II ECONOMIC REVIEW

The Indian economy exhibited resilience during 2024-25, supported by robust macroeconomic fundamentals and proactive policy measures, amidst persisting geopolitical tensions and geoeconomic fragmentation. Headline inflation moderated, although the pace of disinflation was impeded by elevated and volatile food inflation. Deposit and credit exhibited double digit growth. Fiscal consolidation continued both at the centre and state level. The continued strength of the external sector, as reflected in adequate forex reserves and modest current account deficit, supported macroeconomic and financial stability.

II.1.1 The global economic expansion was steady in 2024 *albeit* uneven, amidst geopolitical tensions, geoeconomic fragmentation and heightened trade tensions. Financial conditions turned less restrictive as major central banks embarked on monetary policy easing. Global GDP grew by 3.3 per cent in 2024 (3.5 per cent a year ago)[1]. Global inflation eased to 5.7 per cent in 2024 from 6.6 per cent a year ago as the effect of monetary tightening took hold along with the easing of supply chain pressures; however, it was still above the pre-pandemic average, with elevated services inflation persisting in some major advanced economies. Pandemic-induced fiscal policy measures and gradual fiscal consolidation continued to exert upward pressure on the global public debt-GDP ratio, which is expected to approach 100 per cent by 2030[2]. Global goods and services trade volume growth recovered to 3.8 per cent in 2024 from 1.0 per cent in 2023[3], supported by strong services trade growth and normalising of supply chains. Global financial markets exhibited bouts of volatility over inflated valuations, uncertain trajectory of monetary policy, disinflation losing pace, rising trade tensions and geopolitical risks. Sovereign bond yields softened in the first half of 2024 to rise again during the second half of the year. The US dollar remained firm through the year, putting downward pressure on other advanced economy (AE) and emerging market economy (EME) currencies.

II.1.2 Against this challenging global economic landscape, the Indian economy remained resilient, supported by robust macroeconomic fundamentals and proactive policy measures. Although real gross domestic product (GDP) growth moderated to 6.5 per cent[4] in 2024-25, India remained the fastest growing large economy. Economic activity was bolstered by an improvement in consumption demand and net exports on the expenditure side and buoyant services sector and recovery in agricultural production on the supply side.

1 World Economic Outlook (WEO), April 2025, International Monetary Fund (IMF).

2 Fiscal Monitor, April 2025, IMF.

3 WEO, April 2025, IMF.

4 Refer to footnote 3 of Chapter I of this Report.

II.1.3 Headline inflation moderated further during 2024-25. While food inflation remained volatile and elevated, core disinflation in both goods and services and deflation in fuel contributed to softening of headline inflation, paving the way for progressive alignment of headline inflation with the target.

II.1.4 Both central and state governments pursued fiscal consolidation during 2024-25. The tax receipts of both central and state governments remained robust. On the capital expenditure front, the central government and states recorded modest growth on a year-on-year basis.

II.1.5 Domestic financial markets broadly evolved in an orderly manner during 2024-25. Money market rates largely remained range-bound, and generally aligned with the policy repo rate even as system liquidity oscillated between surplus and deficit conditions. Issuances of certificates of deposit (CDs) increased as credit growth remained robust, although there was narrowing of the gap between credit and deposit growth. Sovereign bond yields softened steadily in H1:2024-25 on fiscal consolidation, inclusion of Indian government bonds (IGBs) in major global bond indices and decline in crude oil prices. However, they exhibited two-way movements in the latter half of the year and fell sharply after the Reserve Bank initiated the policy easing cycle in the February policy meeting. Equity market registered strong gains in the first half of the year before correcting in H2:2024-25. A modest current account deficit and adequate forex reserves imparted resilience to the external sector even as capital flows exhibited volatility.

II.1.6 Against this backdrop, the rest of the chapter is structured into six sections. An analysis of the real economy is presented in section 2 followed by that of inflation and its drivers in section 3. The developments in monetary aggregates and financial markets are presented in sections 4 and 5, respectively. The evolution of government finances (centre and states) is discussed in section 6, and external sector dynamics are covered in section 7.

II.2 THE REAL ECONOMY

II.2.1 The Indian economy exhibited resilience in 2024-25, supported by robust macroeconomic fundamentals and proactive policy measures. Economic activity recovered in H2:2024-25 from the trough in Q2:2024-25, supported by buoyant rural demand, recovery in government expenditure, improved agriculture sector and resilient services sector activity. The financial system remains sound and well-capitalised, underpinned by the healthy balance sheets of financial institutions and corporates.

II.2.2 An assessment of aggregate demand and its major components is etched out in sub-section 2. The developments in aggregate supply conditions in terms of the performance of agriculture, industry and services are presented in sub-section 3. Employment and labour market dynamics are discussed in sub-section 4, with concluding observations in sub-section 5.

2. Aggregate Demand

II.2.3 Aggregate demand – measured by GDP at constant prices – is estimated to have grown by 6.5 per cent in 2024-25, as compared with 9.2 per cent a year ago (Table II.2.1 and Appendix Table 1). While growth in consumption expenditure and export demand accelerated during the year, that in fixed investment recorded a moderation (Appendix Table 2). In terms of

Table II.2.1: Real GDP Growth

(Per cent)

Component	2020-21	2021-22	2022-23	2023-24	2024-25
1	2	3	4	5	6
I. Total Consumption Expenditure	**-4.6**	**9.8**	**7.0**	**5.9**	**7.1**
Private	-5.3	11.7	7.5	5.6	7.6
Government	-0.8	0.0	4.3	8.1	3.8
II. Gross Capital Formation	**-10.6**	**25.4**	**3.5**	**7.3**	**5.8**
Gross Fixed Capital Formation	-7.1	17.5	8.4	8.8	6.1
Change in Stocks	-76.4	525.4	24.3	53.4	4.3
Valuables	29.9	32.5	-16.9	14.4	1.0
III. Net Exports					
Exports	-7.0	29.6	10.3	2.2	7.1
Imports	-12.6	22.1	8.9	13.8	-1.1
IV. GDP	**-5.8**	**9.7**	**7.6**	**9.2**	**6.5**

Source: NSO.

Chart II.2.1: Real GDP Growth - Quarterly

Y-o-Y: Year-on-Year. Q-o-Q: Quarter-on-Quarter. MA: Moving Average. SAAR: Seasonally Adjusted Annualised Rate.
Source: NSO and RBI staff estimates.

quarterly trajectory, real GDP rose (y-o-y) by 6.5 per cent in Q1:2024-25; growth softened to 5.6 per cent in Q2, *inter alia*, on excess rainfall which dampened mining output and electricity demand and restrained government expenditure[5]. The economy, however, picked up momentum in Q3 to grow by 6.2 per cent (Chart II.2.1).

Consumption

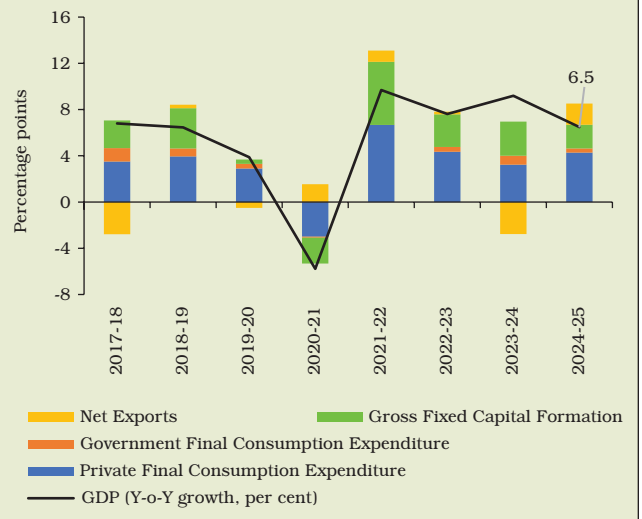
II.2.4 Growth in private final consumption expenditure (PFCE) – the main component of aggregate demand – improved to 7.6 per cent in 2024-25, buoyed by rural consumption demand even though urban demand exhibited some moderation. The share of PFCE in real GDP increased to 56.7 per cent in 2024-25. Good agricultural performance boosted rural demand as seen from its proximate indicators, *viz.,* sales of two-wheelers, motorcycles and tractors, and volume growth of fast-moving consumer goods (FMCG) companies in rural areas. Urban demand, after remaining the driver of post-pandemic consumption, lost pace as reflected in indicators such as consumer non-durables, retail passenger vehicle sales and FMCG volumes in urban areas. Government final consumption expenditure (GFCE) grew at a modest 3.8 per cent in 2024-25, following a robust expansion of 8.1 per cent during 2023-24. With exports growth outpacing that of imports, net exports contributed positively to GDP growth (Chart II.2.2).

