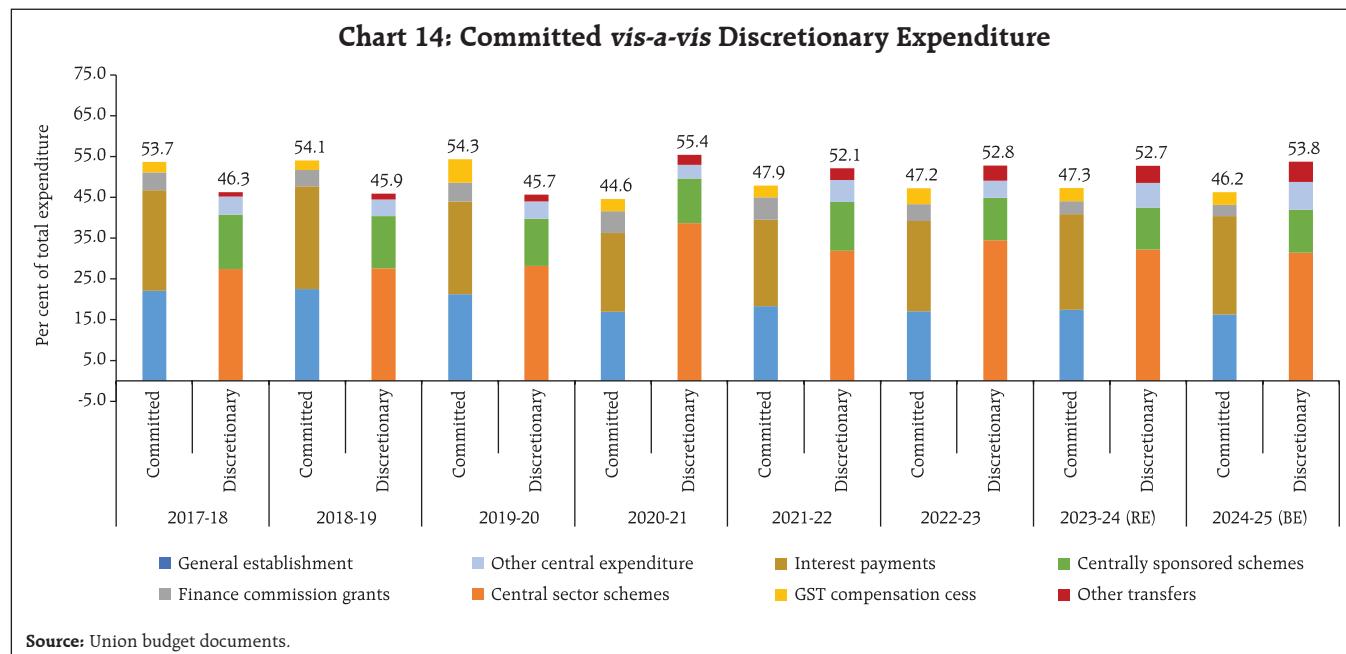
schemes having 100 per cent allocation towards the welfare of the women (Chart 13).

Next, we decompose the total expenditure of the Union government into committed expenditure (which includes establishment expenditure¹², interest payments, grants recommended by the Finance



¹¹ PM *Surya Ghar Muft Bijli Yojana* is a central scheme that aims to provide free electricity to one crore households in India, who opt to install roof top solar electricity unit. The households will be able to get 300 units of electricity free every month.

¹² Establishment expenditure includes expenditure on salaries, wages, pensions and office expenses.



Commission and GST compensation to States) and discretionary expenditure [which includes central sector schemes, centrally sponsored schemes and transfers to States (excluding Finance Commission grants and GST compensation)]. Prior to the pandemic, the share of committed expenditure was higher than discretionary expenditure. However, with the introduction of interest free loans to States for capital expenditure and reduction in the share of expenditure on general establishment, the share of

committed expenditure stands reduced at 46.2 per cent of total expenditure in 2024-25 (BE) [Chart 14].

The Budget proposes to develop a taxonomy for climate financing to augment the capital available for projects pertaining to climate adaptation and mitigation. This will also serve to support India's climate and green commitments. Recently, some countries have adopted the practice of climate budget tagging (CBT) to meet their climate commitments (Box B).

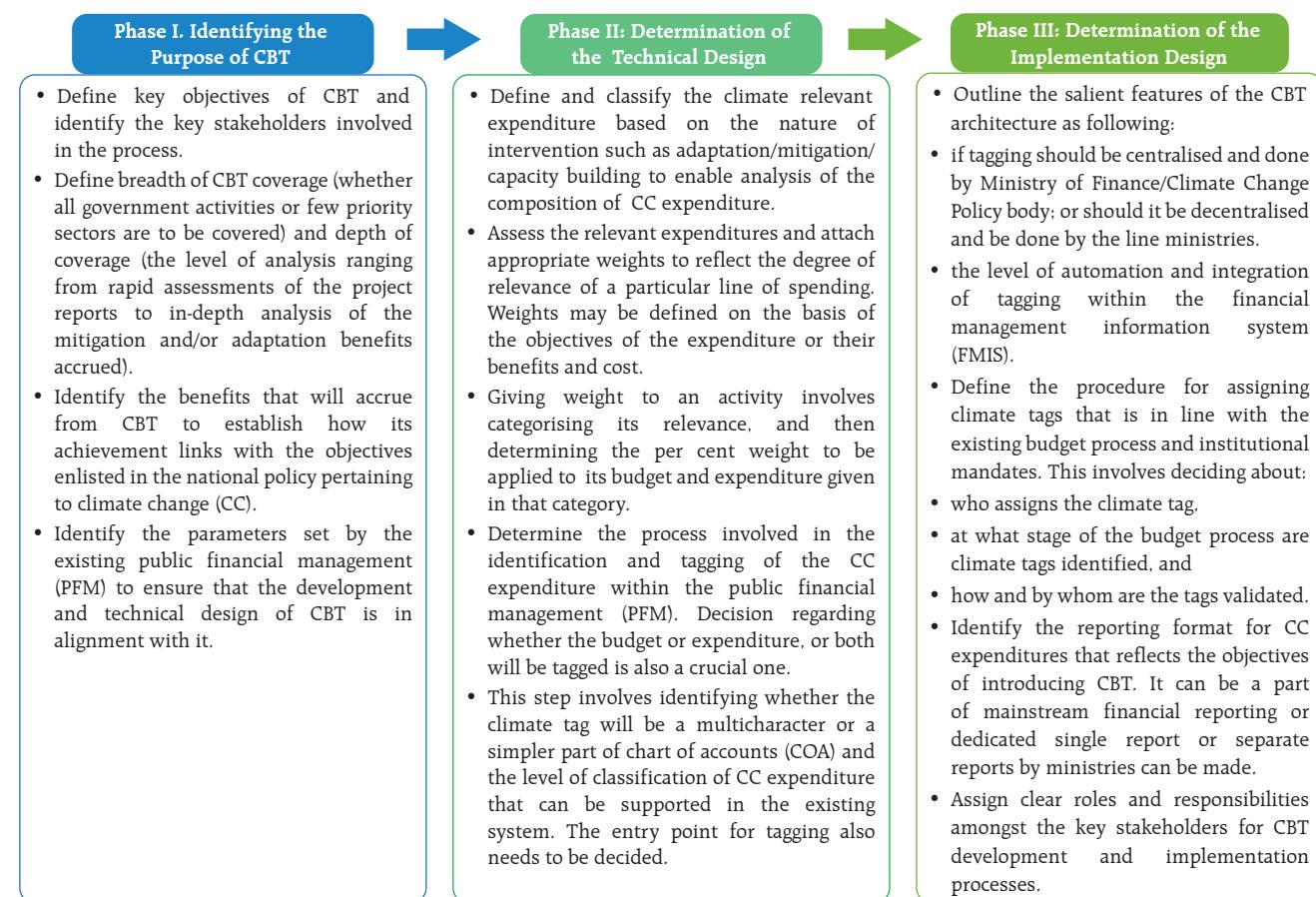
Box B: Climate Budget Tagging - Select Country Experiences

Climate change is a cross-cutting issue with ministries/departments related with energy, forest, water, agriculture, public works and others sharing the responsibilities of undertaking expenditure aimed at climate change mitigation and adaptation. Traditional budgeting methods are not sufficiently equipped to track and monitor cross-sectoral expenditures, and climate budget tagging (CBT) has emerged as a solution to this issue. In recent years, countries have started to show interest in tagging the climate change relevant expenditure to make informed policy decisions and resource allocations (OECD, 2021). CBT is a tool for identifying, classifying, weighing, and marking climate-relevant expenditure in a government's budget system to enable estimation,

tracking and monitoring of such expenditure (UNDP, 2019). The development and implementation process of CBT is briefly outlined in Chart B.1.

Till 2022, 26 countries have introduced or piloted CBT at the central government level. Diverse approaches to CBT have been implemented by different countries depending on their local contexts, political structure, as well as institutional and administrative arrangements. Countries such as Indonesia, Kenya, France, Ireland, and Ethiopia have adopted objective-based approach for defining climate relevant expenditure wherein climate-relevant activities are distinguished based on their intended impact. The coverage of the CBT is limited to select
(Contd.)

Chart B.1: Process of Development and Implementation of Climate Budget Tagging



Source: United Nations Development Programme (UNDP).

sectors in Indonesia, Bangladesh, and Ethiopia, while it is extended to all sectors in Mexico, France, Ireland, Kenya, Nepal and Philippines (World Bank, 2021).

By mainstreaming climate action, CBT enhances the awareness of climate issues in the central finance and line agencies.¹³ The primary challenge in CBT pertains to defining and delineating the functional areas of the climate relevant expenditure. There is also no standard method of assigning the weight to the climate relevant expenditure which makes the cross-country analysis difficult. Another challenge in the CBT process is balancing the desire for granular tagging which provides greater accuracy with the capacity and resources of the government. Budget tagging processes can be subjective, suffer from inclusion and exclusion errors and allow for

'greenwashing'¹⁴ of projects. Clear guidance on the tagging process along with internal ex-post checks of the process, and performance audits of the tagged programmes can help to overcome these challenges (OECD, 2021). CBT provides information only on the quantum of expenditure incurred, not its effectiveness or the outcomes achieved (World Bank, 2021).

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¹³ For example, in Philippines, the implementation of CBT and related reforms have helped to mainstream climate change in the budget process and as a result the allocation of the national budget towards the climate change has increased at compound annual growth rate of 10.9 per cent during 2018 to 2024.

¹⁴ The act of misrepresentation of the environmental performance of an activity/programme to mislead the public/consumers regarding its environmental benefits to paint a more positive picture.

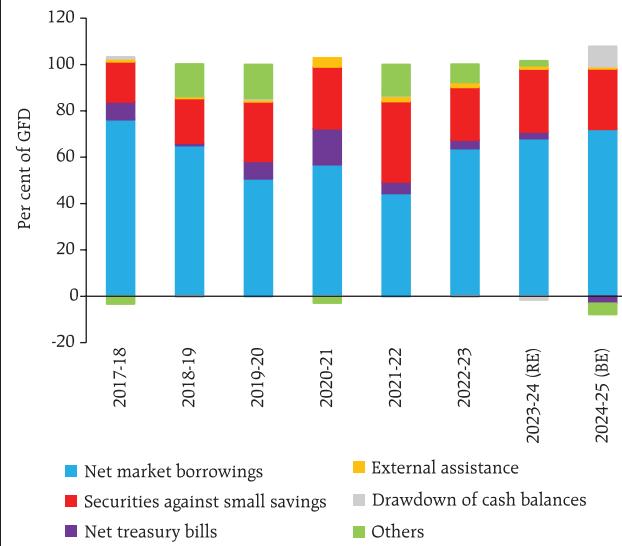
V. Outstanding Debt

After peaking at 62.7 per cent of GDP in 2020-21 due to the impact of the COVID-19 pandemic, the total outstanding debt of the Union government is estimated to fall to 56.8 per cent of GDP in 2024-25 (BE). The interest payment - revenue receipts ratio is estimated to decline from 39.1 per cent in 2023-24 (RE) to 37.2 per cent in 2024-25 (BE). The interest rate growth differential (IRGD), an indicator of debt sustainability, remains favourable. Reiterating its commitment towards debt consolidation, from 2026-27, the government aims to keep the fiscal deficit each year such that the Union government debt as a per cent of GDP will be on a declining path (Chart 15a and b).

VI. Gross Fiscal Deficit Financing

In 2024-25 (BE), GFD is budgeted at 4.9 per cent of GDP, lower than 5.6 per cent of GDP in 2023-24 (PA). Tracking the fiscal deficit dynamics, net as well as gross market borrowings of the Union government in 2024-25 (BE) have been placed lower than 2023-24 (RE) as well as the amount announced in the Interim Union Budget 2024-25. Market borrowings are the main source of financing GFD for the Union

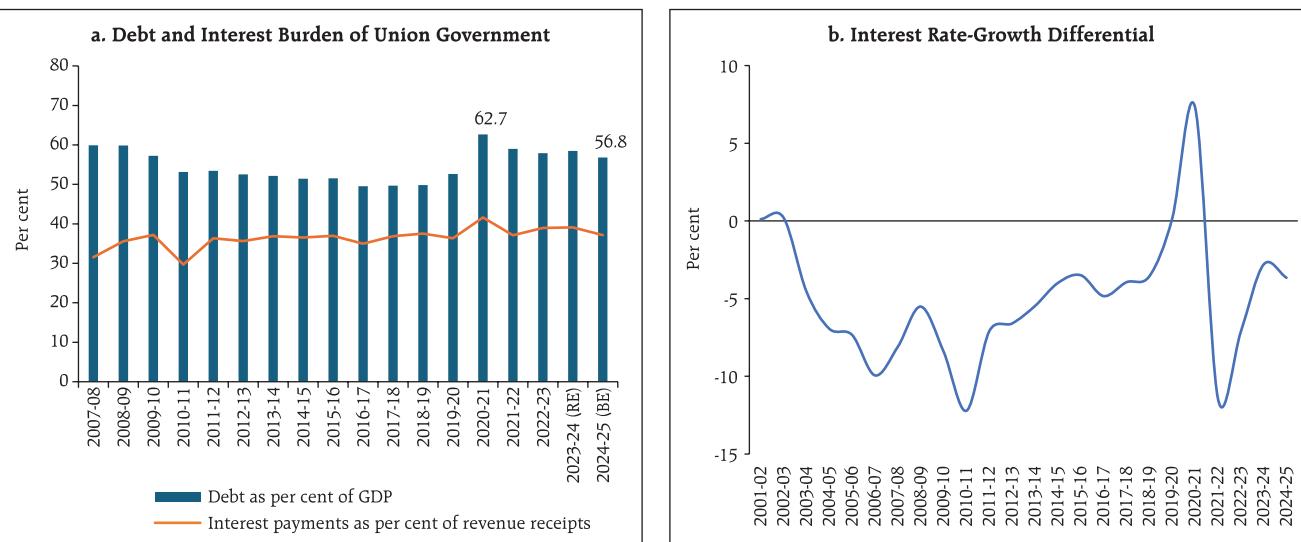
Chart 16: Sources of Financing Gross Fiscal Deficit



Source: Union budget documents.

government, followed by securities issued against small savings. Net market borrowings through dated securities (excluding T-Bills) are expected to finance 72.1 per cent of GFD in 2024-25 (BE) as against 68.0 per cent in 2023-24 (RE) while small savings (NSSF) (₹4.20 lakh crore) would finance 26.0 per cent of GFD in 2024-25 (BE) (₹4.71 lakh crore in 2023-24) [Chart 16].

Chart 15: Outstanding Liabilities and Interest Rate Growth Differential



Sources: Union budget documents; and RBI staff estimates.

Table 3: Market Borrowings of Union Government

(₹ crore)

Financial Year	Gross Market Borrowings	Net Market Borrowings
2018-19	5,71,000 (3.0)	4,22,735 (2.2)
2019-20	7,10,000 (3.5)	4,73,968 (2.4)
2020-21	12,60,116 (6.3)	10,32,907 (5.2)
2021-22	9,68,382 (4.1)	7,04,097 (3.0)
2022-23	14,21,000 (5.3)	11,08,259 (4.1)
2023-24 (RE)	15,43,000 (5.2)	11,80,456 (4.0)
2024-25 (BE)	14,01,000 (4.3)	11,63,181 (3.6)

Note: Figures in parentheses are as per cent of GDP.**Source:** Union budget documents.

The gradual downscaling in the market borrowing requirements (as per cent of GDP) of the Union government towards the pre-pandemic level will facilitate greater availability of resources for the private sector (Table 3).

VII. Resource Transfer from Centre to States

For the fiscal year 2024-25, gross transfers to States/UTs are budgeted to increase by 11.9 per cent as compared with 12.6 per cent growth in 2023-24 (RE), led by higher tax devolution, special assistance for capital expenditure, and transfers under centrally sponsored schemes (Chart 17a and b). Accordingly, the gross transfers to GDP ratio is expected to increase to 7.2 per cent in 2024-25 from 7.1 per cent in 2023-24.¹⁵

Finance Commission Grants are budgeted to decline by 5.7 per cent in 2024-25 (BE), mainly due to a reduction in post devolution revenue deficit grants¹⁶ (Table 4).

In the Union Budget for 2024-25, the Union government has proposed to introduce the *Purvodaya* plan aimed at the all-round development of the eastern States - Bihar, Jharkhand, West Bengal, Odisha, and Andhra Pradesh. This initiative will focus on human resource development, infrastructure enhancement,

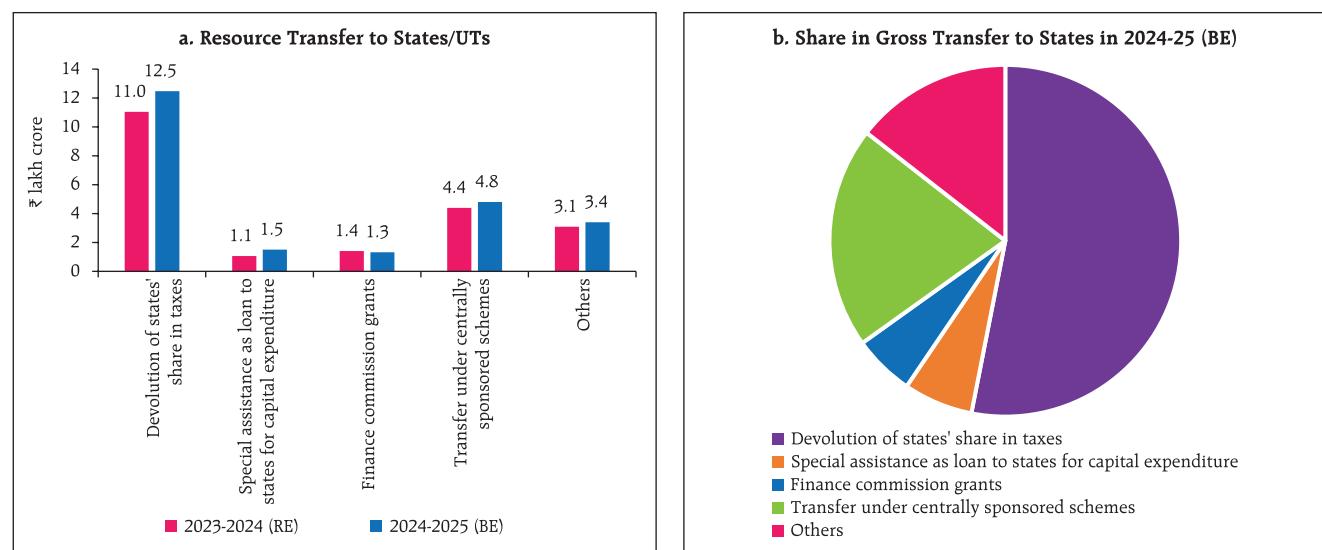
Chart 17: Gross Resource Transfer to States and UTs**Source:** Union budget documents.¹⁵ For details, please refer to Annex II.¹⁶ The post devolution revenue deficit grants are provided to the States under Article 275 of the Constitution. The grants are released to the States as per the recommendations of the successive Finance Commissions to meet the gap in Revenue Accounts of the States post devolution.

Table 4: Finance Commission (FC) Grants to States and UTs

	₹ Lakh Crore		Share in Total FC Grants (per cent)		Growth (per cent)	
	2023-24 (RE)	2024-25 (BE)	2023-24 (RE)	2024-25 (BE)	2023-24 (RE)	2024-25 (BE)
Finance Commission (FC) Grants	1.40	1.32	100.0	100.0	-18.7	-5.7
1. Grant for Local Bodies - Urban Bodies	0.19	0.26	13.7	19.4	8.1	33.5
2. Grant for Local Bodies - Rural Bodies	0.41	0.50	29.0	37.6	-10.5	22.1
3. Grants for Health Sector	0.04	0.06	2.8	4.5	20.9	50.1
4. Post Devolution Revenue Deficit Grants	0.52	0.24	36.8	18.5	-40.1	-52.6
5. Others	0.25	0.26	17.6	20.0	24.4	6.8

Note: Others includes Grants for incubation of new cities, Grants for shared Municipal Services, Grants-in-Aid for SDRF and Grants-in-Aid for State Disaster Mitigation Fund.

Source: Union budget documents.

and economic opportunity creation, with the goal of transforming the region into a significant driver of *Viksit Bharat*. For 2024-25, ₹1.5 lakh crore has been allocated for long-term, interest-free loans to support States¹⁷, an increase from ₹1.1 lakh crore in the previous year.

The Centre will work with States and the private sector to develop 'plug and play' industrial parks equipped with complete infrastructure in or near 100 cities, using town planning schemes. Both the Centre and States will collaborate on developing 'cities as growth hubs' through economic and transit planning, ensuring orderly development of peri-urban areas utilising town planning scheme.

Additionally, the Centre, in collaboration with States, will implement a digital public infrastructure initiative in agriculture, aiming to register details of 6 crore farmers and their lands within three years. States with high stamp duties will be encouraged to reduce rates, particularly for properties purchased by women, since this reform would be a critical element for urban development schemes. States will be incentivised for advancing business reforms action plans and

digitalisation efforts. A new centrally sponsored scheme for skilling, developed in partnership with State governments and industry, will be announced.

VIII. Conclusion

The Union Budget 2024-25 aims at further strengthening the macroeconomic stability as well as harnessing the potential in different sectors of the economy. Special emphasis has been placed on skill development, aimed at improving employability and employment opportunities for the youth. The Budget continues its thrust towards capital expenditure with increased allocations and sustained support towards States' capital expenditure. The Centre has reiterated its commitment towards its medium-term target of GFD below 4.5 per cent of the GDP by 2025-26. From 2026-27 onwards, the Budget has announced its intention to maintain the gross fiscal deficit at a level that ensures that the Union government debt will be on a declining path as per cent of GDP. Overall, the Union Budget 2024-25 strikes the right balance between fiscal prudence and macroeconomic stability which should strengthen the medium-term growth outlook.

¹⁷ A significant part of the 50-year interest-free loan will be earmarked to facilitate faster implementation of reforms related to land, labour, capital, entrepreneurship and technology.

Annex I - Union Budget 2024-25: Key Fiscal Indicators

	₹ Thousand Crore				Per cent of GDP		Growth Rate	
	2022-23	2023-24 (RE)	2023-24 (PA)	2024-25 (BE)	2023-24 (PA)	2024-25 (BE)	2023-24 (PA) over 2022-23	2024-25 (BE) over 2023-24 (PA)
1	2	3	4	5	6	7	8	9
1. Direct Tax	1,660	1,945	1,957	2,207	6.6	6.8	17.9	12.8
(i) Corporation	826	923	911	1,020	3.1	3.1	10.3	12.0
(ii) Income	809	990	1,011	1,150	3.4	3.5	25.0	13.8
2. Indirect Tax	1,394	1,492	1,508	1,633	5.1	5.0	8.2	8.3
(i) GST	849	957	957	1,062	3.2	3.3	12.7	11.0
(ii) Customs	213	219	233	238	0.8	0.7	9.2	2.0
(iii) Excise	323	308	305	324	1.0	1.0	-5.4	6.1
3. Gross Tax Revenue (1+2)	3,054	3,437	3,465	3,840	11.7	11.8	13.4	10.8
4. Assignment to States	948	1,104	1,129	1,247	3.8	3.8	19.1	10.4
5. NCCD Transfers	8	9	9	9	0.0	0.0	9.7	7.8
6. Net Tax Revenue (3-4-5)	2,098	2,324	2,327	2,583	7.9	7.9	10.9	11.0
7. Non-Tax Revenue	285	376	402	546	1.4	1.7	40.8	35.8
(i) Dividends and Profits	100	154	170	289	0.6	0.9	70.6	69.6
(ii) Interest Receipts	28	32	38	38	0.1	0.1	37.5	-0.2
8. Revenue Receipts (6+7)	2,383	2,700	2,728	3,129	9.2	9.6	14.5	14.7
9. Non-Debt Capital Receipts	72	56	60	78	0.2	0.2	-16.3	29.0
(i) Miscellaneous Capital Receipts	46	30	33	50	0.1	0.2	-28.1	51.0
(ii) Recovery of Loans	26	26	27	28	0.1	0.1	4.5	2.4
10. Total Receipts (ex. borrowings) (8+9)	2,455	2,756	2,789	3,207	9.4	9.8	13.6	15.0
11. Revenue Expenditure	3,453	3,540	3,494	3,709	11.8	11.4	1.2	6.2
(i) Interest Payments	929	1,055	1,064	1,163	3.6	3.6	14.6	9.3
(ii) Total Subsidies	578	441	NA	428	NA	1.3	NA	NA
Food	273	212	212	205	0.7	0.6	-22.4	-3.1
Fertiliser	251	189	189	164	0.6	0.5	-24.6	-13.5
Petroleum	7	12	12	12	0.0	0.0	79.5	-2.6
12. Capital Expenditure (i + ii)	740	950	949	1,111	3.2	3.4	28.2	17.1
(i) Capital Outlay	625	807	787	919	2.7	2.8	26.0	16.7
(ii) Loans and Advances	115	143	161	192	0.5	0.6	39.8	19.4
13. Total Expenditure (11+12)	4,193	4,490	4,443	4,821	15.0	14.8	5.9	8.5
14. Gross Fiscal Deficit (13-10)	1,738	1,735	1,654	1,613	5.6	4.9	-4.8	-2.4

NA: Not Available.

Source: Union budget documents.

Annex II: Resource Transfers from Centre to States and UTs with Legislature

	₹ Thousand Crore			Per cent of Gross Transfers			Growth Rate		
	2022-23	2023-24 (RE)	2024-25 (BE)	2022-23	2023-24 (RE)	2024-25 (BE)	2022-23 over 2021-22	2023-24 (RE) over 2022-23	2024-25 (BE) over 2023-24 (RE)
1	2	3	4	5	6	7	8	9	10
I Devolution of States' Share in Taxes	948.4	1,104.5	1,247.2	50.9	52.6	53.1	5.6	16.5	12.9
II Finance Commission Grants <i>of which:</i>	172.8	140.4	132.4	9.3	6.7	5.6	-16.7	-18.7	-5.7
1. Grants for Local Bodies - Urban Bodies	17.8	19.2	25.7	1.0	0.9	1.1	10.1	8.1	33.5
2. Grants for Local Bodies - Rural Bodies	45.6	40.8	49.8	2.4	1.9	2.1	13.1	-10.5	22.1
3. Grants for Health Sector	3.3	4.0	6.0	0.2	0.2	0.3	-73.0	20.9	50.1
4. Grants-in-Aid for SDRF	16.4	19.6	20.6	0.9	0.9	0.9	-7.6	19.4	5.0
5. Grants-in-Aid for State Disaster Mitigation Fund	3.5	4.9	5.1	0.2	0.2	0.2	38.6	39.8	5.0
6. Post Devolution Revenue Deficit Grants	86.2	51.7	24.5	4.6	2.5	1.0	-27.2	-40.1	-52.6
III Some Important Items of Transfer <i>of which:</i>	120.4	161.0	224.6	6.5	7.7	9.6	-40.7	33.7	39.5
1. Externally Aided Projects-Loan	28.2	29.5	33.9	1.5	1.4	1.4	22.1	4.7	14.9
2. Special Assistance as Loan to States for Capital Expenditure	81.2	105.6	150.0	4.4	5.0	6.4	472.4	30.0	42.1
3. Special Assistance under the Demand - Transfers to States	2.3	13.0	20.0	0.1	0.6	0.9	-39.7	472.4	53.8
IV Total Transfers to States [other than I+II+III]	566.9	636.3	686.9	30.4	30.3	29.2	63.9	12.2	8.0
1. Centrally Sponsored Schemes (Revenue)	405.9	439.3	479.6	21.8	20.9	20.4	21.3	8.2	9.2
2. Central Sector Schemes (Revenue)	12.9	64.2	63.4	0.7	3.1	2.7	28.7	398.7	-1.3
3. Other Categories of Expenditure (Revenue)	148.1	132.7	143.9	7.9	6.3	6.1	..	-10.4	8.4
4. Capital Transfers	0.0	0.1	0.1	0.0	0.0	0.0	0.0	..	2.0
V Transfer to Delhi, Puducherry and Jammu and Kashmir	56.2	56.8	57.8	3.0	2.7	2.5	9.9	1.0	1.8
VI Gross Transfers to States/UTs (I+II+III+IV+V)	1,864.6	2,099.0	2,349.0	100.0	100.0	100.0	9.3	12.6	11.9
VII Less Recovery of Loans and Advances	10.1	25.3	50.3	0.5	1.2	2.1	-42.4	149.7	99.0
VIII Net Transfers (VI-VII)	1,854.5	2,073.7	2,298.7	99.5	98.8	97.9	9.9	11.8	10.9
IX Gross Transfers / GDP (per cent)	6.9	7.1	7.2	NA	NA	NA	NA	NA	NA
X Net Transfers / GDP (per cent)	6.9	7.0	7.0	NA	NA	NA	NA	NA	NA

NA: Not Applicable. '..': Abnormal growth due to low base.

Source: Union budget documents.

Annex III: Highlights of Union Budget 2024-25

The Budget lays down the roadmap for the pursuit of the goal of '*Viksit Bharat*' by focusing on nine priorities. Few key proposals for these nine priorities as well as highlights of tax proposals announced in the Budget are enumerated below:

Priority 1: Productivity and Resilience in Agriculture

- A comprehensive review of the agricultural research set-up will be undertaken towards enhancing agricultural productivity and developing climate resilient varieties of crops.
- Digital public infrastructure would be implemented in partnership with States for registering farmers and their lands. This year, a digital crop survey for *Kharif* will be undertaken in 400 districts.
- Towards fast-tracking rural growth and generating large-scale employment, a comprehensive 'National Cooperation Policy' would be released. This would also ensure orderly and holistic development of the cooperative sector.

Priority 2: Employment and Skilling

- Under 'Employment Linked Incentives', the government would launch 3 schemes, viz., providing financial support for the first-time employees in all formal sectors; financial incentive to both employer and employee in the manufacturing sector for their EPFO contribution of their first-time employees; and reimbursement of the employers' EPFO contribution for additional employees hired in all the sectors.
- To promote women participation in the labour force, reforms pertaining to women-specific skilling, improved market access for women led self-help groups (SHGs), setting up of working women hostels in collaboration with industry, and establishment of creches would be undertaken.

- The government has been placing a strong thrust on skilling of youth while meeting the demands of the industry. To this end, it would implement measures such as establishment of 1000 training centres, upward revision of the amount of loans under the model skill loan scheme, and provision of financial support up to ₹10 lakh for pursuit of higher education in domestic institutes for youth not covered under any other scheme.

Priority 3: Inclusive Human Resource Development and Social Justice

- The government will step-up the schemes - PM *Vishwakarma*, PM *SVANidhi*, National Livelihood Mission, and Stand-up India.
- *Pradhan Mantri Janjatiya Unnat Gram Abhiyan* will be launched with a saturation approach to improve the socio-economic condition of the tribal families in the tribal majority villages and aspirational districts.

Priority 4: Manufacturing and Services

- A credit guarantee scheme for the MSMEs will be launched to provide a guarantee cover upto ₹100 crore to MSMEs in manufacturing sector thereby facilitating their purchase of machinery and equipment without collateral or third-party guarantee. Furthermore, the limit of *Mudra* loans will be enhanced to ₹20 lakh for those entrepreneurs who have successfully repaid their previous loans under the *Tarun* category.
- To facilitate internship opportunities in top 500 companies to the youth, an internship allowance of ₹5,000 per month along with a one-time assistance of ₹6,000 will be provided. The companies will be allowed to use their corporate social responsibility (CSR) funds for partially meeting the internship costs.

Priority 5: Urban Development

- The government with partnership from States and Multilateral Development Banks will promote projects addressing water supply, sewage treatment, and solid waste management services in 100 large cities.
- The States which charge high stamp duties would be encouraged to lower them and bring them further down for the properties purchased by the women.

Priority 6: Energy Security

- To improve the share of nuclear energy in the overall energy mix for *Viksit Bharat*, the government will partner with the private sector to pursue (a) setting up of *Bharat Small Reactors*, (b) research and development of *Bharat Small Modular Reactor*, and (c) development of new technology in the domain of nuclear energy.
- An investment-grade energy audit of traditional micro and small industries will be undertaken in 60 clusters and financial support will be provided for their transition to cleaner forms of energy.

Priority 7: Infrastructure

- The government is envisaging a market-based financing framework to provide impetus to private investment via viability gap funding and enabling policy and regulatory environment.
- Phase IV of *Pradhan Mantri Gram Sadak Yojana* will be launched to provide all-weather connectivity to 25,000 rural habitations.

Priority 8: Innovation, Research and Development

- The government will operationalise the *Anusandhan National Research Fund* for basic research and prototype development. Additionally, a financing pool of ₹1 lakh crore will be brought in place to spur innovation and research at a commercial scale in the private sector.
- Venture capital fund of ₹1,000 crore will be set-up to augment the space economy.

Priority 9: Next Generation Reforms

- The government will formulate an overarching Economic Policy Framework to set the scope of next generation reforms for increasing employment opportunities and sustaining higher economic growth. Reforms would be initiated to augment productivity of all factors of production and development of efficient markets and sectors. Towards this, a significant portion of the 50-year interest free loans to the States will be earmarked so as to incentivise the States for faster implementation of reforms and promote competitive federalism.

Tax Proposals

Direct Tax Proposals

- A comprehensive review of the Income Tax Act, 1961, aims to make it more concise and understandable, reducing disputes and litigation. Efforts to reduce the backlog of appeals will include deploying more officers and proposing the *Vivad Se Vishwas Scheme, 2024*, for resolving income tax disputes.
- The Budget has proposed a slew of measures aimed at rationalisation and simplification of capital gains taxation.
- Monetary limits for filing appeals in tax tribunals and courts will be increased to reduce litigation. Safe harbour rules will be expanded to provide certainty in international taxation, and the transfer pricing assessment procedure will be streamlined.
- The Budget has proposed for simplification of the tax regime for charities and structure of tax deduction at source (TDS). Additionally, the delay in payment of TDS will be decriminalised.
- The proposals to promote investment and employment include abolishing the angel tax for all classes of investors, simplifying the tax regime for foreign shipping companies operating

domestic cruises and providing safe harbour rates for foreign mining companies selling raw diamonds in India.

- The corporate tax rate on foreign companies will be reduced from 40 per cent to 35 per cent..
- Measures to deepen the tax base include increasing the security transactions tax (STT) on futures and options and taxing income from share buybacks.
- Social security benefits will be improved by increasing the deduction of employer expenditure towards new pension scheme (NPS).
- Changes have been proposed in the personal income tax rates for the taxpayers opting for the new tax regime as follows:

Proposed		Existing	
Income	Tax Rate	Income	Tax Rate
₹ 0-3 lakh	Nil	₹ 0-3 lakh	Nil
₹ 3-7 lakh	5 per cent	₹ 3-6 lakh	5 per cent
₹ 7-10 lakh	10 per cent	₹ 6-9 lakh	10 per cent
₹ 10-12 lakh	15 per cent	₹ 9-12 lakh	15 per cent
₹12-15 lakh	20 per cent	₹ 12-15 lakh	20 per cent
Above ₹ 15 lakh	30 per cent	Above ₹ 15 lakh	30 per cent

- The standard deduction for salaried employees is proposed to be increased from ₹50,000 to ₹75,000 while that on family pension for pensioners is proposed to be enhanced from ₹15,000 to ₹ 25,000 under the new tax regime.

Indirect Tax Proposals

- Major sector-specific customs duty adjustments include full exemptions on certain cancer medications and critical minerals, reduction of duties on mobile phones and related parts, and exemptions for additional capital goods used in solar cells and panels manufacturing. Proposals also include lowering duties on inputs for seafood, leather and textile exports. Measures to reduce production costs for steel and copper, support the electronics industry, and adjust tariffs on chemicals and plastics were also announced.
- To enhance domestic value addition in gold and precious metal jewellery in the country, it is proposed to reduce customs duties on gold and silver to 6 per cent and that on platinum to 6.4 per cent.

Estimate of Spare Capacity for India's Services Sector

by Abhilash Arun Satape, Nivedita Banerjee, Arti Sinha, M. Sreeramulu[^] and Supriya Majumdar[#]

Estimation of spare capacity in personnel-oriented services sector is more challenging as compared with the manufacturing sector, where total capacity remains relatively more anchored. Given the predominant share of the services sector in national output, an estimate of spare capacity in the services sector - would be useful. This article provides the conceptual background and methodological aspects for estimating spare capacity for the Indian services sector. It also presents quarterly estimates of spare capacity since January-March 2021 based on the data received through Services and Infrastructure Outlook Survey (SIOS).

Introduction

Information on the spare capacity (SC) is useful for assessing slack in an economy for business cycle analysis, as it provides a basis to assess the current operating efficiency of an economy and the extent to which the available productive resources are used by the economy. SC is the ratio of potential increase in the output to the current output that can be achieved under existing conditions in case demand expands. For an individual firm, high levels of SC enable it to engage its existing labour and capital more intensively to increase its output to respond to sudden increase in demand. In case the demand is likely to persist, the enterprises operating almost at minimal spare capacity may deploy more capital and/or employ more employees to increase their output, which may also necessitate them to increase their output prices.

There is a wider divergence in operating mechanism in various sectors, which necessitates differentiating the concept of capacity and its utilisation across sectors. While a manufacturing unit comprehends the capacity utilisation (CU) in terms of installed production capacity of the machines and the production demand, majority of services sector units recognises its spare capacity in terms of labour or working hours. So, measuring capacity utilisation poses challenges as the measuring tools may vary across sectors. As the CU for manufacturing is easy to quantify, the CU estimates for the manufacturing sector are available for many countries, whereas for only a few countries, the CU estimates for the services sector are available due to challenges in proper quantification.

In India, CU for the manufacturing sector is estimated based on quantitative information captured in the quarterly 'Order Books, Inventories and Capacity Utilisation Survey (OBICUS)' conducted by the Reserve Bank of India. The CU for the manufacturing sector tracks the movement of the de-trended Index of Industrial Production (IIP) and is able to capture the investment cycles. Although manufacturing CU is available for India since 2008, similar estimate is not available for the services sector. Given that the services sector is a major contributor to the country's GDP, a strong need for estimating the CU or alternately the SC for the sector was felt, notwithstanding the conceptual challenges, particularly the difficulty in defining installed/potential capacity for the services sector units. Though SC and the CU seems to be closely related (one may imply the other) both have been referred to in this article as per the context.

As business tendency surveys provide timely information on key business parameters, it was envisaged to capture the information on spare capacity for the services sector through forward looking qualitative surveys conducted by the Reserve Bank. Accordingly, a set of questions were included in the Services and Infrastructure Outlook Survey

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(SIOS)¹ questionnaire. This article besides presenting cross-country experiences on SC, briefly discusses methodological aspects followed in collecting information on SC in the Indian context, and also presents quarterly estimates of SC for the Indian services sector since January-March 2021.

The rest of the article is organised in four sections. Section II describes cross country experiences in estimating the SC for the services sector. Section III explains the approach adopted in the Indian context along with methodological aspects and empirical results. Concluding observations are presented in section IV.

II. Cross-country Experiences

The interpretation of capacity utilisation is not straight forward and varies considerably across different industries of the economy. For firms engaged in the more capital-intensive goods-related industries, a high level of capacity utilisation may reveal an impetus to hire more labour and to invest in the capital stock, while for services firms it is more likely to reflect an incentive to hire more labour only (Lane and Rosewall, 2015). Generally, services are rendered and created as and when demanded, and it is not conventional to define the concept of installed capacity and therefore directly asking about the capacity utilisation or installed capacity may not be feasible for services sector. Based on the review of several methods adopted by various central banks / international institutes for such estimation using a similar kind of surveys, two major approaches for different sectors were found useful for our estimation: one is the European model and other one is the Brazilian model.

II.1 The European Model

European Commission, Directorate-General for Economic & Financial Affairs (DG ECFIN) adopted an

indirect approach for estimating CU for services sector units. They had added questions to the standard questionnaire of the Harmonised European Union (EU) wide survey in the services sector since 2011 (Gayer, 2013). These supplementary questions inquire the additional output that firms can generate with the currently available resources. The rate of capacity utilisation is inferred based on this information.

The supplementary questions are:

- a. *If the demand addressed to your firm expanded, could you increase your volume of activity with your present resources?*
YES / NO
- b. *If so, by how much? _____ %*

The capacity utilisation rate is inferred as

$$CU(\text{in per cent}) = \frac{100}{(1 + \frac{\text{percentage of increase}}{100})} \quad \dots(1)$$

The CU can be calculated using equation (1). The 'No' response in question 'a' would imply that the answer to 'b' is zero and in that case the CU equals to 100 per cent.

As stated by European Commission DG ECFIN, the series on capacity utilisation, collected through the above questions on the 'marginal increase of activity', in the services sector appears to be of sufficiently high quality in terms of both cyclical tracking performance and smoothness. All member countries of EU have implemented this question set.

II.2 The Brazilian Model

The Brazilian Institute of Economics (IBRE) [Bittencourt, 2013] introduced the above two questions in its monthly Tendency Survey for the Services and Trade sectors in 2013 following the European model. One additional qualitative question on the level of capacity utilisation (increase, no change, decrease) was also included.

Specific to the construction sector, IBRE also added two separate measures:

¹ The survey questionnaire can be accessed at: https://rbi.org.in/Scripts/BS_ViewForms.aspx

For Labour: "Regarding the labour available at this moment, what is the rate of the current productive capacity utilisation of the company?"

For Machines and equipment: "With respect to machines and equipment available at this moment, what is the company's rate of productive capacity utilisation?"

The results based on the survey outcome were compared with the manufacturing CU. Capacity utilisation in services was assumed to be higher than in manufacturing sector in a long-term perspective. This is due to the higher need for physical capital endowments, which are difficult to adjust in the short-term, requires some capital buffer in manufacturing sector compared to services.

III. The Indian Approach

Drawing upon the cross-country experience, to measure the SC for the Indian services sector, an illustrative method was designed with appropriate questions for inclusion in the existing questionnaire of SIOS on an experimental basis starting from the January-March 2021 round. Instead of capacity utilisation, it was found more appropriate to name the data captured as 'spare capacity' which could be easily understood by the respondents and would differentiate the concept from the manufacturing CU, where large component of fixed assets is involved. The questions related to SC were modified based on feedback and interactions with the respondents, which helped in increasing the response rate over the study period.

The question on spare capacity which was included in the SIOS questionnaire is described below:

III.1 Question on Spare Capacity

a.	With your present infrastructure, employees and other resources, could you increase your volume of activity / business to meet any increase in demand for your services?	Yes/No*
b.	If 'Yes', by how much?	_____ %

*: A 'no' answer implies no spare capacity in your company, in which case, answer to question b will be zero (0).

The above question on capacity basically aims to indirectly capture the 'marginal increase of activity', which can be treated as 'spare capacity', based on individual company's status of running business at the current level. As the base for answer on question 'b' would vary across companies, for making a common base for comparison and ease of aggregation, the answers need to be converted into the CU for the completed quarter which can be computed as:

$$CU_t (\text{in per cent}) = \frac{100}{(1 + \frac{b}{100})} \quad \dots(2)$$

The 'No' response in 'a' would imply that the answer to 'b' is zero and in that case the service providing company does not have any spare capacity and thus the CU equals to 100 per cent.

To make the respondents understand the difficult concept in a simpler way, the following explanatory note was also added in the '*Guidelines for Questions*' of the SIOS questionnaire.

"Spare Capacity may be answered with respect to the realised values i.e., for the previous quarter. While answering, companies may relate to expansion in their business assuming an increase in demand for their services and reply how much percentage increase in their serving capacity/ volume of activity/ business could be achieved with existing resources to meet the additional demand where resources include employees and other infrastructure and logistics (except raw material) required for providing those services. If the answer is 'No', then it implies no spare capacity in your company, in which case, answer to question 'b' will be zero (0) meaning there is no unutilised resources"

The information on spare capacity thus collected through the indirect question is converted into CU using equation (2) and the aggregate CU is calculated using a weighing method which is described in the next section. The absolute spare capacity is then arrived at using the following identity:

$$\text{Capacity Utilisation} + \text{Absolute Spare Capacity} = 100 \quad \dots(3)$$

The spare capacity can be derived from the following equation:

$$\text{Spare Capacity} = 100 * \frac{\text{Absolute Spare Capacity}}{(100 - \text{Absolute Spare Capacity})} \dots (4)$$

The spare capacity based on the above method provides an estimate of unutilised available resources which would have helped achieving additional output under existing conditions in case demand expands. SC has been defined in terms of expected percentage increase in the output to the current output. This approach thus obviates a direct reference to the capacity utilisation or the installed capacity, which are difficult to estimate for the services sector, at the time of seeking inputs in the survey as well as while providing the estimates of the spare capacity. The spare capacity estimates thus reveals a fair idea about the performance of the services sector and its potential response to additional demand in the sector.

III.2 Estimation of Spare Capacity, Methodological Aspects and Empirical Findings

Till date, fourteen rounds of SIOS have been completed including questions on spare capacity in the services sector. The response rates for these fourteen rounds of surveys were satisfactory, but they were also impacted by the specific events that occurred during the survey period such as Covid pandemic (Table 1).

For computing the SC for the services sector at an aggregate level, two-stage weighted average method is adopted, the first stage weights being the company level sales/turnover and second stage weights being the sub-sector wise GVA weights. The first stage weights are obtained from actual annual sales of the companies available in public domain, wherever possible; and for remaining companies' mid-points of the company turnover size-group, as captured in the survey schedule, has been used as a proxy.² For

² The approximation of annual sales was required to be done only for about 20 per cent of companies. The exact company weights and the mid-points of the company turnover size classes were examined and not much difference was found from the actual ones, which allowed us the flexibility to use the mid-points of the company turnover size-intervals as the first stage weights, in case of non-availability of actual sales figures, typically for the smaller companies.

Table 1: Services Sector Companies replied to SC related Question

Survey Quarter	Total Services sector Responses in SIOS	Valid Responses Received on SC	Response Rate (per cent)
Jan-Mar 2021	349	256	73.4
Apr-Jun 2021	552	138	25.0
Jul-Sep 2021	548	380	69.3
Oct-Dec 2021	458	295	64.4
Jan-Mar 2022	493	201	40.8
Apr-Jun 2022	628	366	58.3
Jul-Sep 2022	469	373	79.5
Oct-Dec 2022	797	201	25.2
Jan-Mar 2023	522	329	63.0
Apr-Jun 2023	579	462	79.8
Jul-Sep 2023	581	490	84.3
Oct-Dec 2023	408	302	74.0
Jan-Mar 2024	587	439	74.8
Apr-Jun 2024	600	473	78.8

Source: SIOS, RBI.

the second stage weights, the contribution of the sub-sectors to the total services GVA has been mapped with the available official prints for the year 2011-12. SC for the services sector estimated using above method is presented in Table 2.

The SC estimates³ reveal that, as the services activities in India were relatively lower in Q1:2021-22 due to the adverse impact of the COVID second wave, this resulted in a higher level of spare capacity; the services sector activities picked up notably in Q2:2021-22 witnessing lower SC. The situation reversed again with higher SC observed in Q4:2021-22 as the contact intensive services activities again slowed down due to the Omicron variant of COVID-19. However, the situation improved subsequently.

A cross-country comparison of spare capacity indicates that the estimated SC for services sector for India was in the range of 11 to 14 per cent⁴, broadly

³ As the question asked relates to the responding company's experience with the actual realisation of capacity, the given response pertains to the previous quarter.

⁴ The second wave of COVID-19 (Q1:2021-22) and the period of the COVID-19 Omicron variant wave (Q4:2021-22) are shown as outliers when SC for services were estimated at 24.8 per cent and 17.4 per cent respectively.

Table 2: Estimated SC for Services Sector

Survey conducted during	Reference quarter	Spare Capacity (per cent)
Jan-Mar 2021	Q3:2020-21	13.9
Apr-Jun 2021	Q4:2020-21	13.3
Jul-Sep 2021	Q1:2021-22	24.8
Oct-Dec 2021	Q2:2021-22	11.1
Jan-Mar 2022	Q3:2021-22	13.0
Apr-Jun 2022	Q4:2021-22	17.4
Jul-Sep 2022	Q1:2022-23	13.5
Oct-Dec 2022	Q2:2022-23	12.6
Jan-Mar 2023	Q3:2022-23	13.8
Apr-Jun 2023	Q4:2022-23	13.6
Jul-Sep 2023	Q1:2023-24	12.3
Oct-Dec 2023	Q2:2023-24	11.8
Jan-Mar 2024	Q3:2023-24	11.7
Apr-Jun 2024	Q4:2023-24	11.3

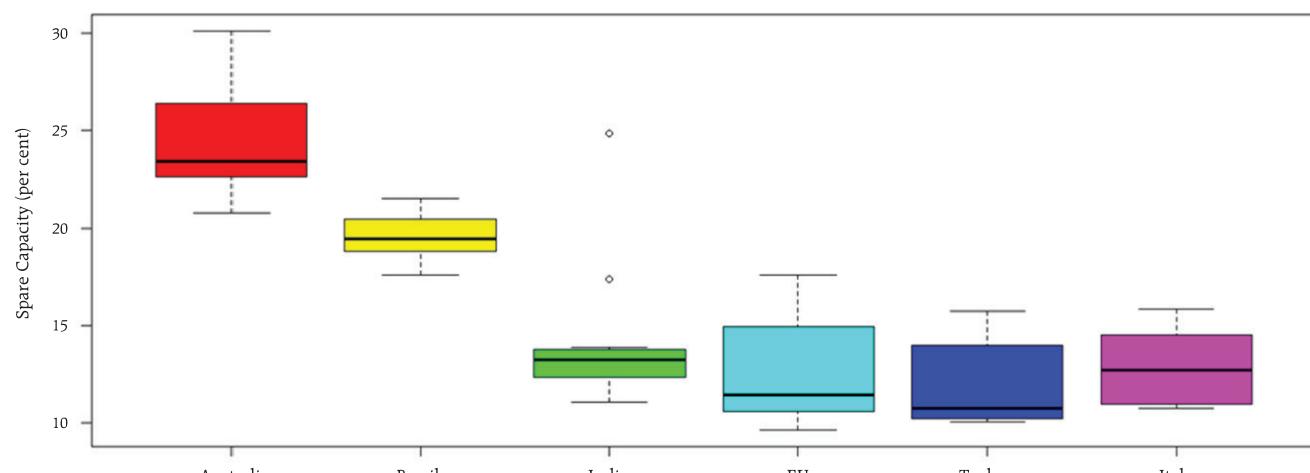
Source: SIOS, RBI.

in-line with that in European Union (EU) and some of its member countries who compile the CU for services sector on regular basis (Chart 1)⁵.

During the second as well as the omicron variant wave of COVID-19 pandemic, the SC in Indian services sector increased significantly, and they are figured as outliers (Chart 1). The range of SC for Brazil and Australia exceeds India.

A comparison of the SC for manufacturing in India (converted from CU using method explained above) with the survey outcome on the services SC reveals that, the SC for manufacturing sector in India exceeds that in the services sector across all quarters (Chart 2a). Cross-country comparison also suggests similar trends except Australia where in a few quarters, the services SC surpassed the manufacturing sector SC (Chart 2). The spare capacity in services could be lower than that in manufacturing sector in a long-term perspective due to the higher need for physical capital endowments in the manufacturing sector, which are difficult to adjust in the short-term, requiring some capital buffer (Bittencourt, 2013).

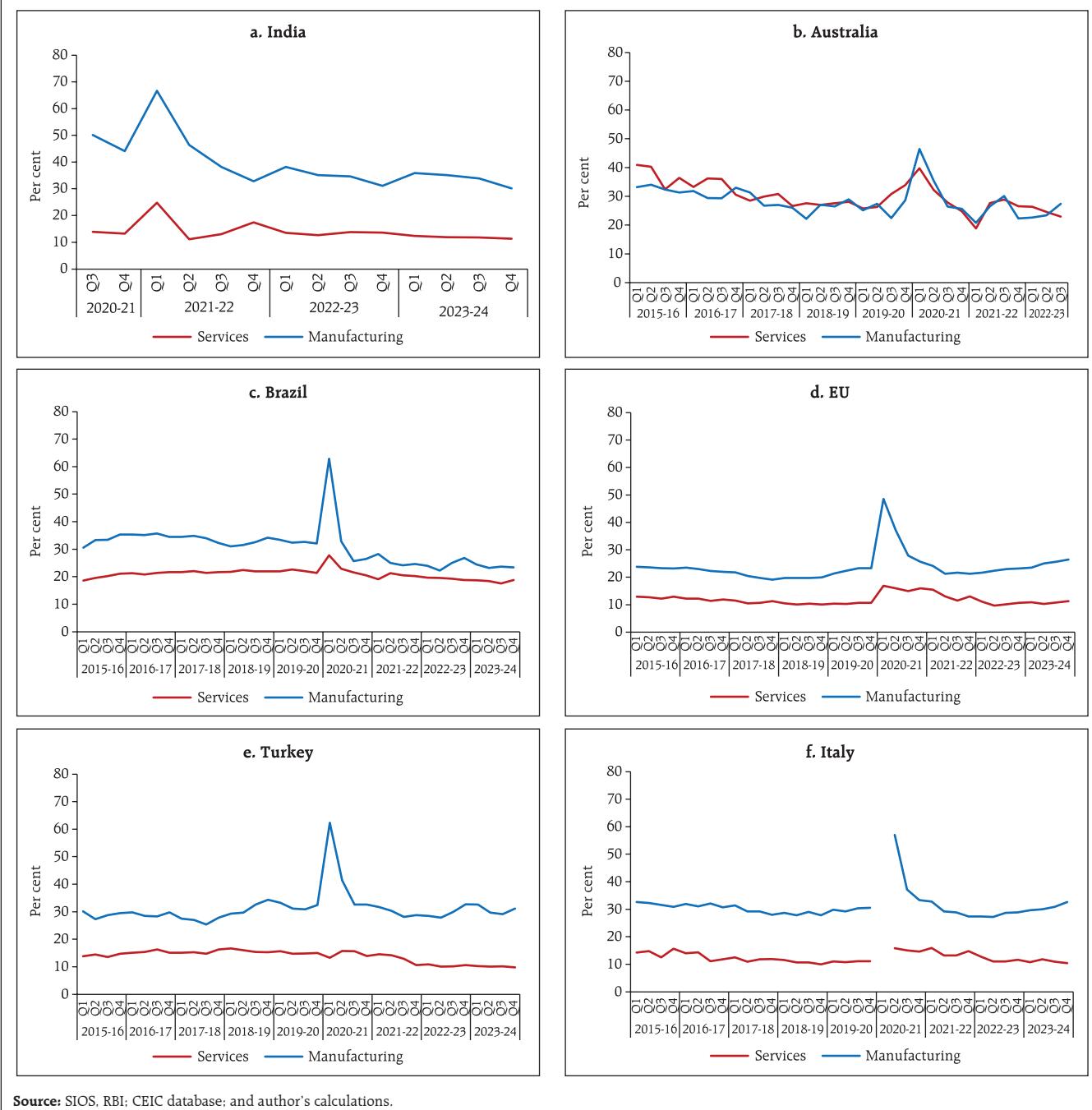
**Chart 1: Cross Country Comparison of Spare Capacity Services Sector
(Q3:2020-21 to Q4:2023-24)**



Source: SIOS, RBI; CEIC database; and author's calculations.

Note: For Australia data plotted for the available period till Q3:2022-23.

⁵ It may be noted that a number of countries calculate the CU instead of SC for the services sector and therefore, using the equation (3) and (4), those have been converted into SC for making similar comparison with India.

Chart 2: Cross-Country Comparison of Spare Capacity for Services and Manufacturing Sectors

Source: SIOS, RBI; CEIC database; and author's calculations.

IV. Conclusion

With service being the major contributor to India's GDP, this article attempted to estimate Spare Capacity (SC) in the services sector by using the information collected through RBI's Services and Infrastructure Outlook Survey. To compute the SC, two experimental

questions were included in the SIOS questionnaire since January-March 2021. The results suggest that the SC of Indian services sector was in the range of 11 to 14 per cent during 3-year period 2021-24, although it may be noted that the sample period largely coincides the post-pandemic period. The inclusion of experimental question was useful in estimating SC for Indian

services sector firms and the information obtained coupled with the CU for manufacturing sector can strengthen inputs for understanding of inflation and output dynamics and for policy formulation.

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Evolution of FinTech and Central Banks: A Text Mining-Based Survey

by Manu Sharma, Dirghau Keshao Raut,
Shobhit Goel and Madhuresh Kumar[^]

Amidst rapid innovations in the delivery of financial services, this article surveys the policy focus of central banks towards FinTech developments using natural language processing-based text mining analysis of central banks' news articles, speeches and interviews. The analysis suggests that 'payment systems' are a priority, both in terms of innovations and regulation by the central banks among different areas of FinTech. Temporal analysis indicates that 'central bank digital currency' (CBDC) and its usage is emerging as the central area of policy discussions and initiatives, with the focus shifting towards modalities of CBDC implementation from the earlier concerns related to applicable technology and financial implications.

Introduction

FinTech developments are reshaping access, affordability and delivery of financial services. FinTech-enabled digital payment platforms, peer-to-peer payment apps and blockchain-based technologies facilitate faster information processing and credential checks and offer more convenience to money transfers and transactions (Laven and Bruggink, 2016). These efficiency benefits have the potential to bring financial services to the underserved and unbanked populations. FinTech solutions, particularly mobile banking and digital wallets often complement traditional banking services, thus promoting financial inclusion. The FinTech revolution can be enabled by both public and

private payment platforms, for instance, the United Payment Interface (UPI) - launched by the National Payment Corporation of India. On the other hand, FinTech companies are also playing a crucial role in financing small and medium-sized enterprises (SMEs) in countries such as China, the United States, the United Kingdom, Korea and Kenya.

The underlying technology driving a vast majority of FinTech innovations including cloud services, AI models and block-chain technology solutions are provided by only a few providers for all financial institutions, and they are currently not subject to supervision by bank regulators leading to concerns about quality control, data security, and a possible conflict of interest (Allen et al., 2021). Accordingly, the central banks are monitoring evolution of FinTech-driven solutions to preserve consumer confidence and the stability of overall financial system. Moreover, in view of their implications for central banking functions such as issuance of currency, regulation/supervision of the banking system and monetary policymaking, central banks are actively involved in tracking developments of FinTech arena. As recently pointed out by the RBI Governor, "Technological innovation has unprecedented potential to make finance more inclusive, competitive and robust. It is crucial that technological advancements in the world of FinTech evolve in a responsible manner and are truly beneficial to the people at large"¹. Many central banks are exploring FinTech innovations such as (i) cross-border uses of CBDC in collaboration with BIS Innovation Hub (BISIH) (ii) linking fast payment systems with other jurisdictions for cross-border financial integration (iii) operationalising regulatory sandboxes to facilitate FinTechs to test their services before full scale deployment.

As the digital economy and financial advancements transcend regulatory boundaries and

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¹ Keynote address by Shri Shaktikanta Das, Governor, RBI (dated September 6, 2023) on *FinTech and the Changing Financial Landscape* at the Global Fintech Festival, Mumbai. Available at: https://www.rbi.org.in/scripts/FS_Speeches.aspx?Id=1383&fn=2765

national frontiers, policymakers require established frameworks that facilitate their cooperation and knowledge-sharing. Against this backdrop, this study attempts to analyse the areas of policy focus of major central banks/ multilateral institutions in the domain of FinTech utilising sources of information such as central bank news, press releases, interviews, speeches. It also classifies the FinTech related concerns of central banks into broad policy clusters and identifies the shift in focus areas of central banks over time to gauge the perspectives/policy priorities of central banks. To achieve the objective, the study employs word frequency plot analysis and networking analysis through Natural Language Processing (NLP) based text mining approach.

The rest of this paper is divided into six sections. Section II briefly covers the literature review on FinTech. Section III highlights the Global FinTech developments and Section IV summarises the FinTech developments in the Indian case. Section V highlights the data and the methodology. Sections VI and VII analyse the results and provide key takeaways and concluding observations.

II. Literature Review

With information technology (IT) developments such as the emergence of the World Wide Web and internet accessibility through mobile phones, financial services are witnessing "electronic" versions coming into existence as products, such as e-banking, e-KYC. FinTech provides an innovative solution bridging financial services and information technology to make the system more efficient and inclusive. The term "FinTech" originates from combining finance and technology, embodying and synergising the essence of employing innovative solutions (using cutting-edge technologies of the likes of internet, artificial intelligence and cloud computing, to name a few) to enhance the quality and ease of accessing banking and financial services (such as lending, payments,

money transfers, and other banking activities). The Financial Stability Board (FSB) defines FinTech as "technology-enabled innovation in financial services in terms of new business models, applications, processes, or products with an associated material effect on the provision of financial services" (FSB, 2019). A common theme that emerges from the definitions of Fintech is the usage of technological innovations like Artificial Intelligence (AI) / Machine Learning (ML), Cloud Platforms, Distributed Ledger Technology (DLT) or mobile internet to address the high cost, low speed, lack of transparency, access and security in traditional financial services used for making payments, savings, credit, or even financial management and advisory (Chart 1).

FinTech has led to the development of innovative banking and financial products to address the gap in traditional banking models. FinTech lenders are found to have been able to penetrate areas underserved by traditional banks and areas with fewer bank branches per capita, thereby promoting financial inclusion although in an unregulated environment (Jagtiani & Lemieux 2018). Using web crawling and text analysis techniques, Cheng & Qu (2020) find that FinTech reduces credit risk in Chinese commercial banks. Deng *et al.* (2021) find that FinTech has a restraining effect on the overall risk of banks; thus, it may contain bank's risk-taking ability and improve the overall stability of operations. The adoption of FinTech is found to improve competitiveness and performance of the banking industry in the UAE (Dwivedi *et al.* 2021); and also capital adequacy, asset quality, management efficiency, earnings power, and liquidity (Xu, 2022).

The literature has also assessed the impact of FinTech on the traditional banking sector (Tang *et al.*, 2023). Regulatory arbitrage to roll-out high profit products hurting profitability of traditional banks and putting consumers at risk are observed (Murinde *et al.*, 2022; Tang *et al.*, 2023). Further, there is concern regarding unfair and discriminatory uses of data

Chart 1: Classification of FinTechs

User Needs	Traditional Model	Gaps	Impact of Technological Innovations				Fintech Solutions
			AI/ML	Data / Cloud Platforms	DLT / Crypto	Mobile	
Pay	Cash/ATM Check Debit/Credit Cards Centralised Settlement	Speed Consistency Transparency Access Cost	L	H	H	H	Mobile PoS Mobile payments DLT-based settlements P2P payments
Save	Bank deposits Mutual Funds Bonds Equities		L	H	H	L	Mobile market funds Blockchain bonds
Borrow	Bank loans Bonds Mortgages Trade Credit Credit cards		H	H	H	L	P2P lending Crowdfunding Blockchain-based lending Platform lending
Manage Risk	Brokerage Underwriting Structured products Regulatory Compliance Insurance		H	L	H	L	Regtech Supitech Smart contracts e-KYC Digital ID
Get Advice	Financial planner Investment Adviser		H.	M	L	M	Robo-advising AI-based wealth management

H: High; M: Medium; L: Low.

Source: IMF(2019); and Authors' illustration.

leading to loss of privacy combined with possible manipulation of consumer behaviour. Compromised data security can lead to fraud and scams (Barefoot, 2020). Big FinTechs (BFT) could undermine developing and emerging countries by crowding out their domestic players, creating monopolies over time, avoiding taxes by shifting profits, taking advantage of regulatory arbitrage to undermine consumer protection laws (Foster *et al.*, 2021). RBI (2024) finds the role of FinTechs in promoting digitalisation which plays a crucial role in financial inclusion. FinTechs can also influence consumer decisions and have far-reaching implications for monetary policy and financial stability (RBI, 2024).

III. Global FinTech Developments

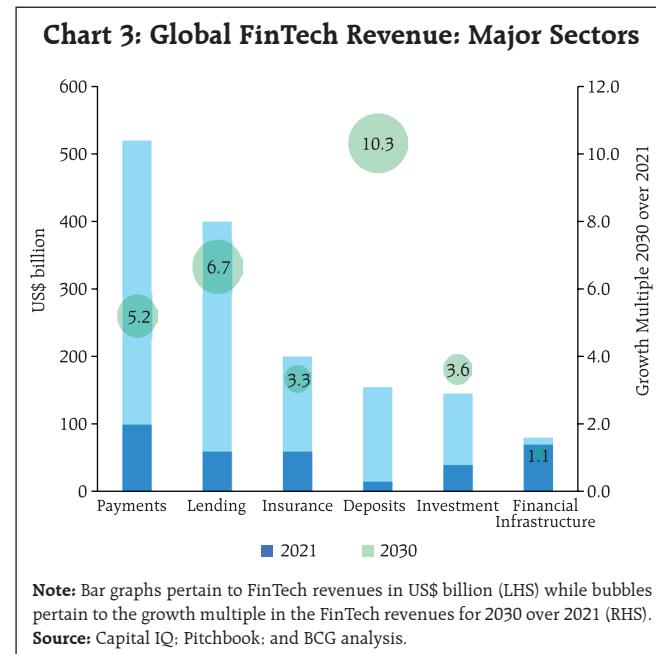
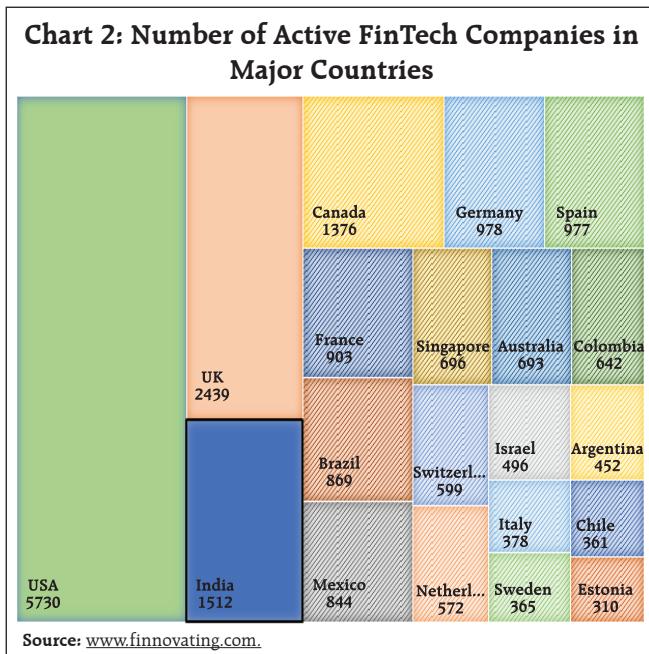
FinTech has transformed the delivery of financial services by making them faster, cheaper, efficient and more accessible². The global FinTech industry

generated revenues of around US\$ 285 billion in 2021 across the major sectors, which is projected to reach US\$ 1.5 trillion by 2030. This growth will be driven primarily by Emerging Asia Pacific (e.g. China, India, and Indonesia), as it has the largest FinTechs, underbanked populations, a high number of small and medium-sized enterprises, and a rising tech-savvy youth and middle class³. In terms of number of active FinTech entities, the United States of America (USA), the United Kingdom (UK) and India are leading the lot (Chart 2). The growth in Fintech-led credit remains in a nascent stage in Continental Europe, the Middle East and Latin America (Claessens *et al.*, 2018; FSB, 2019).

FinTech has expanded financial access in emerging markets and developing economies, reduced the cost of cross-border remittances and benefited women by enabling direct access to government payments and

² Keynote address by Shri Shaktikanta Das, Governor, RBI (dated September 6, 2023) on FinTech and the Changing Financial Landscape at the Global Fintech Festival, Mumbai. Available at: https://www.rbi.org.in/scripts/FS_Speeches.aspx?Id=1383&fn=2765

³ <https://www.bcg.com/press/3may2023-fintech-1-5-trillion-industry-by-2030>



wages without any intermittent leakages through digital accounts (Feyen *et al.*, 2023). FinTech/BigTech credit also witnessed sharp jump driven by advanced countries, which is expected to reach US\$4.9 trillion by 2030 (AMR, 2021). The latest data from the World Bank's Global Financial Inclusion (Global Findex) Database⁴ reveals that worldwide financial account ownership increased from 51 percent to 76 percent between 2011 and 2021. Furthermore, the percentage of adults engaged in digital payment transactions rose from 35 percent in 2014 to 57 percent in 2021. Rapid growth of mobile money, bank applications and financial services offered by BigTechs, as well as the emergence of crypto-assets and CBDCs, has led to introduction of new infrastructures, products and business models that are fundamentally reshaping the structure of financial markets. The developments around cross border usage of CBDCs are particularly on a rise (Box I).

These developments have fuelled up the expectations of a multi-fold increase in the global FinTech revenues across various FinTech sectors by 2030 (Chart 3).

On the regulation aspect, Regulatory Sandboxes have attracted interest across countries. These sandboxes serve to facilitate FinTech initiatives that align with the regulatory intent but may not fully adhere to the precise wording of the regulations (Feyen *et al.*, 2023).

IV. FinTech: The Indian Case

Drawing from the findings of Working Group on FinTech and Digital Banking by RBI (2018), FinTech innovations can be classified into five broad categories on the basis of their application (Chart 4).

As per the Payment Council of India and FinTech Convergence Council Annual Report 2021-22⁵, India is the third largest FinTech ecosystem in the world with the industry's market size expected at nearly US\$ 150 billion by December, 2025. The application of FinTech to payment system has already woven a

⁴ The Global Findex serves as a pioneer publicly available database gauging individuals' utilisation of financial services overtime across various economies. It is based on over 150,000 interviews conducted across more than 140 economies. This database facilitates a comprehensive exploration of how individuals engage in saving, borrowing, conducting payments, and handling financial risks.

⁵ Available at: https://www fintechcouncil in/pdf/PCI_FCC_Annual_Report_2021_22.pdf

Box I: Central Bank Digital Currencies (CBDCs): Crossing the Borders

Out of 29 projects that the Bank for International Settlements Innovation Hub (BISIH) has initiated in the last three years, 13 are centred around CBDCs (BIS, 2023). Globally, the initial set of projects pertaining to CBDCs primarily centred around domestic applications, while the subsequent and the more recent phases comprise CBDC projects exploring techniques to enhance cross-border payments and securities settlement, making them faster, more cost-effective, transparent, and accessible. (Chart B1). This aligns with the G20 cross-border payments programme, which envisions CBDCs playing a potential role in improving the international transactions.

In the Indian context too, the Reserve Bank anticipates that CBDCs, with their ability to enable instant settlement, will play a crucial role in enhancing the affordability, speed, and security of cross-border payments. This vision is further underscored by one of the problem statements identified for the G20 TechSprint 2023, which seeks innovative technology solutions for multilateral cross-border CBDC that can promote interoperability among various CBDC systems or domestic payment systems, reduce operational costs, improve efficiency, and ensure consistent standards across multiple jurisdictions. The Reserve Bank has entered into an agreement with the Central Bank of the United Arab Emirates (CBUAE) to collaborate on FinTech initiatives, including cross-border CBDC payments. Staying abreast with the global developments and progress, the Reserve Bank has also joined the BIS Innovation Hub's multilateral projects, 'Mandala' and 'mBridge,' as an observer (RBI, 2024). CBDCs have an inherent advantage in cross-border transactions in terms of rationalising the cost of international remittances, reducing dependencies and the associated risks emanating from involving multiple intermediaries, increasing efficiency by reducing the time of settlement and enhancing transparency on the status of payment (Auer et al., 2021). However, a notable concern surrounding the cross-border utilisation of CBDCs is, that akin to cryptoassets and stablecoins, it may expose emerging markets and developing economies to various macroeconomic challenges like currency substitution, increased volatility in capital flows and exchange rates, and worsening the issues like tax avoidance and illicit activities (Chen et al., 2022, and Prasad, 2023). To mitigate

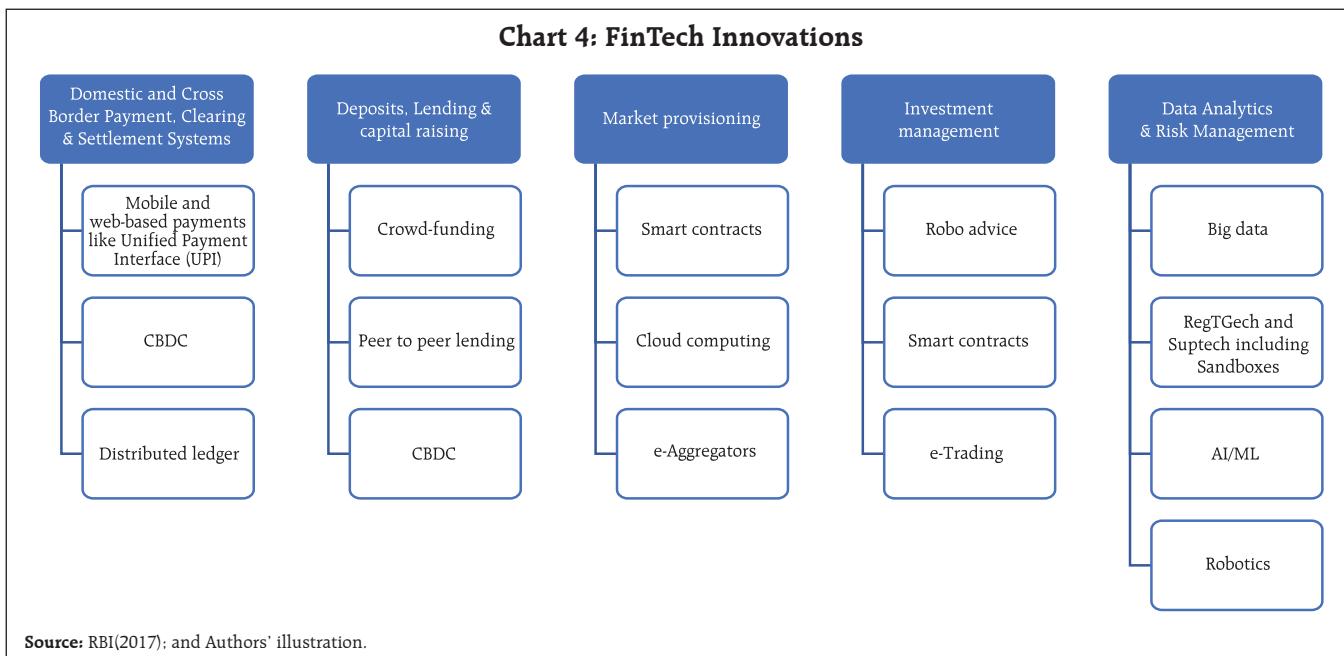
Chart B1: Projects Exploring Cross-border CBDC and the member Central Banks

Project mBridge (CBDC-W)	<ul style="list-style-type: none"> • Hong Kong Monetary Authority • Bank of Thailand • Central Bank of the United Arab Emirates • Digital Currency Research Institute of the People's Bank of China • Saudi Central Bank
Project Dunbar (CBDC-W)	<ul style="list-style-type: none"> • Reserve Bank of Australia • Bank Negara Malaysia • Monetary Authority of Singapore • South African Reserve Bank
Project Ice Breaker (CBDC-R)	<ul style="list-style-type: none"> • Sveriges Riksbank • Norges Bank • Bank of Israel
Project Mariana (CBDC-W)	<ul style="list-style-type: none"> • Banque de France • Swiss National Bank • Monetary Authority of Singapore
Project Jura (CBDC-W)	<ul style="list-style-type: none"> • Banque de France • Swiss National Bank • Private sector consortium led by Accenture Plc.
Onyx/Multiple wCBDC (CBDC-W)	<ul style="list-style-type: none"> • Banque de France • Monetary Authority of Singapore
Project Mandala (CBDC-R & W)	<ul style="list-style-type: none"> • Reserve Bank of Australia • Bank of Korea • Bank Negara Malaysia • Monetary Authority of Singapore
Project Jasper (CBDC-W)	<ul style="list-style-type: none"> • Bank of Canada • Bank of England • Monetary Authority of Singapore
Project Aber (CBDC-W)	<ul style="list-style-type: none"> • Central Bank of the United Arab Emirates • Saudi Central Bank
Project Nexus (CBDC-R & W)	<ul style="list-style-type: none"> • European Central Bank • Bank Negara Malaysia • Monetary Authority of Singapore • Bank Indonesia • Bangko Sentral ng Pilipinas • Bank of Thailand
Project Cedar/Ubin (CBDC-W)	<ul style="list-style-type: none"> • Federal Reserve Bank of New York • Monetary Authority of Singapore
Project Inthanon-LionRock (CBDC-W)	<ul style="list-style-type: none"> • Hong Kong Monetary Authority • Bank of Thailand
Project Sela (CBDC-R)	<ul style="list-style-type: none"> • Hong Kong Monetary Authority • Bank of Israel

Note: R-Retail; W-Wholesale

Source: www.atlanticcouncil.org; and www.bis.org

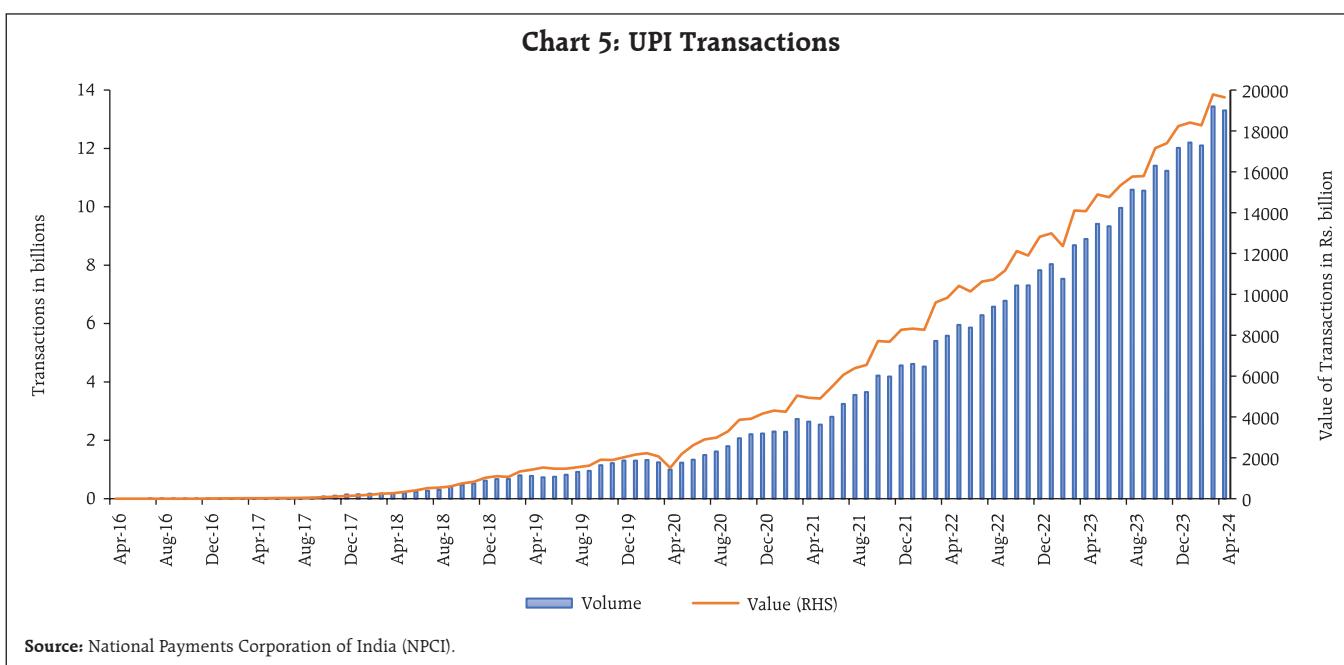
these potential risks, countries can work together to limit the adverse effects of cross-border CBDC usage and ensure that these digital currencies are used in a way that aligns with both global economic stability and individual nations' monetary policies.

Chart 4: FinTech Innovations

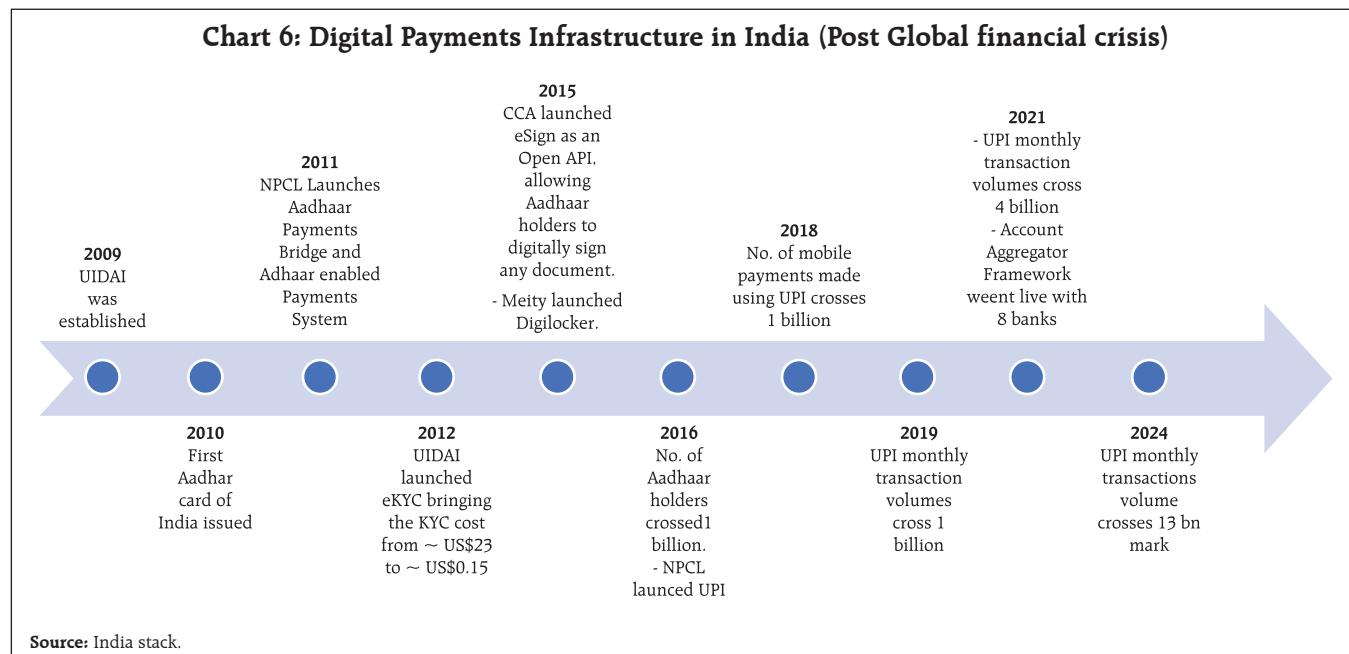
success story for India with Unified Payment Interface (UPI), crossing 13 billion monthly transactions as on April, 2024 (Chart 5). The user friendliness and ease of transaction has been increasingly making UPI a popular medium for retail/ low value transactions which is reflected in a decrease in the average value

of UPI based transactions (rupee value of transactions per unit volume) from ₹1,657 as on January, 2020 to ₹1509 as on January 2024⁶.

The journey of digital payment infrastructure had its roots in the novel Unique Identity Authority of India (UIDAI) project, which is the world's largest

Chart 5: UPI Transactions

⁶ According to the Payment Systems data available on Database on Indian Economy (DBIE).



national identity project (Ramnath and Assisi, 2018). The unique 12-digit Aadhar number had been powering digital banking and payments in India (Chart 6). The Aadhaar-based payment systems including Aadhaar Enabled Payment System (AEPS), Aadhaar Payment Bridge (APB) and Aadhaar Payment App have not only been encouraging cashless transactions but also tend to remove the need for merchants in order to access the Point-of-Sale (POS) terminal/hardware for digital payments.

To give a further boost to the FinTech sector by fostering innovation, while remaining vigilant and addressing the risks associated with the FinTech ecosystem under the adequacy framework, the Reserve Bank established a dedicated FinTech department with effect from January 4, 2022⁷. Regulatory sandboxes have been conducted since 2019 in 'retail payments', 'Cross Border Payments', 'MSME Lending', and 'Prevention and Mitigation of Financial Frauds'. This broader aim is to achieve actionable goals like promoting constructive innovations and incubation in the FinTech sector.