Investment and Saving

II.2.5 The rate of gross domestic investment in the Indian economy, measured by the ratio of gross capital formation (GCF) to GDP at current prices, declined to 31.4 per cent in 2023-24 from

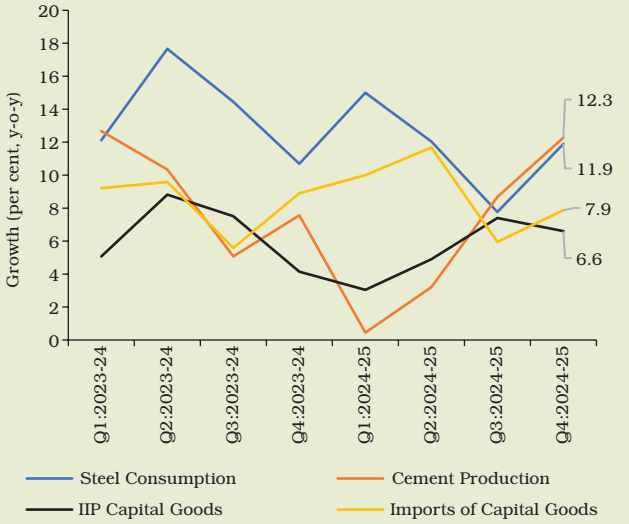
[5] In H1:2024-25, the central government's revenue expenditure grew by 4.2 per cent, with capital expenditure contracting by 15.4 per cent. For state governments (22 states), while revenue expenditure increased by 10.2 per cent, capital expenditure contracted by 6.9 per cent.

Chart II.2.2: Weighted Contribution to GDP Growth



Note: Component-wise contributions do not add up to the growth rate as change in stocks, valuables and statistical discrepancies are not included.
Source: NSO.

Chart II.2.3: Indicators of Investment Demand



Source: Joint Plant Committee, Office of Economic Adviser, NSO and Directorate General of Commercial Intelligence and Statistics (DGCI&S).

32.6 per cent in the preceding year, wholly due to a reduction in net capital inflow from the rest of the world (ROW), which fell to 0.7 per cent of GDP in 2023-24 from 2.0 per cent in the previous year. Available information for 2024-25 indicates an easing in growth of constituents of GCF. Growth in gross fixed capital formation (GFCF) – a primary component of GCF – moderated to 6.1 per cent in 2024-25 from 8.8 per cent in the previous year. It may be noted that government capital outlay (Centre and states[6] combined) declined by 2.7 per cent (y-o-y) during 2024-25 (up to February 2025) as compared with a growth of 31.2 per cent in the corresponding period of 2023-24. The softening in GFCF was mirrored in its key coincident indicators, including steel consumption, cement production, and production and imports of capital goods (Chart II.2.3). Seasonally adjusted capacity utilisation (CU) of the manufacturing sector at 75.3 per cent in Q3:2024-25 was higher than the preceding quarter and its level in the corresponding quarter a year ago[7]. As per the results of the Reserve Bank's 109th industrial outlook survey (IOS), manufacturing firms reported an improvement in demand conditions in Q4:2024-25.

II.2.6 Gross domestic saving as per cent to gross national disposable income (GNDI) remained steady at 30.3 per cent in 2023-24 primarily due to a decline in general government's dissaving. Further, as against the increase in household liabilities to 6.1 per cent of GNDI, the gross financial saving of households increased to 11.2 per cent of GNDI in 2023-24 from 10.7 per cent in the previous year. Resultantly, household financial saving (net) improved to 5.1 per cent of GNDI in 2023-24 from 4.9 per cent in the previous year (Table II.2.2 and Appendix Table 3).

6 Data pertain to 20 states.

7 Based on order books, inventories and capacity utilisation survey (OBICUS) of the Reserve Bank.

Table II.2.2: Financial Saving of Household Sector

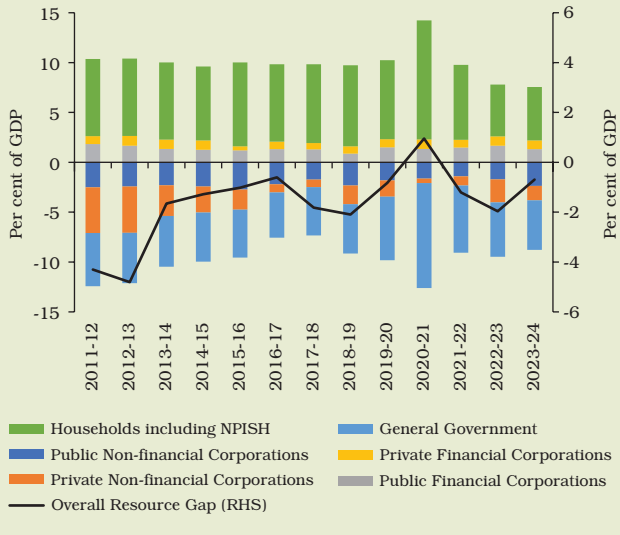
(Per cent of GNDI)

Item	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8	9	10	11
A. Gross Financial Saving	**9.9**	**10.7**	**10.4**	**11.9**	**11.8**	**11.4**	**15.2**	**10.9**	**10.7**	**11.2**
of which:										
1. Currency	1.0	1.4	-2.1	2.8	1.4	1.4	1.9	1.1	0.9	0.4
2. Deposits	4.8	4.6	6.3	3.0	4.2	4.3	6.2	3.5	4.1	4.5
3. Shares and Debentures	0.2	0.2	1.1	1.0	0.9	0.5	0.5	0.9	0.8	0.9
4. Claims on Government	0.0	0.5	0.7	0.9	1.1	1.3	1.3	1.1	0.8	1.1
5. Insurance Funds	2.4	1.9	2.3	2.0	2.0	1.7	2.8	2.0	2.0	1.9
6. Provident and Pension Funds	1.5	2.1	2.1	2.1	2.1	2.2	2.5	2.3	2.3	2.4
B. Financial Liabilities	**3.0**	**2.7**	**3.0**	**4.3**	**4.0**	**3.8**	**3.7**	**3.8**	**5.8**	**6.1**
C. Net Financial Saving (A-B)	**6.9**	**7.9**	**7.3**	**7.5**	**7.8**	**7.6**	**11.6**	**7.2**	**4.9**	**5.1**

GNDI: Gross National Disposable Income.
Note: Figures may not add up to total due to rounding off of numbers.
Source: NSO and RBI staff estimates.

II.2.7 The saving-investment gap narrowed during 2023-24, reflecting a reduced drawdown by the general government, weaker investment demand from households and non-financial corporations, and moderation in savings by financial corporations (Chart II.2.4).

Chart II.2.4: Sectoral Resource Gap



NPISH: Non-profit Institutions Serving Households.
Source: NSO and RBI staff estimates.

3. Aggregate Supply

II.2.8 Aggregate supply – measured by real gross value added (GVA) at basic prices – expanded by 6.4 per cent in 2024-25 as compared with 8.6 per cent a year ago. While industrial activity slowed partly due to an unfavourable base and services sector growth moderated, an improvement in agriculture helped sustain the momentum (Table II.2.3 and Chart II.2.5).

Agriculture and Allied Activities

II.2.9 Agriculture and allied sectors recovered during 2024-25, supported by an above normal south-west monsoon (SWM). The overall SWM rainfall in 2024 (June-September) was 108 per cent[8] of the long-period average (LPA) at the all-India level as against a deficit of six per cent in 2023 (Chart II.2.6a). Its onset over Kerala on May 30 was ahead of the usual date of June 1, and it progressed well to cover the entire country

[8] As per the India Meteorological Department (IMD), normal rainfall range is 96-104 per cent of LPA.