⁷ FinTech Department was created after subsuming the FinTech division of Department of Payment and Settlement Systems.

amidst the implications for the financial industry and markets within the jurisdiction of the Reserve Bank.

In 2020, the RBI set up Reserve Bank Innovation Hub (RBIH) to promote innovation across the financial sector by leveraging on technology and creating an environment which would facilitate and foster innovation. In some of the more recent developments, the Reserve Bank launched pilots of CBDC in 2022 with the commercial banks offering interoperability with UPI. The Reserve Bank is also actively engaging itself in exploring the use of CBDCs for cross border payments. Under India's G20 Presidency, the Reserve Bank and the BIS Innovation Hub (BISIH) jointly launched the fourth edition of the G20 TechSprint, a global technology competition to promote innovative solutions aimed at improving cross-border payments.

V. Data and Methodology

The study applies NLP based text mining approach to analyse the text data related to FinTech to explore the policy developments in this field. Text mining, a component of data mining, uses NLP

techniques⁸ to extract useful information and insights from large amount of unstructured text data. The process of text mining involves structuring the input text, deriving patterns within the structured data, and finally evaluating and interpreting the output. In recent years, text mining has found significant applications in economic and financial sector research, with one specific application being the effective analysis of the regulatory communications in form of publications, research papers and news related to central banks (Bholat *et al.*, 2015). Apel & Grimaldi (2012) measure the sentiment and tone of the minutes of the Swedish central bank, thereby converting qualitative text into quantitative measure and find that this measure is useful in predicting future policy rate decisions. Hendry & Madeley (2012) use Latent Semantic Analysis on Bank of Canada MPRs to investigate what type of information affects returns and volatility in short-term as well as long-term interest rate market. The recent literature has focussed on using specific dictionaries to better capture the subtlety of central bank communications (Lee *et al.*, 2019), along with usage of these techniques to analyse central banks of emerging and developing economies (Omotosho, 2020; Tumala & Omotosho, 2020). This study utilises the methodology proposed by Van Eck and Waltman (2010 and 2014) employing Apache OpenNLP library⁹ to carry out text extraction, pre-processing and analysis.

Two separate text analytics exercises have been attempted on text data samples obtained from (i) the FinTech section of Central Banking¹⁰ News Portal's

website www.centralbanking.com, and (ii) the official website of the Reserve Bank of India (www.rbi.org.in). The FinTech section of Central Banking News Portal includes all the news pieces, articles, speeches, publications and press releases on topics associated with FinTech and the allied domains which are disseminated publicly by nearly 100 central banks and multilateral organisations (Appendix 1). Thus, it provides the information on global FinTech developments at the central bank level under one roof. The obtained text data covers the period from November 2013 to August 2023. The FinTech section of the Reserve Bank's website includes the publicly disseminated information on FinTech by the Reserve Bank. The obtained text data covers the period from February 2018 to August 2023. Text extraction and pre-processing includes sentence detection, tokenisation, part-of-speech tagging, lemmatisation and noun phrase identification. The noun phrases so obtained are fed into NLP based text analytics algorithms to generate the following:

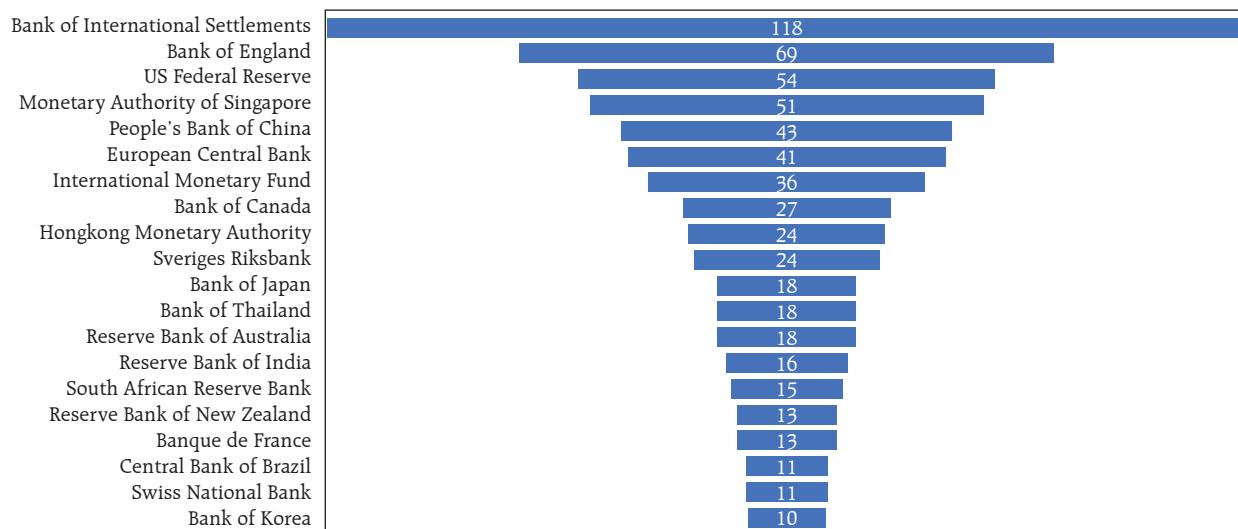
Frequency based Word Plot: The size of each word/its background colour density indicates its frequency or importance in the text. Larger size of words indicates their more frequent appearance in the central bank disseminations (source text) and hence hold greater policy significance. These plots consolidate the variations of words, such as singular and plural forms, into a single word for simplicity. A thesaurus of such words as well as acronyms can be defined by the user for their replacement.

Cluster Network Plot: A Network Plot is a visual representation of the co-occurrence where the networking lines between the words reflect their relatedness. This relatedness is established by analysing how often the terms co-appear in documents. Groups of words that frequently appear together in the parent text are shown as part of one cluster with similar colouring pattern. Also, the words within one cluster are highly networked i.e.,

⁸ NLP involves various techniques at the intersection of computer science and linguistics to empower computers to comprehend natural language akin to humans by receiving real-world inputs, analyse them and interpret them in a manner comprehensible to computers.

⁹ Apache OpenNLP library is a machine learning toolkit for processing of natural language text. For more information on Apache OpenNLP library, reader may refer to Apache OpenNLP Developer Documentation available at <https://opennlp.apache.org/docs/2.0.0/manual/opennlp.html#opennlp>

¹⁰ The FinTech portal of Central Banking (<https://www.centralbanking.com>) covers Fintech and the related news from a network of nearly 100 central bank around the globe which includes speeches, publications, public releases and interviews of executives.

Chart 7: Number of FinTech related Articles pertaining to Major Central Banks/Multilateral Institutions

Source: www.centralbanking.com; and Authors' calculations.

treated together in the parent text as related terms or topics which not only provides the meaning and significance of individual words, but also the overall context in which these are used.

Trend based Temporal Network Plot: The trend in the usage of a word over a period can be visualised using Temporal Network Plot. This tool superimposes a time dimension over the Cluster Network Plot by placing a colour gradient that is changing with a timeline of the occurrence.

Certain words which are re-occurring or highly repetitive, owing to the nature of the text, such as FinTech or financial technology, central bank, policy, world, report, interview, example, instructions etc, have been excluded. Moreover, names of countries, central banks, months etc, which are less relevant in the context, have also been excluded in all three plots.

VI. Results of Text Mining based Survey

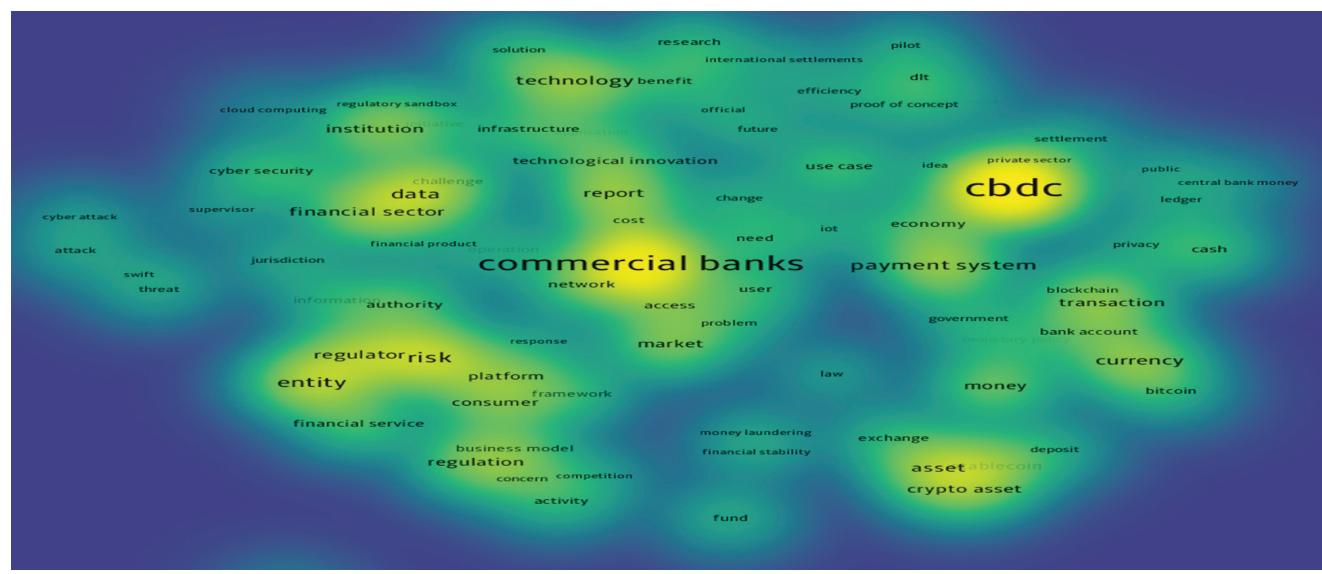
VI.1 FinTech Focus of Central Banks across the World

As noted earlier, the Central Banking news portal provides articles, speeches and interviews

from across nearly 100 central banks and multilateral organisations. Among the central banks, The Bank of England, the US Federal Reserve and the Monetary Authority of Singapore appear at the top with the Reserve Bank of India in the top 15 (Chart 7).

While creating the density plot, only those words occurring more than 100 times in the total text data have been included. The choice of this threshold is to emphasise the most discussed FinTech issue. Accordingly, around 90 such words are identified. The word plot is dominated by words like 'CBDC', 'commercial banks', 'risk', 'entity', 'data', 'payment system' and 'technology', consistent with the broader policy priorities of the central banks (Chart 8). The emergence of CBDC as the most important area being focused by the central banks is on expected lines as 130 countries, representing 98 per cent of global GDP, are exploring CBDC and 64 countries are in an advanced phase of exploration (development, pilot, or launch)¹¹.

¹¹ <https://www.atlanticcouncil.org/cbdctracker>

Chart 8: Focus Areas of FinTech: Central Banks/Multilateral Institutions

Source: Authors' calculations.

The networking analysis highlights that there are 5 broad clusters, with the following themes: 'cyber security', 'regulation/implementation of technology', 'regulation of entity/activity', 'policies related to CBDC' and 'regulation of crypto assets' (Appendix 2.1 & 3):

Cluster 1: This cluster covers policies addressing the cyber security aspect of commercial banks and financial sector and the supervisory vigilance of the central bank towards threats emanating from cyber-attacks. It also highlights the perception of risks and the response mechanism together with other legal aspects faced in the jurisdiction.

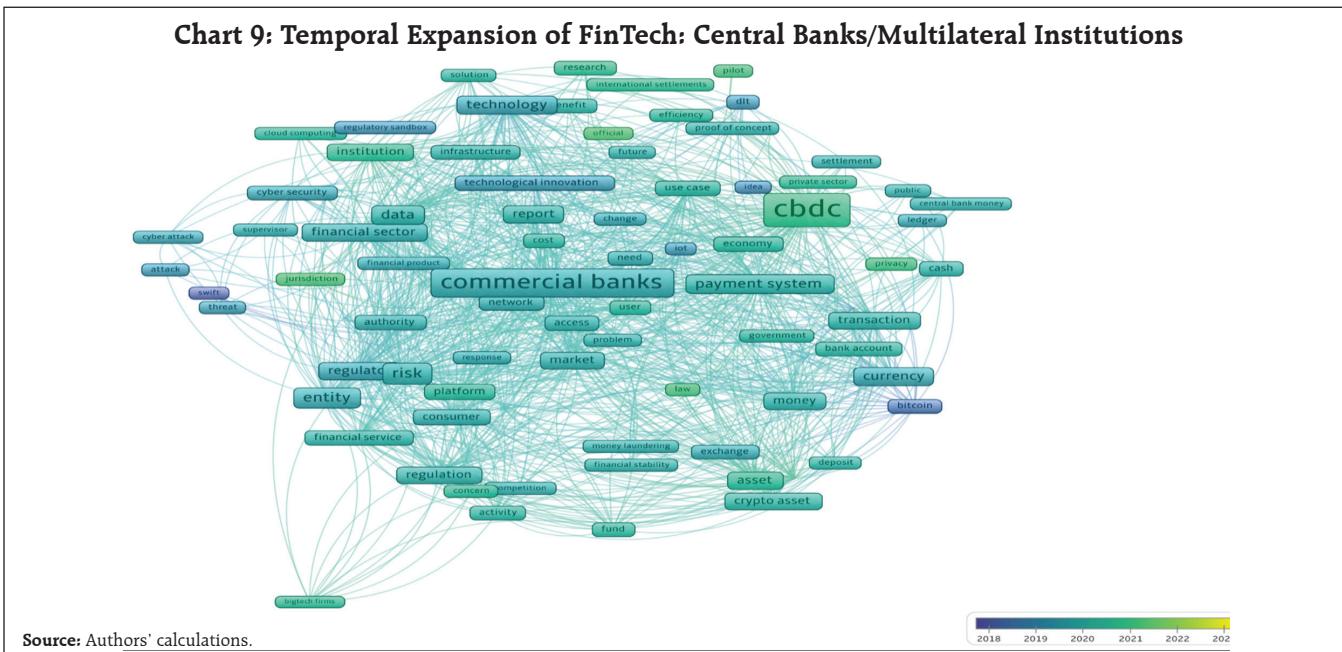
Cluster 2: This cluster identifies regulatory aspects of central bank releases inclined towards technological domain. It includes policy discussions around the use case of pilot projects based on cloud computing, DLT, IoT etc. in obtaining/processing data for implementing regulatory sandboxes and other central bank functionalities, primarily international settlements. The discussion also covers the need for research on such ideas for the future and the technological infrastructure, the related efficiency, benefits as well as the problems in implementing such solutions including the cost aspects.

Cluster 3: This cluster largely focuses on the regulation of the financial services - especially the BigTech firms and the concerns emanating from their activities on consumer, competition and financial stability related matters. The focus seems to be on the entities or firms rather than the technology itself.

Cluster 4: This cluster centres around the implementation of CBDC, its role vis-a-vis cash and deposits, and its overall impact on monetary policy and economy.

Cluster 5: This cluster spans across the central banks' stance on transactions related to crypto assets including digital currencies such as Bitcoin, stablecoins and their exchanges based on blockchain/distributed ledger and the related concerns such as money laundering. It highlights the stance of the government and limit of the law.

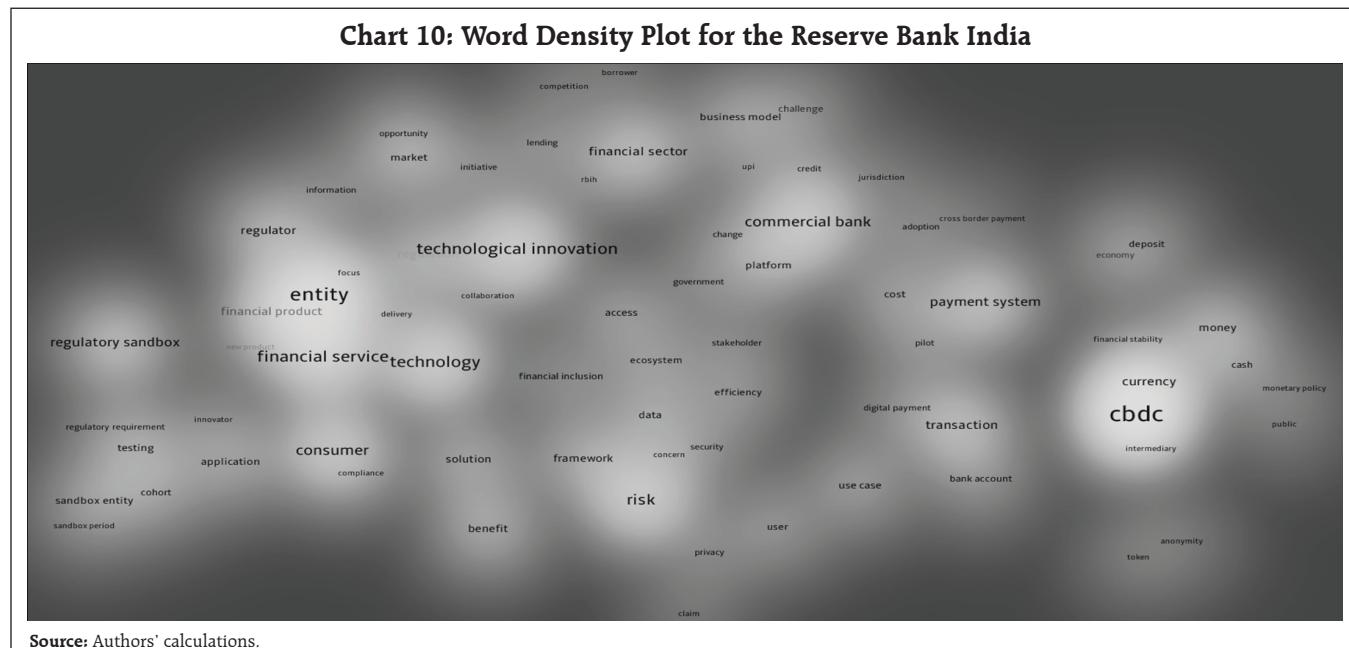
These policy priorities are not static and have evolved over time, adjusting to the needs and challenges. The Temporal Network Plot for the last 5 years showcases that the policy priorities in 2018 and 2019 centred around bitcoin, SWIFT, IoT, DLT, regulatory sandbox, technology, technological innovations, currency, ledger etc, which reflect the



conceptual building blocks of the FinTech innovations as well as the regulatory regime. This shifted to more mature/implementation stage themes over time (such as CBDC, cloud computing, research, cost etc.). The policy debate seems to be shifting towards topics such as bigtech firms, jurisdiction, law, pilots and privacy which mirror the contemporary FinTech concerns of the central bankers' world over (Chart 9).

VI.2 FinTech Focus of the Reserve Bank of India

The density plot shows dominance of words such as CBDC, entity, technological innovation, financial service, technology, risk, commercial bank, consumer etc. CBDC appears to be the most frequently used word in the FinTech related information dissemination of the RBI, as observed in case of other central banks (Chart 10). While creating



the density plot, only those words occurring for more than 20 times in the total text data have been included. Accordingly, around 75 such important words are identified.

The networking analysis identifies 3 clusters. Upon examining the words clustered together, they seem to represent three broad themes - 'regulatory aspects and consumer protection', 'CBDC' and 'financial innovations' (Appendix 2.2 & 3):

Cluster 1: The cluster spans across regulatory aspects of FinTech covering entity, technology, risk, sandbox mechanism, cohort, framework, compliance, testing, solution, financial product and service. Interestingly, the cluster also encompasses the Reserve Bank's focus on consumer, financial service, delivery and financial inclusion, thus, seemingly broadening the regulatory ambit to consumer protection.

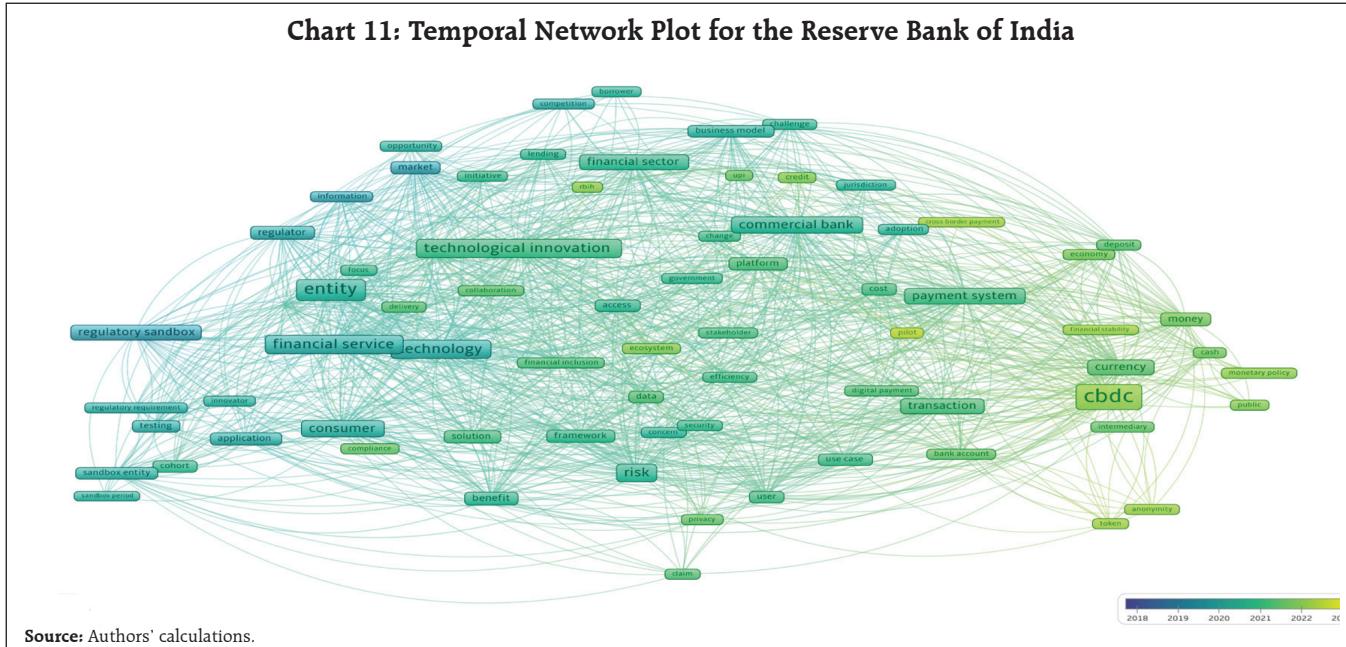
Cluster 2: This cluster highlights the policy debate around CBDC in conjunction with cash and deposits, highlighting its role in payment system and transactions and cross border payments. The impact of CBDC on currency, cash, deposits, financial stability, money, monetary policy and

overall economy also emerged as an area of interest. The features of CBDC like token-based, privacy and anonymity of transactions are also discussed.

Cluster 3: This cluster reflects the FinTech discussions around the existing technological innovations in the financial sector, including the commercial banks and their initiatives/priorities revolving around credit, lending, UPI and data. It highlights the policy concerns, challenges, competition and opportunities for the stakeholders, including borrowers, regarding collaboration, efficiency, access and security to enhance the ecosystem. The Reserve Bank Innovation Hub (RBIH) also appears in the cluster, justifying its role as a platform for financial sector innovations.

According to the Temporal Network Plot for the last 5 years, the policy priorities in 2018 and 2019 were centred around regulatory sandboxes, identifying technologies in financial services, setting regulatory requirements for entities, testing and market information systems. In the ensuing years, the approach graduated to specific policies centred around risk assessment, lending, user cases, security and data platforms. The recent policy debate seems

Chart 11: Temporal Network Plot for the Reserve Bank of India



Source: Authors' calculations.

to be shifting towards topics such as CBDC, its role in monetary policy and its status *vis-à-vis* deposits and currency. Currently, the CBDC related discussions have focussed more on aspects such as its role in cross border payments, financial stability and the features of its pilot launch such as anonymity of transactions (Chart 11).

VII. Conclusion

There is a broad consensus within the global central banking institutions and the Reserve Bank, as reflected in the alignment of policy priorities in areas of FinTech, although their stance towards the regulation of FinTechs is still evolving. Central banks are increasingly focusing on their payment systems, with CBDC emerging as the most widely discussed FinTech application globally and in India. Results obtained from text mining of central banking news/articles shows that the policy discussions on CBDC have evolved beyond initial concerns about technology and its effects on cash, bank deposits, and monetary policy. They now focus on more detailed, practical, and operational aspects, including legal implications, interoperability across jurisdictions, cross-border payments, privacy and pilot projects.

The text mining analysis of FinTech news/policy documents of the Reserve Bank shows that due emphasis is given to consumer protection, service delivery and financial inclusion, stressing upon the need to maintain a healthy balance among all the stakeholders and enshrining an essential feature of the financial services – that of a public good. The central banks have put on regulatory discussions towards the specific technologies (including IoT, DLT and Cloud computing) apart from the entities applying these technologies. On the other hand, the Reserve Bank's regulatory focus appears to be encompassing the regulated entity/activity and the technology with a focus to bring the regulator and the market/innovators together. The Reserve Bank of India's recent push to encourage FinTechs

to establish a Self-Regulating Organisation (SRO), to evolve the industry best practices norms in sync with the laws of the land and the set standards, may go a long way in delineating regulatory perimeter for the FinTech in India.

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Appendices

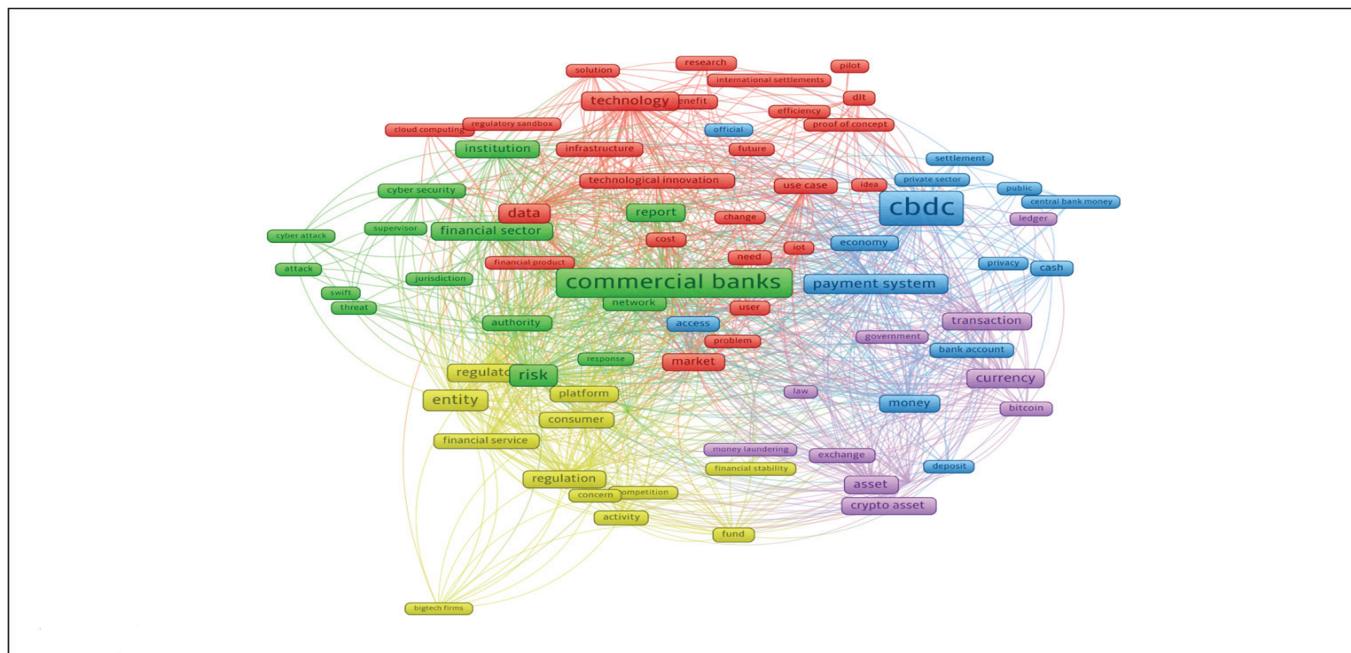
Appendix 1: Central Banks appearing in FinTech related News Articles



Source: Author's calculations.

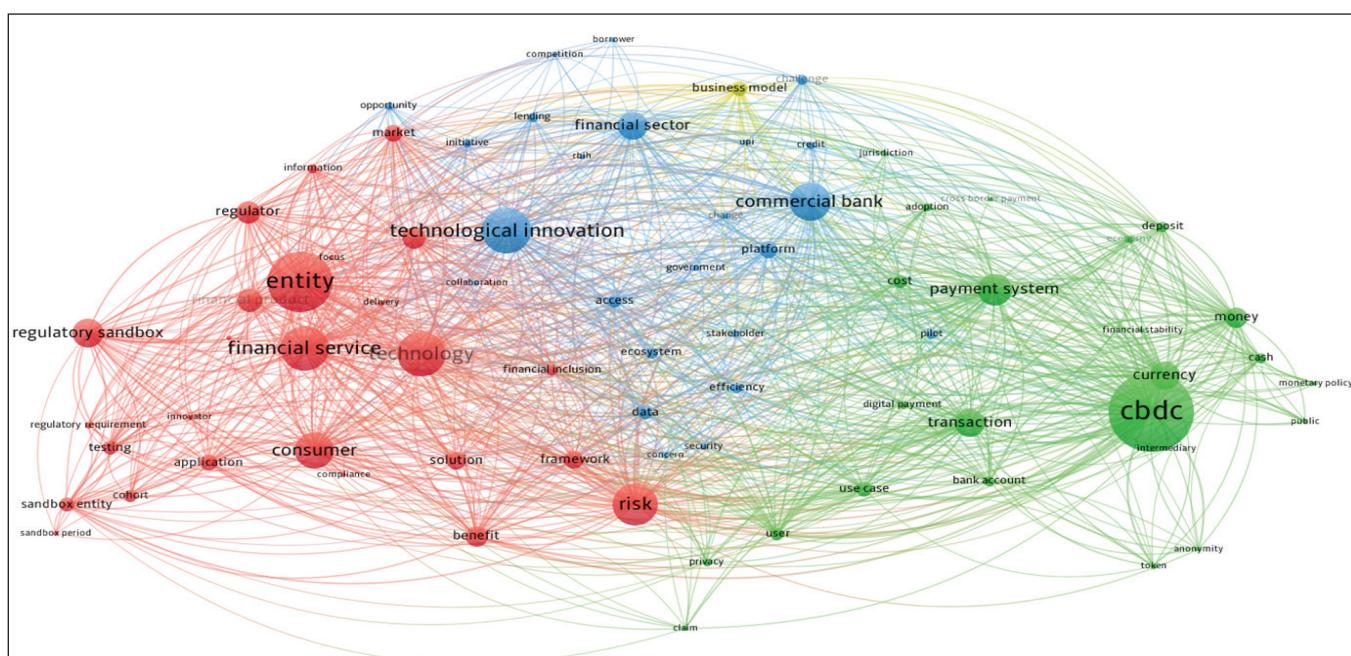
Appendix 2: Cluster Network Plots

2.1: Central Banking FinTech News



Source: Author's calculations.

2.1: RBI FinTech Press Releases/Speeches/Publications



Source: Author's calculations.

Appendix 3: Word Clusters Mapped to their Colour Patterns

Central Banks/Multilateral Institutions					Reserve Bank of India		
Cluster 1 [Policies covering Cyber security]	Cluster 2 [Policies covering regulation/ implementation of technology]	Cluster 3 [Policies covering regulation of entity/activity]	Cluster 4 [Policies related to cbdc]	Cluster 5 [Policies related to crypto assets]	Cluster 1 (Policies covering regulatory aspects and consumer protection)	Cluster 2 (Policies related to -cbdc)	Cluster 3 (Policies around innovations in financial system)
authority	benefit	activity	access	asset	application	adoption	access
attack	change	bigtech firm	bank account	blockchain	benefit	anonymity	borrower
commercial banks	cloud computing	competition	cash	bitcoin	cohort	bank account	challenge
cyber security	cost	concern	cbdc	crypto asset	compliance	cash	change
cyber attack	data	consumer	central bank money	currency	consumer	cbdc	collaboration
financial sector	dlt	entity	deposit	exchange	delivery	claim	commercial bank
institution	efficiency	financial service	economy	government	entity	cost	competition
jurisdiction	financial product	financial stability	monetary policy	ledger	financial inclusion	cross border payment	concern
network	future	fund	money	law	financial product	currency	credit
report	Idea	platform	official	money laundering	financial service	deposit	data
response	infrastructure	regulation	payment system	stablecoin	focus	digital payment	ecosystem
risk	international settlements	regulator	privacy	transaction	framework	economy	efficiency
supervisor	iot		private sector		information	financial stability	financial sector
swift	market		public		innovator	intermediary	government
threat	need		settlement		market	jurisdiction	initiative
	pilot				new product	monetary policy	lending
	problem				regulation	money	opportunity
	proof of concept				regulator	payment system	pilot
	regulatory sandbox				regulatory requirement	privacy	platform
	research				regulatory sandbox	public	rbih
	solution				risk	token	security
	technology				sandbox entity	transaction	stakeholder
	technological innovation				sandbox period	use case	technological innovation
	use case				solution	user	UPI
	user				technology		
					testing		

Source: Authors' illustration.

Private Corporate Investment: Growth in 2023-24 and Outlook for 2024-25

by Kamal Gupta, Rajesh B Kavediya,
Sukti Khandekar and Snigdha Yojindran ^

This article presents an analysis of investment intentions of private corporates based on the projects sanctioned by bank/FIs during 2023-24. The total envisaged cost of the projects financed by banks/FIs reached a new high of ₹3.91 lakh crore during 2023-24, with 54 per cent planned to be invested by the year-end. The phasing profile of the pipeline projects finance suggests that the envisaged capex will increase significantly to ₹2.45 lakh crore in 2024-25 from ₹1.59 lakh crore in 2023-24. Rising domestic demand and capacity utilisation, improved profitability of corporates, sustained credit demand, business optimism and government's thrust on infrastructure development, along with policy measure to encourage investment activities, bode well for private capital investment.

Introduction

Capital investment by private corporates, a major driver of India's long-term growth, has been gaining traction, after moderating during the COVID-19 pandemic. Healthy balance sheet of banks and private companies, improved corporate profits, rising capacity utilisation, sustained credit demand, optimism in business sentiments and government's thrust on public infrastructure¹ bode well for private capital expenditure (capex) cycle, which reflects investment climate and growth potential of the economy and facilitates economic progress.

[^] The authors are from Department of Statistics and Information Management. The views expressed in the article are those of the authors and do not represent the views of the Reserve Bank of India.

¹ RBI Annual Report (2023-24) and various monetary policy related forward looking surveys conducted by the RBI.

As finalisation of corporate balance sheet takes time, many countries adopt survey-based approach to assess the near-term outlook on corporate investment and perspective planning. Such surveys provide lead information on quantum and timing of investment for direct assessment of firms' investment intentions that are expected to materialise in the near to medium-term.

In the Indian context, the Reserve Bank has been tracking private capex plans through monitoring of the projects that are funded by banks /financial institutions (FIs)² for assessing investment outlook.³ This article presents the analysis of investment intentions of private corporates based on the projects sanctioned by bank/FIs during 2023-24, supplemented by alternative sources of capex funding, where the total cost of projects is considered to get a comprehensive view, instead of limiting it to the portion that is financed by banks/FIs.

The article is structured into five sections. Section II sets out the methodology and assumptions used in the study. Important features of projects sanctioned or contracted during the period of review (i.e., 2023-24), funding thereof, and distributional aspects in terms of regions and industries are presented in Section III. Section IV deals with the phasing profile of the sanctioned/contracted loans/financing and estimates growth of corporate investment, while section V concludes the study.

II. Methodology and Assumptions

For the assessment of near-term outlook of investment activity of private corporates, the methodological framework proposed by Rangarajan (1970) has been adopted. For this purpose, data on

² Includes all public sector banks, major private sector and foreign banks, and financial institutions which are actively involved in project financing namely, Industrial Financial Corporation of India (IFCI), Life Insurance Corporation (LIC), Power Finance Corporation (PFC), Rural Electrification Corporation of India (REC) and Export-Import Bank of India (EXIM).

³ Analysis of investment outlook of private corporates are regularly released in the form of articles, initially in the Economic and Political Weekly and, since 1989, in the RBI Bulletin.

investment intentions are gathered through three different sources, *viz.*, (i) banks and FIs which are involved in the business of project finance to private corporates, (ii) finances raised for capex purpose through the external commercial borrowings (ECBs) [including issuance of foreign currency convertible bonds (FCCBs)], rupee denominated bonds (RDBs)], and (iii) funding raised through initial public offerings (IPOs), follow-on public offerings (FPOs) and rights issues by the private corporates for capex purpose.

This study focuses exclusively on projects that receive funding from the aforementioned sources, having a project cost exceeding ₹10 crore, and majority ownership stake of project with private corporates. Projects having majority stake holding with the Central and/or State governments, and projects initiated by trusts and educational institutions are excluded from the scope of this study. It has been ensured that each project is included in the dataset only once, to obviate double counting and consequent overestimation.

The estimates are derived under the assumption that companies adhere to their *ex-ante* capital expenditure plans. It is, however, important to note that these estimates could differ from the actual private corporate fixed investment data provided in national accounts as (a) some of the project investment intentions may undergo modifications in terms of their planned amount and timing; (b) funding sources of certain projects may shift to internal resources and/or other sources, such as, fund raised from capital market/bond financing and foreign direct investment (FDI); and (c) some new projects may come up and some planned ones may be shelved.

III. Characteristics of Projects Sanctioned/Contracted

The investment intentions of private corporates remained buoyant during 2023-24 as reflected in rising total number of projects as well as the total cost of projects sanctioned by banks/FIs. During 2023-24, about 944 projects got assistance from banks/FIs with a record high total cost of projects of ₹3,90,978 crore, as compared to 547 projects sanctioned during

the previous year having total cost of ₹2,66,546 crore (Annex Table A1).

During 2023-24, 438 private companies, which did not avail of any financing from banks/FIs for capex projects, raised ₹1,68,396 crore through ECBs for capex purpose, while 123 other companies raised ₹6,310 crore through domestic equity issuances under the initial public offering (IPO) route for funding their capex needs. Overall, investment plans of 1,505 projects were made during 2023-24, with record investment intentions of ₹5,65,684 crore, as against 982 projects in 2022-23 with investment intentions of ₹3,51,276 crore (Annex Table A1-A4).

i) Size-wise

The size-wise distribution of projects showed a noticeable increase in the number of projects across various sizes. During 2023-24, eleven mega projects (with project cost ₹5,000 crore and above) and 77 large projects (₹1000 crore-₹5000 crore), got sanctioned by banks/FIs, having share of 21.7 per cent and 37.1 per cent of total project costs, respectively. Any deviations from the phasing plans of these mega/large projects can affect the overall capex pattern in the medium-term (Annex Table A5).

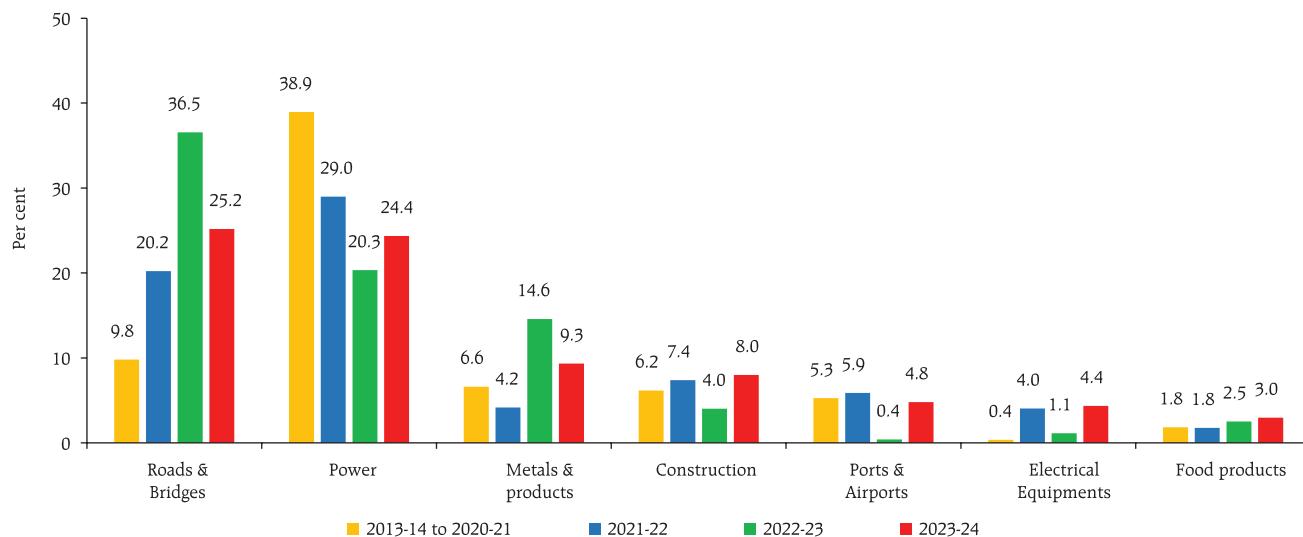
ii) Purpose-wise

Investment in green field (new) projects accounted for the lion share of about 89 per cent in the total cost of projects financed by banks/FIs during 2023-24, in line with the recent trends, which points to likely capacity expansion by private corporates going forward. Investment in expansion and modernisation of existing projects accounted for 8.6 per cent share in the total project cost (Annex Table A6).

iii) Industry-wise

Industry-wise distribution of projects sanctioned during 2023-24 indicates that the infrastructure sector⁴ remained the major sector accounting for

⁴ Infrastructure sector comprises (a) power, (b) telecom, (c) ports and airports, (d) storage and water management, (e) special economic zone (SEZ), industrial, biotech and IT park, and (f) roads & bridges.

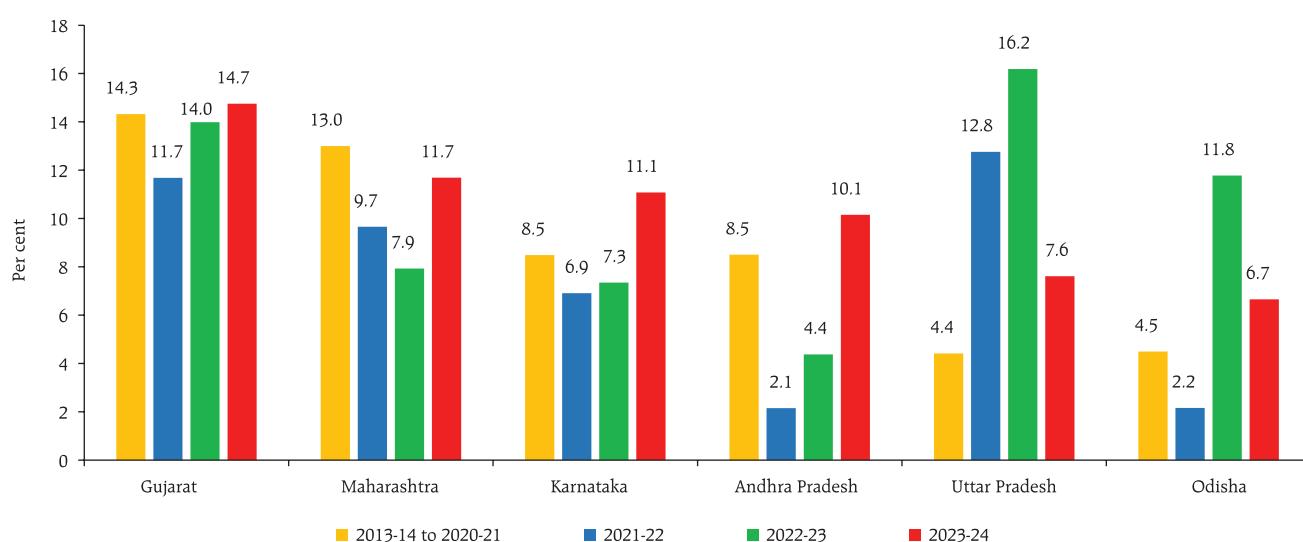
Chart 1: Share of Major Industries in Aggregate Cost of Projects Sanctioned by Banks/FIs

Source: Data on project finance gathered from banks/FIs and Authors' calculations.

55.5 per cent share in the total cost of projects, primarily driven by investment in 'Roads & bridges' and 'Power' (Annex Table A7). Beside infrastructure, among the other major industries, metal & metal products, construction, electrical equipments, and food products also accounted for a sizable share in the total cost of projects (Chart 1 and Annex Table 7).

iv) State-wise

The state-wise distribution of projects sanctioned revealed that the top five states viz., Gujarat, Maharashtra, Karnataka, Andhra Pradesh and Uttar Pradesh together accounted for about 55 per cent of the total cost of projects sanctioned during 2023-24 (Chart 2 and Annex Table A8)⁵.

Chart 2: Share of Major States in Aggregate Cost of Projects Sanctioned by Banks/FIs

Source: Data on project finance gathered from banks/FIs and Authors' calculations.

⁵ The projects spread across multiple states have been classified as "multi-state" projects.

IV. Phasing Profile of Investment Intentions

The phasing profile of capital expenditures of projects sanctioned by banks/FIs till the end of the financial year 2023-24 provides near-term (one year ahead) investment outlook of private corporates. The phasing from the cohort of projects in 2023-24 indicates that about 54 per cent (₹2,12,266 crore) of the total proposed capital expenditure was planned to be invested by the year-end, while 29.7 per cent (₹1,15,928 crore) is planned to be spent in 2024-25 and another 16.1 per cent (₹62,783 crore) in the subsequent period. Based on the phasing profile of projects sanctioned by banks/FIs till 2023-24, the envisaged capex recorded a significant increase of 41.7 per cent to ₹2,80,975 crore during 2023-24 (Annex Table A1).

Resources raised through the ECB and IPO route by private corporates supplement the financing of their investment activities. From the funds raised through the ECB route for the capex purpose during 2023-24 and the prior period, capital expenditure planned to be made during 2023-24 more than doubled to ₹1,16,073 crore as compared with previous year. Also, planned capex from the fund raised through IPO route increased to ₹6,138 crore in 2023-24, though its share in total envisaged capital expenditure remained minuscule (Annex Table A2 and A3).

Overall, based on the various channels of fundings, as alluded earlier, total capital investment of ₹4,03,186 crore was intended to be made by the private corporate sector in 2023-24, significantly higher (56.6 per cent) than the planned capex during the previous year, led by the rise in total funds for projects sanctioned by banks/FIs and funds raised through the ECB route. The phasing profile of the envisaged capex, based on the pipeline projects⁶ sanctioned by the banks/ FIs in the previous years prior to the reference year, indicate that the envisaged capital investment is expected to increase from ₹1,17,182 crore in 2023-24 to ₹1,68,176

⁶ Pipeline projects are those projects which are already undertaken for implementation. Capex from pipeline projects are envisaged amounts for a given year, which got sanctioned prior to that given year.

crore in 2024-25; taking into account all channels of financing, the total envisaged capital investment is estimated at ₹2,45,212 crore in 2024-25 as against ₹1,59,221 crore in 2023-24 (Annex Table A1 and A4).

V. Conclusion

The significant rise in envisaged capital investment of private corporates, based on the projects sanctioned by banks/FIs during 2023-24, points to upbeat investment cycle. The total cost of projects sanctioned by banks/FIs increased to a record high of ₹3,90,978 crore. Infrastructure sector continued to attract the major share of envisaged capital investment, led by 'Roads & Bridges' and 'Power' sectors, reflecting the government push towards infrastructure development. Of the total cost of projects envisaged during 2023-24, 54 per cent was planned to be invested by the end of financial year 2023-24, 30 per cent is provided for 2024-25 and the remaining 16 per cent is envisaged to be invested in the subsequent years. The phasing profile of pipeline projects finance through all the three channels suggests that the envisaged capex could increase significantly to ₹2,45,212 crore in 2024-25 from ₹1,59,221 crore in 2023-24.

Healthy balance sheets of both corporates and banks, improved corporate profitability, sustained credit demand, rising capacity utilisation, and optimism in business sentiments as reflected in the forward-looking enterprise surveys conducted by the RBI as also by the other agencies, provide conducive environment for private corporates to undertake investments going forward. On the downside, global financial market volatility, protracted geopolitical tensions and geoeconomic fragmentation could dampen the investment plans. Overall, the investment cycle is expected to remain upbeat and its sustainability needs to be watched closely.

References:

- Rangarajan, C. (1970). Forecasting capital expenditure in the corporate sector. *Economic and Political Weekly*, 5(51), 2049-2051.

Table A1: Phasing of Capex of Projects Sanctioned by Banks/FIs

Year of sanction ↓	No of Projects	Project Cost in the Year of Sanction (₹ crore)	Project Cost due to Revision/ Cancellation^ (in ₹ crore)	2013-14	2014-15	2015-16	2016-17	2017-18
	1	2	3	5	6	7	8	9
upto 2013-14				1,70,603	93,658	34,172	14,421	4,722
2014-15	326	87,601	87,253 (0.4)	14,920	34,589	25,765	9,535	1,246
2015-16	346	95,371	91,781 (3.8)	3,787	7,434	37,517	28,628	8,079
2016-17	541	1,82,807	1,79,249 (2.0)	1,352	3,952	25,388	71,186	41,075
2017-18	485	1,72,831	1,68,239 (2.6)		620	15,184	12,445	63,001
2018-19	409	1,76,581	1,59,189 (9.8)			569	6,862	11,000
2019-20	320	2,00,038	1,75,830 (12.1)					4,049
2020-21	220	75,558	75,558 (0.0)					
2021-22	401	1,43,314	1,41,976 (0.9)					
2022-23	547	2,66,547	2,66,546 (0.0)					
2023-24	944	3,90,978						
Grand Total^				1,90,662	1,40,253	1,38,595	1,43,077	1,33,172
Percentage change					-26.4	-1.2	3.2	-6.9

Table A1: Phasing of Capex of Projects Sanctioned by Banks/FIs (Contd.)

Year of sanction ↓	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Beyond 2024-25
	10	11	12	13	14	15	16	17
upto 2013-14	1,472							
2014-15	162	1,036						
2015-16	4,964	1,152	220					
2016-17	21,643	8,566	4,001	2,086				
2017-18	41,436	22,767	10,202	2,342	242			
2018-19	59,973	47,080	21,248	9,759	2,663	35		
2019-20	14,524	53,978	58,556	28,116	14,114	2,299	194	
2020-21	2,491	3,709	29,013	26,166	9,711	3,867	601	
2021-22		3,610	10,543	59,622	44,176	18,442	3,541	2,042
2022-23		1,127	2,150	16,663	87,997	92,539	47,912	18,158
2023-24			2,235	6,783	39,455	1,63,793	1,15,928	62,783
Grand Total^	1,46,665	1,43,025	1,38,168	1,51,537	1,98,358	2,80,975	1,68,176	82,983
Percentage change	10.1	-2.5	-3.4	9.7	30.9	41.7	#	

&: Column totals indicate envisaged capex in a particular year covering the projects which received financial assistance in various years. The estimate is ex ante incorporating only envisaged investments. They are different from those actually realised/utilised.

#: Per cent change for 2024-25 is not worked out as capex from proposal that are likely to be sanctioned in 2024-25 is not yet available.

^ : Figures in bracket are percentage of revision/cancellation.

Table A2: Phasing of Capex Projects* Funded through ECBs/ FCCBs/RDBs**

Year of sanction ↓	No of LRNs issued	Total loan contracted (₹ crore)	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
	1	2	3	4	5	6	7	8
upto 2013-14			78,864	27,376	4,896			
2014-15	478	57,327		36,791	16,806	3,151	575	2
2015-16	314	38,885			28,998	7,311	2,572	4
2016-17	346	22,154				14,953	6,005	1,192
2017-18	419	37,896					17,822	13,054
2018-19	515	72,490						46,221
2019-20	495	95,491						
2020-21	362	40,564						
2021-22	363	51,059						
2022-23	393	81,101						
2023-24	438	1,68,396						
Grand Total[§]			78,864	64,167	50,700	25,415	26,974	60,473
Percentage change				-18.6	-21.0	-49.9	6.1	124.2

Table A2: Phasing of Capex Projects* Funded through ECBs/ FCCBs/RDBs (Contd.)**

Year of sanction ↓	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Beyond 2024-25
	9	10	11	12	13	14	15
upto 2013-14							
2014-15	2						
2015-16							
2016-17	2	2					
2017-18	6,484	529	7				
2018-19	17,725	1,236	5,398	1,844	66		
2019-20	65,367	17,157	11,717	965	285		
2020-21		21,865	13,574	3,219	1,675	231	
2021-22		13	29,315	16,554	5,089	89	
2022-23				33,927	31,785	14,438	950
2023-24				32	77,173	59,287	31,904
Grand Total[§]	89,580	40,802	60,011	56,542	1,16,073	74,045	32,854
Percentage change	48.1	-54.5	47.1	-5.8	105.3	#	

*:Projects which did not receive assistance from banks/FIs.

**:Rupee Denominated Bonds (RDBs) have been included since 2016-17.

#:Percent change for 2024-25 is not worked out as capex from proposals that are likely to be drawn in 2024-25 is not yet available.

§: The estimate is ex ante incorporating only envisaged investment. They are different from those actually realised/utilised.

LRN: Loan registration number.

Table A3: Phasing of Capex of Projects Funded Through Equity Issues*

Equity issued during ↓	No. of Companies	Capex Envisaged (₹ crore)	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
	1	2	3	4	5	6	7	8
upto 2013-14			494	492	70			
2014-15	24	1,078		189	557	332		
2015-16	40	4,511		11	644	2,753	849	183
2016-17	29	1,159			14	471	368	163
2017-18	51	1,538					419	327
2018-19	39	609						506
2019-20	12	53						2
2020-21	12	663						
2021-22	27	3,410						
2022-23	42	3,629						
2023-24	123	6,310						
Grand Total[§]			494	692	1,285	3,556	1,636	1,181
Percentage change				40.1	85.7	176.7	-54.0	-27.8

Table A3: Phasing of Capex of Projects Funded Through Equity Issues* (Contd.)

Equity issued during ↓	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Beyond 2024-25
	9	10	11	12	13	14	15
upto 2013-14							
2014-15							
2015-16	71						
2016-17	143						
2017-18	787	5					
2018-19	90	13					
2019-20	49	2					
2020-21		139	421	84	19		
2021-22		10	757	1,304	939	400	
2022-23				1,172	2,181	276	
2023-24				58	2,999	2,316	937
Grand Total[§]	1,140	169	1,178	2,618	6,138	2,992	937
Percentage change	-3.5	-85.2	597.0	122.2	134.4	#	

*: Projects which did not receive assistance from banks/FIs/ECBs/FCCBs/RDBs.

#: Per cent change for 2024-25 is not worked out as capex from proposals that are likely to be implemented in 2024-25 is not yet available.

§: The estimate is ex ante incorporating only envisaged investment, they are different from those actually realized / utilised.

Table A4: Phasing of Capex of Projects Funded Through Banks/FIs/IPOs/ECBs/FCCBs/RDBs*/IPOS

Year of sanction ↓	No of Companies or Banks/FIs/ECBs/FCCBs /RDBs /IPOS	Project Cost (₹ crore)	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
	1	2	3	4	5	6	7	8
upto 2013-14			2,49,961	1,21,526	39,138	14421	4722	1472
2014-15	828	1,45,658	14920	71,569	43,128	13,018	1821	164
2015-16	700	1,35,177	3787	7445	67,159	38,692	11,500	5151
2016-17	916	2,02,562	1352	3952	25402	86,610	47,448	22,998
2017-18	955	2,07,673		620	15184	12445	81,242	54,817
2018-19	963	2,32,288			569	6862	11000	1,06,700
2019-20	827	2,71,374					4049	14526
2020-21	594	1,16,785						2491
2021-22	791	1,96,445						
2022-23	982	3,51,276						
2023-24	1,505	5,65,684						
Grand Total^g			2,70,020	2,05,112	1,90,580	1,72,048	1,61,782	2,08,319
Percentage change				-24.0	-7.1	-9.7	-6.0	28.8

Table A4: Phasing of Capex of Projects Funded Through Banks/FIs/IPOs/ECBs/FCCBs/RDBs*/IPOS (Contd.)

Year of sanction ↓	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Beyond 2024-25
	9	10	11	12	13	14	15
upto 2013-14							
2014-15	1038						
2015-16	1223	220					
2016-17	8711	4003	2086				
2017-18	30,038	10736	2349	242			
2018-19	64,895	22,497	15,157	4,507	101		
2019-20	1,19,394	75,715	39,833	15,079	2584	194	
2020-21	3709	51,017	40,161	13,014	5,561	832	
2021-22	3610	10566	89,694	62,034	24,470	4030	2,042
2022-23	1127	2150	16663	1,23,096	1,26,505	62,626	19,108
2023-24		2,235	6,783	39,545	2,43,965	1,77,531	95,624
Grand Total^g	2,33,745	1,79,139	2,12,726	2,57,518	4,03,186	2,45,212	1,16,774
Percentage change	12.2	-23.4	18.7	21.1	56.6	#	

*: Rupee Denominated Bonds (RDBs) have been included since 2016-17.

^g: Per cent change for 2024-25 is not worked out as capex from proposals that are likely to be sanctioned in 2024-25 is not yet available.

&: The estimate is ex ante incorporating only envisaged investment, they are different from those actually realised/utilised.

Table A5: Size-wise Distribution of Projects Sanctioned by Banks/FIs: 2013-14 to 2023-24

Period	Number and Share of Projects	Less than ₹100 crore	₹100 crore to ₹500 crore	₹500 crore to ₹1000 crore	₹1000 crore to ₹5000 crore	₹5000 crore & above	Total
2013-14	No. of Projects	306	115	25	21	5	472
	Per cent Share	8.3	20	13.9	29.1	28.7	100 (1,27,328)
2014-15	No. of Projects	223	65	18	19	1	326
	Per cent Share	9	16.6	14.6	47.8	12	100 (87,253)
2015-16	No. of Projects	214	76	34	21	1	346
	Per cent Share	8.6	20.9	26	38.5	5.9	100 (91,781)
2016-17	No. of Projects	287	180	29	40	5	541
	Per cent Share	5.8	23.3	11.9	41.7	17.4	100 (1,79,239)
2017-18	No. of Projects	263	149	28	42	3	485
	Per cent Share	5.2	21	10.8	43.8	19.1	100 (1,68,239)
2018-19	No. of Projects	220	110	39	36	4	409
	Per cent Share	4.8	17	17	39.6	21.6	100 (1,59,189)
2019-20	No. of Projects	150	84	45	36	5	320
	Per cent Share	3.3	11.9	18.6	37.4	28.8	100 (1,75,830)
2020-21	No. of Projects	128	52	15	24	1	220
	Per cent Share	5.5	16.8	14.2	53.5	10	100 (75,558)
2021-22	No. of Projects	200	127	36	36	2	401
	Per cent Share	5.6	20.0	19.6	46.9	7.9	100 (1,41,976)
2022-23	No. of Projects	264	156	51	68	8	547
	Per cent Share	3.9	13.6	14.1	41.3	27.1	100 (2,66,546)
2023-24	No. of Projects	484	265	107	77	11	944
	Per cent Share	4.6	16.6	20.0	37.1	21.7	100 (3,90,978)

Note: i. Figures in brackets are total cost of projects in ₹ crore.

ii. Per cent share is the share in total cost of projects. Percentages may not total 100 due to rounding.

Table A6: Purpose-wise Distribution of Projects Sanctioned by Banks/FIs during 2013-14 to 2023-24

Period	Number and Share of Projects	New	Expansion & Modernisation	Diversification	Others	Total
2013-14	No. of Projects	361	95	2	14	472
	Percent Share	65.2	20.1	-	14.7	100 (1,27,328)
2014-15	No. of Projects	203	92	2	29	326
	Percent Share	39.4	14.7	0.2	45.7	100 (87,253)
2015-16	No. of Projects	260	64	3	19	346
	Percent Share	73.6	14.3	0.1	12.0	100 (91,781)
2016-17	No. of Projects	429	97	4	11	541
	Percent Share	78.6	9.9	0.1	11.3	100 (1,79,249)
2017-18	No. of Projects	396	80	2	7	485
	Percent Share	89.0	9.5	0.1	1.5	100 (1,68,239)
2018-19	No. of Projects	309	80	-	20	409
	Percent Share	76.8	19.3	-	3.9	100 (1,59,189)
2019-20	No. of Projects	262	37	1	20	320
	Percent Share	79.8	13.7	-	6.4	100 (1,75,830)
2020-21	No. of Projects	181	38	1	-	220
	Percent Share	94.1	5.9	-	-	100 (75,558)
2021-22	No. of Projects	312	88	1	-	401
	Percent Share	89.1	10.8	0.1	-	100 (1,41,976)
2022-23	No. of Projects	440	101	-	6	547
	Percent Share	93.1	6.1	-	0.8	100 (2,66,546)
2023-24	No. of Projects	767	167	4	6	944
	Percent Share	89.1	8.6	0.1	2.2	100 (3,90,978)

Note: i. Figures in brackets are total cost of projects in ₹ crore.
ii. Per cent share is the share in total cost of projects. Percentages may not total 100 due to rounding.
iii. -: Nil/Negligible.

Table A7: Industry-wise Distribution of Projects Sanctioned by Banks/FIs: 2013-14 to 2023-24

Industry	2013-14		2014-15		2015-16		2016-17		2017-18		2018-19	
	No. of Projects	Per cent Share										
Infrastructure	87	39.7	74	48.9	108	72	204	62.5	150	51.7	122	60.3
i) Power	70	35.1	65	42.2	92	57.1	170	45.4	117	36.5	78	26.8
ii) Telecom	1	-	1	4.9	1	0.3	1	-	-	-	-	-
iii) Ports & Airports	1	0.8	-	-	3	2.4	8	5.7	6	3.1	4	14.2
iv) Storage & Water Management	5	1.1	2	0.6	4	4.2	6	3.7	2	0.4	13	5.7
v) SEZ, Industrial, Biotech and IT Park	8	1.5	3	0.9	1	0.4	2	0.4	9	1.6	11	3.2
vi) Roads & Bridges	2	1.2	3	0.3	7	7.6	17	7.3	16	10.1	16	10.4
Metal & Metal Products	44	17.4	17	17.4	14	1.5	23	4.9	21	9.7	16	3
Construction	27	2.1	29	4	26	1.8	60	12	39	5.3	26	2.3
Electrical & Electronics	9	2	7	0.2	2	0.2	9	0.2	6	0.2	1	0.1
Food Products	43	1.8	34	2.9	26	1.8	38	0.9	47	2.8	28	1.4
Chemicals & Pesticides	15	1	7	2.6	11	1.6	10	2.1	23	11.4	19	2.9
Textiles	58	10.3	50	4.1	49	4.8	57	4.1	54	3.7	27	3.4
Transport Services	14	0.5	5	0.6	10	1.2	12	0.4	16	4.1	5	0.2
Coke and Petroleum Products	1	0.5	1	3.4	2	2.0	2	0.5	1	0.4	-	-
Cement	12	7.1	7	3.8	5	1.9	5	2.3	3	0.6	10	5.1
Transport Equipments and Parts	14	1.0	7	5.3	4	2.5	9	3.6	10	0.3	5	0.8
Mining and quarrying	1	0.6	2	0.1	10	2.7	4	0.4	1	-	-	-
Hotels and Restaurants	22	2.2	15	1.1	16	1.1	12	0.8	29	2.9	26	1.9
Pharmaceuticals	19	1.3	9	1.5	11	0.3	12	1.1	15	0.6	23	1.6
Hospitals & Health services	10	0.7	2	0.1	1	-	22	1.1	18	1.8	15	2.6
Rubber & Plastic product	9	0.3	8	0.8	4	0.5	8	0.2	10	2.5	5	0.5
IT Software	3	0.1	1	-	1	-	-	-	1	-	2	0.7
Others*	84	11.4	51	3.2	46	4.1	54	2.9	41	2.0	79	13.3
Total	472	100	326	100	346	100	541	100	485	100	409	100
Total project cost in ₹ crore	1,27,328		87,253		91,781		1,79,249		1,68,239		1,59,189	

*: Comprise industries like Paper & paper products, Agricultural & related activities, Manufacturing of electric and non-electric machinery, Glass & pottery, Sugar and allied products, Entertainment, Trading of services, Printing & publishing, other manufacturing and other services.

Note: i. Per cent share is the share in total cost of project. Percentages may not total 100 due to rounding.

ii. -: Nil/Negligible.

Table A7: Industry-wise Distribution of Projects Sanctioned by Banks/FIs: 2013-14 to 2023-24 (Contd.)

Industry	2019-20		2020-21		2021-22		2022-23		2023-24	
	No. of Projects	Per cent Share								
Infrastructure	99	61.5	63	74.3	95	56.4	135	59.9	245	55.5
i) Power	47	32.9	35	49.3	58	29	53	20.3	139	24.4
ii) Telecom	-	-	-	-	-	-	-	-	1	0.6
iii) Ports & Airports	4	8.4	1	0.1	2	5.9	2	0.4	9	4.8
iv) Storage & Water Management	4	0.4	5	1.2	2	0.2	3	0.8	4	0.0
v) SEZ, Industrial, Biotech and IT Park	8	1.3	5	2.2	3	1.1	8	1.9	10	0.5
vi) Roads & Bridges	36	18.5	17	21.5	30	20.2	69	36.5	82	25.2
Metal & Metal Products	14	0.8	6	0.8	27	4.2	60	14.6	71	9.3
Construction	44	11.4	27	4.8	22	7.4	35	4	56	8.0
Electrical & Electronics	4	-	1	0.1	5	4	9	1.1	15	4.4
Food Products	32	1.9	20	1.5	25	1.8	40	2.5	107	3.0
Chemicals & Pesticides	12	1.3	9	1.6	20	3.4	16	2.3	33	2.9
Textiles	11	0.5	15	1.8	56	4.5	42	2.8	58	2.2
Transport Services	14	1.4	1	0.1	18	2.4	21	0.6	35	2.1
Coke and Petroleum Products	3	8.0	-	-	7	1.0	17	1.1	28	1.6
Cement	2	0.1	5	1.3	3	3.3	2	0.8	11	1.3
Transport Equipments and Parts	5	0.4	2	0.3	5	0.4	16	0.6	12	1.2
Mining and quarrying	-	-	-	-	1	0.1	7	1.8	11	1.2
Hotels and Restaurants	16	1.7	4	2.9	12	0.9	13	0.4	58	1.1
Pharmaceuticals	9	0.6	7	0.5	20	1.3	30	2.1	29	0.8
Hospitals & Health services	12	0.7	7	0.3	19	2.3	20	1.1	25	0.7
Rubber & Plastic product	5	0.3	17	2.1	12	0.8	13	0.8	24	0.7
IT Software	1	-	-	-	2	0.6	4	1.2	4	0.6
Others*	37	9.3	36	7.6	52	5.2	67	2.3	122	3.5
Total	320	100	220	100	401	100	547	100	944	100
Total project cost in ₹ crore	1,75,830		75,558		1,41,976		2,66,546		3,90,978	

*: Comprise industries like Paper & paper products, Agricultural & related activities, Manufacturing of electric and non-electric machinery, Glass & pottery, Sugar and allied products, Entertainment, Trading of services, Printing & publishing, other manufacturing and other services.

Note: i. Per cent share is the share in total cost of project. Percentages may not total 100 due to rounding.

ii. -: Nil/Negligible.

Table A8: State-wise Distribution of Projects Sanctioned by Banks/FIs: 2013-14 to 2023-24

State	2013-14		2014-15		2015-16		2016-17		2017-18		2018-19	
	No. of Projects	Per cent Share										
Gujarat	66	14.5	71	9.5	61	15.1	102	23	71	8	56	11.1
Maharashtra	76	19.7	38	14.8	36	9.4	57	8.8	65	23.3	34	11.5
Karnataka	39	6.2	27	5.4	21	6.2	52	6.8	64	9.6	34	5.7
Andhra Pradesh	37	4	24	8.1	33	12.3	47	8	22	9.9	29	11.1
Uttar Pradesh	21	1.1	20	5.4	15	2.5	22	3.7	30	2.4	28	4.8
Odisha	10	11.7	5	15.9	6	3.1	6	3.1	5	3	9	1.4
Telangana	-	-	-	-	10	3.8	51	5.5	17	1.9	26	9.1
Rajasthan	24	1.4	29	11.1	10	0.9	23	2.8	33	6.3	21	7.7
Jharkhand	4	0.3	2	0.7	5	0.3	1	0	3	0.3	2	0.5
Madhya Pradesh	30	6.1	14	3.9	21	7.0	18	7.5	10	0.7	12	1.6
Chhattisgarh	16	10.7	8	7.4	8	4.6	15	4.0	7	4.8	6	0.9
Tamil Nadu	33	5.4	27	2.9	26	9.3	23	4.4	28	6.6	32	12.8
Bihar	6	0.2	4	0.1	6	0.2	4	0.2	3	0.1	6	0.4
West Bengal	12	1.2	9	1.3	14	3.1	18	1.7	14	1.8	13	1.1
Jammu & Kashmir	10	5.2	2	0.1	9	0.2	3	0.1	8	2.0	11	0.4
Punjab	28	1.5	6	0.3	11	1.7	29	2.1	31	2.2	15	1.9
Haryana	15	1.1	11	1.9	16	3.6	13	1.6	21	0.5	18	1.7
Delhi	5	0.4	2	0.1	1	0.1	5	0.3	6	1.2	8	1.3
Assam	4	0.3	2	0.2	4	0.4	10	0.6	5	0.8	4	0.2
Himachal Pradesh	3	1.8	3	0.1	8	1.4	1	0.0	8	2.3	7	0.3
Kerala	3	0.0	4	0.2	4	0.1	6	2.7	3	0.1	6	0.9
Goa	-	-	-	-	1	0.0	3	0.6	2	1.9	3	1.8
Uttarakhand	5	0.1	5	0.2	2	0.1	11	0.4	6	0.4	9	0.4
Multi-State #	21	6.9	10	9.5	13	13.5	17	11.8	16	7.5	15	9.8
others*	4	0.2	3	0.9	5	1.1	4	0.3	7	2.4	5	1.7
Total	472	100	326	100	346	100	541	100	485	100	409	100
Total Cost of Projects (in ₹ crore)	1,27,328		87,253		91,781		1,79,249		1,68,239		1,59,189	

Table A8: State-wise Distribution of Projects Sanctioned by Banks/FIs: 2013-14 to 2023-24 (Contd.)

State	2019-20		2020-21		2021-22		2022-23		2023-24	
	No. of Projects	Per cent Share								
Gujarat	47	15.1	54	17.1	82	11.7	82	14.0	154	14.7
Maharashtra	41	6.9	13	8.5	44	9.7	48	7.9	93	11.7
Karnataka	33	17.2	11	6.1	24	6.9	37	7.3	61	11.1
Andhra Pradesh	12	4	7	15	11	2.1	27	4.4	51	10.1
Uttar Pradesh	24	5.4	30	13.7	33	12.8	45	16.2	69	7.6
Odisha	6	1.9	2	0.1	9	2.2	12	11.8	23	6.7
Telangana	12	4	9	1.9	16	3.4	30	1.9	40	4.1
Rajasthan	23	3.8	21	17.1	32	12.6	22	3.1	61	3.6
Jharkhand	4	9.4	1	0.2	6	0.8	12	1.9	17	3.4
Madhya Pradesh	10	1.2	19	2.8	18	4.2	35	5.0	56	3.4
Chhattisgarh	6	0.2	3	1.2	4	0.8	8	1.4	26	3.3
Tamil Nadu	28	8.3	7	0.7	40	8.8	44	4.8	83	3.0
Bihar	6	3.4	1	0	5	3.4	6	1.6	13	2.6
West Bengal	7	0.9	3	0.4	11	2.6	16	1.0	28	2.3
Jammu & Kashmir	3	0.3	5	0.2	5	0.2	23	3.1	36	1.9
Punjab	9	0.8	4	0.7	15	2.1	21	2.5	34	1.6
Haryana	20	3.4	15	7.8	14	2.0	14	1.0	25	1.5
Delhi	3	0.5	2	0.1	3	0.6	12	0.4	10	1.2
Assam	1	0.3	3	4.4	2	0.0	6	0.7	13	0.9
Himachal Pradesh	6	0.1	4	0.2	7	1.2	11	2.2	10	0.3
Kerala	3	1.0	-	-	5	4.2	12	0.9	11	0.2
Goa	2	0.1	-	-	3	3.0	3	0.8	4	0.1
Uttarakhand	5	0.1	2	0.1	2	0.4	5	0.2	8	0.1
Multi-State #	8	11.7	2	1.4	7	4.0	10	5.5	12	4.4
others*	1	0.0	2	0.3	3	0.3	6	0.3	6	0.3
Total	320	100	220	100	401	100	547	100	547	100
Total Cost of Projects (in ₹ crore)	1,75,830		75,558		1,41,976		2,66,546		3,90,978	

#: Comprise projects over several states.

*: Comprise remaining states/union territories.

Note: i. Per cent share is the share in total cost of project. Percentages may not total 100 due to rounding.

ii. -: Nil/Negligible.

Measuring Progress in Sustainable Development Goals (SDGs): An Application of Natural Language Processing (NLP) on Budget Documents

by Rajni Dahiya and Shashi Kant[^]

This article examines the progress in terms of focus on SDGs across the Union Government and select States in India by looking at the budget documents. Using topic modelling, each theme is assigned to one or more SDGs based on multi-label classification, to determine whether there are systematic or structural differences in policies on SDGs as outlined in budget documents. Results show that the combined focus on SDGs by the Union Government and select States has increased in 2023 compared to 2012. It is observed that the emphasis on different SDGs varies over time depending on the changing circumstances and there is considerable heterogeneity among the Union Government and select States with reference to their focus on the individual SDGs.

Introduction

SDGs are a set of 17 ambitious global goals tackling critical challenges i.e., poverty, inequality, climate change, and environmental degradation which emerged from the Rio+20 conference in 2012 and were formally adopted by all United Nations (UN) member countries in 2015 (Table A1 in Annex provides a detailed description of each of these goals).¹ SDGs are successors to the millennium development goals (MDGs) of 2000, but they go further by building

upon previous successes and lessons learned. They offer a framework for collaborative action towards a more sustainable and equitable world by 2030.

Comprehending the advancements achieved for each goal under SDG empowers policymakers, organisations, and individuals to take purposeful, outcome-driven actions. Taking a step in this direction, the first edition of the SDG India Index was launched in December 2018, incorporating 62 indicators from 39 targets across 13 SDGs.² NITI Aayog releases the SDG India Index, which assesses the progress made by all States and Union Territories (UTs) towards achieving the SDGs by utilising the latest data provided by ministries and departments. The index is based on the National Indicator Framework developed by the Ministry of Statistics and Programme Implementation (MoSPI) in consultation with NITI Aayog. Normalised scores are calculated for each State/UT and the composite index of a goal is computed using an arithmetic mean of the normalised values of all indicators related to the goal. Each indicator within each State/UT is assigned equal weight.

This article offers a novel approach to measure progress in SDGs by leveraging advancements in NLP. This approach aims to bridge the data gap in emerging market economies and construct time series in case backward data is not available (Conforti et al., 2020). Additionally, it may help in automated text labelling of vast documents from diverse sources overcoming the limitations of manual labelling, which may be time-consuming and prone to bias (Guisiano et al., 2022). The methodology in this study uses NLP techniques to extract information from budget documents and deploys a large language model (LLM) to study whether there are systematic or structural differences in policies on SDGs as outlined in budget documents. In the digital age, NLP algorithms,

[^] The authors are from the Department of Economic and Policy Research (DEPR). We sincerely thank Dr G.V.Nadhanael for his insightful comments which have significantly improved the quality of the article. The views expressed in this article are those of the authors and do not represent the views of the RBI.

¹ United Nations SDGs: <https://sdgs.un.org/goals>.

² SDG India Index Methodology, 2018: <https://sdgindiaindex.niti.gov.in/assets/Files/SDG%20India%20Index%202018%20Methodology.docx>.

especially transformer models, are instrumental in making sense of vast unstructured text data, helping machines process information efficiently (Vaswani *et al.*, 2017). The basics of NLP are presented in the Annex.

The available studies on progress in SDGs in India have largely focused on challenges, implementation, and state-wise comparison of performance (Mohandas, 2018; Panda *et al.*, 2018); While several studies have explored the intersection of SDGs and NLP in other country contexts such as Amel-Zadeh *et al.*, (2021) and Matsui *et al.*, (2022), this article contributes to the literature by providing a theme-based SDG classification within large textual datasets. Also, by using a blend of NLP techniques and network analysis to chart relationships among SDGs, this article explores interconnectedness across them. This co-occurrence analysis reveals important thematic connections and identifies potential synergies between the SDGs (Smith *et al.*, 2021; Zhou *et al.*, 2022).

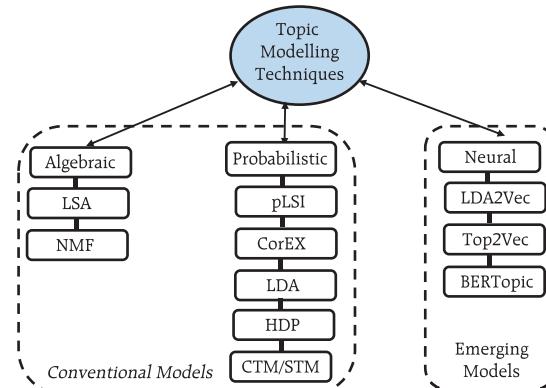
Overall, NLP techniques can complement quantitative assessments like the SDG India Index. By analysing budget documents of the Union Government as well as select State Governments based on availability, the article deploys NLP to unveil the government's overall narrative and messaging surrounding SDGs. It delves into government priorities and narratives through thematic analysis, identifying recurring themes and topics in budget documents, and offering a deeper understanding beyond mere numbers. It also allows for comparative analysis, offering insights into how different government entities tackle SDGs and track trends in the government's communication focus over time. Accordingly, the remainder of the article is organised as follows: Section II discusses topic modelling; Section III delves into data and methodology; Section IV details the results, and Section V concludes the analysis.

II. NLP and Topic Modelling: Some Preliminaries

Topic modelling in NLP is an unsupervised learning approach for organising text documents based on their underlying semantic structure. From an algorithmic perspective, topic modelling techniques can be broadly classified into three main categories: algebraic, probabilistic, and neural models (Vayansky *et al.*, 2020; Abdelrazek *et al.*, 2023). The first two fall under traditional statistics-based methods, while the third represents the more contemporary approach of employing artificial neural networks in NLP (Chart 1).

Among conventional models, LDA has been the dominant choice for decades (Blei *et al.*, 2003). However, many studies have uncritically applied LDA, neglecting justification for their topic modelling method selection. A significant drawback of LDA is its dependence on the bag-of-words (BoW) approach, neglecting semantic relationships among words (Chen *et al.*, 2023). In general, conventional topic modelling techniques such as LDA necessitate intricate corpus pre-processing, meticulous parameter selection (e.g., determining the number of topics), proper model evaluation, and interpretation of generated topics relying on both common sense

Chart 1: Categories of Topic Models



Note: In traditional models, algebraic models comprise latent semantic analysis (LSA), and non-negative matrix factorization (NMF). The probabilistic models encompass probabilistic latent semantic indexing (pLSI), anchored correlation explanation (CorEx) [Gallagher *et al.*, 2017], latent dirichlet allocation (LDA) [Blei *et al.*, 2003], along with numerous extensions and variants of LDA, including hierarchical dirichlet process (HDP), correlated topic model (CTM), and structural topic model (STM).

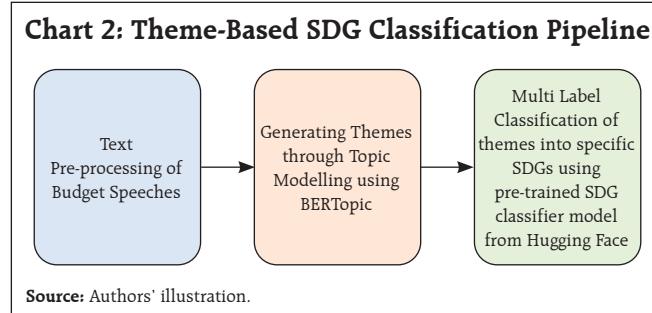
Sources: Chen, *et al.*, (2023); and Authors' illustration.

and domain knowledge. Recently developed neural models have gained significant popularity since 2016. Examples within the neural category encompass LDA2Vec (Moody, 2016), SBM (Gerlach et al., 2018), deep LDA (Bhat et al., 2020), Top2Vec (Angelov, 2020), and BERTopic (Grootendorst, 2022). This trend aligns with the exponential progress of deep learning in recent years.

III. Data and Methodology

This study utilises budget speeches from select Indian States (Andhra Pradesh, Karnataka, Kerala, Odisha, Tamil Nadu, and West Bengal) and the Union Government, spanning from 2012 to 2023. As shown in Chart 2, after text pre-processing of the respective budget speeches, BERTopic was employed for generating distinct themes as it outperformed traditional models i.e., NMF, LSA, and LDA (Egger et al., 2022; Chen et al., 2023).³ These themes were further classified into specific SDGs using Hugging Face's pre-trained SDG classifier model.⁴ It is important to note that this study focuses on the first 15 SDGs, as the pre-trained model is fine-tuned based on publicly available data from the OSDG community (OSDG, 2022) which classifies the data in the first 15 SDGs.

In order to measure the evolution of emphasis on SDG goals over time, a key tool in NLP known as TF-IDF⁵, is used. The intuition behind TF-IDF is



³ BERTopic is successful in capturing context and word semantics due to its use of bidirectional encoder representations transformer (BERT) word embeddings (Devlin et al., 2019; Amin et al., 2022).

⁴ Pre-trained SDG classifier model is available at: https://huggingface.co/jonas/sdg_classifier_osdg.

that a term's importance is inversely related to its frequency across documents. This score combines two factors: term frequency (TF) which measures how often a term appears in a document, and inverse document frequency (IDF) which penalises common terms across the entire corpus.

TF-IDF scores are calculated by multiplying TF and IDF.

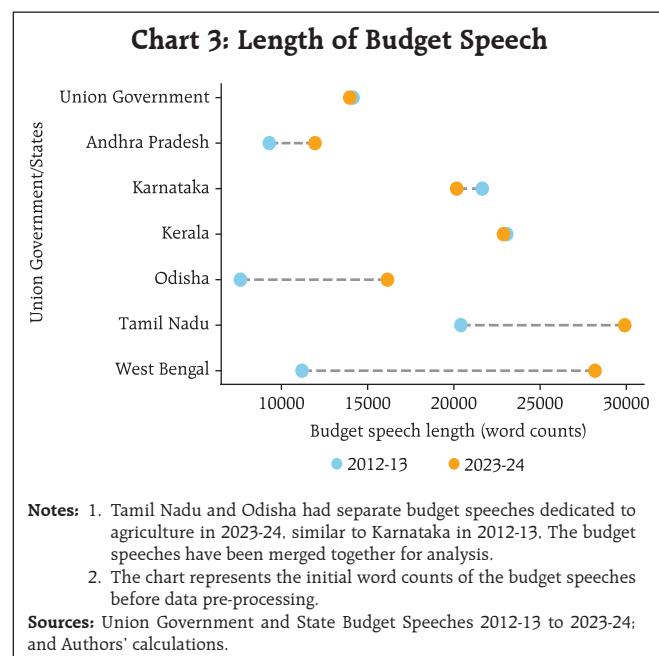
$$TFIDF_{t,d,D} = TF_{t,d} \times IDF_{t,D}$$

A detailed explanation about TF-IDF is provided in the Annex.