Table II.2.3: Real GVA Growth

(Per cent)

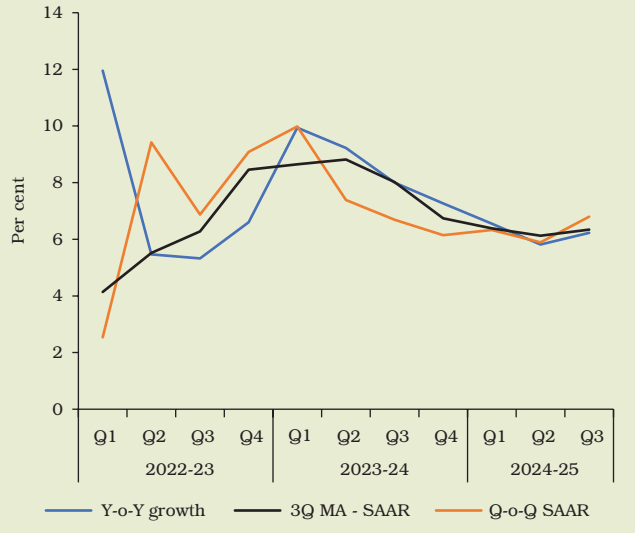
Sector	2020-21	2021-22	2022-23	2023-24	2024-25
1	2	3	4	5	6
I. Agriculture, Forestry and Fishing	**4.0**	**4.6**	**6.3**	**2.7**	**4.6**
II. Industry	**1.1**	**9.6**	**0.0**	**11.0**	**4.3**
II.1 Mining and Quarrying	-8.2	6.3	3.4	3.2	2.8
II.2 Manufacturing	3.1	10.0	-1.7	12.3	4.3
II.3 Electricity, Gas, Water Supply and Other Utility Services	-4.2	10.3	10.8	8.6	6.0
III. Services	**-7.9**	**10.6**	**10.2**	**9.2**	**7.5**
III.1 Construction	-4.6	19.9	9.1	10.4	8.6
III.2 Trade, Hotels, Transport, Communication and Services Related to Broadcasting	-19.9	15.2	12.3	7.5	6.4
III.3 Financial, Real Estate and Professional Services	1.9	5.7	10.8	10.3	7.2
III.4 Public Administration, Defence and Other Services	-7.6	7.5	6.7	8.8	8.8
IV. GVA at Basic Prices	**-4.1**	**9.4**	**7.2**	**8.6**	**6.4**

Source: NSO and RBI staff estimates.

on July 2, six days ahead of the normal date. The SWM rainfall over the monsoon core zone, which consists of most of the rainfed agriculture regions in the country, stood at 122 per cent of LPA.

II.2.10 Above-normal SWM helped replenish reservoir levels to 88 per cent of the capacity by the end of the SWM season from a five-year low of 20 per cent in June 2024 (Chart II.2.6b).

Chart II.2.5: Real GVA Growth - Quarterly

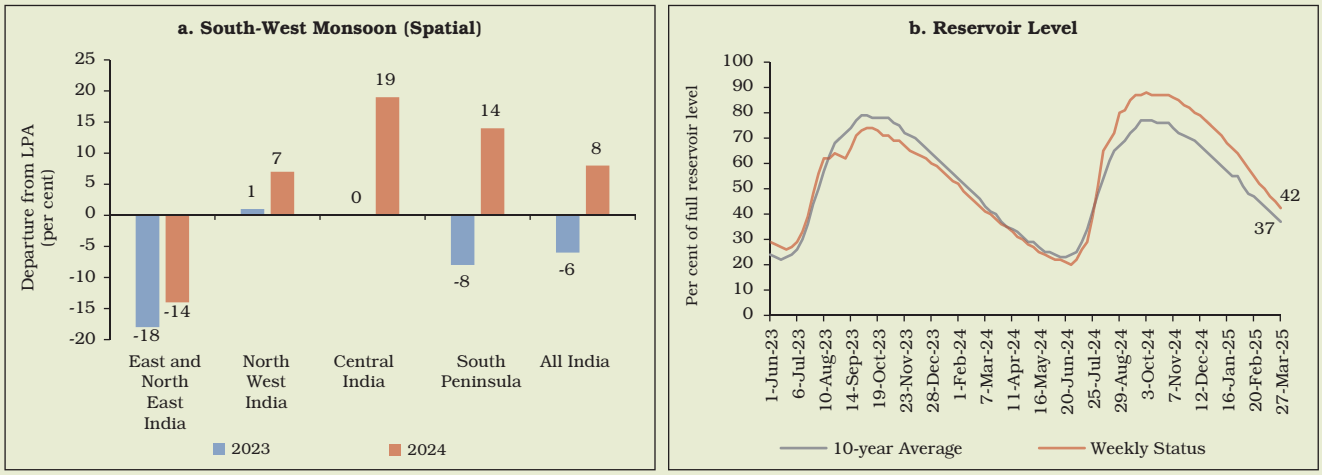


SAAR - Seasonally Adjusted Annualised Rate. MA: Moving Average.
Source: NSO and RBI staff estimates.

II.2.11 Satisfactory progress of SWM and comfortable reservoir levels aided the expansion of the area under foodgrains and oilseeds (*kharif* and *rabi*) by 2.7 per cent during the year. Accordingly, the second advance estimates (SAE) of agricultural crops placed foodgrains production during 2024-25 (*kharif* and *rabi*) at 3,309.2 lakh tonne, 4.8 per cent higher than the final estimates of 2023-24 (Table II.2.4). The year was marked with the record production of rice, wheat, maize, groundnut and soybean. According to the first advance estimates (FAE), the output of horticultural crops during 2024-25 was placed at 3,620.9 lakh tonne, 2.1 per cent higher than the final estimates (FE) of 2023-24, driven by higher production of onion and potato.

II.2.12 The government announced an increase in minimum support prices (MSP) for major

Chart II.2.6: Rainfall and Reservoir Levels



Source: India Meteorological Department (IMD) and Central Water Commission (CWC), GoI.

kharif and *rabi* crops for 2024-25 in a range of 1.4 to 12.7 per cent, ensuring a return of at least 50 per cent over the cost of production[9]. Wheat and paddy MSPs provide 105 per cent and 50 per cent returns over the cost of production, respectively. The Union Budget 2025-26 has focused on areas such as enhancing productivity and sustainability in agriculture and improving agricultural infrastructure.

II.2.13 The overall public stock of foodgrains held by the Food Corporation of India (FCI) stood at 749 lakh tonne (as at end-March 2025), with

Table II.2.4: Agricultural Crop Production 2024-25*

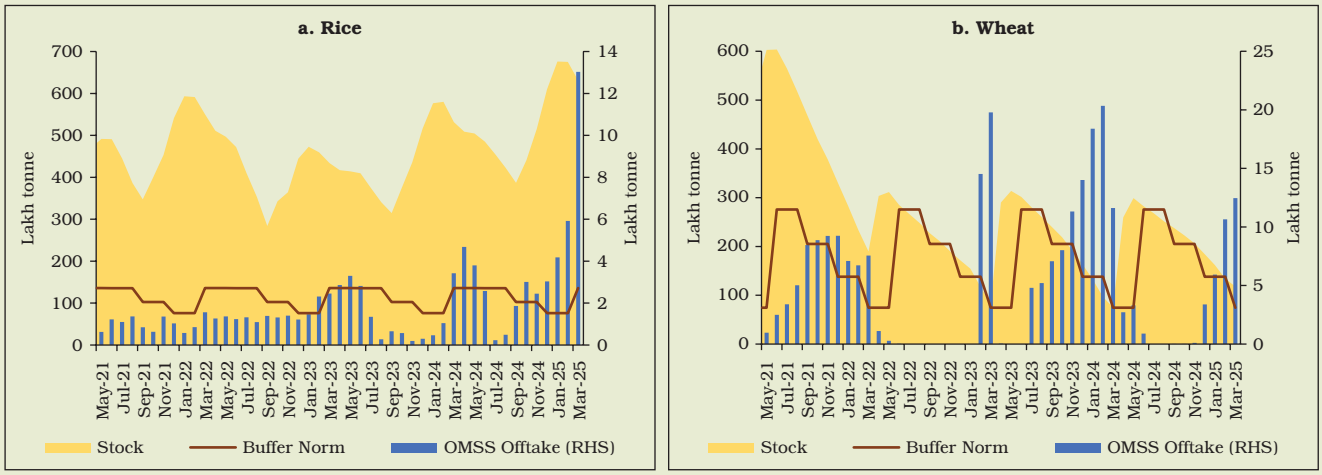
(Lakh tonne)

Crop	2023-24 Final Estimates (FE)	2024-25 Second Advance Estimates (SAE)	2024-25 (SAE) Variation over 2023-24 Final Estimates (per cent)
1	2	3	4
1. Foodgrains	3,157.7	3,309.2	4.8
Rice	1,278.6	1,364.4	6.7
Wheat	1,132.9	1,154.3	1.9
Nutri/Coarse Cereals	524.5	560.3	6.8
Pulses	221.7	230.2	3.8
Tur	34.2	35.1	2.8
Gram	110.4	115.4	4.5
Urad	20.9	18.0	-14.0
Moong	12.6	16.1	28.0
2. Oilseeds	384.4	416.7	8.4
3. Cotton#	325.2	294.3	-9.5
4. Jute and Mesta##	96.9	86.2	-11.0
5. Sugarcane	4,531.6	4,350.8	-4.0

*: *Kharif* and *Rabi* crops (excluding summer crops). #: Lakh bales of 170 kg each. ##: Lakh bales of 180 kg each.
Source: Ministry of Agriculture and Farmers Welfare, GoI.

[9] Actual paid out cost *plus* imputed value of family labour (A2+FL).

Chart II.2.7: Monthly Position of Stock, Offtake and Buffer Norm



Source: Food Corporation of India, Ministry of Consumer Affairs, Food and Public Distribution, GoI.

rice stock of 631 lakh tonne (4.6 times the buffer requirement) and wheat stock at 118 lakh tonne (1.6 times the buffer requirement) [Chart II.2.7]. The government relaxed the export restrictions on rice on improved supply conditions while it undertook offloading of wheat under open market sales scheme (OMSS) to moderate wheat prices for consumers.

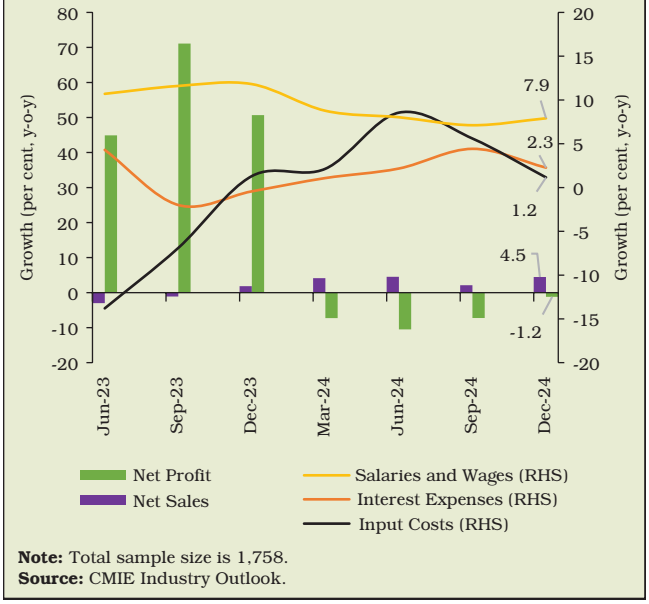
Industrial Sector

II.2.14 Industrial sector GVA growth eased to 4.3 per cent in 2024-25 from 11.0 per cent in the preceding year (Table II.2.3). Manufacturing sector, which accounts for 80 per cent of the industrial sector also moderated to 4.3 per cent in 2024-25 over a high base of 12.3 per cent in 2023-24. This was mirrored in a slowdown of profitability in the corporate manufacturing sector (Chart II.2.8).

II.2.15 Industrial output, as measured by the index of industrial production (IIP), moderated during 2024-25 (Chart II.2.9a). Within the manufacturing sector, 17 of 23 industry groups recorded expansion (y-o-y). As per the use-based classification, all categories of industries except consumer non-durables recorded growth (Chart II.2.9b).

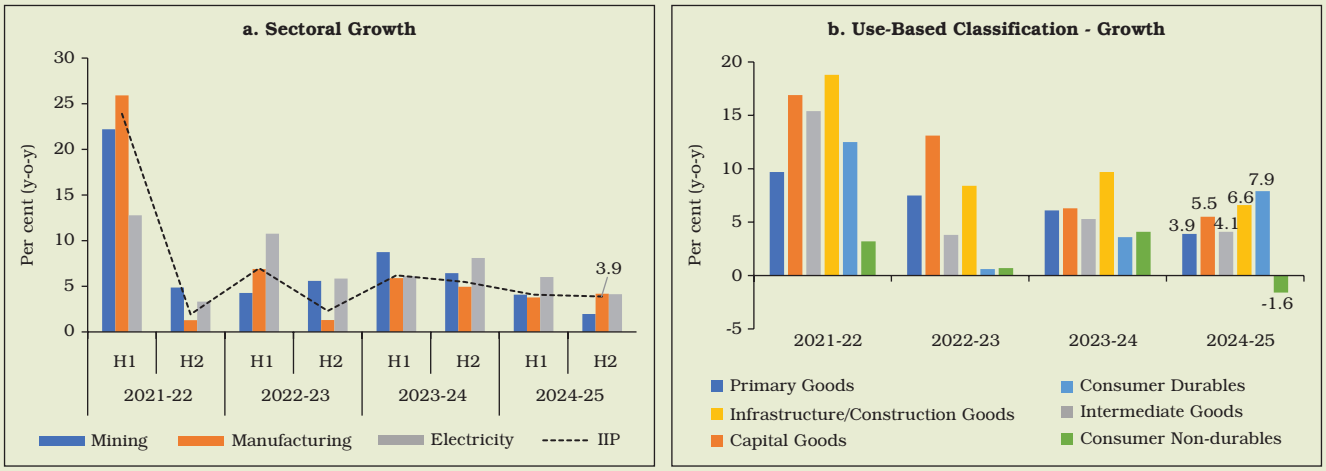
II.2.16 The production linked incentive (PLI) scheme is helping to steer growth across several key manufacturing industries and placing the country as a part of the global value chain through production and exports. By end-

Chart II.2.8: Organised Manufacturing Firms



Note: Total sample size is 1,758.
Source: CMIE Industry Outlook.

Chart II.2.9: Index of Industrial Production



Source: MoSPI, GoI.

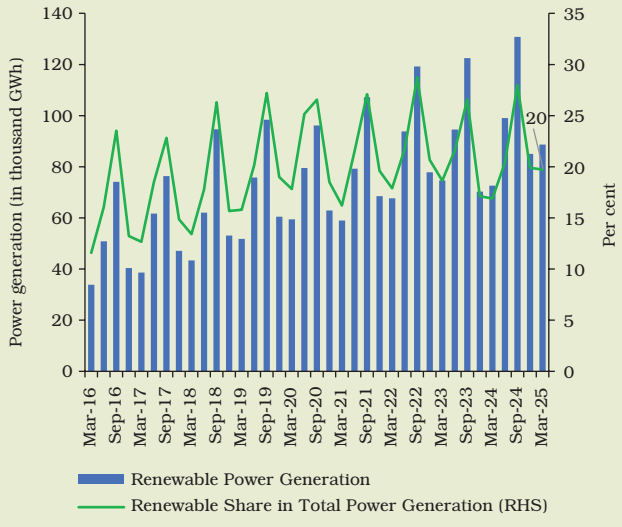
November 2024, actual investments of around ₹1.61 lakh crore have been realised, resulting in production and sales of around ₹14 lakh crore, over 11.5 lakh jobs (direct and indirect) and more than ₹5.3 lakh crore of exports in key sectors such as electronics, pharmaceuticals, and food processing[10]. The government has launched the second edition of the PLI scheme for specialty steel in January 2025[11].

II.2.17 Renewable energy (including large hydro), which accounts for around 20.0 per cent of the total power generation, recorded a healthy growth of 12.2 per cent (y-o-y) during 2024-25 as compared to a contraction of 1.6 per cent in the previous year (Chart II.2.10). As at end-March 2025, India's renewable energy capacity stood at 220.1 gigawatts (GW) [46.3 per cent of the total installed capacity].

Services Sector

II.2.18 Growth in the services sector softened in H1:2024-25 due to a broad-based moderation across its constituents. Proximate indicators of the services sector, such as GST E-way bills,

Chart II.2.10: Renewable Power Generation



GWh: Gigawatt hour.
Source: Central Electricity Authority.

[10] 'PLI scheme incentivises domestic manufacturing, increases production, creates new jobs and boosts exports', Press Information Bureau (PIB), March 22, 2025.

[11] 'PLI Scheme 1.1 Launched by Union Steel and Heavy Industries Minister', PIB, January 6, 2025.

commercial vehicle sales, aviation cargo and passenger traffic have remained firm in H2 (Table II.2.5).