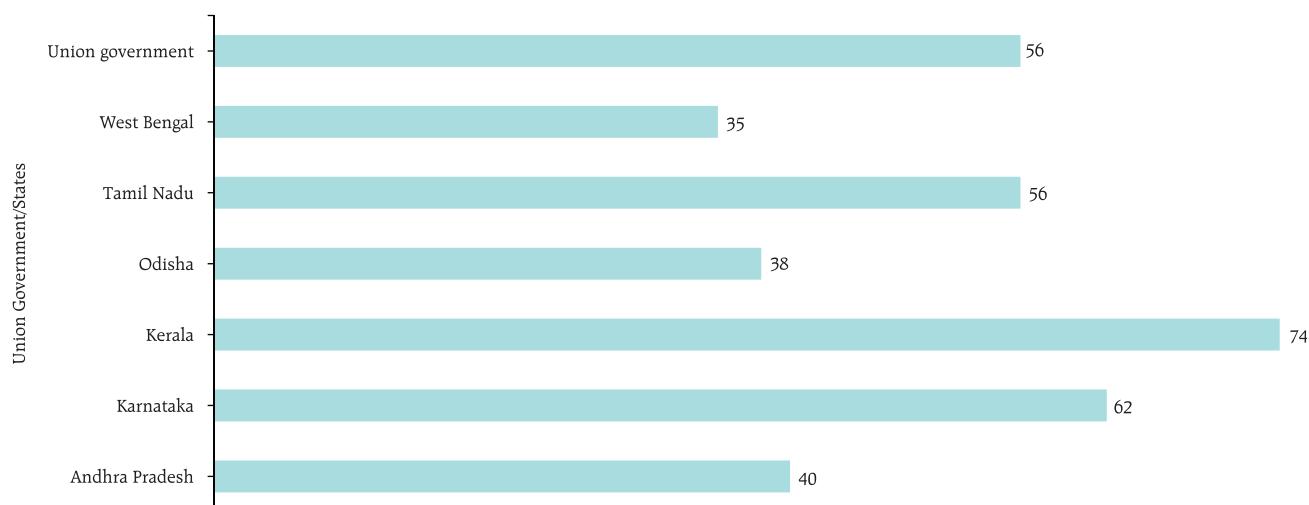
IV. Results

First, the overall evolution of communication strategy in budget documents is analysed. It is found that budget speeches length marginally decreased, in terms of word counts, for the Union Government, Kerala and Karnataka, while it increased for other States in 2023-24 compared to 2012-13 (Chart 3).

Looking beyond number of words, an analysis of unique number of topics mentioned in the budgets were attempted. Through topic modelling, amongst



⁵ Term Frequency-Inverse Document Frequency (TF-IDF).

Chart 4: Number of Topics

Note: Theme (-)1 has been removed as it usually contains either generic topics or a combination of irrelevant words hence is treated as an outlier (Grootendorst, 2022), and a few additional themes were also removed during text cleaning as they were not aligned with SDGs. Total number of budget documents analysed were 84.

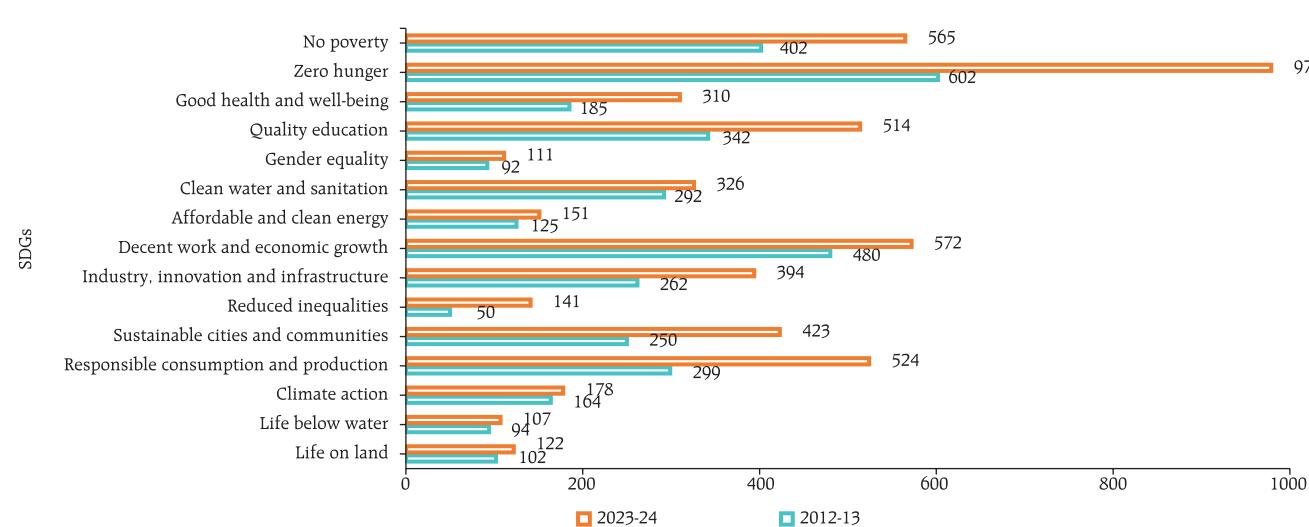
Sources: Union Government and State Budget Speeches 2012-13 to 2023-24; and Authors' calculations.

the sample states, Kerala's budget speeches emerged as the most diverse in SDG themes, followed by Karnataka, the Union Government, and Tamil Nadu (Chart 4).

IV.1 Transition in SDGs Focus over Time

Results show that the combined focus by the Union Government and select States has increased in 2023-24 compared to 2012-13 on all fifteen SDGs,

indicating their stronger commitment towards achieving these goals by 2030. In particular, the focus on zero hunger (SDG 2), good health and well-being (SDG 3), reduced inequalities (SDG 10), sustainable cities and communities (SDG 11), and responsible consumption and production (SDG 12) has witnessed a remarkable increase in 2023-24 compared to 2012-13 (Chart 5).

Chart 5: SDG Focus Transition (2023-24 vs 2012-13)

Note: Frequency, derived from c-TF-IDF (details in Annex), is aggregated for both the Union Government and select States.

Sources: Union Government and State Budget Speeches 2012-13 to 2023-24; and Authors' calculations.

IV.2 Trend in SDGs

To delve deeper into the trends within the key SDGs across 2012-13 to 2023-24, the combined focus by the Union Government and select States on the first four SDGs was analysed. This analysis reveals variation in focus over the years. In 2023-24, both no poverty (SDG 1) and zero hunger (SDG 2) reached their highest focus (Chart 6a and 6b). The COVID-19 pandemic significantly impacted the focus on good health and well-being (SDG 3), with a steep rise in 2021-22, reaching its highest level in the last nine years (Chart 6c). For quality education (SDG 4), both

2018-19 and 2023-24 saw significant reforms in the education sector. Key schemes i.e., *Samagra Shiksha Abhiyan*⁶ (2018) and the National Education Policy (2023) mark these years as pivotal for education development in India (Chart 6d).

IV.3 Mapping the Interconnectedness of the SDGs: A Co-Occurrence Analysis

SDGs are not mutually exclusive and targeting a particular SDG may help achieve other linked goals as well. Analysing these co-occurrences renders valuable insights into the interconnectedness

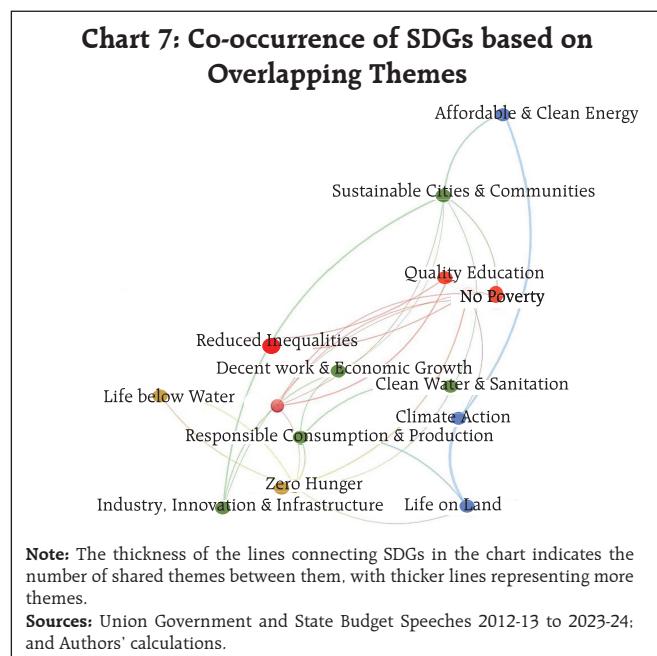
Chart 6: Trend in Key SDGs Combined across the Union Government and States



- Notes:**
1. The frequency metric used here is the c-tf-idf score.
 2. While the budget speeches address all the fifteen SDGs set by the United Nations, this paper shows the trend only in the first four SDGs to demonstrate the analysis approach. Similar visualisations can be created to explore trends in the remaining SDGs.
 3. In election years, for the Union Government and select States, the budget speeches analysed are the final speeches, not the interim speeches.

Sources: Union Government and State Budget Speeches 2012-13 to 2023-24; and Authors' calculations.

⁶ The *Samagra Shiksha* scheme is an integrated scheme for school education covering the entire gamut from pre-school to class XII. The scheme treats school education as a continuum and is in accordance with SDG 4. About the scheme: <https://dse.education.gov.in/scheme/samagra-shiksha>.



of the SDGs which helps in the identification of integrated policy approaches that address multiple goals simultaneously. The analysis of co-occurrence of SDGs based on overlapping themes is presented in Chart 7. The theme related to renewable energy was tagged with affordable and clean energy (SDG 7), responsible consumption and production (SDG 12), and climate action (SDG 13) because renewable energy directly addresses the goal of providing clean and affordable energy, promoting sustainable consumption practices and mitigating climate change risk. Similarly, a theme focused on forests and biodiversity was tagged with climate action (SDG 13) and life on land (SDG 15). This reflects the crucial role forests play in sustaining life on land and mitigating the impact of climate change.

IV.4 Policy Alignment between the Union Government and States

Amel-Zadeh *et al.* (2021) employed NLP techniques to pinpoint companies that aligned with the UN SDGs through the analysis of the text in their sustainability disclosures. The same principles may be extended to measure alignment of the Union Government and States with various SDGs. *A priori*, policy focus of the Centre and the States is expected to be different and also could vary over time. The constitution divides subjects of governance into three verticals *i.e.*, Union, States, and Concurrent lists. This gives the national and sub-national governments the freedom and space to act on the subjects in their jurisdiction with some degree of overlap in the concurrent list where the two can cooperate and complement each other's policies. The States can make policies fine-tuned to suit their local conditions. The hypothesis gets reaffirmed when this study reduces the dimensionality of the 15 SDGs to a 2-dimensional plane using two principal components. Each budget document can be represented by a 15x1 vector in terms of the focus it has on various SDGs. To visualise the orientation of policies, the dimensionality is reduced from a 15-D space to a 2-D space by plotting the first two principal components which together represent 47 per cent of the total variance (Table 1).

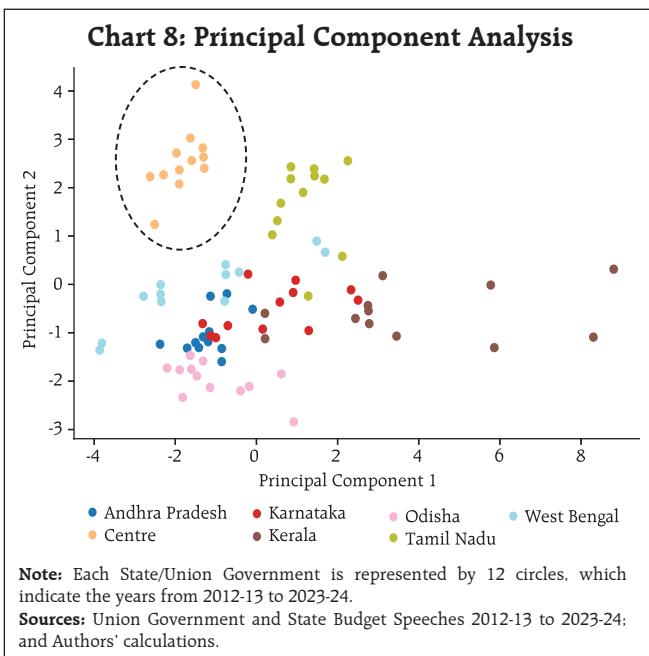
The visual representation depicts that the topics covered in budget documents of Union Government (cluster highlighted by black dots), and States are segregated from each other (Chart 8). While policies of some States show less variance across the years, others display considerable diversity in emphasis

Table 1: Cumulative Variation Explained by Successive Principal Component

PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7	PC 8	PC 9	PC 10
0.32	0.47	0.60	0.67	0.74	0.80	0.84	0.88	0.91	0.93
PC 11	PC 12	PC 13	PC 14	PC 15					
0.96	0.97	0.98	0.99	1.00					

Note: Values are rounded off to two decimal points.

Sources: Union Government and State Budget Speeches 2012-13 to 2023-24; and Authors' calculations.



on SDGs. The Union Government exhibits the least variance across the years compared to the States (Table 2). These differences suggest that the State level policies might be devised keeping in view their local situations.

V. Conclusion

NLP has become an invaluable tool for enhancing data analysis and is increasingly being applied in policymaking. This article proposes a novel use of NLP to measure progress towards SDGs in the Indian context, complementing existing quantitative approaches. The analysis undertaken for the Union Government and select States indicates that their combined focus on SDGs was higher in 2023-24 as compared to 2012-13 pointing towards a stronger commitment towards achieving these goals by 2030. The focus on various SDGs has varied over time depending on the changing circumstances such as an increase in focus on health during the COVID-19 pandemic. It is also found that SDGs are not mutually exclusive and exhibit significant interconnectedness between them. Therefore, targeting a particular SDG may help achieve other linked goals too. Furthermore, this approach helps to check the heterogeneity in

Table 2: Clusters Size in SDG Representation of Budget Documents

Region	Average Cluster Size
Kerala	3.50
Karnataka	2.84
Tamil Nadu	2.33
West Bengal	2.26
Andhra Pradesh	2.06
Odisha	1.93
Union Government	1.78

Note: The average cluster size is calculated using Euclidean distance of each data point from the centroid of each cluster in Chart 8.

Source: Authors' calculations.

focus on SDGs among Union Government and select States. Going beyond the traditional quantitative measures, the analysis of relative focus on SDGs presented in this article provides important policy insights into the evolution, interconnectedness, and relative focus over time.

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Annex**Table A1: Description of SDGs**

SDG	Description
1. No Poverty	End poverty in all its forms everywhere.
2. Zero Hunger	End hunger, achieve food security, and promote sustainable agriculture.
3. Good Health and Well-being	Ensure healthy lives and promote well-being for all at all ages.
4. Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities.
5. Gender Equality	Achieve gender equality and empower all women and girls.
6. Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all.
7. Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable, and modern energy for all.
8. Decent Work and Economic Growth	Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.
9. Industry, Innovation, and Infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.
10. Reduced Inequality	Reduce inequality within and among countries.
11. Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient, and sustainable.
12. Responsible Consumption and Production	Ensure sustainable consumption and production patterns.
13. Climate Action	Take urgent action to combat climate change and its impacts.
14. Life Below Water	Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.
15. Life on Land	Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss.
16. Peace, Justice, and Strong Institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels.
17. Partnerships for the Goals	Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Source: <https://sdgs.un.org/goals>.

I. Primer on NLP**a. Terminology**

The fundamental unit of analysis in NLP is the "term", which can be either a single word like "development" or a sequence of words known as "n-grams" (Cavnar *et al.*, 1994). While words retain their conventional meaning, n-grams represent groups of words treated as a single unit for analysis. Examples include "Good Health" and "Quality Education" which are "bi-grams" (Hachaj *et al.*, 2018) often analysed as single terms within NLP tasks.

Documents can range from sentences and paragraphs to entire literary works and are typically the primary unit of analysis when analysing text. Here, the documents which are analysed are budget speeches from the Union Government and six States for fiscal years 2012 to 2023.

Finally, a corpus is a collection of documents analysed, equivalent to a 'data set'. In this case, the corpus is the set of budget speeches. The corpus is comprised of multiple documents, each of which is comprised of terms. Anastasopoulos *et al.*, (2017) neatly summarised the NLP processing hierarchy in mathematical notations (Chart A1).

Chart A1: NLP Processing Hierarchy

Terms ⊑ Document ⊑ Corpus

Source: Anastasopoulos et al., (2017); and Authors' illustration.

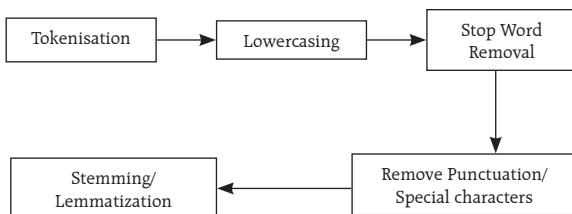
b. From Text to Data

Text pre-processing is a critical step in NLP (Kurniasih et al., 2022). It involves several key steps to refine the raw text data before it is converted to numbers. The initial step is tokenisation where text is segmented into individual words or tokens (Webster et al., 1992). Lowercasing is essential for ensuring text consistency by converting all characters to lowercase, making "budget" and "Budget" equivalent in analysis. Stop word removal (Sharma et al., 2015) filters out common, low-information words like "the", "is", "are", etc., so that the focus is on the words that convey meaning. Removing punctuation, such as periods or commas, improves text readability and removes unnecessary clutter. Lastly, stemming or lemmatization (Khyani et al., 2021) simplifies words to their root forms, making sure that words with similar meanings are represented in the same way: "budgeting", "budgeted" and "budgets" all become "budget" (Chart A2).

c. Document-Term Matrix (DTM)

A DTM is a key tool in NLP and text analysis, transforming documents into a structured numerical format for analysis (Antonellis et al., 2006; and Anastasopoulos et al., 2017). It represents each document in rows and unique terms in columns, using values to indicate term frequency or presence in documents. Different methods can be used to fill the

Chart A2: Text Pre-Processing Pipeline



Sources: Camacho-Collados, J. et al., (2017); and Authors' illustration.

cells, including TF (term frequency), binary (presence/absence), and TF-IDF (combining term frequency with term uniqueness) [Christian et al., 2016]. The most common of these is TF-IDF which will be discussed in detail in the next section.

d. Overview of TF-IDF

The key intuition behind TF-IDF is that a term's importance is inversely related to its frequency across documents. This score combines two factors: Term Frequency (TF) measures how often a term appears in a document, while Inverse Document Frequency (IDF) penalizes common terms across the entire corpus. IDF is calculated as:

$$IDF_{t,D} = \log \left(\frac{N}{count(deD:ted)} \right) \quad \text{Equation (1)}$$

In this context, t represents the term (word) for which this paper aim to assess commonality, and N stands for the total number of documents (d) in the corpus (D). The denominator corresponds to the count of documents where the term t is present.

To prevent divide-by-zero errors when terms are absent in the corpus, IDF calculations typically add 1 to the count of documents containing the term, effectively adjusting the denominator to $(1 + count)$. The popular library scikit-learn solves this by modifying the formula as follows:

$$IDF_t = 1 + \log \frac{(1 + n)}{(1 + DF_t)} \quad \text{Equation (2)}$$

Thus, with IDF, infrequent terms stand out, revealing hidden insights within documents.

Putting it together: TF-IDF

TF-IDF scores, calculated by multiplying TF and IDF.

$$TFIDF_{t,d,D} = TF_{t,d} \times IDF_{t,D} \quad \text{Equation (3)}$$

A term's relevance within a document is reflected by its TF-IDF score, with 0 representing minimal importance and higher scores signifying increasing significance. This article uses c-TF-IDF which is a class-based TF-IDF procedure that can be used to generate features from textual documents based on the class they are in⁷.

⁷ <https://github.com/MaartenGr/cTFIDF>

CURRENT STATISTICS

Select Economic Indicators

Reserve Bank of India

Money and Banking

Prices and Production

Government Accounts and Treasury Bills

Financial Markets

External Sector

Payment and Settlement Systems

Occasional Series

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Notes: .. = Not available.

– = Nil/Negligible.

P = Preliminary/Provisional. PR = Partially Revised.

No. 1: Select Economic Indicators

Item	2023-24	2022-23		2023-24	
		Q3	Q4	Q3	Q4
		1	2	3	4
1 Real Sector (% Change)					
1.1 GVA at Basic Prices	7.2	4.8	6.0	6.8	6.3
1.1.1 Agriculture	1.4	5.2	7.6	0.4	0.6
1.1.2 Industry	9.3	-2.8	1.7	10.8	8.3
1.1.3 Services	7.9	7.5	7.3	7.5	7.0
1.1a Final Consumption Expenditure	3.8	2.4	3.5	3.1	3.4
1.1b Gross Fixed Capital Formation	9.0	5.0	3.8	9.7	6.5
	2023-24		2023		2024
			May.	Jun.	May.
			1	2	3
			4	5	
1.2 Index of Industrial Production	5.9	5.7	4.0	6.2	4.2
2 Money and Banking (% Change)					
2.1 Scheduled Commercial Banks					
2.1.1 Deposits	12.9	11.4	12.9	12.2	10.7
	(13.5)			(12.7)	(11.1)
2.1.2 Credit #	16.3	15.3	16.2	16.1	13.9
	(20.2)			(19.8)	(17.4)
2.1.2.1 Non-food Credit #	16.3	15.5	16.3	16.2	13.9
	(20.2)			(19.8)	(17.4)
2.1.3 Investment in Govt. Securities	11.1	14.8	14.3	8.8	7.4
	(12.8)			(10.3)	(8.6)
2.2 Money Stock Measures					
2.2.1 Reserve Money (M0)	5.6	8.1	6.5	5.8	7.4
2.2.2 Broad Money (M3)	11.1	10.1	13.4	12.1	9.7
				(12.5)	(10.1)
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	5.2	5.1	5.0	5.1
	(5.0)			(4.9)	(5.1)
3.4 Credit-Deposit Ratio	78.1	75.2	75.1	77.5	77.3
	(80.3)			(79.6)	(79.3)
3.5 Incremental Credit-Deposit Ratio #	95.8	50.4	63.7	59.2	57.9
	(113.4)			(57.3)	(55.5)
3.6 Investment-Deposit Ratio	29.5	30.0	29.6	29.0	28.7
	(29.8)			(29.3)	(28.9)
3.7 Incremental Investment-Deposit Ratio	25.8	28.5	23.0	13.4	9.4
	(28.4)			(12.6)	(6.3)
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	8.75/10.10	8.75/10.10	9.10/10.25	9.10/10.40
4.7 MCLR (Overnight)	8.00/8.60	7.90/8.50	7.95/8.35	8.00/8.60	8.10/8.60
4.8 Term Deposit Rate >1 Year	6.50/7.25	6.00/7.25	6.00/7.25	6.00/7.25	6.00/7.30
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	6.36	6.79	6.56	6.67
4.11 91-Day Treasury Bill (Primary) Yield	-	6.78	6.76	6.85	6.80
4.12 182-Day Treasury Bill (Primary) Yield	7.28	6.90	6.87	7.01	6.92
4.13 364-Day Treasury Bill (Primary) Yield	7.31	6.89	6.87	7.04	6.96
4.14 10-Year G-Sec Par Yield (FBIL)	7.31	7.05	7.10	7.01	7.04
5 Reference Rate and Forward Premiums					
5.1 INR-US\$ Spot Rate (Rs. Per Foreign Currency)	83.37	82.72	82.04	83.30	83.45
5.2 INR-Euro Spot Rate (Rs. Per Foreign Currency)	90.22	88.79	89.13	90.12	89.25
5.3 Forward Premiums of US\$ 1-month (%)	1.00	1.45	1.39	1.08	1.10
	3-month (%)	1.11	1.55	1.32	1.22
	6-month (%)	1.31	1.62	1.38	1.34
6 Inflation (%)					
6.1 All India Consumer Price Index	5.4	4.3	4.9	4.8	5.1
6.2 Consumer Price Index for Industrial Workers	5.19	4.4	5.6	3.9	3.7
6.3 Wholesale Price Index	-0.7	-3.6	-4.2	2.7	3.4
6.3.1 Primary Articles	3.6	-1.9	-3.0	7.4	8.8
6.3.2 Fuel and Power	-4.6	-9.2	-12.5	1.0	1.0
6.3.3 Manufactured Products	-1.7	-3.0	-2.8	1.0	1.4
7 Foreign Trade (% Change)					
7.1 Imports	-5.7	-6.0	-16.8	7.4	5.0
7.2 Exports	-3.1	-10.4	-18.8	13.4	2.5

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-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				
			Jul.	Jun. 28	Jul. 05	Jul. 12	Jul. 19
	1	2	3	4	5	6	7
1 Issue Department							
1.1 Liabilities							
1.1.1 Notes in Circulation	3482333	3293414	3528937	3537675	3540340	3520466	3502874
1.1.2 Notes held in Banking Department	11	12	11	12	10	11	10
1.1/2 Total Liabilities (Total Notes Issued) or Assets	3482344	3293426	3528948	3537687	3540350	3520478	3502885
1.2 Assets							
1.2.1 Gold	162996	139545	172686	175948	179811	184164	176856
1.2.2 Foreign Securities	3318885	3153606	3356024	3361357	3360210	3336030	3325806
1.2.3 Rupee Coin	463	276	237	382	329	283	223
1.2.4 Government of India Rupee Securities	-	-	-	-	-	-	-
2 Banking Department							
2.1 Liabilities							
2.1.1 Deposits	1782333	1556122	1729450	1671947	1666912	1708710	1702094
2.1.1.1 Central Government	101	100	101	101	101	101	100
2.1.1.2 Market Stabilisation Scheme	-	-	-	-	-	-	-
2.1.1.3 State Governments	42	42	42	43	42	42	42
2.1.1.4 Scheduled Commercial Banks	1008618	899279	973455	991015	952094	1006938	976073
2.1.1.5 Scheduled State Co-operative Banks	10092	8475	8453	8358	8240	8394	8282
2.1.1.6 Non-Scheduled State Co-operative Banks	6412	4675	5259	5508	5324	5245	5278
2.1.1.7 Other Banks	48725	47209	49202	48733	49339	48989	49426
2.1.1.8 Others	545400	472703	564106	482400	531269	512949	538460
2.1.1.9 Financial Institution Outside India	162944	123638	128832	135788	120503	126052	124433
2.1.2 Other Liabilities	1804747	1547468	1635592	1670279	1723763	1748890	1723581
2.1/2 Total Liabilities or Assets	3587080	3103589	3365042	3342226	3390674	3457600	3425675
2.2 Assets							
2.2.1 Notes and Coins	11	12	11	12	10	11	10
2.2.2 Balances Held Abroad	1480408	1277030	1459215	1494388	1567916	1621174	1625418
2.2.3 Loans and Advances							
2.2.3.1 Central Government	-	-	-	-	-	-	-
2.2.3.2 State Governments	2300	13909	7286	25838	16359	19805	21239
2.2.3.3 Scheduled Commercial Banks	266021	45028	102741	14157	8204	6416	7161
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	3082	9061	8969	9061	9062	9062
2.2.3.9 Financial Institution Outside India	162650	123608	129258	135740	121018	126490	124192
2.2.4 Bills Purchased and Discounted							
2.2.4.1 Internal	-	-	-	-	-	-	-
2.2.4.2 Government Treasury Bills	-	-	-	-	-	-	-
2.2.5 Investments	1365425	1402884	1349978	1350826	1348222	1347121	1322437
2.2.6 Other Assets	297868	238037	307492	312295	319882	327520	316156
2.2.6.1 Gold	272028	229814	298664	303570	310235	317745	306207

* 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
Jun. 1, 2024	-	-	-	-	9131	56402	-	-	-	-	-47271
Jun. 2, 2024	-	-	-	-	9095	53280	-	-	-	-	-44185
Jun. 3, 2024	-	-	-	-	1153	96047	-	-	-	-	-94894
Jun. 4, 2024	-	-	-	44430	3356	74999	-	-	-	-	-116073
Jun. 5, 2024	-	-	-	-	1600	57007	-	-	-	-	-55407
Jun. 6, 2024	-	-	-	-	5933	72538	-	-	-	-	-66605
Jun. 7, 2024	-	-	-	-	1251	56794	-	-	-	-	-55543
Jun. 8, 2024	-	-	-	-	539	37867	-	-	-	-	-37328
Jun. 9, 2024	-	-	-	-	701	39846	-	-	-	-	-39145
Jun. 10, 2024	-	-	-	-	4072	47080	-	-	-	-	-43008
Jun. 11, 2024	-	-	-	-	3498	55271	-	-	-	-	-51773
Jun. 12, 2024	-	-	-	-	1968	60222	-	-	-	-	-58254
Jun. 13, 2024	-	-	-	-	9683	60876	-	-	-	-	-51193
Jun. 14, 2024	-	-	75001	-	30211	65086	-	-	-	-	40126
Jun. 15, 2024	-	-	-	-	16422	37337	-	-	-	-	-20915
Jun. 16, 2024	-	-	-	-	5767	31537	-	-	-	-	-25770
Jun. 17, 2024	-	-	-	-	43647	39493	-	-	-	-	4154
Jun. 18, 2024	-	-	100002	-	1243	42626	-	-	-	-	58619
Jun. 19, 2024	-	-	-	-	2865	37153	-	-	-	-	-34288
Jun. 20, 2024	-	-	-	-	7106	50370	-	-	-	-	-43264
Jun. 21, 2024	-	-	100005	-	15199	44438	-	-	-	-	70766
Jun. 22, 2024	-	-	-	-	12992	32189	-	-	-	-	-19197
Jun. 23, 2024	-	-	-	-	12856	34342	-	-	-	-	-21486
Jun. 24, 2024	-	-	25005	-	1587	50653	-	0	0	-	-24061
Jun. 25, 2024	-	-	-	-	2329	70732	-	0	0	-	-68403
Jun. 26, 2024	-	-	-	-	4603	67507	-	0	0	-	-62904
Jun. 27, 2024	-	-	-	-	70085	91688	-953	10	10	-	-22556
Jun. 28, 2024	-	-	50003	-	46848	134120	703	0	0	-	-36566
Jun. 29, 2024	-	-	-	-	6399	97575	-	0	0	-	-91176
Jun. 30, 2024	-	-	-	-	3522	69443	-	0	0	-	-65921

No. 4: Sale/ Purchase of U.S. Dollar by the RBI**i) Operations in onshore / offshore OTC segment**

Item	2023-24	2023		2024	
		Jun.	May	Jun.	Jun.
		1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US \$ Million) (1.1-1.2)	41271	4504	4222	-2107	
1.1 Purchase (+)	194296	7785	23647	15936	
1.2 Sale (-)	153025	3281	19425	18043	
2 ₹ equivalent at contract rate (₹ Crores)	339528	37063	35160	-17688	
3 Cumulative (over end-March) (US \$ Million)	41271	19579	575	-1532	
(₹ Crore)	339528	160738	4672	-13016	
4 Outstanding Net Forward Sales (-)/ Purchase (+) at the end of month (US \$ Million)	-541	19468	-10360	-15835	

ii) Operations in currency futures segment

Item	2023-24	2023		2024	
		Jun.	May	Jun.	Jun.
		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	0	2287	2338	
1.2 Sale (-)	7930	0	2287	2338	
2 Outstanding Net Currency Futures Sales (-)/ Purchase (+) at the end of month (US \$ Million)	-1080	0	-1812	-1974	

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

Item	As on June 30 , 2024		
	Long (+)	Short (-)	Net (1-2)
	1	2	3
1. Upto 1 month	0	15835	-15835
2. More than 1 month and upto 3 months	0	0	0
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	15835	-15835

No. 5: RBI's Standing Facilities

(₹ Crore)

Item	As on the Last Reporting Friday							
	2023-24	2023	2024					
			Jul. 28	Feb. 23	Mar. 22	Apr. 19	May. 31	Jun. 28
	1	2	3	4	5	6	7	8
1 MSF	49906	25417	144270	49906	3238	14601	46848	2021
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	3082	9066	9810	8770	9311	9061	9062
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	28499	153336	59716	12008	23912	55909	11083

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		
		Jun. 30	May 31	Jun. 14	Jun. 28
	1	2	3	4	5
1 Currency with the Public (1.1 + 1.2 + 1.3 – 1.4)	3410042	3234608	3468476	3489248	3445861
1.1 Notes in Circulation	3477795	3329414	3537190	3552362	3528333
1.2 Circulation of Rupee Coin	32689	30182	33115	33115	33322
1.3 Circulation of Small Coins	743	743	743	743	743
1.4 Cash on Hand with Banks	101419	125809	102896	97329	117141
2 Deposit Money of the Public	2681424	2668926	2742637	2625354	2842003
2.1 Demand Deposits with Banks	2586888	2590246	2651468	2535411	2746237
2.2 'Other' Deposits with Reserve Bank	94536	78680	91169	89944	95766
3 M1 (1 + 2)	6091466	5903535	6211113	6114602	6287864
4 Post Office Saving Bank Deposits	225927	208884	225927	225927	225927
5 M2 (3 + 4)	6317393	6112419	6437040	6340529	6513791
6 Time Deposits with Banks	18739918	17521213	19303478	19236078	19413975
	(18848160)		(19398657)	(19329083)	(19503372)
7 M3 (3 + 6)	24831384	23424748	25514591	25350681	25701839
	(24939627)		(25609770)	(25443685)	(25791236)
8 Total Post Office Deposits	1298623	1191699	1298623	1298623	1298623
9 M4 (7 + 8)	26130007	24616447	26813214	26649304	27000462
	(26238250)		(26908393)	(26742308)	(27089859)

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		
		Jun. 30	May. 31	Jun. 14	Jun. 28
	1	2	3	4	5
1 Net Bank Credit to Government	7512016	7190341	7370024	7425491	7424141
1 Net Bank Credit to Government (Including Merger)	(7603571)		(7454906)	(7510409)	(7489485)
1.1 RBI's net credit to Government (1.1.1–1.1.2)	1193213	1220251	966036	973578	1026142
1.1.1 Claims on Government	1370428	1414555	1374629	1373298	1355438
1.1.1.1 Central Government	1363828	1404719	1363906	1365304	1348151
1.1.1.2 State Governments	6600	9835	10723	7994	7286
1.1.2 Government deposits with RBI	177215	194303	408593	399720	329296
1.1.2.1 Central Government	177172	194261	408551	399678	329254
1.1.2.2 State Governments	42	42	42	42	42
1.2 Other Banks' Credit to Government	6318803	5970090	6403988	6451913	6397999
1.2 Other Banks Credit to Government (Including Merger)	(6410358)		(6488870)	(6536831)	(6463344)
2 Bank Credit to Commercial Sector	16672145	15123403	17035758	16964445	17144910
2 Bank Credit to Commercial Sector (Including Merger)	(17202832)		(17546837)	(17470960)	(17645141)
2.1 RBI's credit to commercial sector	14406	5383	11372	11370	10922
2.2 Other banks' credit to commercial sector	16657739	15118021	17024387	16953076	17133988
2.2 Other banks credit to commercial sector (Including Merger)	(17188425)		(17535465)	(17459590)	(17634219)
2.2.1 Bank credit by commercial banks	15901477	14383718	16271321	16199903	16381945
2.2.1 Bank credit by commercial banks (Including Merger)	(16432164)		(16782399)	(16706418)	(16882176)
2.2.2 Bank credit by co-operative banks	738194	717536	734587	734494	733421
2.2.3 Investments by commercial and co-operative banks in other securities	18068	16766	18479	18679	18621
2.2.3 Investments by commercial and co-operative banks in other securities (Including Merger)	(18068)		(18479)	(18679)	(18621)
3 Net Foreign Exchange Assets of Banking Sector (3.1 + 3.2)	5543700	4960071	5591936	5608008	5589632
3.1 RBIs net foreign exchange assets (3.1.1 - 3.1.2)	5240824	4717246	5289060	5305132	5286756
3.1.1 Gross foreign assets	5241083	4717503	5289319	5305390	5287015
3.1.2 Foreign liabilities	259	257	259	259	259
3.2 Other banks' net foreign exchange assets	302876	242825	302876	302876	302876
4 Government's Currency Liabilities to the Public	33432	30925	33858	33858	34065
5 Banking Sector's Net Non-monetary Liabilities	4929908	3879992	4516984	4681121	4490909
5 Banking Sectors Net Non-monetary Liabilities (Including Merger)	(5443907)		(5017766)	(5179550)	(4967088)
5.1 Net non-monetary liabilities of RBI	1789875	1481797	1610257	1647273	1631572
5.2 Net non-monetary liabilities of other banks (residual)	3140033	2398194	2906728	3033848	2859337
5.2 Net non-monetary liabilities of other banks (residual) (Including Merger)	(3654032)		(3407510)	(3532277)	(3335515)
M₃(1+2+3+4-5)	24831384	23424748	25514591	25350681	25701839
M ₃ (1+2+3+4-5) (Including Merger)	(24939627)		(25609770)	(25443685)	(25791236)

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		
		Jun. 30	May 31	Jun. 14	Jun. 28
		1	2	3	4
Monetary Aggregates					
NM ₁ (1.1+1.2.1+1.3)	6091466	5903535	6211113	6114602	6287864
NM ₂ (NM ₁ + 1.2.2.1)	14424621	13709198	14792897	14662823	14915606
NM ₂ (NM ₁ + 1.2.2.1) (Including Merger)	(14473330)		(14835727)	(14704675)	(14955835)
NM ₃ (NM ₂ + 1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 - 2.4 - 2.5)	25384097	23724457	26020669	25891323	26225085
NM ₃ (NM ₂ + 1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 - 2.4 - 2.5) (Including Merger)	(25492339)		(26115848)	(25984328)	(26314482)
1 Components					
1.1 Currency with the Public	3410042	3234608	3468476	3489248	3445861
1.2 Aggregate Deposits of Residents	21105010	19936164	21722100	21531457	21918997
1.2 Aggregate Deposits of Residents (Including Merger)	(21213252)		(21817278)	(21624461)	(22008393)
1.2.1 Demand Deposits	2586888	2590246	2651468	2535411	2746237
1.2.2 Time Deposits of Residents	18518121	17345918	19070631	18996046	19172760
1.2.2 Time Deposits of Residents (Including Merger)	(18626364)		(19165810)	(19089051)	(19262157)
1.2.2.1 Short-term Time Deposits	8333155	7805663	8581784	8548221	8627742
1.2.2.1 Short-term Time Deposits (Including Merger)	(8381864)		(8624615)	(8590073)	(8667971)
1.2.2.1.1 Certificates of Deposits (CDs)	369399	288827	364274	357042	407354
1.2.2.2 Long-term Time Deposits	10184967	9540255	10488847	10447826	10545018
1.2.2.2 Long-term Time Deposits (Including Merger)	(10244500)		(10541196)	(10498978)	(10594186)
1.3 'Other' Deposits with RBI	94536	78680	91169	89944	95766
1.4 Call/Term Funding from Financial Institutions	774509	475004	738925	780675	764461
2 Sources					
2.1 Domestic Credit	25295986	23397013	25526551	25499673	26017302
2.1 Domestic Credit (Including Merger)	(25918227)		(26122512)	(26091106)	(26582877)
2.1.1 Net Bank Credit to the Government	7512016	7190341	7370024	7425491	7424141
2.1.1 Net Bank Credit to the Government (Including Merger)	(7603571)		(7454906)	(7510409)	(7489485)
2.1.1.1 Net RBI credit to the Government	1193213	1220251	966036	973578	1026142
2.1.1.2 Credit to the Government by the Banking System	6318803	5970090	6403988	6451913	6397999
2.1.1.2 Credit to the Government by the Banking System (Including Merger)	(6410358)		(6488870)	(6536831)	(6463344)
2.1.2 Bank Credit to the Commercial Sector	17783970	16206672	18156528	18074182	18593161
2.1.2 Bank Credit to the Commercial Sector (Including Merger)	(18314656)		(18667606)	(18580697)	(19093392)
2.1.2.1 RBI Credit to the Commercial Sector	14406	5383	11372	11370	10922
2.1.2.2 Credit to the Commercial Sector by the Banking System	17769564	16201289	18145156	18062813	18582239
2.1.2.2 Credit to the Commercial Sector by the Banking System (Including Merger)	(18300250)		(18656234)	(18569328)	(19082470)
2.1.2.2.1 Other Investments (Non-SLR Securities)	1089184	1068672	1101545	1090913	1432378
2.2 Government's Currency Liabilities to the Public	33432	30925	33858	33858	34065
2.3 Net Foreign Exchange Assets of the Banking Sector	5110820	4777388	5157953	5153019	5180164
2.3.1 Net Foreign Exchange Assets of the RBI	5240824	4717246	5289060	5305132	5286756
2.3.2 Net Foreign Currency Assets of the Banking System	-130004	60142	-131107	-152112	-106593
2.4 Capital Account	3912897	3783732	4268718	4258716	4258925
2.5 Other items (net)	1657243	697137	929757	1034939	1223699

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		
		Jun.	Apr.	May	Jun.
		1	2	3	4
1 NM₃	25386437	23724457	25701274	26020669	26225085
	(25494679)		(25807257)	(26115848)	(26314482)
2 Postal Deposits	729246	678045	729246	729246	729246
3 L₁ (1 + 2)	26115683	24402502	26430520	26749915	26954331
	(26223925)		(26536503)	(26845094)	(27043728)
4 Liabilities of Financial Institutions	85150	73056	78167	72510	68179
4.1 Term Money Borrowings	2375	1164	1858	1324	748
4.2 Certificates of Deposit	70245	62185	63595	58570	54670
4.3 Term Deposits	12531	9707	12713	12616	12761
5 L₂ (3 + 4)	26200833	24475559	26508687	26822425	27022510
	(26309076)		(26614669)	(26917604)	(27111907)
6 Public Deposits with Non-Banking Financial Companies	102994	91373	102994
7 L₃ (5 + 6)	26303828	24566932	27125505

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		
		Jun. 30	May 31	Jun. 14	Jun. 28
	1	2	3	4	5
1 Components					
1.1 Currency in Circulation	3511461	3360417	3571371	3586577	3563002
1.2 Bankers' Deposits with the RBI	1025449	931226	1014134	1046164	1036368
1.2.1 Scheduled Commercial Banks	956011	871167	951109	983708	973455
1.3 'Other' Deposits with the RBI	94536	78680	91169	89944	95766
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 - 2.4 - 2.5)	4631446	4370324	4676674	4722685	4695137
2 Sources					
2.1 RBI's Domestic Credit	1147066	1103951	964014	1030968	1005887
2.1.1 Net RBI credit to the Government	1193213	1220251	966036	973578	1026142
2.1.1.1 Net RBI credit to the Central Government (2.1.1.1.1 + 2.1.1.1.2 + 2.1.1.1.3 + 2.1.1.1.4 - 2.1.1.1.5)	1186655	1210459	955355	965626	1018898
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	1404284	1363469	1364966	1347914
2.1.1.1.3.1 Central Government Securities	1363369	1404284	1363469	1364966	1347914
2.1.1.1.4 Rupee Coins	459	435	438	338	237
2.1.1.1.5 Deposits of the Central Government	177172	194261	408551	399678	329254
2.1.1.2 Net RBI credit to State Governments	6557	9793	10681	7952	7244
2.1.2 RBI's Claims on Banks	-60553	-121683	-13394	46021	-31176
2.1.2.1 Loans and Advances to Scheduled Commercial Banks	-60553	-121683	-13394	46021	-31176
2.1.3 RBI's Credit to Commercial Sector	14406	5383	11372	11370	10922
2.1.3.1 Loans and Advances to Primary Dealers	9358	3319	9311	9311	9061
2.1.3.2 Loans and Advances to NABARD	-	-	-	-	-
2.2 Government's Currency Liabilities to the Public	33432	30925	33858	33858	34065
2.3 Net Foreign Exchange Assets of the RBI	5240824	4717246	5289060	5305132	5286756
2.3.1 Gold	439319	359585	471621	467693	471350
2.3.2 Foreign Currency Assets	4801522	4357678	4817456	4837456	4815423
2.4 Capital Account	1589134	1636418	1767903	1745794	1728614
2.5 Other Items (net)	200741	-154620	-157646	-98521	-97042

No. 11: Reserve Money - Components and Sources

(₹ Crore)

Item	2023-24	Outstanding as on March 31/last Fridays of the month/Fridays					
		2023	2024				
			Jun. 30	May 31	Jun. 7	Jun. 14	Jun. 21
		1	2	3	4	5	6
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 + 2.4 + 2.5 - 2.6)	4631446	4370324	4676674	4712247	4722685	4713491	4695137
1 Components							
1.1 Currency in Circulation	3511461	3360417	3571371	3587572	3586577	3580220	3563002
1.2 Bankers' Deposits with RBI	1025449	931226	1014134	1034930	1046164	1041780	1036368
1.3 'Other' Deposits with RBI	94536	78680	91169	89745	89944	91491	95766
2 Sources							
2.1 Net Reserve Bank Credit to Government	1193213	1220251	966036	1000814	973578	863673	1026142
2.2 Reserve Bank Credit to Banks	-60553	-121683	-13394	1253	46021	151757	-31176
2.3 Reserve Bank Credit to Commercial Sector	14406	5383	11372	11283	11370	11275	10922
2.4 Net Foreign Exchange Assets of RBI	5240824	4717246	5289060	5319452	5305132	5310876	5286756
2.5 Government's Currency Liabilities to the Public	33432	30925	33858	33858	33858	33858	34065
2.6 Net Non-Monetary Liabilities of RBI	1789875	1481797	1610257	1654412	1647273	1657947	1631572

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		
		Jun. 30	May 31	Jun. 14	Jun. 28
	1	2	3	4	5
1 Components					
1.1 Aggregate Deposits of Residents	20145188 (20253430)	18980723 (20854359)	20759181 (20662886)	20569882 (21044606)	20955209
1.1.1 Demand Deposits	2443853	2448921	2506493	2390694	2601677
1.1.2 Time Deposits of Residents	17701334 (17809577)	16531802 (18347866)	18252688 (18272192)	18179188 (18442928)	18353531
1.1.2.1 Short-term Time Deposits	7965600	7439311	8213709	8180635	8259089
1.1.2.1.1 Certificates of Deposits (CDs)	369399	288827	364274	357042	407354
1.1.2.2 Long-term Time Deposits	9735734	9092491	10038978	9998553	10094442
1.2 Call/Term Funding from Financial Institutions	774509	475004	738925	780675	764461
2 Sources					
2.1 Domestic Credit	23019606 (23641847)	21128908 (24077971)	23482010 (24038841)	23447408 (24479935)	23914360
2.1.1 Credit to the Government	6014054 (6105609)	5669865 (6182473)	6097590 (6230374)	6145456 (6157070)	6091725
2.1.2 Credit to the Commercial Sector	17005551 (17536238)	15459043 (17895499)	17384420 (17808467)	17301952 (18322865)	17822634
2.1.2.1 Bank Credit	15901477 (16432164)	14383718 (16782399)	16271321 (16706418)	16199903 (16882176)	16381945
2.1.2.1.1 Non-food Credit	15878397 (16409083)	14355812 (16742141)	16231062 (16669495)	16162980 (16848272)	16348042
2.1.2.2 Net Credit to Primary Dealers	22904	14859	19488	19087	16136
2.1.2.3 Investments in Other Approved Securities	949	756	1029	1012	1137
2.1.2.4 Other Investments (in non-SLR Securities)	1080222	1059710	1092582	1081950	1423416
2.2 Net Foreign Currency Assets of Commercial Banks (2.2.1-2.2.2-2.2.3)	-130004	60142	-131107	-152112	-106593
2.2.1 Foreign Currency Assets	241661	321980	259269	247170	304848
2.2.2 Non-resident Foreign Currency Repatriable Fixed Deposits	221796	175295	232847	240032	241215
2.2.3 Overseas Foreign Currency Borrowings	149868	86544	157529	159250	170226
2.3 Net Bank Reserves (2.3.1+2.3.2-2.3.3)	1105997	1106732	1055398	1022970	1109609
2.3.1 Balances with the RBI	956011	871167	951109	983708	973455
2.3.2 Cash in Hand	89433	113882	90895	85283	104977
2.3.3 Loans and Advances from the RBI	-60553	-121683	-13394	46021	-31176
2.4 Capital Account	2299592	2123143	2476644	2488752	2506141
2.5 Other items (net) (2.1+2.2+2.3-2.4-1.1-1.2)	776310	716911	431552	478957	691565
2.5.1 Other Demand and Time Liabilities (net of 2.2.3)	787560	738329	809829	806341	759345
2.5.2 Net Inter-Bank Liabilities (other than to PDs)	201214	38319	180030	163163	148239

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		
		Jun. 30	May 31	Jun. 14	Jun. 28	
				1	2	3
1 SLR Securities	6106558 (6015003)	5670620	6183502 (6098620)	6231386 (6146468)	6158207 (6092862)	
2 Other Government Securities (Non-SLR)	177136	180605	165544	148863	148667	
3 Commercial Paper	61175	59999	43225	45921	51636	
4 Shares issued by						
4.1 PSUs	8475	9630	12979	13241	13257	
4.2 Private Corporate Sector	77722	71997	91501	93695	92870	
4.3 Others	5624	4671	7227	6486	7012	
5 Bonds/Debentures issued by						
5.1 PSUs	103070	89816	114668	113874	118392	
5.2 Private Corporate Sector	287596	297118	244991	231252	248705	
5.3 Others	124690	112399	133707	141285	144082	
6 Instruments issued by						
6.1 Mutual funds	62499	42908	96688	93656	66099	
6.2 Financial institutions	172340	190568	181756	193678	178443	

Note: Data against column Nos.(1), (2) & (3) are Final and for column Nos. (4) & (5) data are Provisional.