II.2.19 India's construction sector exhibited a mixed picture as steel consumption slowed while cement production recovered during H2. Housing

Table II.2.5: High Frequency Indicators - Growth Rate

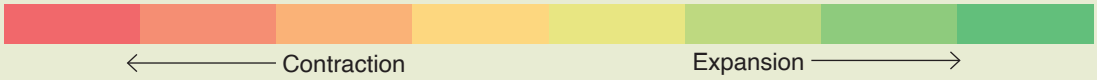
(Per cent, y-o-y)

	2023-24				2024-25			
Indicators	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9
Industry								
Index of Industrial Production	4.8	7.8	6.1	5.1	5.5	2.7	4.4	3.6
Eight Core Industries	6.0	10.5	8.4	5.8	6.3	2.4	5.4	4.4
Electricity Demand (Energy Met)	0.7	11.7	25.4	7.9	11.6	1.1	6.4	-27.5
Production of Passenger Vehicles	6.7	7.3	5.0	9.4	6.2	-0.5	7.4	6.4
Production of Two Wheelers	1.3	-1.5	19.0	26.4	19.6	12.5	8.4	5.8
Production of Three Wheelers	24.3	19.8	14.0	9.0	9.2	6.3	9.4	9.5
Urban Demand								
Domestic Air Passenger Traffic	19.1	23.0	9.1	5.2	5.6	7.2	11.4	12.0
Passenger Vehicle Sales	9.6	5.8	8.6	10.8	3.5	-1.3	5.1	3.6
Agriculture / Rural Demand								
Domestic Sales of Tractors	-1.9	-5.8	-4.9	-22.9	0.5	0.7	13.5	23.4
Two-Wheeler Sales	11.2	-1.6	22.6	24.9	20.4	12.6	3.0	1.4
Three-Wheeler Sales	89.6	62.6	36.0	7.8	13.7	6.7	0.2	8.0
MGNREGA: Work Demand (Persons)	-0.9	14.7	-0.2	-8.9	-14.1	-18.0	0.5	5.4
Transport								
Commercial Vehicle Sales	-3.5	6.8	3.7	-3.6	3.5	-10.9	1.3	1.6
Vahan Total Registration	6.0	13.8	10.7	11.0	10.1	3.0	11.7	0.5
Two-Wheeler Retail Sales	3.2	12.2	10.8	11.4	12.7	4.7	12.4	-1.3
Three-Wheeler Retail Sales	76.3	68.0	40.2	26.8	11.4	4.9	4.0	-0.3
Passenger Vehicles Retail Sales	5.0	12.5	9.0	8.9	3.6	-5.1	5.9	4.5
Tractor Retail Sales	19.2	9.4	-5.9	9.2	-12.4	-5.1	20.1	-4.5
Commercial Vehicle Retail Sales	7.0	6.7	6.4	1.6	1.0	-3.8	-1.4	0.8
Toll Collection - Volume	15.3	13.3	12.8	10.9	5.6	7.6	9.8	15.1
Toll Collection - Value	22.4	20.5	19.0	17.3	9.5	10.3	12.7	17.2
Petrol Consumption	6.8	5.7	4.7	8.4	7.1	7.3	9.7	5.8
ATF Consumption	13.4	13.1	11.0	10.0	11.4	9.4	8.8	6.5
Diesel Consumption	8.0	4.3	1.0	4.1	1.6	0.1	4.8	1.2
International Air Passenger Traffic	35.0	21.6	18.5	17.0	15.9	10.3	10.0	8.6
Domestic Air Cargo	-4.7	-1.0	8.5	10.0	7.1	7.6	4.6	3.1
International Air Cargo	0.1	3.7	10.7	25.0	18.4	21.9	15.0	1.3
Freight Traffic: Freight Originating#	1.1	4.8	6.4	8.4	5.0	-0.4	1.4	-
Port Cargo	1.9	2.9	10.2	3.6	3.9	6.1	-1.7	8.3
Domestic Trade								
GST E-Way Bill	15.8	15.0	17.1	16.3	16.0	16.8	16.9	19.4
GST E-Way Bill Intra-State	19.3	18.4	22.1	18.2	17.5	17.0	13.8	19.5
GST E-Way Bill Inter-State	10.0	9.3	8.6	13.1	13.2	16.5	23.0	19.1
GST Revenue	11.6	10.6	12.9	11.5	10.1	8.9	8.3	10.4

Table II.2.5: High Frequency Indicators - Growth Rate *(Concld.)*

(Per cent, y-o-y)

	2023-24				2024-25			
Indicators	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	2	3	4	5	6	7	8	9
External Trade								
Merchandise Exports	-14.1	-3.2	1.0	4.9	5.9	-3.4	3.0	-4.4
Merchandise Imports	-12.8	-9.9	0.0	2.7	7.6	9.7	6.5	1.2
Services Exports	5.9	4.2	5.2	4.1	9.8	12.2	17.9	-25.7
Services Imports	0.9	-4.7	-4.3	-0.2	7.2	12.7	22.2	-33.1
Import of Capital Goods	9.2	9.6	5.6	8.9	10.0	11.7	6.0	7.9
Construction								
Steel Consumption	12.1	17.7	14.7	10.6	15.0	12.0	7.8	11.9
Cement Production	12.7	10.3	5.0	7.5	0.5	3.2	8.7	12.4
Tourism and Hospitality								
Hotel Occupancy Rate	-2.6	-2.1	0.2	2.4	-2.4	2.1	1.8	1.2
Foreign Tourist Arrivals*	36.2	21.3	17.2	8.1	2.4	-1.7	-3.0	-4.5
PMI								
Manufacturing PMI	57.9	57.9	55.5	57.5	58.2	57.4	56.8	57.4
Manufacturing Future Outlook	63.0	65.1	63.5	65.4	65.2	62.6	63.4	64.8
Services PMI	60.6	61.1	58.7	61.2	60.5	59.6	58.7	58.0
Services Future Outlook	60.2	63.5	62.9	62.3	63.2	62.2	63.8	62.2
Composite PMI	60.9	61.3	58.1	61.2	61.0	59.9	59.0	58.7
Composite Future Outlook	61.0	64.0	62.5	63.2	63.8	62.3	63.6	63.1



*: Data for Q4:2024-25 are up to February 2025. ATF: Aviation Turbine Fuel. PMI: Purchasing Managers' Index.
#: Data for Q3:2024-25 pertain to October-November. -: Not available.

Note: All PMI values are reported in index form (>50: Expansion; <50: Contraction; and =50: No change).

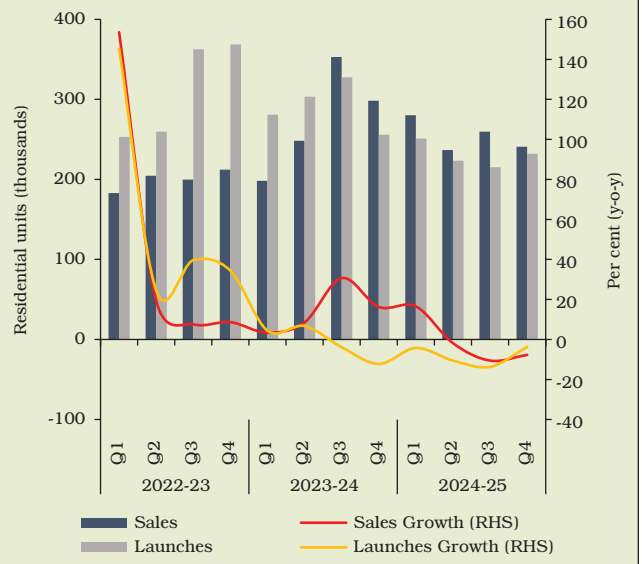
Source: Society of Indian Automobile Manufacturers (SIAM); Federation of Automobile Dealers Associations (FADA); Ministry of Statistics and Program Implementation (MoSPI), GoI; Office of Economic Adviser, GoI; S&P Global; Ministry of Petroleum and Natural Gas, GoI; Tractor and Mechanisation Association; *Vahan* Registration Portal; Airports Authority of India; Ministry of Railways, GoI; Indian Ports Association; Goods and Services Tax Network (GSTN); Joint Plant Committee; HVS Anarock; Ministry of Tourism, GoI; Ministry of Commerce and Industry, GoI; Ministry of Rural Development, GoI; and RBI.

sales, after registering an uptick in 2023-24, slowed in 2024-25 with growth turning negative in the last three quarters. Launches continued to decline for the sixth quarter on a y-o-y basis (Chart II.2.11).

II.2.20 The services sector composite index (SSCI)[12], which monitors activity in construction, trade, transport, and financial services, and serves as a coincident indicator of GVA growth in the services sector [excluding public

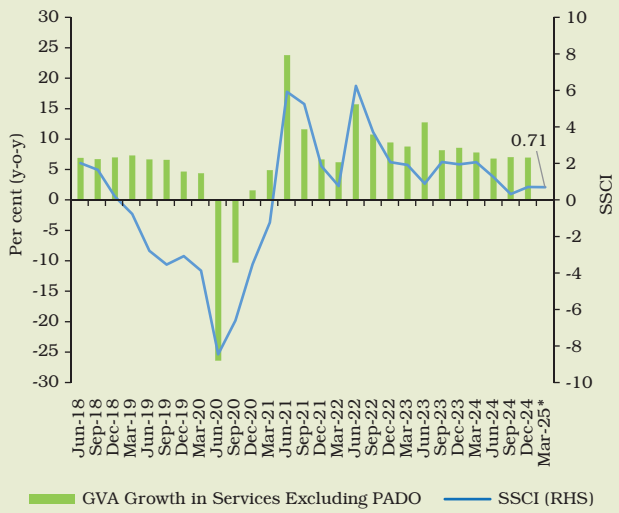
[12] SSCI is constructed by extracting and combining high-frequency data from key indicators across three major sub-sectors of the services sector, *viz.,* construction; trade, hotels, transport, communication and services related to broadcasting; and financial, real estate and professional services. These indicators are combined using a dynamic factor model to generate the final index.

Chart II.2.11: Residential Housing Sector



Source: PropTiger.

Chart II.2.12: Growth in Services Sector (Excluding PADO) and SSCI



*: SSCI for March 2025 quarter is based on partial data available.
Source: NSO and RBI staff estimates.

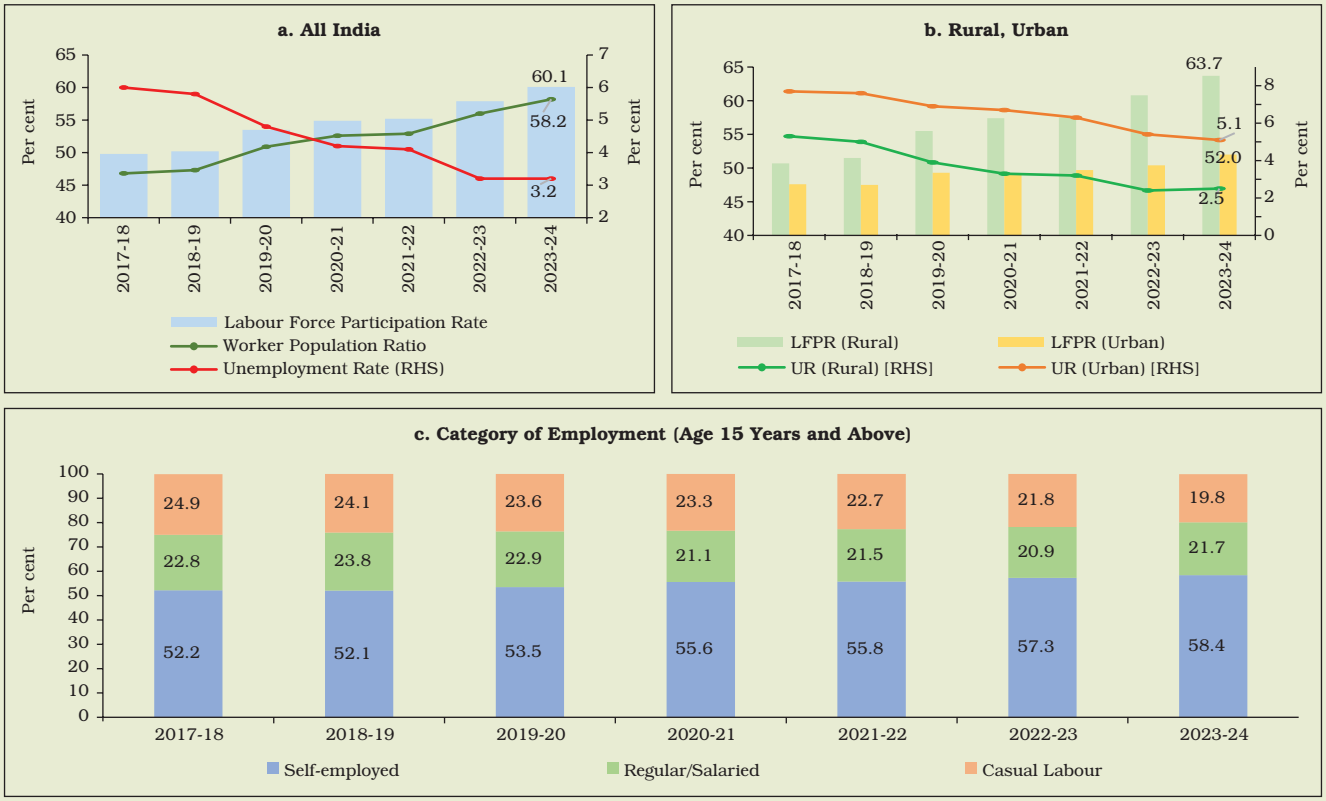
administration, defence, and other services (PADO)], rebounded in Q3:2024-25 after observing a sequential decline in the previous two quarters. The recovery in Q3 was on account of a turnaround in trade and construction sector indicators. SSCI remained robust in Q4:2024-25 (Chart II.2.12).

4. Employment

II.2.21 According to the latest periodic labour force survey (PLFS) report, the labour force participation rate (LFPR) and worker population ratio (WPR) increased during 2023-24 (July-June), marking their highest levels since its inception. The unemployment rate (UR) remained unchanged in 2023-24 from the previous year (Chart II.2.13a). The overall LFPR increased in both rural and urban areas in 2023-24, driven by a rise in the female LFPR (Chart II.2.13b). Similar patterns were witnessed in the case of WPR. The unemployment rate declined in urban regions, while it increased marginally in rural regions. The proportion of self-employed in the workforce has been increasing consistently since 2018-19 while the share of casual labourers is on the decline. The share of regular wage/salaried employees improved to 21.7 per cent in 2023-24 from 20.9 per cent in 2022-23, although it was lower than 23.8 per cent recorded in 2018-19 (Chart II.2.13c).

II.2.22 As per the quarterly PLFS covering urban areas, the LFPR and the worker population ratio for persons aged 15 years and above remained steady during Q3:2024-25, with unemployment rate hovering at the lowest of the series (Chart II.2.14). The employment in the organised sector, as measured by payroll data, also remained robust in 2024-25 (Chart II.2.15). The average net subscribers added to employees' provident fund organisation (EPFO) per month stood at 10.8 lakh during 2024-25, reflecting continued strength in formal sector employment opportunities.

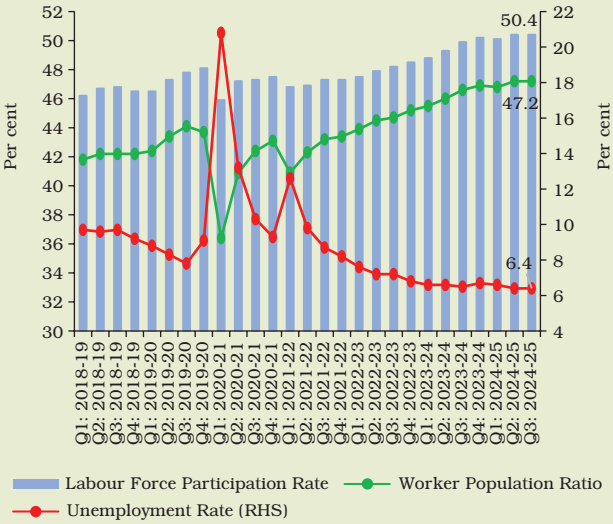
Chart II.2.13: Labour Market Indicators – Annual PLFS



Source: MoSPI, GoI.

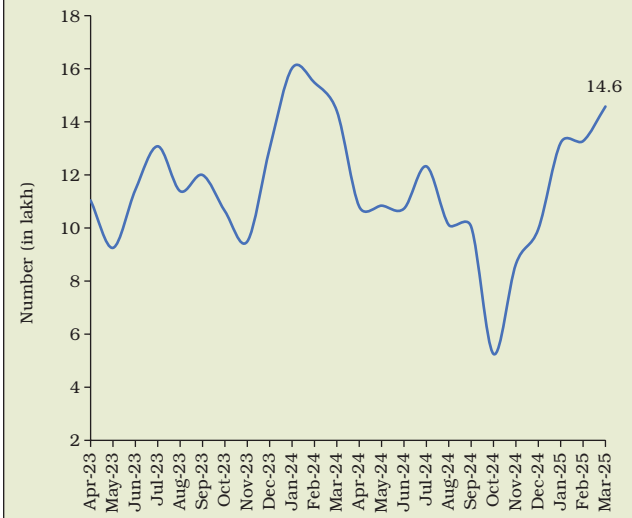
II.2.23 The employment index in the purchasing managers' index (PMI) remained above the 'no change' level of 50 for the manufacturing and services sector throughout 2024-25 (Chart II.2.16a). The *Naukri* index, which provides information on job listings, showed an

Chart II.2.14: Quarterly Labour Market Indicators – Urban Areas



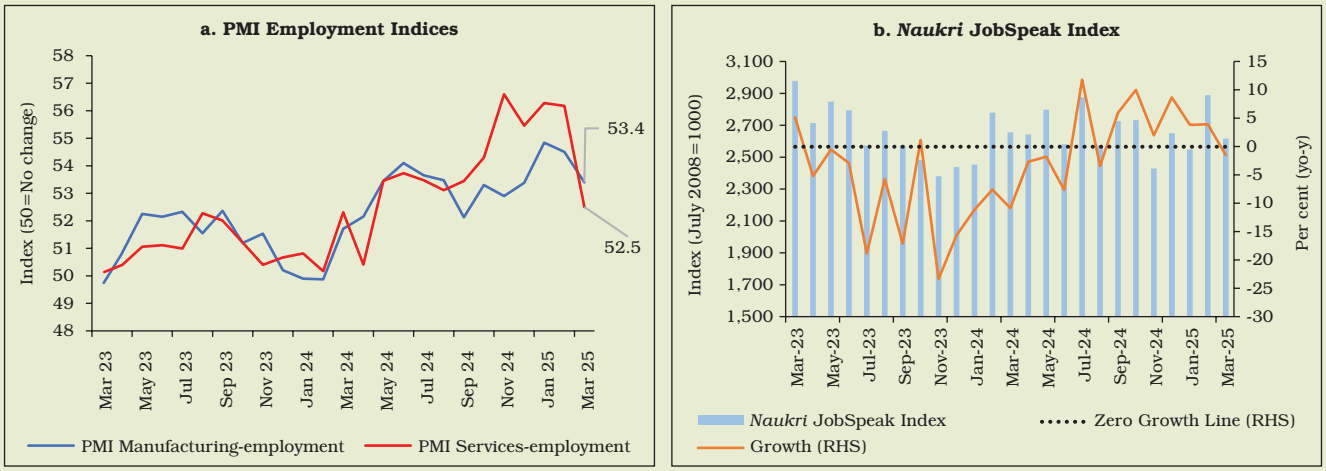
Source: MoSPI, GoI.