Data since July 14, 2023 include the impact of the merger of a non-bank with a bank.

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	
		Jun.	May	Jun.		Jun.	May	Jun.
	1	2	3	4	5	6	7	8
Number of Reporting Banks	210	211	208	208	137	136	135	135
1 Liabilities to the Banking System	554117	362097	527766	512668	549351	358882	523457	508308
1.1 Demand and Time Deposits from Banks	298452	260058	287696	285619	294471	257646	283850	281546
1.2 Borrowings from Banks	182566	39861	163135	150174	182429	39731	163095	150168
1.3 Other Demand and Time Liabilities	73100	62178	76934	76875	72452	61504	76511	76594
2 Liabilities to Others	22664868	20917143	23268654	23454844	22190597	20455895	22793492	22979852
2.1 Aggregate Deposits	20932067	19598267	21544610	21743457	20475226	19156018	21087206	21285821
(20823825)			(21449431)	(21654060)	(20366984)		(20992028)	(21196424)
2.1.1 Demand	2492916	2494898	2556468	2651692	2443853	2448921	2506493	2601677
2.1.2 Time	18439151	17103368	18988142	19091764	18031373	16707097	18580713	18684143
2.2 Borrowings	782260	480435	743310	768687	777942	475004	738925	764461
2.3 Other Demand and Time Liabilities	950541	838442	980734	942700	937428	824873	967361	929570
3 Borrowings from Reserve Bank	222716	50867	71305	102741	222716	50867	71305	102741
3.1 Against Usance Bills /Promissory Notes	-	-	-	-	-	-	-	-
3.2 Others	222716	50867	71305	102741	222716	50867	71305	102741
4 Cash in Hand and Balances with Reserve Bank	1043272	1008078	1064380	1100832	1020916	985049	1042004	1078432
4.1 Cash in Hand	91886	116514	93275	107446	89433	113882	90895	104977
4.2 Balances with Reserve Bank	951386	891564	971105	993386	931483	871167	951109	973455
5 Assets with the Banking System	455057	399804	430488	446434	374474	335423	362432	376205
5.1 Balances with Other Banks	246384	242322	233894	250069	198327	198986	185597	200204
5.1.1 In Current Account	12010	19964	10711	15362	8971	15084	8068	12536
5.1.2 In Other Accounts	234373	222357	223183	234707	189357	183903	177529	187668
5.2 Money at Call and Short Notice	39614	43022	27885	27374	12355	27198	13028	11606
5.3 Advances to Banks	51325	30275	53558	51727	48368	28362	51405	50288
5.4 Other Assets	117734	84186	115150	117264	115424	80876	112401	114106
6 Investment	6256962	5815448	6336009	6310568	6106558	5670620	6183502	6158207
(6165407)			(6251126)	(6245223)	(6015003)		(6098620)	(6092862)
6.1 Government Securities	6249319	5809384	6328175	6302648	6105610	5669865	6182473	6157070
6.2 Other Approved Securities	7643	6064	7834	7919	949	756	1029	1137
7 Bank Credit	16866336	14787746	17219029	17316113	16432164	14383718	16782882	16882176
(16335650)			(16707950)	(16815882)	(15901477)		(16271803)	(16381945)
7a Food Credit	75472	79878	90882	84526	23081	27906	40259	33904
7.1 Loans, Cash-credits and Overdrafts	16565348	14521900	16902163	16989393	16134303	14120923	16469360	16558740
7.2 Inland Bills-Purchased	60471	43766	64372	69416	60467	43753	64367	68064
7.3 Inland Bills-Discounted	199761	176389	210953	214878	197358	174035	208274	213615
7.4 Foreign Bills-Purchased	16662	19478	16346	17206	16412	19262	16125	16976
7.5 Foreign Bills-Discounted	24094	26212	25195	25220	23624	25744	24756	24780

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
			Jun. 30	May 31	Jun. 28	2024-25
	1	2	3	4	%	%
I. Bank Credit (II + III)	16432164	14383718	16781420	16880782	2.7	17.4
	(15901477)		(16270342)	(16380551)	(3.0)	(13.9)
II. Food Credit	23081	27906	40259	33904	46.9	21.5
III. Non-food Credit	16409083	14355812	16741162	16846879	2.7	17.4
	(15878397)		(16230083)	(16346648)	(2.9)	(13.9)
1. Agriculture & Allied Activities	2071251	1839319	2139047	2159559	4.3	17.4
2. Industry (Micro and Small, Medium and Large)	3652804	3447826	3703160	3728156	2.1	8.1
	(3635810)		(3687080)	(3712270)	(2.1)	(7.7)
2.1 Micro and Small	726315	659279	736404	731625	0.7	11.0
2.2 Medium	303998	280971	313398	316322	4.1	12.6
2.3 Large	2622490	2507577	2653358	2680209	2.2	6.9
3. Services	4592227	4010839	4681338	4707069	2.5	17.4
	(4490467)		(4587710)	(4616040)	(2.8)	(15.1)
3.1 Transport Operators	230175	204104	243074	242193	5.2	18.7
3.2 Computer Software	25917	23580	25787	26677	2.9	13.1
3.3 Tourism, Hotels & Restaurants	77513	70430	78408	78351	1.1	11.2
3.4 Shipping	7067	7288	6908	7019	-0.7	-3.7
3.5 Aviation	43248	41578	45556	45360	4.9	9.1
3.6 Professional Services	167234	150089	179919	172138	2.9	14.7
3.7 Trade	1025752	923022	1054824	1059459	3.3	14.8
3.7.1. Wholesale Trade ¹	538744	484404	556014	557604	3.5	15.1
3.7.2 Retail Trade	487008	438618	498810	501856	3.0	14.4
3.8 Commercial Real Estate	469013	343536	479120	483297	3.0	40.7
	(400470)		(415390)	(421756)	(5.3)	(22.8)
3.9 Non-Banking Financial Companies (NBFCs) ² of which,	1548027	1434293	1568073	1555496	0.5	8.5
3.9.1 Housing Finance Companies (HFCs)	325626	333527	331251	328232	0.8	-1.6
3.9.2 Public Financial Institutions (PFIs)	226963	192734	226676	197127	-13.1	2.3
3.10 Other Services ³	998281	812919	999668	1037078	3.9	27.6
	(978198)		(980290)	(1018174)	(4.1)	(25.2)
4. Personal Loans	5331290	4368025	5456633	5486107	2.9	25.6
	(4852210)		(4995156)	(5091342)	(4.9)	(16.6)
4.1 Consumer Durables	23713	22412	24683	24123	1.7	7.6
4.2 Housing	2718715	2052839	2786598	2798568	2.9	36.3
	(2264677)		(2349060)	(2427447)	(7.2)	(18.2)
4.3 Advances against Fixed Deposits	125239	121686	123334	126533	1.0	4.0
4.4 Advances to Individuals against share & bonds	8492	7840	9262	9357	10.2	19.3
4.5 Credit Card Outstanding	257016	221370	267979	273044	6.2	23.3
4.6 Education	119380	101693	121102	121990	2.2	20.0
4.7 Vehicle Loans	589251	525518	602270	603829	2.5	14.9
4.8 Loan against gold jewellery	102562	94872	116777	123776	20.7	30.5
4.9 Other Personal Loans	1386921	1219794	1404629	1404889	1.3	15.2
	(1362113)		(1380790)	(1381337)	(1.4)	(13.2)
5. Priority Sector (Memo)						
(i) Agriculture & Allied Activities ⁴	2081856	1857357	2078112	2186829	5.0	17.7
(ii) Micro & Small Enterprises ⁵	1974191	1769204	2030754	2020474	2.3	14.2
(iii) Medium Enterprises ⁶	490703	447562	502496	511467	4.2	14.3
(iv) Housing	755222	633058	762822	752911	-0.3	18.9
	(660572)		(670883)	(661668)	(0.2)	(4.5)
(v) Education Loans	62235	59458	61277	61269	-1.6	3.0
(vi) Renewable Energy	5991	4572	5923	6279	4.8	37.3
(vii) Social Infrastructure	2613	2642	2674	2949	12.9	11.6
(viii) Export Credit	11774	13219	11218	11721	-0.5	-11.3
(ix) Others	61336	69669	62047	60871	-0.8	-12.6
(x) Weaker Sections including net PSLC- SF/MF	1647778	1434996	1670313	1716930	4.2	19.6

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.
- (3) Bank credit, Food credit and Non-food credit given for the period May 19, 2023 pertains to the June 2, 2023.
- (4) For Bank credit, Food credit and Non-food credit, Y-o-Y growth rates were calculated based on the outstanding credit as on May 31, 2024, over June 2, 2023.

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	Outstanding as on				Growth(%)	
	Mar. 22, 2024	2024		Financial year so far	Y-o-Y	
		Jun. 30	May 31	Jun. 28	2024-25	2024
	1	2	3	4	%	%
2 Industries (2.1 to 2.19)	3652804 (3635810)	3447826 (3687080)	3703160 (3712270)	3728156 (3712270)	2.1 (2.1)	8.1 (7.7)
2.1 Mining & Quarrying (incl. Coal)	54166	53666	55370	55600	2.6	3.6
2.2 Food Processing	208864	186319	207369	206410	-1.2	10.8
2.2.1 Sugar	26383	21779	26622	24945	-5.5	14.5
2.2.2 Edible Oils & Vanaspati	19700	19182	18763	18123	-8.0	-5.5
2.2.3 Tea	5692	5623	5677	5853	2.8	4.1
2.2.4 Others	157089	139736	156307	157490	0.3	12.7
2.3 Beverage & Tobacco	31136	22969	30995	30518	-2.0	32.9
2.4 Textiles	256048	240440	255653	255274	-0.3	6.2
2.4.1 Cotton Textiles	99199	92697	97916	96345	-2.9	3.9
2.4.2 Jute Textiles	4280	3755	4254	4245	-0.8	13.0
2.4.3 Man-Made Textiles	45111	41020	44848	45229	0.3	10.3
2.4.4 Other Textiles	107458	102968	108635	109456	1.9	6.3
2.5 Leather & Leather Products	12588	12088	12437	12621	0.3	4.4
2.6 Wood & Wood Products	23839	21906	24301	24222	1.6	10.6
2.7 Paper & Paper Products	46426	44782	46961	47584	2.5	6.3
2.8 Petroleum, Coal Products & Nuclear Fuels	132356	128022	139876	150054	13.4	17.2
2.9 Chemicals & Chemical Products	249347	228204	256275	254950	2.2	11.7
2.9.1 Fertiliser	37569	38418	39055	36925	-1.7	-3.9
2.9.2 Drugs & Pharmaceuticals	81036	73353	83250	81818	1.0	11.5
2.9.3 Petro Chemicals	23157	21129	25091	25356	9.5	20.0
2.9.4 Others	107584	95303	108881	110852	3.0	16.3
2.10 Rubber, Plastic & their Products	90420	83772	88414	88917	-1.7	6.1
2.11 Glass & Glassware	12090	9776	12224	12340	2.1	26.2
2.12 Cement & Cement Products	59757	57100	59706	60571	1.4	6.1
2.13 Basic Metal & Metal Product	384447	356440	389190	398182	3.6	11.7
2.13.1 Iron & Steel	273803	239694	275226	281763	2.9	17.6
2.13.2 Other Metal & Metal Product	110645	116747	113964	116419	5.2	-0.3
2.14 All Engineering	196643	187106	199049	203490	3.5	8.8
2.14.1 Electronics	43175	42899	43835	45351	5.0	5.7
2.14.2 Others	153468	144207	155215	158139	3.0	9.7
2.15 Vehicles, Vehicle Parts & Transport Equipment	113185	106768	111779	113222	0.0	6.0
2.16 Gems & Jewellery	84860	81421	82752	84039	-1.0	3.2
2.17 Construction	133520	131576	136280	137097	2.7	4.2
2.18 Infrastructure	1304096	1254603	1337749	1323860	1.5	5.5
2.18.1 Power	644042	625754	658087	646566	0.4	3.3
2.18.2 Telecommunications	138192	123823	134410	132542	-4.1	7.0
2.18.3 Roads	318072	308556	335702	335841	5.6	8.8
2.18.4 Airports	7280	7659	7556	7779	6.9	1.6
2.18.5 Ports	6681	7237	6412	6483	-3.0	-10.4
2.18.6 Railways	13062	11336	13203	13275	1.6	17.1
2.18.7 Other Infrastructure	176767	170238	182380	181374	2.6	6.5
2.19 Other Industries	259016	240866	256777	269206	3.9	11.8

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							
		May 26	Mar. 29	Apr. 05	Apr. 19	Apr. 26	May 03	May 17	May 31
	1	2	3	4	5	6	7	8	9
Number of Reporting Banks	33	33	33	33	33	33	33	33	33
1 Aggregate Deposits (2.1.1.2+2.2.1.2)	138788.9	138906.0	138788.9	138798.4	137357.2	135856.4	137855.6	135672.9	135938.7
2 Demand and Time Liabilities									
2.1 Demand Liabilities	30226.7	27948.0	30226.7	28549.4	28302.3	28654.1	29748.9	27309.7	28297.6
2.1.1 Deposits									
2.1.1.1 Inter-Bank	9101.3	6050.4	9101.3	8044.1	8096.3	7965.2	7934.7	7634.3	7482.3
2.1.1.2 Others	15000.4	15165.1	15000.4	14969.9	14869.0	14417.9	16196.2	14617.1	15241.7
2.1.2 Borrowings from Banks	130.0		130.0	440.7		679.5	499.7		154.9
2.1.3 Other Demand Liabilities	5995.0	6732.0	5995.0	5094.7	5337.0	5591.5	5118.3	5058.3	5418.7
2.2 Time Liabilities	198141.8	182295.0	198141.8	195944.6	192115.1	189681.3	190499.2	189412.7	187897.4
2.2.1 Deposits									
2.2.1.1 Inter-Bank	72308.4	56779.6	72308.4	70753.2	67955.0	66557.0	66911.4	66378.9	65382.8
2.2.1.2 Others	123788.5	123740.9	123788.5	123828.5	122488.2	121438.5	121659.4	121055.8	120697.0
2.2.2 Borrowings from Banks	673.6	841.5	673.6	652.8	652.8	652.8	879.3	920.1	663.8
2.2.3 Other Time Liabilities	1371.3	933.4	1371.3	710.1	1019.1	1033.0	1049.1	1057.9	1153.8
3 Borrowing from Reserve Bank	0.0						150.0		
4 Borrowings from a notified bank / Government	95914.5	76779.0	95914.5	89985.8	87425.2	86593.2	85136.5	84716.3	84175.6
4.1 Demand	27317.7	16752.6	27317.7	25417.7	24184.6	23967.7	23767.7	23507.7	23112.7
4.2 Time	68596.8	60026.4	68596.8	64568.1	63240.6	62625.5	61368.8	61208.6	61062.9
5 Cash in Hand and Balances with Reserve Bank	16263.7	11133.0	16263.7	15725.0	13393.3	12135.1	13141.4	10494.5	12165.3
5.1 Cash in Hand	960.0	842.0	960.0	726.3	874.7	777.3	819.5	853.6	714.6
5.2 Balance with Reserve Bank	15303.7	10291.0	15303.7	14998.7	12518.6	11357.8	12321.9	9640.9	11450.7
6 Balances with Other Banks in Current Account	2088.1	2848.2	2088.1	2751.6	1725.5	1625.6	1573.3	1480.0	1528.5
7 Investments in Government Securities	77700.5	72717.9	77700.5	75562.7	75605.0	75501.1	75604.0	76369.8	76376.5
8 Money at Call and Short Notice	34355.3	21303.2	34355.3	30264.5	26097.0	23246.7	22827.2	22441.5	21180.5
9 Bank Credit (10.1+11)	135141.9	128078.0	135141.9	134343.5	134755.3	137382.4	137182.4	135776.2	135733.7
10 Advances									
10.1 Loans, Cash-Credits and Overdrafts	134936.8	128009.3	134936.8	134130.7	134570.3	137200.4	136992.2	135600.7	135524.3
10.2 Due from Banks	142185.2	121063.9	142185.2	139090.4	136863.1	136586.9	135859.4	135411.7	136109.4
11 Bills Purchased and Discounted	205.1	68.5	205.1	212.8	185.0	182.0	190.2	175.5	209.4

Prices and Production

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

Group/Sub group	2023-24			Rural			Urban			Combined		
	Rural	Urban	Combined	Jul.23	Jun.24	Jul.24 (P)	Jul.23	Jun.24	Jul.24 (P)	Jul.23	Jun.24	Jul.24 (P)
	1	2	3	4	5	6	7	8	9	10	11	12
1 Food and beverages	185.9	192.7	188.4	190.0	195.5	200.4	199.4	203.5	208.3	193.5	198.4	203.3
1.1 Cereals and products	181.4	181.7	181.5	176.5	190.1	191.4	177.8	190.0	191.2	176.9	190.1	191.3
1.2 Meat and fish	213.0	221.3	215.9	215.5	231.4	227.2	222.0	240.5	237.3	217.8	234.6	230.8
1.3 Egg	185.4	189.5	187.0	180.0	188.6	192.5	184.8	192.9	197.0	181.9	190.3	194.2
1.4 Milk and products	181.4	181.5	181.4	180.6	185.1	185.5	180.3	185.8	186.7	180.5	185.4	185.9
1.5 Oils and fats	165.3	158.7	162.9	165.3	162.2	163.3	158.7	156.1	157.1	162.9	160.0	161.0
1.6 Fruits	172.1	179.9	175.7	173.4	179.3	181.5	186.7	190.0	192.3	179.6	184.3	186.5
1.7 Vegetables	183.9	229.9	199.5	227.0	215.9	248.8	295.3	269.7	303.4	250.2	234.2	267.3
1.8 Pulses and products	192.2	196.5	193.7	185.3	208.8	211.5	187.9	215.1	218.0	186.2	210.9	213.7
1.9 Sugar and confectionery	126.2	128.1	126.9	123.8	130.0	130.3	125.8	132.1	132.3	124.5	130.7	131.0
1.10 Spices	238.0	228.4	234.8	234.5	229.2	229.4	224.6	224.8	225.0	231.2	227.7	227.9
1.11 Non-alcoholic beverages	180.7	168.2	175.5	179.7	183.0	183.1	167.3	171.3	172.1	174.5	178.1	178.5
1.12 Prepared meals, snacks, sweets	193.3	200.9	196.8	192.0	197.3	197.6	199.2	206.4	207.2	195.3	201.5	202.1
2 Pan, tobacco and intoxicants	202.0	207.1	203.3	201.0	206.1	206.5	205.2	212.1	212.9	202.1	207.7	208.2
3 Clothing and footwear	192.9	181.5	188.4	191.9	196.3	196.7	180.2	185.1	185.5	187.3	191.9	192.3
3.1 Clothing	193.5	183.5	189.6	192.4	197.1	197.5	182.2	187.3	187.6	188.4	193.2	193.6
3.2 Footwear	189.4	170.2	181.4	189.0	191.4	191.7	169.0	173.3	173.8	180.7	183.9	184.3
4 Housing	--	176.7	176.7	--	--	--	175.3	179.1	180.0	175.3	179.1	180.0
5 Fuel and light	183.0	178.9	181.4	185.5	180.5	179.9	187.4	169.3	169.6	186.2	176.3	176.0
6 Miscellaneous	181.7	173.7	177.8	180.7	186.3	187.7	172.9	177.9	179.2	176.9	182.2	183.6
6.1 Household goods and services	181.5	171.8	176.9	180.9	184.1	184.3	170.8	175.2	175.7	176.1	179.9	180.2
6.2 Health	190.8	185.2	188.7	189.1	196.0	196.5	183.5	190.7	191.4	187.0	194.0	194.6
6.3 Transport and communication	171.1	161.4	166.0	170.6	172.0	175.3	161.1	161.9	164.6	165.6	166.7	169.7
6.4 Recreation and amusement	175.8	171.1	173.2	175.1	178.6	179.1	170.5	173.7	174.1	172.5	175.8	176.3
6.5 Education	184.0	179.1	181.1	183.8	188.1	190.2	178.9	183.7	184.9	180.9	185.5	187.1
6.6 Personal care and effects	186.3	187.4	186.8	184.4	199.2	199.8	185.4	200.8	201.3	184.8	199.9	200.4
General Index (All Groups)	185.6	182.4	184.1	187.6	192.2	195.3	184.7	187.8	190.2	186.3	190.2	192.9

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		136.4		139.9	141.4
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89	1229		1196		1269	1280
3 Consumer Price Index for Rural Labourers	1986-87	-	1240		1207		1281	1292

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	
		Jun.	May	Jun.	May
		1	2	3	4
1 Standard Gold (₹ per 10 grams)	60624	59056		72135	
2 Silver (₹ per kilogram)	72243	71190		86866	
				72014	88666

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	
			Jul.	May.	Jun.(P)	Jul.(P)
			1	2	3	4
1 ALL COMMODITIES	100.000	151.4	152.1	153.5	153.9	155.2
1.1 PRIMARY ARTICLES	22.618	183.0	191.7	188.1	191.6	197.6
1.1.1 FOOD ARTICLES	15.256	191.3	205.9	199.3	205.0	213.0
1.1.1.1 Food Grains (Cereals+Pulses)	3.462	193.8	187.3	204.1	206.7	208.1
1.1.1.2 Fruits & Vegetables	3.475	210.2	282.9	220.8	245.1	276.9
1.1.1.3 Milk	4.440	180.3	177.9	184.0	184.3	186.0
1.1.1.4 Eggs, Meat & Fish	2.402	172.1	176.5	178.4	174.5	173.7
1.1.1.5 Condiments & Spices	0.529	235.4	234.5	236.9	237.3	237.2
1.1.1.6 Other Food Articles	0.948	189.5	180.4	207.7	208.5	209.1
1.1.2 NON-FOOD ARTICLES	4.119	162.4	161.9	156.5	155.8	157.2
1.1.2.1 Fibres	0.839	168.0	166.0	159.9	159.8	164.2
1.1.2.2 Oil Seeds	1.115	185.0	187.8	179.2	180.0	179.8
1.1.2.3 Other non-food Articles	1.960	134.9	135.0	131.4	132.6	133.4
1.1.2.4 Floriculture	0.204	279.7	262.4	260.7	228.8	232.6
1.1.3 MINERALS	0.833	217.7	215.4	227.1	227.3	229.6
1.1.3.1 Metallic Minerals	0.648	204.2	202.7	219.3	219.7	225.4
1.1.3.2 Other Minerals	0.185	265.0	260.1	254.5	254.2	244.3
1.1.4 CRUDE PETROLEUM & NATURAL GAS	2.410	153.6	144.7	156.9	156.0	157.9
1.2 FUEL & POWER	13.152	152.0	145.4	150.1	147.7	147.9
1.2.1 COAL	2.138	136.4	137.6	135.8	135.8	135.6
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	279.8	236.0	236.0	232.0
1.2.2 MINERAL OILS	7.950	159.0	151.8	159.5	155.7	157.4
1.2.3 ELECTRICITY	3.064	145.0	134.2	135.7	135.5	131.9
1.3 MANUFACTURED PRODUCTS	64.231	140.2	139.5	142.0	141.9	141.7
1.3.1 MANUFACTURE OF FOOD PRODUCTS	9.122	160.5	159.9	164.5	165.6	165.9
1.3.1.1 Processing and Preserving of meat	0.134	145.3	143.0	155.8	156.0	156.6
1.3.1.2 Processing and Preserving of fish, Crustaceans, Molluscs and products thereof	0.204	142.9	140.7	143.2	143.9	141.9
1.3.1.3 Processing and Preserving of fruit and Vegetables	0.138	130.4	131.4	131.8	132.1	131.9
1.3.1.4 Vegetable and Animal oils and Fats	2.643	145.0	147.7	147.6	148.2	149.2
1.3.1.5 Dairy products	1.165	179.1	179.0	179.4	180.0	179.2
1.3.1.6 Grain mill products	2.010	175.6	170.7	182.8	184.7	184.5
1.3.1.7 Starches and Starch products	0.110	157.1	149.9	162.9	164.9	168.9
1.3.1.8 Bakery products	0.215	165.4	165.1	165.7	165.4	166.1
1.3.1.9 Sugar, Molasses & honey	1.163	134.6	131.3	139.6	139.2	138.5
1.3.1.10 Cocoa, Chocolate and Sugar confectionery	0.175	139.8	138.4	149.9	152.5	155.8
1.3.1.11 Macaroni, Noodles, Couscous and Similar farinaceous products	0.026	149.9	148.3	147.0	150.2	150.9
1.3.1.12 Tea & Coffee products	0.371	176.2	187.9	193.9	198.8	202.4
1.3.1.13 Processed condiments & salt	0.163	192.1	189.1	192.3	193.8	191.1
1.3.1.14 Processed ready to eat food	0.024	146.3	146.6	149.1	152.9	152.1
1.3.1.15 Health supplements	0.225	179.1	177.0	179.2	181.4	184.6
1.3.1.16 Prepared animal feeds	0.356	208.3	208.3	204.8	206.6	206.8
1.3.2 MANUFACTURE OF BEVERAGES	0.909	131.5	130.8	133.2	133.4	133.6
1.3.2.1 Wines & spirits	0.408	133.3	132.2	134.0	134.1	134.7
1.3.2.2 Malt liquors and Malt	0.225	135.6	135.0	138.3	139.0	138.9
1.3.2.3 Soft drinks; Production of mineral waters and Other bottled waters	0.275	125.5	125.3	127.8	127.9	127.5
1.3.3 MANUFACTURE OF TOBACCO PRODUCTS	0.514	173.5	173.2	174.3	174.9	177.2
1.3.3.1 Tobacco products	0.514	173.5	173.2	174.3	174.9	177.2

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023	2024		
			Jul.	May.	Jun.(P)	Jul.(P)
			1	2	3	4
1.3.4 MANUFACTURE OF TEXTILES	4.881	134.6	133.9	135.7	136.4	136.7
1.3.4.1 Preparation and Spinning of textile fibres	2.582	120.1	118.9	122.0	122.0	122.5
1.3.4.2 Weaving & Finishing of textiles	1.509	157.5	157.5	156.5	158.1	158.1
1.3.4.3 Knitted and Crocheted fabrics	0.193	120.0	119.3	123.2	124.5	125.2
1.3.4.4 Made-up textile articles, Except apparel	0.299	156.6	156.1	159.2	159.2	158.8
1.3.4.5 Cordage, Rope, Twine and Netting	0.098	139.2	140.0	138.9	139.3	141.1
1.3.4.6 Other textiles	0.201	129.6	127.8	132.1	133.7	133.1
1.3.5 MANUFACTURE OF WEARING APPAREL	0.814	150.8	150.2	152.0	152.2	152.1
1.3.5.1 Manufacture of Wearing Apparel (woven), Except fur Apparel	0.593	148.7	148.2	150.1	150.3	150.1
1.3.5.2 Knitted and Crocheted apparel	0.221	156.6	155.7	157.2	157.3	157.4
1.3.6 MANUFACTURE OF LEATHER AND RELATED PRODUCTS	0.535	124.1	125.7	124.0	124.1	124.5
1.3.6.1 Tanning and Dressing of leather; Dressing and Dyeing of fur	0.142	107.3	111.9	104.2	103.7	104.5
1.3.6.2 Luggage, Handbags, Saddlery and Harness	0.075	140.9	141.6	141.0	141.1	141.6
1.3.6.3 Footwear	0.318	127.7	128.1	128.8	129.1	129.4
1.3.7 MANUFACTURE OF WOOD AND PRODUCTS OF WOOD AND CORK	0.772	146.6	144.4	149.5	149.8	149.5
1.3.7.1 Saw milling and Planing of wood	0.124	137.8	137.9	139.5	139.7	139.8
1.3.7.2 Veneer sheets; Manufacture of plywood, Laminboard, Particle board and Other panels and Boards	0.493	146.1	143.3	149.5	149.8	149.2
1.3.7.3 Builder's carpentry and Joinery	0.036	206.4	201.8	215.3	215.4	215.6
1.3.7.4 Wooden containers	0.119	139.8	139.1	140.3	140.9	141.2
1.3.8 MANUFACTURE OF PAPER AND PAPER PRODUCTS	1.113	140.3	139.5	138.1	138.3	138.7
1.3.8.1 Pulp, Paper and Paperboard	0.493	147.6	146.8	144.3	144.5	144.6
1.3.8.2 Corrugated paper and Paperboard and Containers of paper and Paperboard	0.314	140.9	139.5	144.4	144.5	145.6
1.3.8.3 Other articles of paper and Paperboard	0.306	128.0	127.9	121.6	122.0	121.9
1.3.9 PRINTING AND REPRODUCTION OF RECORDED MEDIA	0.676	182.3	180.3	185.6	185.2	186.3
1.3.9.1 Printing	0.676	182.3	180.3	185.6	185.2	186.3
1.3.10 MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS	6.465	136.9	136.6	135.8	136.4	136.8
1.3.10.1 Basic chemicals	1.433	139.9	139.1	137.5	137.9	137.9
1.3.10.2 Fertilizers and Nitrogen compounds	1.485	142.8	143.6	143.3	143.2	143.3
1.3.10.3 Plastic and Synthetic rubber in primary form	1.001	132.3	130.8	131.2	134.0	135.3
1.3.10.4 Pesticides and Other agrochemical products	0.454	132.8	132.1	127.8	127.3	128.6
1.3.10.5 Paints, Varnishes and Similar coatings, Printing ink and Mastics	0.491	143.7	143.4	140.4	140.6	140.2
1.3.10.6 Soap and Detergents, Cleaning and Polishing preparations, Perfumes and Toilet preparations	0.612	139.7	140.6	138.7	138.8	138.9
1.3.10.7 Other chemical products	0.692	134.4	134.2	135.0	135.5	136.4
1.3.10.8 Man-made fibres	0.296	103.6	102.6	104.9	106.9	107.3
1.3.11 MANUFACTURE OF PHARMACEUTICALS, MEDICINAL CHEMICAL AND BOTANICAL PRODUCTS	1.993	142.9	141.8	144.0	144.0	144.7
1.3.11.1 Pharmaceuticals, Medicinal chemical and Botanical products	1.993	142.9	141.8	144.0	144.0	144.7
1.3.12 MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS	2.299	127.5	127.0	128.3	128.8	129.0
1.3.12.1 Rubber Tyres and Tubes; Retreading and Rebuilding of Rubber Tyres	0.609	113.7	113.2	113.4	113.9	114.9
1.3.12.2 Other Rubber Products	0.272	107.3	107.4	109.3	110.4	112.1
1.3.12.3 Plastics products	1.418	137.3	136.7	138.3	138.7	138.3
1.3.13 MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS	3.202	134.7	134.6	132.3	131.5	130.5
1.3.13.1 Glass and Glass products	0.295	163.8	164.4	163.8	162.4	163.5
1.3.13.2 Refractory products	0.223	119.7	119.1	119.1	118.6	118.1
1.3.13.3 Clay Building Materials	0.121	123.9	123.9	120.2	116.2	117.1
1.3.13.4 Other Porcelain and Ceramic Products	0.222	122.3	121.4	124.8	124.4	124.6
1.3.13.5 Cement, Lime and Plaster	1.645	137.3	137.4	132.8	131.7	129.9

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023		2024	
			Jul.	May.	Jun.(P)	Jul.(P)
			1	2	3	4
1.3.13.6 Articles of Concrete, Cement and Plaster	0.292	137.7	138.4	139.3	139.7	138.4
1.3.13.7 Cutting, Shaping and Finishing of Stone	0.234	130.3	130.0	131.2	132.3	132.8
1.3.13.8 Other Non-Metallic Mineral Products	0.169	102.4	101.3	97.2	97.4	95.7
1.3.14 MANUFACTURE OF BASIC METALS	9.646	141.0	139.9	144.7	143.1	141.1
1.3.14.1 Inputs into steel making	1.411	140.3	135.6	143.5	139.6	135.0
1.3.14.2 Metallic Iron	0.653	153.6	155.5	154.6	152.1	148.4
1.3.14.3 Mild Steel - Semi Finished Steel	1.274	119.9	122.2	122.0	120.2	119.2
1.3.14.4 Mild Steel - Long Products	1.081	141.3	139.5	144.5	143.9	140.2
1.3.14.5 Mild Steel - Flat products	1.144	143.4	142.8	140.7	140.5	139.6
1.3.14.6 Alloy steel other than Stainless Steel- Shapes	0.067	137.6	136.1	142.2	141.7	136.5
1.3.14.7 Stainless Steel - Semi Finished	0.924	136.4	136.0	140.5	133.1	131.3
1.3.14.8 Pipes & tubes	0.205	169.7	169.0	166.7	166.7	167.1
1.3.14.9 Non-ferrous metals incl. precious metals	1.693	144.8	143.7	157.4	157.5	156.6
1.3.14.10 Castings	0.925	141.0	137.2	144.1	145.0	145.0
1.3.14.11 Forgings of steel	0.271	173.3	173.0	173.1	174.4	171.4
1.3.15 MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT	3.155	138.6	138.3	136.4	135.7	136.2
1.3.15.1 Structural Metal Products	1.031	132.3	130.2	131.1	130.0	130.9
1.3.15.2 Tanks, Reservoirs and Containers of Metal	0.660	157.6	158.7	153.3	151.3	151.4
1.3.15.3 Steam generators, Except Central Heating Hot Water Boilers	0.145	106.3	105.8	108.0	109.5	111.2
1.3.15.4 Forging, Pressing, Stamping and Roll-Forming of Metal; Powder Metallurgy	0.383	141.4	141.7	133.9	134.1	135.5
1.3.15.5 Cutlery, Hand Tools and General Hardware	0.208	108.4	108.7	102.0	101.5	101.7
1.3.15.6 Other Fabricated Metal Products	0.728	143.8	144.5	145.5	145.4	145.2
1.3.16 MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS	2.009	119.3	118.4	122.2	122.0	121.1
1.3.16.1 Electronic Components	0.402	115.0	115.4	117.9	117.8	117.6
1.3.16.2 Computers and Peripheral Equipment	0.336	135.3	135.1	135.3	135.3	136.0
1.3.16.3 Communication Equipment	0.310	136.1	131.5	146.3	145.9	145.9
1.3.16.4 Consumer Electronics	0.641	103.6	103.5	103.3	103.3	100.5
1.3.16.5 Measuring, Testing, Navigating and Control equipment	0.181	113.8	112.7	119.8	117.8	118.1
1.3.16.6 Watches and Clocks	0.076	157.2	156.7	162.7	163.0	163.1
1.3.16.7 Irradiation, Electromedical and Electrotherapeutic equipment	0.055	108.3	107.1	113.5	113.6	109.9
1.3.16.8 Optical instruments and Photographic equipment	0.008	103.8	103.9	105.9	109.9	107.2
1.3.17 MANUFACTURE OF ELECTRICAL EQUIPMENT	2.930	131.4	130.9	133.4	133.5	133.4
1.3.17.1 Electric motors, Generators, Transformers and Electricity distribution and Control apparatus	1.298	130.1	128.8	131.7	131.3	131.1
1.3.17.2 Batteries and Accumulators	0.236	137.8	136.9	140.5	140.7	141.7
1.3.17.3 Fibre optic cables for data transmission or live transmission of images	0.133	123.4	122.8	119.6	121.0	120.7
1.3.17.4 Other electronic and Electric wires and Cables	0.428	146.1	146.4	154.6	155.5	154.4
1.3.17.5 Wiring devices, Electric lighting & display equipment	0.263	116.8	116.0	118.9	119.4	119.0
1.3.17.6 Domestic appliances	0.366	133.8	135.2	131.9	132.1	131.9
1.3.17.7 Other electrical equipment	0.206	120.9	121.6	122.4	122.2	123.2
1.3.18 MANUFACTURE OF MACHINERY AND EQUIPMENT	4.789	129.0	128.6	130.7	130.7	130.4
1.3.18.1 Engines and Turbines, Except aircraft, Vehicle and Two wheeler engines	0.638	128.9	126.9	132.3	132.3	133.0
1.3.18.2 Fluid power equipment	0.162	131.9	131.0	133.4	133.7	133.9
1.3.18.3 Other pumps, Compressors, Taps and Valves	0.552	117.4	117.0	117.9	117.9	118.2
1.3.18.4 Bearings, Gears, Gearing and Driving elements	0.340	127.7	125.8	128.2	128.5	128.4
1.3.18.5 Ovens, Furnaces and Furnace burners	0.008	83.7	85.8	85.2	86.5	83.7
1.3.18.6 Lifting and Handling equipment	0.285	128.6	127.9	129.8	130.3	130.3