Chart II.2.15: Employees' Provident Fund - Net Payroll Additions



Source: Ministry of Labour and Employment, GoI.

Chart II.2.16: PMI Employment Indices and *Naukri* Index



Source: IHS Markit, Infoedge.

uptick in white-collar hiring in 2024-25 (Chart II.2.16b).

II.2.24 Research and development (R&D) expenditure fosters innovation and technological progress and is associated with improved firm and overall productivity. In India, the ratio of R&D expenditure in GDP rose marginally from 0.61 per cent to 0.64 per cent[13] between 1995-96 and 2020-21. India's share in global R&D expenditure rose from 2.1 per cent in 2000 to 2.6 per cent in 2023 (World Intellectual Property Organisation, 2024) [Box II.2.1].

Box II.2.1
R&D Expenditure as a Driver of India's Productivity Growth

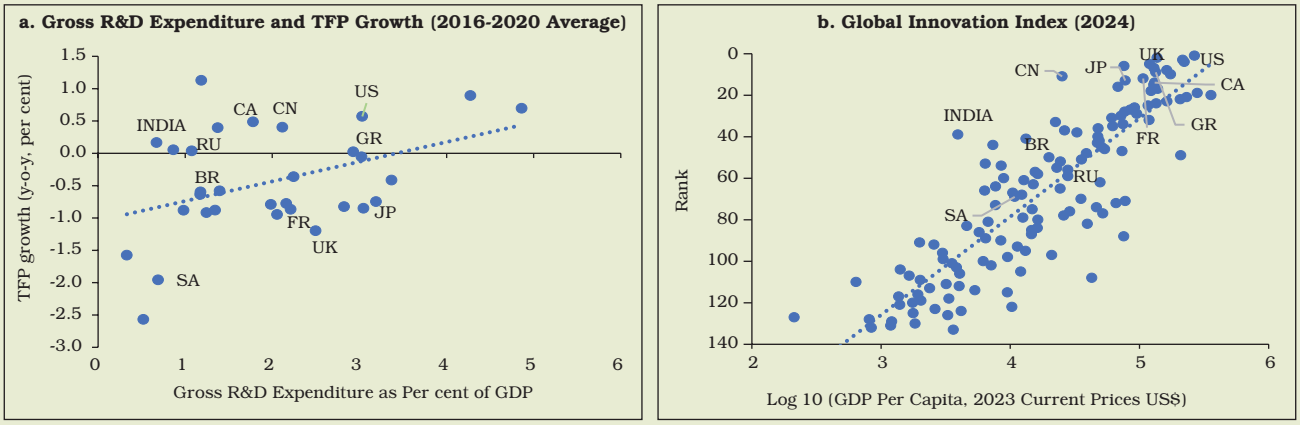
Impact of R&D investment on total factor productivity (TFP) is well established through specific sectors and firm size, with large firms and high-tech industries gaining more (Griliches,1998). Recent country-specific studies (Mamatzakis *et al.,* 2023; Ali and Akhtar, 2024) as well as panel studies on emerging market economies (EMEs) [Herzer, 2022] also corroborate the positive impact of R&D investment on TFP. The available literature suggests that the effect is more pronounced for advanced economies owing to their higher absorptive capacity and supportive institutional frameworks (OECD, 2015); foreign R&D spillovers *via* imports or foreign direct investment (FDI) which often outweigh the impact of domestic R&D (Krammer, 2015). The effect of domestic R&D on TFP growth followed an inverted-U pattern, suggesting that middle-income countries benefit the most from domestic R&D as compared to low-and high-income countries (Goñi and Maloney, 2014). In case of India, productivity gains of high-tech firms in the manufacturing sector are found to be associated with higher R&D intensity in the previous period along with FDI flows in the sector and higher usage of imported inputs and capital goods (Bhattacharya *et al.*, 2021).

Cross-country data suggest that R&D expenditure is generally positively associated with TFP growth (Chart 1a).

(Contd.)

[13] S&T Indicators Tables - Research and Development Statistics, 2022-23, Ministry of Science & Technology, Government of India.

Chart 1: R&D Expenditure, Innovation, GDP Per Capita and Total Factor Productivity



BR: Brazil. CA: Canada. CN: China. FR: France. GR: Germany. JP: Japan. RU: Russia. SA: South Africa.
UK: United Kingdom. US: United States.
Source: World Development Indicators, World Bank; World Intellectual Property Organization; and The Conference Board.

Table 1: Impact of R&D Expenditure Growth on TFP Growth in India

Dependent Variable: India's Aggregate TFP Growth				
1	2	3	4	5
	Model 1	Model 2	Model 3	Model 4
Gross R&D Expenditure	0.24**	0.24***	0.26***	0.21***
	(0.12)	(0.088)	(0.055)	(0.077)
FDI Inflows			0.0029*	0.0035**
			(0.0017)	(0.0018)
Export + Import				0.062***
				(0.024)
Deterministic Trend	-0.00016	0.021	0.15***	0.19***
	(0.046)	(0.052)	(0.034)	(0.027)
Global Metal Price Index $_{t-2}$		-0.016	-0.045**	-0.030
		(0.019)	(0.019)	(0.022)
Annual Rainfall's Deviation from LPA $_{t-2}$		0.030	0.062***	0.12***
		(0.028)	(0.024)	(0.034)
Constant	-0.43	-0.53	-3.28***	-4.14***
	(1.12)	(0.72)	(1.06)	(1.00)
Number of Observations	34	34	29	29
Wald Chi-Square	10.1	40.8	45.9	71.5
Wald Chi-Square: p-value	0.017	0.00	0.00	0.00
Hansen's J Chi-Square	1.37	12.3	11.9	10.3
Hansen's J Chi-Square p-value	0.50	0.09	0.16	0.17
GMM C (Orthogonality) Chi-Square	0.86	0.059	0.29	2.68
GMM C (Orthogonality) Chi-Square: p-value	0.35	0.80	0.87	0.44

***, ** and * indicate significance levels at 1 per cent, 5 per cent and 10 per cent, respectively.

Note: 1. Figures in parentheses are robust standard errors.
2. Hansen's J-test suggests that the overidentifying restrictions are valid at 5 per cent.
3. The GMM C tests fail to reject the null hypothesis that the explanatory variables are exogenous at 5 per cent.
4. The Annual estimates for R&D expenditure are available from 1995-96 onwards only. Additional estimates for 1985-86 and 1990-91 were available at the source. The R&D expenditure for the intermediate years between 1985-86 and 1990-91, and 1990-91 and 1995-96 are interpolated.
5. TFP growth, gross R&D expenditure, FDI inflows, export and import, and global metal price index have been used in terms of y-o-y growth.

(Contd.)

Countries with higher income levels, as measured by GDP per capita, tend to have better innovation rankings. India secured 39th position among 133 economies in the Global Innovation Index 2024 (Chart 1b).

In this study, the impact of growth in India's aggregate R&D expenditure on aggregate TFP growth is explored in a generalised method of moments (GMM) framework for the period 1986-87 to 2019-20 (Table 1). The GMM methodology was preferred to control for inherent endogeneity, as R&D investments may also be affected by the level of output, profits, and productivity. Accordingly, appropriate instruments are used for R&D investments like growth, economic disturbances, commodity prices, *etc.*

The models suggest that a one percentage point increase in R&D expenditure leads to a 0.21 to 0.26 percentage point rise in TFP growth. Some of the control variables such as FDI and trade flows were found to positively and significantly impact TFP. In contrast, some supply side factors such as increase in global metal price and adverse monsoons have a negative impact on TFP growth.