No. 21: Wholesale Price Index (Concl'd.)
 (Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023		2024		
			Jul.	May.	Jun.(P)	Jul.(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	147.4	147.8	148.3	146.6	
1.3.18.9 Agricultural and Forestry machinery	0.833	142.5	141.8	145.2	145.0	143.5	
1.3.18.10 Metal-forming machinery and Machine tools	0.224	122.5	122.3	122.4	122.4	122.4	
1.3.18.11 Machinery for mining, Quarrying and Construction	0.371	88.6	89.1	89.7	89.9	89.0	
1.3.18.12 Machinery for food, Beverage and Tobacco processing	0.228	124.4	124.4	125.3	125.8	125.9	
1.3.18.13 Machinery for textile, Apparel and Leather production	0.192	137.2	138.0	139.2	134.9	137.6	
1.3.18.14 Other special-purpose machinery	0.468	144.7	144.3	146.1	146.3	145.2	
1.3.18.15 Renewable electricity generating equipment	0.046	70.8	71.1	70.0	69.6	69.7	
1.3.19 MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS	4.969	128.4	128.5	129.8	129.8	129.7	
1.3.19.1 Motor vehicles	2.600	128.5	128.6	130.6	130.2	130.2	
1.3.19.2 Parts and Accessories for motor vehicles	2.368	128.2	128.4	128.9	129.3	129.1	
1.3.20 MANUFACTURE OF OTHER TRANSPORT EQUIPMENT	1.648	143.1	142.4	143.9	143.9	144.4	
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	105.9	108.3	108.3	109.8	
1.3.20.3 Motor cycles	1.302	144.7	143.9	144.6	144.6	145.0	
1.3.20.4 Bicycles and Invalid carriages	0.117	137.9	138.6	135.9	135.5	136.0	
1.3.20.5 Other transport equipment	0.002	159.2	155.3	162.5	162.8	160.2	
1.3.21 MANUFACTURE OF FURNITURE	0.727	159.6	159.9	158.7	158.8	157.4	
1.3.21.1 Furniture	0.727	159.6	159.9	158.7	158.8	157.4	
1.3.22 OTHER MANUFACTURING	1.064	158.2	151.3	178.5	177.1	178.8	
1.3.22.1 Jewellery and Related articles	0.996	157.9	150.5	179.7	178.3	180.0	
1.3.22.2 Musical instruments	0.001	187.0	193.1	211.6	201.9	200.0	
1.3.22.3 Sports goods	0.012	155.2	155.3	160.1	161.7	163.0	
1.3.22.4 Games and Toys	0.005	159.6	159.6	161.3	161.0	161.5	
1.3.22.5 Medical and Dental instruments and Supplies	0.049	163.1	164.5	159.1	159.1	158.6	
2 FOOD INDEX	24.378	179.8	188.7	186.3	190.3	195.4	

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	Apr-Jun		Jun	
				2023-24	2024-25	2023	2024
	1	2	3	4	5	6	7
General Index	100.00	138.5	146.7	143.4	150.8	143.9	150.0
1 Sectoral Classification							
1.1 Mining	14.37	119.9	128.9	124.3	134.1	122.3	134.9
1.2 Manufacturing	77.63	137.1	144.7	141.2	146.6	141.6	145.3
1.3 Electricity	7.99	185.2	198.3	199.7	221.4	205.2	222.8
2 Use-Based Classification							
2.1 Primary Goods	34.05	139.2	147.7	146.3	156.4	146.7	156.0
2.2 Capital Goods	8.22	100.3	106.6	100.8	103.5	107.4	110.0
2.3 Intermediate Goods	17.22	149.4	157.3	154.4	159.6	154.2	159.0
2.4 Infrastructure/ Construction Goods	12.34	160.7	176.3	171.3	182.0	170.9	178.4
2.5 Consumer Durables	12.84	114.5	118.6	113.5	125.3	116.8	126.9
2.6 Consumer Non-Durables	15.33	147.7	153.7	150.4	149.7	146.7	144.6

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 2024-25 (Budget Estimates)	April – June			
		2024-25 (Actuals)	2023-24 (Actuals)	Percentage to Budget Estimates	
				2024-25	2023-24
	1	2	3	4	5
1 Revenue Receipts	3129200	829677	588588	26.5	22.4
1.1 Tax Revenue (Net)	2583499	549633	433620	21.3	18.6
1.2 Non-Tax Revenue	545701	280044	154968	51.3	51.4
2 Non Debt Capital Receipt	78000	4520	10703	5.8	12.7
2.1 Recovery of Loans	28000	4516	6468	16.1	28.1
2.2 Other Receipts	50000	4	4235	0.0	6.9
3 Total Receipts (excluding borrowings) (1+2)	3207200	834197	599291	26.0	22.1
4 Revenue Expenditure of which :	3709401	788858	772181	21.3	22.0
4.1 Interest Payments	1162940	264052	243705	22.7	22.6
5 Capital Expenditure	1111111	181051	278480	16.3	27.8
6 Total Expenditure (4+5)	4820512	969909	1050661	20.1	23.3
7 Revenue Deficit (4-1)	580201	-40819	183593	-7.0	21.1
8 Fiscal Deficit (6-3)	1613312	135712	451370	8.4	25.3
9 Gross Primary Deficit (8-4.1)	450372	-128340	207665	-28.5	29.4

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	2023		2024					
		Jun. 30	May 24	May 31	Jun. 7	Jun. 14	Jun. 21	Jun. 28	
		1	2	3	4	5	6	7	8
1 91-day									
1.1 Banks	18054	20917	5175	7219	6799	6696	6606	10411	
1.2 Primary Dealers	22676	22503	34953	28830	30883	29232	27126	24135	
1.3 State Governments	5701	35098	37927	37927	42427	44407	44835	46310	
1.4 Others	88670	128280	111972	110051	103417	99172	95368	88554	
2 182-day									
2.1 Banks	84913	72494	72514	66301	66915	64359	61859	54590	
2.2 Primary Dealers	87779	131141	69402	69388	62478	58413	58731	66312	
2.3 State Governments	4070	18791	9152	9842	9842	10842	14592	14592	
2.4 Others	102311	135365	122088	124315	126606	129228	127409	123098	
3 364-day									
3.1 Banks	91819	78636	97274	96254	94635	92786	92156	92592	
3.2 Primary Dealers	159085	173343	152797	152028	155138	152296	145237	143140	
3.3 State Governments	41487	50712	41120	41131	41056	36416	37753	38191	
3.4 Others	165095	145021	161929	159718	154228	154918	158607	156268	
4 14-day Intermediate									
4.1 Banks									
4.2 Primary Dealers									
4.3 State Governments	318736	171431	200174	180187	120227	222113	245624	204835	
4.4 Others	442	956	390	1700	1031	550	379	592	
Total Treasury Bills (Excluding 14 day Intermediate T Bills) #	871662	1012301	916304	903004	894426	878765	870281	858193	

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)	Cutoff 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															
May. 29	4000	70	14436	1529	13	3971	1529	5500	98.32		6.8478				
Jun. 5	4000	71	12821	6537	33	3963	6537	10500	98.32		6.8619				
Jun. 12	4000	96	17221	4541	28	3959	4541	8500	98.32		6.8370				
Jun. 19	4000	85	24062	1261	21	3939	1261	5200	98.33		6.8150				
Jun. 26	4000	86	21345	2035	24	3965	2035	6000	98.33		6.8034				
182-day Treasury Bills															
2024-25															
May. 29	4000	112	15743	1034	21	3966	1034	5000	96.62		7.0080				
Jun. 5	4000	83	12948	1023	41	3977	1023	5000	96.62		7.0189				
Jun. 12	4000	122	20217	1040	30	3960	1040	5000	96.63		6.9925				
Jun. 19	4000	131	23846	4643	16	3907	4643	8550	96.65		6.9601				
Jun. 26	4000	90	16913	55	7	3945	55	4000	96.67		6.9191				
364-day Treasury Bills															
2024-25															
May. 29	4000	104	13643	32	43	3979	32	4011	93.44		7.0364				
Jun. 5	4000	99	16629	106	34	3976	106	4082	93.44		7.0347				
Jun. 12	4000	141	24630	308	18	3962	308	4270	93.47		7.0111				
Jun. 19	4000	121	21511	1434	14	3981	1434	5416	93.49		6.9800				
Jun. 26	4000	104	15036	456	11	3987	456	4443	93.51		6.9594				

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		
June 01 ,2024	5.00-6.24	5.96		
June 03 ,2024	5.10-6.55	6.46		
June 04 ,2024	5.10-6.60	6.46		
June 05 ,2024	5.10-6.60	6.52		
June 06 ,2024	5.40-6.70	6.50		
June 07 ,2024	5.40-6.60	6.51		
June 10 ,2024	5.40-6.60	6.51		
June 11 ,2024	5.40-6.65	6.52		
June 12 ,2024	5.40-6.60	6.52		
June 13 ,2024	5.40-6.58	6.48		
June 14 ,2024	5.40-6.80	6.68		
June 15 ,2024	5.50-6.72	6.31		
June 18 ,2024	5.10-6.90	6.73		
June 19 ,2024	5.10-6.75	6.65		
June 20 ,2024	5.10-6.80	6.64		
June 21 ,2024	5.10-6.82	6.70		
June 24 ,2024	5.10-6.85	6.71		
June 25 ,2024	5.10-6.75	6.59		
June 26 ,2024	5.10-6.75	6.59		
June 27 ,2024	5.10-6.85	6.72		
June 28 ,2024	5.10-7.10	6.77		
June 29 ,2024	5.50-6.25	6.04		
July 01 ,2024	5.10-6.65	6.54		
July 02 ,2024	5.00-6.60	6.49		
July 03 ,2024	5.10-6.55	6.49		
July 04 ,2024	5.10-6.55	6.50		
July 05 ,2024	4.50-6.65	6.52		
July 06 ,2024	5.50-6.24	6.13		
July 08 ,2024	5.10-6.65	6.54		
July 09 ,2024	5.10-6.55	6.47		
July 10 ,2024	5.10-6.60	6.47		
July 11 ,2024	5.10-6.60	6.47		
July 12 ,2024	5.10-6.55	6.46		
July 15 ,2024	5.10-6.55	6.47		

Note: Includes Notice Money.

No. 27: Certificates of Deposit

Item	2023		2024		
	Jun. 30		May. 17	May. 31	Jun. 14
	1	2	3	4	5
1 Amount Outstanding (₹ Crore)	287157.00	367450.64	369203.22	352302.19	409554.44
1.1 Issued during the fortnight (₹ Crore)	20253.00	33905.56	44822.51	55859.00	84271.02
2 Rate of Interest (per cent)	6.76-7.88	7.05-7.28	7.00-7.49	6.95-7.75	6.97-7.71

No. 28: Commercial Paper

Item	2023		2024		
	Jun. 30		May 15	May 31	Jun. 15
	1	2	3	4	5
1 Amount Outstanding (₹ Crore)	433212.15	421150.90	403970.00	431100.55	422447.45
1.1 Reported during the fortnight (₹ Crore)	67287.35	52596.55	80921.75	106920.70	56023.85
2 Rate of Interest (per cent)	6.77-12.37	7.06-11.96	7.05-13.92	6.95-12.08	6.99-15.06

No. 29: Average Daily Turnover in Select Financial Markets

(₹ Crore)

Item	2023-24	2023		2024				
		Jun. 30	May 24	May 31	Jun. 7	Jun. 14	Jun. 21	Jun. 28
		1	2	3	4	5	6	7
1 Call Money	17761	18286	20332	19446	19424	18322	19913	23962
2 Notice Money	2550	4366	408	4362	435	4521	613	3722
3 Term Money	871	1140	1212	1154	218	1172	673	613
4 Triparty Repo	601363	652452	535322	720037	629542	744474	617320	799629
5 Market Repo	574534	655035	506526	671501	564363	677435	539543	663566
6 Repo in Corporate Bond	1817	285	3625	3762	3459	4233	2865	3558
7 Forex (US \$ million)	95115	107572	113570	113440	117280	100629	110450	135891
8 Govt. of India Dated Securities	90992	99704	123616	96496	159010	117091	108012	107938
9 State Govt. Securities	6102	4202	5060	3779	3906	3305	2336	8036
10 Treasury Bills								
10.1 91-Day	5378	6688	7696	2928	6853	5523	3692	5128
10.2 182-Day	6079	17354	7204	5660	3683	3689	2813	4984
10.3 364-Day	4307	16258	2954	1838	180985	134722	128135	136084
10.4 Cash Management Bills			0	0	0	0	0	0
11 Total Govt. Securities (8+9+10)	112858	144205	146530	110701	354437	264330	244988	262169
11.1 RBI	492	42	331	32	384	123	1026	948

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

(Amount in ₹ Crore)

Security & Type of Issue	2023-24		2023-24 (Apr.-Jun.)		2024-25 (Apr.-Jun.) *		Jun. 2023		Jun. 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	53	10739	111	41230	25	1484	38	3571
1A Premium	328	76319	48	10248	103	23722	23	1295	33	3215
1.1 Public	272	65832	36	6881	75	36381	18	1287	22	2521
1.1.1 Premium	272	62791	36	6739	75	19501	18	1213	22	2409
1.2 Rights	67	15110	17	3859	36	4849	7	198	16	1051
1.2.1 Premium	56	13527	12	3509	28	4221	5	82	11	806
2 Preference Shares	-	-	-	-	-	-	-	-	-	-
2.1 Public	-	-	-	-	-	-	-	-	-	-
2.2 Rights	-	-	-	-	-	-	-	-	-	-
3 Bonds & Debentures	44	16342	9	2575	10	2454	2	539	3	560
3.1 Convertible	-	-	-	-	-	-	-	-	-	-
3.1.1 Public	-	-	-	-	-	-	-	-	-	-
3.1.2 Rights	-	-	-	-	-	-	-	-	-	-
3.2 Non-Convertible	44	16342	9	2575	10	2454	2	539	3	560
3.2.1 Public	44	16342	9	2575	10	2454	2	539	3	560
3.2.2 Rights	-	-	-	-	-	-	-	-	-	-
4 Total (1+2+3)	383	97284	62	13314	121	43684	27	2024	41	4131
4.1 Public	316	82174	45	9456	85	38835	20	1826	25	3081
4.2 Rights	67	15110	17	3859	36	4849	7	198	16	1051

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		2023		2024			
				Jun.	Feb.	Mar.	Apr.	May	Jun.
		1	2	3	4	5	6	7	
1 Exports	₹ Crore	3619292	282259	343518	346249	294476	330575	293772	
	US \$ Million	437113	34324	41406	41718	35306	39641	35195	
1.1 Oil	₹ Crore	696850	55566	68163	44950	58783	67927	46045	
	US \$ Million	84157	6757	8216	5416	7048	8145	5516	
1.2 Non-oil	₹ Crore	2922442	226693	275356	301299	235693	262648	247727	
	US \$ Million	352956	27567	33190	36302	28258	31495	29678	
2 Imports	₹ Crore	5592877	440059	498718	475374	452881	514997	468827	
	US \$ Million	675430	53513	60113	57276	54298	61755	56167	
2.1 Oil	₹ Crore	1487581	103468	140134	142994	137648	166316	125624	
	US \$ Million	179618	12582	16891	17229	16503	19944	15050	
2.2 Non-oil	₹ Crore	4105296	336591	358584	332380	315233	348681	343203	
	US \$ Million	495812	40931	43222	40047	37795	41812	41116	
3 Trade Balance	₹ Crore	-1973585	-157800	-155200	-129125	-158405	-184422	-175055	
	US \$ Million	-238317	-19189	-18707	-15558	-18992	-22115	-20972	
3.1 Oil	₹ Crore	-790731	-47902	-71972	-98044	-78865	-98389	-79580	
	US \$ Million	-95461	-5825	-8675	-11813	-9456	-11798	-9534	
3.2 Non-oil	₹ Crore	-1182854	-109899	-83229	-31081	-79540	-86033	-95475	
	US \$ Million	-142856	-13364	-10032	-3745	-9537	-10317	-11438	

Source: DGCI&S and Ministry of Commerce & Industry.

No. 32: Foreign Exchange Reserves

Item	Unit	2023		2024					
		Aug. 04	Jun. 21	Jun. 28	Jul. 05	Jul. 12	Jul. 19	Jul. 26	
				1	2	3	4	5	6
1 Total Reserves	₹ Crore	4982323	5460976	5436574	5486788	5570621	5612521	5587802	
	US \$ Million	601453	653711	651997	657155	666854	670857	667386	
1.1 Foreign Currency Assets	₹ Crore	4418603	4796186	4776850	4818462	4890773	4919732	4913727	
	US \$ Million	533400	574134	572881	577110	585470	588048	586877	
1.2 Gold	₹ Crore	370124	475795	471350	479517	490045	501909	483062	
	US \$ Million	44680	56956	56528	57432	58663	59992	57695	
1.3 SDRs	Volume (Metric Tonnes)	797.72	837.03	840.76	841.51	841.51	841.51	843.38	
	SDRs Million	13674	13699	13699	13699	13699	13699	13699	
	₹ Crore	151376	150781	150209	150585	151296	152323	152398	
	US \$ Million	18274	18049	18014	18036	18111	18207	18202	
1.4 Reserve Tranche Position in IMF	₹ Crore	42220	38215	38165	38222	38507	38556	38614	
	US \$ Million	5099	4572	4573	4578	4609	4610	4612	

*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	2024-25
		Jun.	May.	Jun. (P)		Apr.-Jun.	Apr.-Jun.(P)
		1	2	3	4	5	6
1 NRI Deposits	151879	141345	154784	155711		2208	3954
1.1 FCNR(B)	25733	20485	26853	27414		1121	1681
1.2 NR(E)RA	98624	96512	99895	100059		489	1530
1.3 NRO	27522	24349	28037	28239		598	743

P: Provisional.

No. 34: Foreign Investment Inflows

(US \$ Million)

Item	2023-24	2023-24	2024-25 (P)	2023	2024 (P)	
		Apr.-Jun.	Apr.-Jun.	Jun.	May.	Jun.
		1	2	3	4	5
1.1 Net Foreign Direct Investment (1.1.1-1.1.2)	9790	4727	6931	1305	3250	-212
1.1.1 Direct Investment to India (1.1.1.1-1.1.1.2)	26469	7361	10505	1967	4972	652
1.1.1.1 Gross Inflows/Gross Investments	70941	17789	22491	5443	7891	7332
1.1.1.1.1 Equity	45817	11266	16499	3268	5960	5521
1.1.1.1.1.1 Government (SIA/FIPB)	585	45	209	5	80	118
1.1.1.1.1.2 RBI	31826	9264	11765	2519	3787	3244
1.1.1.1.1.3 Acquisition of shares	12013	1637	4205	638	1986	2052
1.1.1.1.1.4 Equity capital of unincorporated bodies	1394	320	320	107	107	107
1.1.1.1.2 Reinvested earnings	19768	4541	4541	1514	1514	1514
1.1.1.1.3 Other capital	5355	1983	1452	661	417	297
1.1.1.2 Repatriation/Disinvestment	44472	10427	11986	3476	2918	6679
1.1.1.2.1 Equity	41334	9351	11488	3117	2633	6620
1.1.1.2.2 Other capital	3137	1077	498	359	285	59
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	2634	3574	662	1722	864
1.1.2.1 Equity capital	9111	1864	2172	479	1046	537
1.1.2.2 Reinvested Earnings	5786	1446	1446	482	482	482
1.1.2.3 Other Capital	5406	813	1103	198	440	287
1.1.2.4 Repatriation/Disinvestment	3624	1489	1147	496	246	442
1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3-1.2.4)	44081	15731	1130	7650	-1456	5249
1.2.1 GDRs/ADRs	-	-	-	-	-	-
1.2.2 FIIs	44626	16089	1082	7769	-1508	5281
1.2.3 Offshore funds and others	-	-	-	-	-	-
1.2.4 Portfolio investment by India	544	358	-48	119	-51	32
1 Foreign Investment Inflows	53872	20458	8061	8954	1794	5037

P: Provisional

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

(US \$ Million)

Item	2023-24	2023		2024		
		Jun.	Apr.	May.	Jun.	
				3	4	5
1 Outward Remittances under the LRS	31735.74	3890.83	2285.77	2420.58	2181.85	
1.1 Deposit	916.45	227.23	72.67	52.98	39.02	
1.2 Purchase of immovable property	242.51	45.85	23.19	21.69	18.77	
1.3 Investment in equity/debt	1510.89	314.73	98.94	98.86	120.22	
1.4 Gift	3580.27	643.95	311.16	271.93	228.81	
1.5 Donations	11.31	2.22	1.70	0.58	2.01	
1.6 Travel	17006.27	1482.81	1144.31	1401.16	1275.63	
1.7 Maintenance of close relatives	4611.53	890.89	391.69	320.80	270.72	
1.8 Medical Treatment	79.62	7.64	10.38	7.66	6.42	
1.9 Studies Abroad	3478.65	237.32	208.02	210.99	177.07	
1.10 Others	298.24	38.20	23.70	33.94	43.19	

**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	
			Jul	Jun	Jul
	1	2	3	4	5
40-Currency Basket (Base: 2015-16=100)					
1 Trade-Weighted					
1.1 NEER	91.27	90.74	90.69	92.22	92.00
1.2 REER	102.86	103.71	106.04	106.36	107.33
2 Export-Weighted					
2.1 NEER	93.03	93.12	92.96	94.68	94.43
2.2 REER	101.12	101.22	103.53	103.46	104.31
6-Currency Basket (Trade-weighted)					
1 Base : 2015-16 =100					
1.1 NEER	85.93	83.62	83.72	83.67	83.40
1.2 REER	101.80	101.66	103.45	103.52	104.65
2 Base : 2022-23 =100					
2.1 NEER	100.00	97.31	97.43	97.37	97.06
2.2 REER	100.00	99.86	101.62	101.69	102.80

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

(Amount in US \$ Million)

Item	2023-24	2023		2024	
		Jun.	May	Jun.	Jun.
		1	2	3	4
1 Automatic Route					
1.1 Number	1188	138	108	121	
1.2 Amount	29461	5885	3669	1811	
2 Approval Route					
2.1 Number	33	3	2	4	
2.2 Amount	19748	2074	343	1005	
3 Total (1+2)					
3.1 Number	1221	141	110	125	
3.2 Amount	49209	7959	4012	2816	
4 Weighted Average Maturity (in years)	5.60	5.30	4.90	5.80	
5 Interest Rate (per cent)					
5.1 Weighted Average Margin over alternative reference rate (ARR) for Floating Rate Loans@	1.66	1.49	2.05	1.36	
5.2 Interest rate range for Fixed Rate Loans	0.00-27.00	0.00-11.67	0.00-11.67	0.00-11.00	

Borrower Category

I. Corporate Manufacturing	15836	4820	497	603
II. Corporate-Infrastructure	15916	2116	1366	808
a.) Transport	1505	14	0	0
b.) Energy	3513	0	434	745
c.) Water and Sanitation	33	27	0	27
d.) Communication	6309	1750	0	0
e.) Social and Commercial Infrastructure	115	3	56	17
f.) Exploration,Mining and Refinery	2480	30	0	19
g.) Other Sub-Sectors	1961	292	876	0
III. Corporate Service-Sector	1526	10	138	37
IV. Other Entities	1728	0	0	19
a.) units in SEZ	1	0	0	19
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	905	1424	1311
a). NBFC- IFC/AFC	7734	332	555	1062
b). NBFC-MFI	531	288	52	38
c). NBFC-Others	5096	285	817	211
VIII. Non-Government Organization (NGO)	0	0	0	0
IX. Micro Finance Institution (MFI)	0	0	0	0
X. Others	822	108	587	38

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	Jan-Mar 2023			Jan-Mar 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance Of Payments (1+2+3)	391827	386248	5579	502210	471456	30754
1 Current Account (1.1+ 1.2)	238010	239366	-1356	253561	247879	5682
1.1 Merchandise	115821	168408	-52587	121652	172546	-50894
1.2 Invisibles (1.2.1+1.2.2+1.2.3)	122189	70959	51231	131909	75333	56576
1.2.1 Services	85833	46758	39075	89357	46672	42685
1.2.1.1 Travel	8445	7698	747	9961	8063	1898
1.2.1.2 Transportation	7956	8091	-135	7772	7829	-57
1.2.1.3 Insurance	824	455	369	927	650	277
1.2.1.4 G.n.i.e.	144	307	-163	129	315	-186
1.2.1.5 Miscellaneous	68464	30207	38256	70568	29814	40753
1.2.1.5.1 Software Services	38473	4103	34370	41551	4908	36643
1.2.1.5.2 Business Services	22260	16314	5945	22620	16388	6232
1.2.1.5.3 Financial Services	2093	1303	790	1599	1269	330
1.2.1.5.4 Communication Services	2558	2217	341	498	506	-7
1.2.2 Transfers	28650	3888	24762	32097	3378	28719
1.2.2.1 Official	24	342	-318	51	282	-231
1.2.2.2 Private	28627	3547	25080	32046	3096	28950
1.2.3 Income	7706	20312	-12606	10455	25283	-14828
1.2.3.1 Investment Income	6010	19395	-13385	8523	24244	-15721
1.2.3.2 Compensation of Employees	1695	917	778	1932	1039	893
2 Capital Account (2.1+2.2+2.3+2.4+2.5)	153422	146882	6540	248111	223578	24534
2.1 Foreign Investment (2.1.1+2.1.2)	83781	79091	4691	158711	145366	13345
2.1.1 Foreign Direct Investment	17084	10730	6355	19834	17881	1954
2.1.1.1 In India	15858	6538	9319	19128	11411	7718
2.1.1.1.1 Equity	9708	6254	3454	12762	10934	1829
2.1.1.1.2 Reinvested Earnings	4976	0	4976	5332		5332
2.1.1.1.3 Other Capital	1173	284	889	1034	477	557
2.1.1.2 Abroad	1227	4191	-2964	706	6470	-5764
2.1.1.2.1 Equity	1227	2123	-896	706	3208	-2503
2.1.1.2.2 Reinvested Earnings	0	1103	-1103	0	1446	-1446
2.1.1.2.3 Other Capital	0	965	-965	0	1815	-1815
2.1.2 Portfolio Investment	66697	68361	-1664	138877	127485	11392
2.1.2.1 In India	66117	67704	-1588	138217	126638	11579
2.1.2.1.1 FIIs	66117	67704	-1588	138217	126638	11579
2.1.2.1.1.1 Equity	57476	59959	-2483	120154	112150	8004
2.1.2.1.1.2 Debt	8640	7745	895	18063	14487	3575
2.1.2.1.2 ADR/GDRs	0	0	0	0		0
2.1.2.2 Abroad	580	657	-77	660	847	-187
2.2 Loans (2.2.1+2.2.2+2.2.3)	26512	23457	3055	30700	28949	1751
2.2.1 External Assistance	3240	1522	1718	3587	1562	2025
2.2.1.1 By India	8	22	-14	8	31	-23
2.2.1.2 To India	3232	1500	1732	3579	1531	2048
2.2.2 Commercial Borrowings	7323	5698	1624	15113	13418	1695
2.2.2.1 By India	272	382	-110	3401	4308	-907
2.2.2.2 To India	7051	5316	1735	11711	9110	2601
2.2.3 Short Term to India	15950	16237	-287	12000	13969	-1969
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	15950	13646	2305	12000	12865	-865
2.2.3.2 Suppliers' Credit up to 180 days	0	2592	-2592	0	1104	-1104
2.3 Banking Capital (2.3.1+2.3.2)	27997	32047	-4050	40722	33811	6911
2.3.1 Commercial Banks	27922	32047	-4125	39768	33811	5957
2.3.1.1 Assets	4274	13260	-8986	9220	12330	-3110
2.3.1.2 Liabilities	23648	18787	4861	30548	21481	9067
2.3.1.2.1 Non-Resident Deposits	21066	17485	3581	26041	20678	5363
2.3.2 Others	75	0	75	955	0	955
2.4 Rupee Debt Service	0	7	-7	7	7	-7
2.5 Other Capital	15131	12280	2852	17978	15445	2533
3 Errors & Omissions	395	0	395	538	0	538
4 Monetary Movements (4.1+ 4.2)	0	5579	-5579	0	30754	-30754
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	5579	-5579	30754	-30754	

Note: P: Preliminary.

No. 39: India's Overall Balance of Payments

(₹ Crore)

Item	Jan-Mar 2023			Jan-Mar 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance Of Payments (1+2+3)	3223390	3177490	45899	4169720	3914381	255339
1 Current Account (1.1+ 1.2)	1958005	1969160	-1155	2105253	2058074	47179
1.1 Merchandise	952809	1385415	-432606	1010049	1432606	-422556
1.2 Invisibles (1.2.1+1.2.2+1.2.3)	1005196	583745	421451	1095204	625468	469735
1.2.1 Services	706112	384660	321451	741908	387502	354406
1.2.1.1 Travel	69476	63331	6145	82705	66948	15758
1.2.1.2 Transportation	65454	66565	-1111	64527	65002	-475
1.2.1.3 Insurance	6777	3740	3037	7699	5395	2304
1.2.1.4 G.n.i.e.	1185	2525	-1339	1073	2616	-1543
1.2.1.5 Miscellaneous	563219	248500	314719	585904	247541	338363
1.2.1.5.1 Software Services	316497	33753	282744	344986	40752	304234
1.2.1.5.2 Business Services	183122	134212	48910	187807	136067	51740
1.2.1.5.3 Financial Services	17215	10718	6497	13280	10537	2743
1.2.1.5.4 Communication Services	21041	18237	2804	4136	4197	-61
1.2.2 Transfers	235693	31986	203706	266491	28049	238442
1.2.2.1 Official	194	2810	-2616	423	2344	-1921
1.2.2.2 Private	235499	29176	206322	266068	25705	240363
1.2.3 Income	63392	167098	-103707	86804	209917	-123113
1.2.3.1 Investment Income	49444	159555	-110111	70763	201290	-130527
1.2.3.2 Compensation of Employees	13948	7544	6404	16041	8627	7414
2 Capital Account (2.1+2.2+2.3+2.4+2.5)	1262134	1208330	53804	2060004	1856307	203698
2.1 Foreign Investment (2.1.1+2.1.2)	689231	650644	38587	1317736	1206932	110803
2.1.1 Foreign Direct Investment	140546	88268	52278	164679	148458	16220
2.1.1.1 In India	130453	53788	76665	158819	94741	64078
2.1.1.1.1 Equity	79863	51450	28413	105963	90780	15183
2.1.1.1.2 Reinvested Earnings	40937	0	40937	44274	0	44274
2.1.1.1.3 Other Capital	9652	2338	7315	8582	3960	4621
2.1.1.2 Abroad	10093	34480	-24387	5860	53718	-47858
2.1.1.2.1 Equity	10093	17465	-7372	5860	26638	-20778
2.1.1.2.2 Reinvested Earnings	0	9073	-9073	0	12009	-12009
2.1.1.2.3 Other Capital	0	7941	-7941	0	15071	-15071
2.1.2 Portfolio Investment	548685	562376	-13691	1153057	1058474	94583
2.1.2.1 In India	543912	556972	-13060	1147577	1051439	96139
2.1.2.1.1 FIIs	543912	556972	-13060	1147577	1051439	96139
2.1.2.1.1.1 Equity	472831	493254	-20423	997608	931154	66454
2.1.2.1.1.2 Debt	71080	63718	7363	149969	120285	29685
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	4774	5404	-631	5480	7035	-1555
2.2 Loans (2.2.1+2.2.2+2.2.3)	218106	192973	25133	254894	240356	14538
2.2.1 External Assistance	26652	12519	14133	29784	12969	16816
2.2.1.1 By India	63	180	-117	66	255	-188
2.2.1.2 To India	26589	12339	14250	29718	12714	17004
2.2.2 Commercial Borrowings	60240	46876	13363	125478	111407	14071
2.2.2.1 By India	2237	3144	-907	28241	35769	-7528
2.2.2.2 To India	58003	43732	14271	97237	75638	21599
2.2.3 Short Term to India	131214	133577	-2364	99631	115980	-16349
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	131214	112256	18958	99631	106817	-7185
2.2.3.2 Suppliers' Credit up to 180 days	0	21322	-21322	0	9163	-9163
2.3 Banking Capital (2.3.1+2.3.2)	230320	263635	-33115	338106	280721	57384
2.3.1 Commercial Banks	229701	263635	-33934	330180	280721	49459
2.3.1.1 Assets	35162	109084	-73921	76548	102370	-25822
2.3.1.2 Liabilities	194539	154551	39988	253632	178351	75281
2.3.1.2.1 Non-Resident Deposits	173302	143842	29461	216214	171683	44531
2.3.2 Others	619	0	619	7926	0	7926
2.4 Rupee Debt Service	0	60	-60	0	60	-60
2.5 Other Capital	124477	101018	23459	149269	128237	21033
3 Errors & Omissions	3250	0	3250	4463	0	4463
4 Monetary Movements (4.1+ 4.2)	0	45899	-45899	0	255339	-255339
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	45899	-45899	0	255339	-255339

Note: P: Preliminary.

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

Item	(US\$ Million)					
	Jan-Mar 2023			Jan-Mar 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
1 Current Account (1.A+1.B+1.C)						
1.A Goods and Services (1.A.a+1.A.b)						
1.A.a Goods (1.A.a.1 to 1.A.a.3)						
1.A.a.1 General merchandise on a BOP basis	238010	239346	-1336	253558	247857	5701
1.A.a.2 Net exports of goods under merchanting	201654	215166	-13512	211010	219218	-8208
1.A.a.3 Nonmonetary gold	115821	168408	-52587	121652	172546	-50894
1.A.a.1 General merchandise on a BOP basis	115268	161779	-46511	121353	162955	-41602
1.A.a.2 Net exports of goods under merchanting	553	0	553	300	0	300
1.A.a.3 Nonmonetary gold	0	6629	-6629	9591	9591	-9591
1.A.b Services (1.A.b.1 to 1.A.b.13)						
1.A.b.1 Manufacturing services on physical inputs owned by others	85833	46758	39075	89357	46672	42685
1.A.b.2 Maintenance and repair services n.i.e.	327	52	275	352	18	335
1.A.b.3 Transport	56	644	-587	55	456	-401
1.A.b.4 Travel	7956	8091	-135	7772	7829	-57
1.A.b.5 Construction	8445	7698	747	9961	8063	1898
1.A.b.6 Insurance and pension services	1099	705	394	1658	791	867
1.A.b.7 Financial services	824	455	369	927	650	277
1.A.b.8 Charges for the use of intellectual property n.i.e.	2093	1303	790	1599	1269	330
1.A.b.9 Telecommunications, computer, and information services	290	2729	-2438	319	3365	-3046
1.A.b.10 Other business services	41116	6606	34509	42137	5707	36430
1.A.b.11 Personal, cultural, and recreational services	22260	16314	5945	22620	16388	6232
1.A.b.12 Government goods and services n.i.e.	1045	1390	-346	1253	1496	-243
1.A.b.13 Others n.i.e.	144	307	-163	129	315	-186
1.A.b.13 Others n.i.e.	178	464	-286	575	324	251
1.B Primary Income (1.B.1 to 1.B.3)						
1.B.1 Compensation of employees	7706	20312	-12606	10455	25283	-14828
1.B.2 Investment income	1695	917	778	1932	1039	893
1.B.2.1 Direct investment	4839	18772	-13934	6758	23566	-16808
1.B.2.2 Portfolio investment	2156	10609	-8453	2518	13929	-11411
1.B.2.3 Other investment	78	2755	-2676	94	2383	-2289
1.B.2.4 Reserve assets	210	5246	-5035	874	7026	-6152
1.B.3 Other primary income	2393	163	231	3272	229	3043
1.B.3 Other primary income	1172	623	549	1765	678	1087
1.C Secondary Income (1.C.1+1.C.2)						
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	28650	3868	24782	32093	3356	28737
1.C.1.1 Personal transfers (Current transfers between resident and/non-resident households)	28627	3547	25080	32046	3096	28950
1.C.1.2 Other current transfers	27984	2631	25352	31301	2324	28977
1.C.2 General government	643	915	-272	745	772	-27
1.C.2 General government	23	321	-298	48	260	-212
2 Capital Account (2.1+2.2)						
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	272	260	12	182	138	44
2.2 Capital transfers	120	35	85	21	50	-30
2.2 Capital transfers	152	225	-73	161	87	74
3 Financial Account (3.1 to 3.5)						
3.1 Direct Investment (3.1A+3.1B)						
3.1.A Direct Investment in India	153151	152222	929	247933	254216	-6283
3.1.A Equity and investment fund shares	17084	10730	6355	19834	17881	1954
3.1.A.1 Equity other than reinvestment of earnings	15858	6538	9319	19128	11411	7718
3.1.A.2 Reinvestment of earnings	14684	6254	8430	18095	10934	7161
3.1.A.2 Debt instruments	4976	0	4976	5332	5332	5332
3.1.A.2.1 Direct investor in direct investment enterprises	1173	284	889	1034	477	557
3.1.B Direct Investment by India	1173	284	889	1034	477	557
3.1.B.1 Equity and investment fund shares	1227	4191	-2964	706	6470	-5764
3.1.B.1.1 Equity other than reinvestment of earnings	1227	3226	-1999	706	4655	-3949
3.1.B.1.2 Reinvestment of earnings	1227	2123	-896	706	3208	-2503
3.1.B.2 Debt instruments	0	1103	-1103	1446	1446	-1446
3.1.B.2.1 Direct investor in direct investment enterprises	0	965	-965	0	1815	-1815
3.1.B.2.1 Direct investor in direct investment enterprises	0	965	-965	1815	1815	-1815
3.2 Portfolio Investment						
3.2.A Portfolio Investment in India	66697	68361	-1664	138877	127485	11392
3.2.A.1 Equity and investment fund shares	66117	67704	-1588	138217	126638	11579
3.2.A.2 Debt securities	57476	59959	-2483	120154	112150	8004
3.2.B Portfolio Investment by India	8640	7745	895	18063	14487	3575
3.2.B.1 Equity and investment fund shares	580	657	-77	660	847	-187
3.3 Financial derivatives (other than reserves) and employee stock options						
3.4 Other investment						
3.4.1 Other equity (ADRs/GDRs)	65708	61219	4489	83096	68816	14280
3.4.2 Currency and deposits	0	0	0	0	0	0
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	21141	17485	3656	26996	20678	6318
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	75	0	75	955	0	955
3.4.2.3 General government	21066	17485	3581	26041	20678	5363
3.4.2.4 Other sectors	0	0	0	0	0	0
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	17418	21782	-4364	32426	28113	4313
3.4.3.A Loans to India	17139	21378	-4239	29017	23774	5243
3.4.3.B Loans by India	280	404	-125	3409	4339	-929
3.4.4 Insurance, pension, and standardized guarantee schemes	41	30	11	54	85	-31
3.4.5 Trade credit and advances	15950	16237	-287	12000	13969	-1969
3.4.6 Other accounts receivable/payable - other	11157	5685	5472	11620	5972	5648
3.4.7 Special drawing rights	0	0	0	0	0	0
3.5 Reserve assets						
3.5.1 Monetary gold	0	5579	-5579	0	30754	-30754
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	5579	-5579	0	30754	-30754
4 Total assets/liabilities						
4.1 Equity and investment fund shares	153151	152222	929	247933	254216	-6283
4.2 Debt instruments	77670	76458	1212	145795	137951	7844
4.3 Other financial assets and liabilities	64323	64499	-176	90518	79539	10979
5 Net errors and omissions						
5 Net errors and omissions	395	0	395	538	538	538

Note: P: Preliminary.

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

(₹ Crore)

Item	Jan-Mar 2023			Jan-Mar 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	1958000	1968993	-10992	2105225	2057890	47336
1.A Goods and Services (1.A.a+1.A.b)	1658921	1770076	-111155	1751957	1820108	-68150
1.A.a Goods (1.A.a.1 to 1.A.a.3)	952809	1385415	-432606	1010049	1432606	-422556
1.A.a.1 General merchandise on a BOP basis	948262	1330884	-382622	1007561	1352971	-345410
1.A.a.2 Net exports of goods under merchanting	4548	0	4548	2488	0	2488
1.A.a.3 Nonmonetary gold	0	54532	-54532	0	79635	-79635
1.A.b Services (1.A.b.1 to 1.A.b.13)	706112	384660	321451	741908	387502	354406
1.A.b.1 Manufacturing services on physical inputs owned by others	2689	425	2264	2923	146	2778
1.A.b.2 Maintenance and repair services n.i.e.	464	5295	-4831	455	3786	-3331
1.A.b.3 Transport	65454	66565	-1111	64527	65002	-475
1.A.b.4 Travel	69476	63331	6145	82705	66948	15758
1.A.b.5 Construction	9040	5797	3244	13763	6567	7196
1.A.b.6 Insurance and pension services	6777	3740	3037	7699	5395	2304
1.A.b.7 Financial services	17215	10718	6497	13280	10537	2743
1.A.b.8 Charges for the use of intellectual property n.i.e.	2389	22449	-20059	2648	27942	-25294
1.A.b.9 Telecommunications, computer, and information services	338240	54349	283891	349851	47384	302467
1.A.b.10 Other business services	183122	134212	48910	187807	136067	51740
1.A.b.11 Personal, cultural, and recreational services	8596	11438	-2842	10404	12421	-2016
1.A.b.12 Government goods and services n.i.e.	1185	2525	-1339	1073	2616	-1543
1.A.b.13 Others n.i.e.	1463	3817	-2354	4771	2691	2081
1.B Primary Income (1.B.1 to 1.B.3)	63392	167098	-103707	86804	209917	-123113
1.B.1 Compensation of employees	13948	7544	6404	16041	8627	7414
1.B.2 Investment income	39805	154433	-114627	56107	195663	-139556
1.B.2.1 Direct investment	17740	87278	-69538	20904	115646	-94742
1.B.2.2 Portfolio investment	644	22661	-22016	782	19786	-19004
1.B.2.3 Other investment	1731	43156	-41425	7255	58332	-51077
1.B.2.4 Reserve assets	19690	1338	18352	27166	1900	25266
1.B.3 Other primary income	9638	5122	4516	14656	5627	9029
1.C Secondary Income (1.C.1+1.C.2)	235688	31819	203869	264644	27865	238599
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	235499	29176	206322	266068	25705	240363
1.C.1.1 Personal transfers (Current transfers between resident and non-resident households)	230210	21647	208563	259885	19295	240591
1.C.1.2 Other current transfers	5288	7529	-2241	6183	6410	-227
1.C.2 General government	189	2642	-2453	396	2160	-1764
2 Capital Account (2.1+2.2)	2237	2137	100	1509	1144	364
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	986	288	698	171	419	-248
2.2 Capital transfers	1250	1849	-599	1338	725	613
3 Financial Account (3.1 to 3.5)	1259902	1252260	7643	2058523	2110686	-52163
3.1 Direct Investment (3.1A+3.1B)	140546	88268	52278	164679	148458	16220
3.1.A Direct Investment in India	130453	53788	76665	158819	94741	64078
3.1.A.1 Equity and investment fund shares	120800	51450	69350	150237	90780	59457
3.1.A.1.1 Equity other than reinvestment of earnings	79863	51450	28413	105963	90780	15183
3.1.A.1.2 Reinvestment of earnings	40937	0	40937	44274	0	44274
3.1.A.2 Debt instruments	9652	2338	7315	8582	3960	4621
3.1.A.2.1 Direct investor in direct investment enterprises	9652	2338	7315	8582	3960	4621
3.1.B Direct Investment by India	10093	34480	-24387	5860	53718	-47858
3.1.B.1 Equity and investment fund shares	10093	26539	-16446	5860	38647	-32787
3.1.B.1.1 Equity other than reinvestment of earnings	10093	17465	-7372	5860	26638	-20778
3.1.B.1.2 Reinvestment of earnings	0	9073	-9073	0	12009	-12009
3.1.B.2 Debt instruments	0	7941	-7941	0	15071	-15071
3.1.B.2.1 Direct investor in direct investment enterprises	0	7941	-7941	0	15071	-15071
3.2 Portfolio Investment	548685	562376	-13691	1153057	1058474	94583
3.2.A Portfolio Investment in India	543912	556972	-13060	1147577	1051439	96139
3.2.1 Equity and investment fund shares	472831	493254	-20423	997608	931154	66454
3.2.2 Debt securities	71080	63718	7363	149969	120285	29685
3.2.B Portfolio Investment by India	4774	5404	-631	5480	7035	-1555
3.3 Financial derivatives (other than reserves) and employee stock options	30121	52094	-21973	50865	77053	-26187
3.4 Other investment	540550	503623	36927	689922	571362	118560
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	173921	143842	30080	224139	171683	52457
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	619	0	619	7926	0	7926
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	173302	143842	29461	216214	171683	44531
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)	143291	179189	-35898	269228	233414	35814
3.4.3.A Loans to India	140991	175865	-34873	240921	197391	43530
3.4.3.B Loans by India	2300	3324	-1024	28307	36024	-7717
3.4.4 Insurance, pension, and standardized guarantee schemes	337	245	92	448	704	-257
3.4.5 Trade credit and advances	131214	133577	-2364	99631	115980	-16349
3.4.6 Other accounts receivable/payable - other	91787	46770	45017	96475	49580	46895
3.4.7 Special drawing rights	0	0	0	0	0	0
3.5 Reserve assets	0	45899	-45899	0	255339	-255339
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	45899	-45899	0	255339	-255339
4 Total assets/liabilities	1259902	1252260	7643	2058523	2110686	-52163
4.1 Equity and investment fund shares	638957	628987	9970	1210498	1145373	65124
4.2 Debt instruments	529159	530604	-1445	751550	660393	91157
4.3 Other financial assets and liabilities	91787	92669	-883	96475	304919	-208444
5 Net errors and omissions	3250	0	3250	4463	0	4463

Note: P: Preliminary.

No. 42: India's International Investment Position

(US\$ Million)

Item	As on Financial Year/Quarter End							
	2023-24		2023				2024	
			Mar.		Dec.		Mar.	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	1	2	3	4	5	6	7	8
1. Direct investment Abroad/in India	242271	542516	225592	523322	236506	536795	242271	542516
1.1 Equity Capital*	153343	511142	142071	493896	149394	505572	153343	511142
1.2 Other Capital	88927	31374	83521	29426	87112	31223	88927	31374
2. Portfolio investment	10286	283804	13106	243561	10661	269154	10286	283804
2.1 Equity	8518	168679	7449	138958	8438	161206	8518	168679
2.2 Debt	1768	115126	5657	104603	2223	107948	1768	115126
3. Other investment	129328	563664	101420	518847	120558	552330	129328	563664
3.1 Trade credit	33450	118598	27507	124304	31689	120355	33450	118598
3.2 Loan	13578	221964	9256	202334	14845	215009	13578	221964
3.3 Currency and Deposits	52803	154787	33046	141133	44452	149326	52803	154787
3.4 Other Assets/Liabilities	29497	46404	31612	28815	29572	45438	29497	46404
4. Reserves	646419		578449		622452		646419	
5. Total Assets/ Liabilities	1028304	1389984	918567	1285729	990178	1358280	1028304	1389984
6. Net IIP (Assets - Liabilities)		-361680		-367162		-368102		-361680

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
		Jun.	May.	Jun.		Jun.	May.	Jun.
	1	-2	-1	0	5	2	3	4
A. Settlement Systems								
Financial Market Infrastructures (FMIs)								
1 CCIL Operated Systems (1.1 to 1.3)	43.04	3.81	4.07	4.36	259206893	22638088	22018913	22580094
1.1 Govt. Securities Clearing (1.1.1 to 1.1.3)	16.80	1.54	1.60	1.60	170464587	15259736	14632648	15107943
1.1.1 Outright	9.51	0.88	0.98	0.97	13463848	1299039	1363203	1372786
1.1.2 Repo	4.94	0.45	0.43	0.42	76718788	7312076	6669493	6414226
1.1.3 Tri-party Repo	2.35	0.21	0.19	0.21	80281951	6648621	6599952	7320931
1.2 Forex Clearing	24.92	2.17	2.37	2.67	80984671	6854522	6780829	6953169
1.3 Rupee Derivatives @	1.31	0.10	0.10	0.09	7757636	523830	605436	518982
B. Payment Systems								
I Financial Market Infrastructures (FMIs)	-	-	-	-	-	-	-	-
1 Credit Transfers - RTGS (1.1 to 1.2)	2700.16	212.30	249.71	231.84	170886670	14336617	15186947	16037694
1.1 Customer Transactions	2686.04	211.10	248.49	230.72	152406168	12739932	13559606	14570686
1.2 Interbank Transactions	14.12	1.20	1.22	1.12	18480503	1596685	1627340	1467008
II Retail								
2 Credit Transfers - Retail (2.1 to 2.6)	1486106.89	106299.38	156773.59	155567.02	67542859	5151213	6279019	6073917
2.1 AePS (Fund Transfers) @	3.92	0.30	0.31	0.30	261	20	18	16
2.2 APBS \$	25888.17	1875.41	2295.50	2929.34	390743	25772	37499	43676
2.3 IMPS	60053.35	4681.02	5576.99	5167.51	6495652	500482	606167	577794
2.4 NACH Cr \$	16227.27	1294.91	1074.61	1311.11	1525104	109983	132404	113888
2.5 NEFT	72639.50	5097.12	7467.75	7307.34	39136014	3039491	3457995	3331461
2.6 UPI @	1311294.68	93350.61	140358.43	138851.42	19995086	1475464	2044937	2007081
2.6.1 of which USSD @	26.19	2.18	1.62	1.41	352	30	17	15
3 Debit Transfers and Direct Debits (3.1 to 3.3)	18249.53	1453.92	1698.67	1697.73	1687658	129549	167035	171469
3.1 BHIM Aadhaar Pay @	193.59	14.83	19.33	21.07	6112	487	506	581
3.2 NACH Dr \$	16426.49	1296.38	1539.23	1544.59	1678769	128819	166305	170756
3.3 NETC (linked to bank account) @	1629.45	142.71	140.11	132.07	2777	243	225	132
4 Card Payments (4.1 to 4.2)	58469.79	4731.29	5105.17	5003.43	2423563	188284	208520	200081
4.1 Credit Cards (4.1.1 to 4.1.2)	35610.15	2629.05	3601.36	3579.49	1831134	137234	164955	158822
4.1.1 PoS based \$	18614.08	1378.71	1906.58	1895.40	651911	48854	63831	59417
4.1.2 Others \$	16996.08	1250.34	1694.78	1684.10	1179223	88380	101124	99405
4.2 Debit Cards (4.2.1 to 4.2.1)	22859.64	2102.24	1503.82	1423.94	592429	51049	43565	41259
4.2.1 PoS based \$	16477.95	1499.66	1114.38	1063.60	393589	33778	29772	27630
4.2.2 Others \$	6381.69	602.58	389.44	360.33	198840	17271	13793	13629
5 Prepaid Payment Instruments (5.1 to 5.2)	78775.40	6569.82	5496.00	5236.08	283048	23509	16697	15897
5.1 Wallets	63256.69	5303.68	4204.49	4038.05	234353	19762	11566	11298
5.2 Cards (5.2.1 to 5.2.2)	15518.71	1266.13	1291.51	1198.03	48695	3747	5131	4599
5.2.1 PoS based \$	8429.87	681.07	689.94	650.89	11247	1017	1027	946
5.2.2 Others \$	7088.84	585.06	601.57	547.14	37447	2730	4104	3653
6 Paper-based Instruments (6.1 to 6.2)	6632.10	539.36	524.39	484.42	7212333	578306	611518	553834
6.1 CTS (NPCI Managed)	6632.10	539.36	524.39	484.42	7212333	578306	611518	553834
6.2 Others	0.00	-	-	-	-	-	-	-
Total - Retail Payments (2+3+4+5+6)	1648233.71	119593.76	169597.82	167988.69	79149461	6070861	7282789	7015198
Total Payments (1+2+3+4+5+6)	1650933.88	119806.06	169847.53	168220.52	250036131	20407478	22469736	23052892
Total Digital Payments (1+2+3+4+5)	1644301.78	119266.70	169323.14	167736.10	242823799	19829172	21858218	22499058

CURRENT STATISTICS

PART II - Payment Modes and Channels

System	Volume (Lakh)					Value (₹ Crore)				
	FY 2023-24	2023		2024		FY 2023-24	2023		2024	
		Jun.	May.	Jun.	Jun.		Jun.	May.	Jun.	Jun.
	1	-1	0	1	5	3	4	5	5	
A. Other Payment Channels										
1 Mobile Payments (mobile app based) (1.1 to 1.2)	1252599.21	88097.74	134522.56	133652.25	30687088	2243152	3126322	3046393		
1.1 Intra-bank \$	83000.56	6145.85	9224.51	8682.06	5676805	416271	585196	559035		
1.2 Inter-bank \$	1169598.65	81951.89	125298.05	124970.19	25010283	1826881	2541125	2487357		
2 Internet Payments (Netbanking / Internet Browser Based) @ (2.1 to 2.2)	45034.98	3566.29	3771.12	3714.13	102117736	8354717	8705212	9501615		
2.1 Intra-bank @	12033.28	929.63	1010.25	1026.53	53247042	4456179	4276566	4875740		
2.2 Inter-bank @	33001.71	2636.66	2760.86	2687.59	48870694	3898539	4428645	4625875		
B. ATMs										
3 Cash Withdrawal at ATMs \$ (3.1 to 3.3)	66440.72	5577.45	5166.41	5076.57	3259388	274070	260240	255229		
3.1 Using Credit Cards \$	95.80	7.43	8.63	8.29	4648	352	441	426		
3.2 Using Debit Cards \$	66001.01	5540.43	5133.52	5045.81	3241538	272643	258785	253844		
3.3 Using Pre-paid Cards \$	343.90	29.58	24.26	22.47	13202	1074	1014	959		
4 Cash Withdrawal at PoS \$ (4.1 to 4.2)	15.18	2.29	0.33	0.28	148	23	3	3		
4.1 Using Debit Cards \$	15.06	2.29	0.31	0.27	147	23	3	3		
4.2 Using Pre-paid Cards \$	0.12	0.01	0.02	0.02	1	0	0	0		
5 Cash Withdrawal at Micro ATMs @	11754.95	943.77	879.79	973.79	314003	25991	22804	24426		
5.1 AcPS @	11754.95	943.77	879.79	973.79	314003	25991	22804	24426		

PART III - Payment Infrastructures (Lakh)

System	As on March 2024	2023		2024		
		Jun.	May.	Jun.	Jun.	
	1	-1	0	1		
Payment System Infrastructures						
1 Number of Cards (1.1 to 1.2)	10667.22	10645.15	10780.74	10835.23		
1.1 Credit Cards	1018.03	886.82	1033.00	1038.13		
1.2 Debit Cards	9649.19	9758.33	9747.74	9797.10		
2 Number of PPIs @ (2.1 to 2.2)	16743.63	16709.14	14840.92	15051.30		
2.1 Wallets @	13381.80	13409.30	11302.14	11375.61		
2.2 Cards @	3361.82	3299.84	3538.78	3675.69		
3 Number of ATMs (3.1 to 3.2)	2.58	2.59	2.57	2.56		
3.1 Bank owned ATMs \$	2.23	2.23	2.22	2.21		
3.2 White Label ATMs \$	0.35	0.36	0.36	0.35		
4 Number of Micro ATMs @	17.55	14.96	15.62	15.18		
5 Number of PoS Terminals	89.03	80.94	88.04	89.67		
6 Bharat QR @	62.50	56.88	61.21	61.64		
7 UPI QR *	3462.03	2720.15	3299.47	3401.24		

@: 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 –

• 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.

Occasional Series

No. 44: Small Savings

(₹ Crore)

Scheme		2022-23	2023		2024	
			Feb.	Dec.	Jan.	Feb.
			1	2	3	4
1 Small Savings						
	Receipts	173993	11210	16670	16076	14570
	Outstanding	1636935	1599193	1789946	1805716	1819758
1.1 Total Deposits						
	Receipts	125209	8093	12386	11340	10025
	Outstanding	1137451	1113230	1247555	1258895	1268920
1.1.1 Post Office Saving Bank Deposits	Receipts	20680	1170	2279	3014	1520
	Outstanding	209112	200257	213964	216978	218498
1.1.2 Sukanya Samriddhi Yojna	Receipts	29003	1965	2171	2130	2233
	Outstanding	87787	77472	104859	106989	109222
1.1.3 National Saving Scheme, 1987	Receipts	-244	0	0	0	0
	Outstanding	0	0	0	0	0
1.1.4 National Saving Scheme, 1992	Receipts	-20	0	0	0	0
	Outstanding	0	0	0	0	0
1.1.5 Monthly Income Scheme	Receipts	6492	484	1713	1895	1927
	Outstanding	242313	242198	263383	265278	267205
1.1.6 Senior Citizen Scheme 2004	Receipts	17971	1475	2197	2290	2153
	Outstanding	137304	135986	169033	171323	173476
1.1.7 Post Office Time Deposits	Receipts	29155	1814	2429	2379	2632
	Outstanding	280436	278939	297989	300368	303000
1.1.7.1 1 year Time Deposits	Outstanding	125951	125377	135196	136762	138552
1.1.7.2 2 year Time Deposits	Outstanding	9497	9282	11265	11483	11730
1.1.7.3 3 year Time Deposits	Outstanding	7543	7380	8472	8628	8782
1.1.7.4 5 year Time Deposits	Outstanding	137445	136900	143056	143495	143936
1.1.8 Post Office Recurring Deposits	Receipts	21552	1203	1616	-344	-420
	Outstanding	178422	176836	196491	196147	195727
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	288	-18	-19	-24	-20
	Outstanding	1745	1439	1488	1464	1444
1.1.11 PM Care for children	Receipts	332	0	0	0	0
	Outstanding	332	103	348	348	348
1.2 Saving Certificates						
	Receipts	33965	2504	3957	4247	3940
	Outstanding	366317	363564	407244	411185	414597
1.2.1 National Savings Certificate VIII issue	Receipts	10793	658	1213	1581	1446
	Outstanding	165836	164750	177154	178735	180181
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	-1892	0	0	0	0
	Outstanding	0	0	0	0	0
1.2.4 Kisan Vikas Patras - 2014	Receipts	25064	1846	1568	1561	1428
	Outstanding	199624	197646	216509	218070	219498
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		0	1176	1105	1066
	Outstanding		0	15064	16169	17235
1.2.8 Other Certificates	Outstanding	857	1168	-1483	-1789	-2317
1.3 Public Provident Fund						
	Receipts	14819	613	327	489	605
	Outstanding	133167	122399	135147	135636	136241

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
	Mar.	Jun.	Sep.	Dec.	Mar.
	1	2	3	4	5
(A) Total (in ₹. Crore)	9645776	9898751	10383607	10538792	10740389
1 Commercial Banks	36.61	36.58	37.96	37.55	37.66
2 Co-operative Banks	1.64	1.56	1.52	1.49	1.47
3 Non-Bank PDs	0.49	0.73	0.66	0.67	0.66
4 Insurance Companies	25.97	26.21	26.05	26.16	25.98
5 Mutual Funds	2.81	2.69	3.02	3.03	2.90
6 Provident Funds	4.71	4.59	4.42	4.57	4.47
7 Pension Funds	3.98	4.18	4.32	4.44	4.52
8 Financial Institutions	0.98	1.20	0.54	0.55	0.55
9 Corporates	1.62	1.22	1.21	1.33	1.35
10 Foreign Portfolio Investors	1.36	1.59	1.61	1.92	2.34
11 RBI	14.26	13.78	13.06	12.54	12.31
12 Others	5.57	5.67	5.64	5.74	5.79
12.1 State Governments	2.03	2.03	2.04	2.07	2.04

Category	State Governments Securities				
	2023				2024
	Mar.	Jun.	Sep.	Dec.	Mar.
	1	2	3	4	5
(B) Total (in ₹. Crore)	4929079	5050874	5161642	5338587	5646219
1 Commercial Banks	33.91	34.13	33.87	33.90	34.14
2 Co-operative Banks	3.64	3.68	3.60	3.53	3.39
3 Non-Bank PDs	0.62	0.50	0.61	0.63	0.60
4 Insurance Companies	26.80	26.73	26.97	26.64	26.14
5 Mutual Funds	1.94	2.08	1.86	2.00	2.09
6 Provident Funds	21.29	21.19	21.70	22.00	22.35
7 Pension Funds	4.81	4.84	4.82	4.56	4.76
8 Financial Institutions	1.84	1.82	1.65	1.63	1.59
9 Corporates	2.00	1.92	1.87	2.03	2.02
10 Foreign Portfolio Investors	0.02	0.02	0.02	0.03	0.07
11 RBI	0.72	0.70	0.69	0.66	0.63
12 Others	2.42	2.39	2.34	2.37	2.20
12.1 State Governments	0.27	0.27	0.27	0.27	0.25

Category	Treasury Bills				
	2023				2024
	Mar.	Jun.	Sep.	Dec.	Mar.
	1	2	3	4	5
(C) Total (in ₹. Crore)	823313	1012301	925317	849151	871662
1 Commercial Banks	53.92	47.64	56.35	57.18	58.53
2 Co-operative Banks	1.29	1.20	1.20	1.28	1.67
3 Non-Bank PDs	2.85	1.99	0.54	1.70	1.66
4 Insurance Companies	6.11	4.93	5.26	5.50	5.06
5 Mutual Funds	15.30	17.04	12.74	11.21	11.89
6 Provident Funds	0.10	1.46	1.52	0.08	0.15
7 Pension Funds	0.07	0.01	0.01	0.00	0.01
8 Financial Institutions	3.72	7.96	4.10	5.34	7.16
9 Corporates	4.99	4.42	4.00	4.58	4.50
10 Foreign Portfolio Investors	0.40	0.12	0.10	0.07	0.01
11 RBI	0.00	0.00	0.00	0.00	0.00
12 Others	11.25	13.23	14.17	13.06	9.36
12.1 State Governments	7.16	10.33	11.36	9.26	5.88

Note: (-) represents nil or negligible

The Table format is revised since Monthly Bulletin for the month of June 2023.

State Government Securities include special bonds issued under Ujwal DISCOM Assurance Yojana (UDAY).

Bank PDs are clubbed under Commercial Banks. However, they form a 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.

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 June-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	969.34	21	1412.55	21	1810.39	10
2	Arunachal Pradesh	-	-	-	-	-	-
3	Assam	740.99	9	-	-	-	-
4	Bihar	-	-	-	-	-	-
5	Chhattisgarh	-	-	-	-	-	-
6	Goa	-	-	-	-	-	-
7	Gujarat	-	-	-	-	-	-
8	Haryana	347.99	8	296.04	4	-	-
9	Himachal Pradesh	-	-	656.00	1	19.01	1
10	Jammu & Kashmir UT	-	-	798.35	22	332.56	9
11	Jharkhand	-	-	-	-	-	-
12	Karnataka	-	-	-	-	-	-
13	Kerala	324.41	13	1332.96	12	1445.06	7
14	Madhya Pradesh	-	-	-	-	-	-
15	Maharashtra	-	-	-	-	-	-
16	Manipur	13.89	25	152.94	21	70.67	6
17	Meghalaya	160.69	12	64.34	6	-	-
18	Mizoram	21.01	5	-	-	-	-
19	Nagaland	108.54	5	58.78	3	-	-
20	Odisha	-	-	-	-	-	-
21	Puducherry	-	-	-	-	-	-
22	Punjab	1715.30	30	506.41	25	47.60	3
23	Rajasthan	4289.49	19	563.03	6	-	-
24	Tamil Nadu	-	-	-	-	-	-
25	Telangana	779.75	30	1262.77	29	839.68	16
26	Tripura	-	-	-	-	-	-
27	Uttar Pradesh	-	-	-	-	-	-
28	Uttarakhand	381.31	9	602.00	9	630.90	9
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 June 2024			
		Consolidated Sinking Fund (CSF)	Guarantee Redemption Fund (GRF)	Government Securities	Auction Treasury Bills (ATBs)
1	2	3	4	5	
1	Andhra Pradesh	11077	1091	0	0
2	Arunachal Pradesh	2544	6	0	1700
3	Assam	6866	86	0	0
4	Bihar	10439	0	0	9700
5	Chhattisgarh	7477	62	1	5665
6	Goa	1006	438	0	0
7	Gujarat	13788	640	0	14000
8	Haryana	2238	1627	0	0
9	Himachal Pradesh	-	0	0	0
10	Jammu & Kashmir UT	0	0	0	0
11	Jharkhand	2311	0	0	750
12	Karnataka	19448	722	0	47309
13	Kerala	2989	0	0	0
14	Madhya Pradesh	-	1224	0	0
15	Maharashtra	67016	1674	0	0
16	Manipur	67	134	0	0
17	Meghalaya	1222	104	0	0
18	Mizoram	440	61	0	0
19	Nagaland	1713	44	0	0
20	Odisha	17448	1958	112	6574
21	Puducherry	554	0	0	1500
22	Punjab	8808	0	0	0
23	Rajasthan	0	0	129	8100
24	Tamil Nadu	3313	0	0	3470
25	Telangana	7568	1653	0	0
26	Tripura	1173	26	0	325
27	Uttarakhand	4815	202	0	0
28	Uttar Pradesh	8309	-	89	0
29	West Bengal	12466	940	239	0
Total		215096	12693	570	99093

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	
						April		May		June		
		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	7000	4834	14000	11084	6000	4000	27000
2	Arunachal Pradesh	559	389	902	672	-	-96	-	-50	-	-	-146
3	Assam	17100	16105	18500	16000	1000	1000	2000	2000	-	-450	3000
4	Bihar	36800	27467	47612	29910	-	-	-	-	-	-	-
5	Chhattisgarh	2000	-2287	32000	26213	-	-	-	-500	-	-250	-750
6	Goa	1350	500	2550	1560	-	-100	-	-	-	-200	-300
7	Gujarat	43000	28300	30500	11947	-	-	-	-	2000	-1000	2000
8	Haryana	45158	28638	47500	28364	1000	1000	2000	1000	5500	3925	8500
9	Himachal Pradesh	14000	11941	8072	5856	1000	450	700	500	1200	1000	2900
10	Jammu & Kashmir UT	8473	5969	16337	13904	-	-300	2500	2350	2300	2150	4800
11	Jharkhand	4000	-155	1000	-2505	-	-	-	-	-	-	-
12	Karnataka	36000	26000	81000	63003	-	-	-	-1500	-	-1000	-2500
13	Kerala	30839	15620	42438	26638	1000	-1000	5500	3800	3500	2500	10000
14	Madhya Pradesh	40158	26849	38500	26264	-	-	-	-1000	-	-350	-1350
15	Maharashtra	72000	42815	110000	79738	10000	8900	-	-2200	-	-2200	10000
16	Manipur	1422	1147	1426	1076	-	-	200	200	-	-60	200
17	Meghalaya	1753	1356	1364	912	100	100	200	200	200	120	500
18	Mizoram	1315	1129	901	641	-	-20	200	180	71	51	271
19	Nagaland	1854	1199	2551	2016	-	-135	-	-65	300	300	100
20	Odisha	0	-7500	0	-4658	-	-500	-	-	-	-	-500
21	Puducherry	1200	698	1100	475	-	-	-	-	250	150	250
22	Punjab	45500	33660	42386	29517	5500	3800	5700	4900	5500	3658	16700
23	Rajasthan	46057	30110	73624	49718	-	-1000	10500	9000	8000	3688	18500
24	Sikkim	1414	1320	1916	1701	-	-	-	-	-	-	-
25	Tamil Nadu	87000	65722	113001	75970	5000	1000	8000	5500	8000	4750	21000
26	Telangana	40150	30922	49618	39385	4000	3166	4000	916	5000	5000	13000
27	Tripura	0	-645	0	-550	-	-	-	-	-	-	-
28	Uttar Pradesh	55612	1450	97650	85335	-	-2000	-	-1000	-	-1233	-4233
29	Uttarakhand	3200	41797	6300	3800	900	900	-	-	500	500	1400
30	West Bengal	63000	42500	69910	48910	-	-1800	2000	200	3500	2500	5500
	Grand Total	758392	518829	1007058	717140	36500	18199	57500	35515	51821	27549	145821
												81263

- : 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	2020-21				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	583412.7	554437.6	463583.5	679174.4	2280608.2
<i>Per cent of GDP</i>	<i>15.0</i>	<i>11.7</i>	<i>8.5</i>	<i>11.8</i>	<i>11.5</i>
I. Financial Assets	788786.3	592945.3	633317.9	1047276.1	3062325.6
<i>Per cent of GDP</i>	<i>20.3</i>	<i>12.5</i>	<i>11.6</i>	<i>18.2</i>	<i>15.4</i>
<i>of which:</i>					
1. Total Deposits (a+b)	297412.4	278631.7	158172.2	506213.3	1240429.7
(a) Bank Deposits	281191.3	264565.3	147096.0	507719.3	1200571.8
i. Commercial Banks	279010.5	262033.7	143558.6	462689.8	1147292.5
ii. Co-operative Banks	2180.8	2531.6	3537.3	45029.5	53279.3
(b) Non-Bank Deposits	16221.1	14066.4	11076.3	-1506.0	39857.9
<i>of which:</i>					
Other Financial Institutions (i+ii)	11040.9	8886.2	5896.0	-6686.2	19137.0
i. Non-Banking Financial Companies	1441.0	3763.0	3514.8	3521.2	12240.0
ii. Housing Finance Companies	9599.9	5123.2	2381.3	-10207.3	6897.0
2. Life Insurance Funds	124387.9	143462.2	157535.1	142216.5	567601.8
3. Provident and Pension Funds (including PPF)	114496.3	107087.9	105344.6	175769.3	502698.2
4. Currency	202432.7	21286.9	91456.0	66800.5	381976.1
5. Investments	6249.8	-12956.4	67659.3	63624.0	124576.7
<i>of which:</i>					
(a) Mutual Funds	-16021.0	-28837.7	57675.4	51267.0	64083.8
(b) Equity	18599.4	8291.5	5307.1	6333.3	38531.2
6. Small Savings (excluding PPF)	42751.6	54377.4	52095.1	91597.0	240821.1
II. Financial Liabilities	205373.6	38507.7	169734.4	368101.7	781717.4
<i>Per cent of GDP</i>	<i>5.3</i>	<i>0.8</i>	<i>3.1</i>	<i>6.4</i>	<i>3.9</i>
Loans/Borrowings					
1. Financial Corporations (a+b)	205490.3	38624.3	169851.0	368219.1	782184.7
(a) Banking Sector	211058.8	13213.0	139622.0	276579.8	640473.6
<i>of which:</i>					
i. Commercial Banks	211259.3	13213.8	140514.3	240050.4	605037.9
(b) Other Financial Institutions	-5568.6	25411.3	30229.0	91639.4	141711.1
i. Non-Banking Financial Companies	-15450.4	21627.1	15921.2	64881.1	86979.0
ii. Housing Finance Companies	10516.6	2875.1	13048.5	25336.1	51776.2
iii. Insurance Corporations	-634.8	909.2	1259.3	1422.2	2955.9
2. Non-Financial Corporations (Private Corporate Business)	33.8	33.8	33.8	33.0	134.4
3. General Government	-150.4	-150.4	-150.4	-150.4	-601.7

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

(Amount in ₹ Crore)

Item	2021-22				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	370115.8	334234.9	489774.4	503089.0	1696155.6
<i>Per cent of GDP</i>	7.2	6.0	7.9	7.7	7.2
I. Financial Assets	364661.7	527896.1	818355.4	887657.3	2597511.9
<i>Per cent of GDP</i>	7.1	9.4	13.1	13.6	11.1
<i>of which:</i>					
1. Total Deposits (a+b)	-82726.1	204033.6	426977.3	277625.7	824852.1
(a) Bank Deposits	-106428.9	197105.1	422392.9	264882.9	777952.1
i. Commercial Banks	-107940.7	195441.8	418267.0	262326.1	768094.3
ii. Co-operative Banks	1511.8	1663.4	4125.9	2556.8	9857.8
(b) Non-Bank Deposits	23702.8	6928.5	4584.5	12742.8	46900.0
<i>of which:</i>					
Other Financial Institutions (i+ii)	16950.0	170.7	-2178.3	5960.0	20902.3
i. Non-Banking Financial Companies	4972.6	-765.5	73.3	4211.8	8492.2
ii. Housing Finance Companies	11977.3	936.2	-2251.6	1748.2	12410.1
2. Life Insurance Funds	114711.5	127449.8	103248.6	121541.6	466951.5
3. Provident and Pension Funds (including PPF)	127624.0	115463.1	98146.0	221372.4	562605.5
4. Currency	128660.2	-68631.2	62793.3	146845.0	269667.4
5. Investments	24929.6	82305.4	69760.9	50972.1	227967.9
<i>of which:</i>					
(a) Mutual Funds	14573.0	63151.3	37912.2	44963.7	160600.1
(b) Equity	4502.5	13218.5	27808.2	3084.1	48613.3
6. Small Savings (excluding PPF)	50405.2	66218.1	56372.0	68243.2	241238.4
II. Financial Liabilities	-5454.1	193661.2	328581.0	384568.3	901356.3
<i>Per cent of GDP</i>	-0.1	3.5	5.3	5.9	3.8
Loans/Borrowings					
1. Financial Corporations (a+b)	-5562.3	193553.0	328472.8	384460.1	900923.7
(a) Banking Sector	21436.5	138722.6	267950.7	348360.4	776470.2
<i>of which:</i>					
i. Commercial Banks	26978.6	140268.7	265271.5	337009.8	769528.5
(b) Other Financial Institutions	-26998.8	54830.4	60522.2	36099.7	124453.5
i. Non-Banking Financial Companies	-34757.9	28876.8	29476.5	-2163.2	21432.2
ii. Housing Finance Companies	7132.0	24403.8	29494.8	37436.2	98466.8
iii. Insurance Corporations	627.1	1549.8	1550.9	826.7	4554.5
2. Non-Financial Corporations (Private Corporate Business)	33.8	33.8	33.8	33.8	135.1
3. General Government	74.4	74.4	74.4	74.4	297.4

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

(Amount in ₹ Crore)

Item	2022-23				Annual
	Q1	Q2	Q3	Q4	
Net Financial Assets (I-II)	297770.4	293705.1	279460.1	505937.8	1376873.5
Per cent of GDP	4.6	4.5	4.0	7.0	5.1
I. Financial Assets	586920.5	646714.8	750856.7	974558.5	2959050.5
Per cent of GDP	9.0	9.8	10.8	13.6	10.9
of which:					
1. Total Deposits (a+b)	183072.0	315216.2	276593.9	324746.6	1099628.6
(a) Bank Deposits	163162.9	299545.0	256363.7	307491.6	1026563.1
i. Commercial Banks	158613.3	300565.0	248459.8	284968.0	992606.2
ii. Co-operative Banks	4549.6	-1020.1	7903.8	22523.6	33956.9
(b) Non-Bank Deposits	19909.1	15671.3	20230.2	17255.0	73065.5
of which:					
Other Financial Institutions (i+ii)	6314.4	2076.7	6635.6	3660.4	18687.1
i. Non-Banking Financial Companies	4040.2	3267.2	1800.9	5372.2	14480.5
ii. Housing Finance Companies	2274.2	-1190.5	4834.7	-1711.8	4206.6
2. Life Insurance Funds	73669.9	152049.5	167894.1	141206.6	534820.1
3. Provident and Pension Funds (including PPF)	155604.2	132126.0	140204.4	235093.2	663027.7
4. Currency	66438.9	-54579.3	76760.1	148990.2	237609.8
5. Investments	51603.2	48630.6	49879.2	64168.5	214281.5
of which:					
(a) Mutual Funds	35443.5	44484.0	40205.9	58954.5	179087.8
(b) Equity	13560.9	1378.2	6434.1	1664.9	23038.1
6. Small Savings (excluding PPF)	54375.1	51114.5	37367.7	58196.2	201053.5
II. Financial Liabilities	289150.0	353009.7	471396.5	468620.7	1582177.0
Per cent of GDP	4.4	5.4	6.8	6.5	5.8
Loans/Borrowings					
1. Financial Corporations (a+b)	289141.6	353001.2	471388.1	468612.3	1582143.3
(a) Banking Sector	234845.3	263782.5	368167.4	349555.0	1216350.1
of which:					
i. Commercial Banks	230283.8	261265.3	365304.6	331292.5	1188146.3
(b) Other Financial Institutions	54296.3	89218.8	103220.8	119057.3	365793.1
i. Non-Banking Financial Companies	29281.6	54439.6	75878.8	80295.9	239895.9
ii. Housing Finance Companies	22336.7	33031.2	24903.3	36745.8	117017.0
iii. Insurance Corporations	2678.0	1747.9	2438.7	2015.6	8880.3
2. Non-Financial Corporations (Private Corporate Business)	33.7	33.7	33.7	33.7	135.0
3. General Government	-25.3	-25.3	-25.3	-25.3	-101.3

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 2022-23 and revised estimates for 2020-21 and 2021-22.

3. The preliminary estimates for 2022-23 will undergo revision with the release of first revised estimates of national income, consumption expenditure, savings, and capital formation, 2022-23 by the 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-2020	Sep-2020	Dec-2020	Mar-2021
Financial Assets (a+b+c+d+e+f+g+h)	20405824.2	21066027.8	21906338.5	22874301.5
<i>Per cent of GDP</i>	107.2	111.5	114.0	115.4
(a) Bank Deposits (i+ii)	9977865.6	10242430.9	10389526.9	10897246.1
i. Commercial Banks	9192702.5	9454736.2	9598294.8	10060984.6
ii. Co-operative Banks	785163.1	787694.7	791232.1	836261.6
(b) Non-Bank Deposits				
<i>of which:</i>				
Other Financial Institutions	180857.4	189743.6	195639.6	188953.5
i. Non-Banking Financial Companies	51463.0	55226.1	58740.8	62262.0
ii. Housing Finance Companies	129394.4	134517.6	136898.8	126691.5
(c) Life Insurance Funds	4102000.7	4274424.9	4551882.0	4752932.3
(d) Currency	2434693.7	2455980.6	2547436.6	2614237.0
(e) Mutual funds	1343752.0	1443784.4	1648999.0	1730461.0
(f) Public Provident Fund (PPF)	663478.0	671884.3	678997.2	742189.5
(g) Pension Funds	464705.0	494930.0	548913.0	578025.0
(h) Small Savings (excluding PPF)	1238471.7	1292849.1	1344944.2	1370257.1
Financial Liabilities (a+b)	7190710.8	7229335.1	7399186.1	7767405.3
<i>Per cent of GDP</i>	37.8	38.3	38.5	39.2
Loans/Borrowings				
(a) Banking Sector	5728735.3	5741948.3	5881570.2	6158150.0
<i>of which:</i>				
i. Commercial Banks	5226482.2	5239696.0	5380210.4	5620260.7
ii. Co-operative Banks	500870.2	500865.3	499968.8	536494.1
(b) Other Financial Institutions	1461975.5	1487386.9	1517615.9	1609255.3
<i>of which:</i>				
i. Non-Banking Financial Companies	687643.6	709270.7	725191.9	790073.0
ii. Housing Finance Companies	673118.3	675993.4	689041.8	714377.9
iii. Insurance Corporations	101213.7	102122.8	103382.2	104804.4

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

(Amount in ₹ Crore)

Item	Jun-2021	Sep-2021	Dec-2021	Mar-2022
Financial Assets (a+b+c+d+e+f+g+h)	23318920.4	23991428.3	24700622.2	25435684.2
<i>Per cent of GDP</i>	110.7	109.3	108.7	108.4
(a) Bank Deposits (i+ii)	10790817.3	10987922.4	11410315.3	11675198.2
i. Commercial Banks	9953043.9	10148485.7	10566752.7	10829078.8
ii. Co-operative Banks	837773.4	839436.7	843562.6	846119.4
(b) Non-Bank Deposits				
<i>of which:</i>				
Other Financial Institutions	205903.4	206074.1	203895.8	209855.7
i. Non-Banking Financial Companies	67234.6	66469.1	66542.3	70754.2
ii. Housing Finance Companies	138668.8	139605.0	137353.4	139101.6
(c) Life Insurance Funds	4929725.2	5142278.8	5213527.2	5357350.2
(d) Currency	2742897.3	2674266.1	2737059.4	2883904.4
(e) Mutual funds	1855000.1	2064363.5	2126112.0	2152140.5
(f) Public Provident Fund (PPF)	757397.8	762264.0	767287.3	834147.6
(g) Pension Funds	616517.0	667379.0	699173.0	736592.0
(h) Small Savings (excluding PPF)	1420662.3	1486880.4	1543252.3	1586495.5
Financial Liabilities (a+b)	7755119.8	7868215.0	8256715.7	8668329.0
<i>Per cent of GDP</i>	36.8	35.9	36.3	36.9
Loans/Borrowings				
(a) Banking Sector	6172863.3	6231128.1	6559106.7	6934620.2
<i>of which:</i>				
i. Commercial Banks	5640516.1	5700327.0	6025626.4	6389789.3
ii. Co-operative Banks	530937.1	529376.2	532040.6	543376.3
(b) Other Financial Institutions	1582256.5	1637086.9	1697609.1	1733708.8
<i>of which:</i>				
i. Non-Banking Financial Companies	755315.1	784191.9	813668.4	811505.2
ii. Housing Finance Companies	721510.0	745913.7	775408.5	812844.7
iii. Insurance Corporations	105431.4	106981.2	108532.1	109358.8

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

(Amount in ₹ Crore)

Item	Jun-2022	Sep-2022	Dec-2022	Mar-2023
Financial Assets (a+b+c+d+e+f+g+h)	25689017.4	26240728.5	27208717.9	28083947.0
<i>Per cent of GDP</i>	<i>103.2</i>	<i>101.5</i>	<i>102.4</i>	<i>103.1</i>
(a) Bank Deposits (i+ii)	11911196.2	11956360.9	12421907.5	12701761.3
i. Commercial Banks	11060527.2	11106712.0	11564354.7	11821685.0
ii. Co-operative Banks	850669.0	849648.9	857552.8	880076.4
(b) Non-Bank Deposits				
<i>of which:</i>				
Other Financial Institutions	216170.2	218246.9	224882.5	228542.9
i. Non-Banking Financial Companies	74794.4	78061.6	79862.5	85234.7
ii. Housing Finance Companies	141375.8	140185.3	145020.0	143308.2
(c) Life Insurance Funds	5325967.3	5559681.9	5786592.6	6038630.4
(d) Currency	2950343.2	2895763.9	2972524.0	3121514.2
(e) Mutual funds	2048097.3	2260209.7	2355315.8	2367792.5
(f) Public Provident Fund (PPF)	851913.4	858591.1	864730.6	939814.6
(g) Pension Funds	744459.2	799889.0	853412.0	898342.0
(h) Small Savings (excluding PPF)	1640870.6	1691985.1	1729352.9	1787549.1
Financial Liabilities (a+b)	8957470.6	9310471.8	9781859.9	10253472.2
<i>Per cent of GDP</i>	<i>36.0</i>	<i>36.0</i>	<i>36.8</i>	<i>37.6</i>
Loans/Borrowings				
(a) Banking Sector	7169465.5	7433248.0	7801415.3	8153970.3
<i>of which:</i>				
i. Commercial Banks	6620073.1	6881338.5	7246643.0	7580935.6
ii. Co-operative Banks	547894.8	550354.8	553201.4	571339.8
(b) Other Financial Institutions	1788005.1	1877223.8	1980444.6	2099501.9
<i>of which:</i>				
i. Non-Banking Financial Companies	840786.9	895226.5	971105.3	1051401.1
ii. Housing Finance Companies	835181.3	868212.5	893115.8	929861.7
iii. Insurance Corporations	112036.9	113784.8	116223.5	118239.1

Note : 1. Data as ratios to GDP have been calculated based on the Provisional Estimates of National Income 2022-23, released by NSO on May 31, 2023.

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://dbie.rbi.org.in>.

Detailed explanatory notes are available in the relevant press releases issued by RBI and other publications/releases of the Bank such as **Handbook of Statistics on the Indian Economy**.

Recent Publications of the Reserve Bank of India

Name of Publication	Price	
	India	Abroad
1. Reserve Bank of India Bulletin 2024	₹350 per copy ₹250 per copy (concessional rate*) ₹4,000 (one year subscription) ₹3,000 (one year concessional rate*)	US\$ 15 per copy US\$ 150 (one-year subscription) (inclusive of air mail courier charges)
2. Handbook of Statistics on the Indian States 2022-23	₹550 (Normal) ₹600 (inclusive of postage)	US\$ 24 (inclusive of air mail courier charges)
3. Handbook of Statistics on the Indian Economy 2022-23	₹600 (Normal) ₹650 (inclusive of postage) ₹450 (concessional) ₹500 (concessional with postage)	US\$ 50 (inclusive of air mail courier charges)
4. State Finances - A Study of Budgets of 2023-24	₹600 per copy (over the counter) ₹650 per copy (inclusive of postal charges)	US\$ 24 per copy (inclusive of air mail courier charges)
5. Report on Currency and Finance 2023-24	₹575 per copy (over the counter) ₹625 per copy (inclusive of postal charges)	US\$ 22 per copy (inclusive of air mail courier charges)
6. Reserve Bank of India Occasional Papers Vol. 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. 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 (<http://dbie.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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