The above evidence substantiates the criticality of R&D investment for sustaining innovation and long-term productivity growth. Apart from the direct impact, incentivising R&D could have a significant spillover effect on the wider economy.

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8. OECD (2015), 'The Future of Productivity', Organisation for Economic Co-operation and Development, Paris.

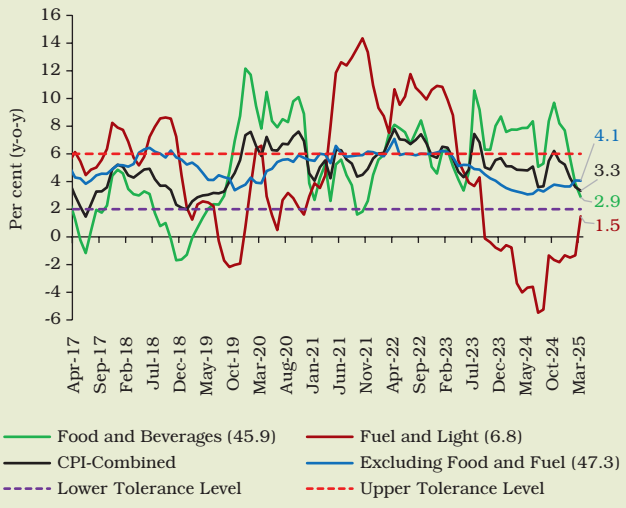
5. Conclusion

II.2.25 India's economic activity gained momentum in H2:2024-25 driven by an uptick in domestic demand, increase in exports of goods and services, buoyant agriculture sector and sustained resilience in services. Rising input cost pressures in the manufacturing sector coupled with global headwinds such as protectionist trade policies, persistent geopolitical tensions and subdued global demand, however, continue to pose risks to growth.

II.3 PRICE SITUATION

II.3.1 In India, headline inflation[14] moderated to an average of 4.6 per cent during 2024-25 from 5.4 per cent during 2023-24, with intra-year trajectory driven by food price fluctuations due to recurrent supply-side shocks from weather disturbances. Consumer Price Index (CPI) inflation eased during April-August 2024 followed by hardening in September-October due to a sharp increase in food prices, driven mainly by vegetables and edible oils. Subsequently, food inflation eased during November 2024-March 2025 with the winter crop arrivals. Fuel prices remained in deflation led by a fall in liquefied petroleum gas (LPG) prices. Core inflation (*i.e.*, CPI excluding food and fuel) eased during 2024-25, reflecting, *inter alia*, the cumulative and lagged impact of monetary policy actions and easing of input cost pressures (Chart II.3.1). Proactive supply management measures by the government also aided in containing inflationary pressures in 2024-25.

Chart II.3.1: Inflation across Major Components



Note: 1. Figures in parentheses indicate weight in CPI-Combined.
2. April and May 2020 data were imputed by the NSO.
Source: NSO and RBI staff estimates.

II.3.2 Volatility of headline inflation, as measured by standard deviation, remained unchanged in 2024-25 (Table II.3.1). The intra-year distribution of inflation showed a negative kurtosis reflecting fewer extreme values in 2024-25.

II.3.3 Against this backdrop, sub-section 2 assesses developments in global commodity prices and inflation. Sub-section 3 discusses movements in headline inflation in India including

Table II.3.1: CPI Headline Inflation – Key Summary Statistics

(Per cent)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
1	2	3	4	5	6	7	8	9	10	11
Mean	4.9	4.5	3.6	3.4	4.8	6.2	5.5	6.7	5.4	4.6
Standard Deviation	0.7	1.0	1.2	1.1	1.8	1.1	0.9	0.7	0.9	0.9
Skewness	-0.9	0.2	-0.2	0.1	0.5	-0.7	-0.1	-0.1	1.5	0.0
Kurtosis	-0.1	-1.6	-1.0	-1.5	-1.4	-0.7	-1.0	-0.6	1.6	-1.2
Median	5.0	4.3	3.4	3.5	4.3	6.5	5.6	6.7	5.1	4.8
Maximum	5.7	6.1	5.2	4.9	7.6	7.6	7.0	7.8	7.4	6.2
Minimum	3.7	3.2	1.5	2.0	3.0	4.1	4.2	5.7	4.3	3.3

Note: Skewness and Kurtosis are unit-free. Annual inflation is the average of the monthly inflation rates during the year and therefore, may vary from the annual inflation calculated from the average index for the year.
Source: NSO and RBI staff estimates.

[14] Headline inflation is measured by year-on-year changes in the all-India CPI-Combined (Rural + Urban) [base year: 2012=100] released by the National Statistical Office (NSO), Ministry of Statistics and Programme Implementation (MoSPI), Government of India (GoI).

major turning points, followed by a detailed analysis of its primary constituents in sub-section 4. Other indicators of prices and costs are analysed in sub-section 5, followed by the concluding observations.

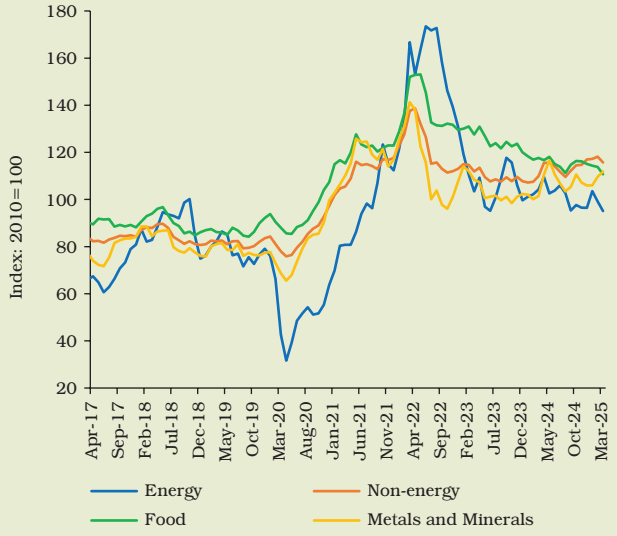
2. Global Inflation Developments

II.3.4 Global commodity prices moderated in 2024 on the back of subdued demand and improved supply conditions (Chart II.3.2). While food prices corrected in 2024 on robust agricultural production and higher supplies, beverages witnessed sharp price pressures – driven primarily by cocoa and coffee prices on weather-induced supply disturbances. In the second half of 2024, palm oil prices also increased sharply, *inter alia*, on Indonesia's announcement of the B40 bio-diesel programme in August 2024 mandating higher palm oil blending with diesel (up from 35 per cent to 40 per cent), effective from January 1, 2025. Energy prices fell further in 2024 as increased oil supply by non-OPEC offset supply cuts by OPEC+ amid subdued consumption demand. Metals and minerals prices, however, increased in 2024 with increase in copper and aluminium demand from renewable energy sources, electricity grids and electric vehicles. Prices of precious metals such as gold and silver increased on rising global demand for safe haven assets.

3. Inflation in India

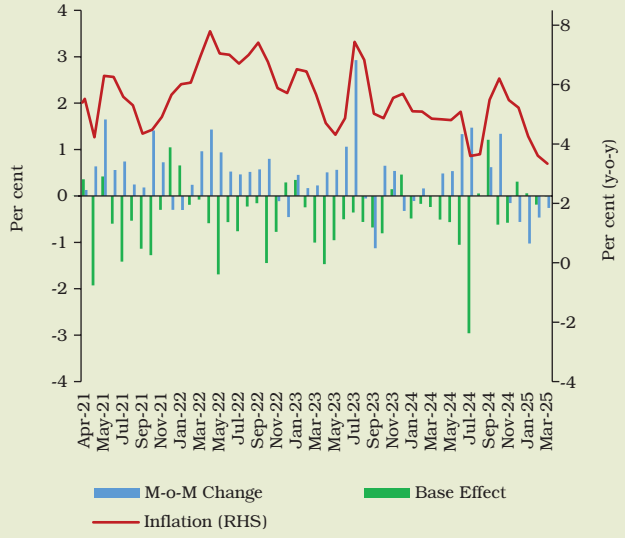
II.3.5 CPI headline inflation in India eased from 4.8 per cent in April-May 2024 to 3.6 per cent in July 2024 before rising again to 6.2 per cent in October 2024 (Chart II.3.3). The movements in headline inflation were driven primarily by the food group due to overlapping supply shocks from intermittent weather disturbances, even as core inflation remained largely contained while fuel continued to be in deflation. Headline inflation eased to 3.3 per cent in March 2025 on sharp moderation in food inflation. Overall, headline inflation averaged 4.6 per cent during 2024-25, 73 basis points (bps) lower than the previous year (Appendix Table 4).

Chart II.3.2: International Commodity Prices



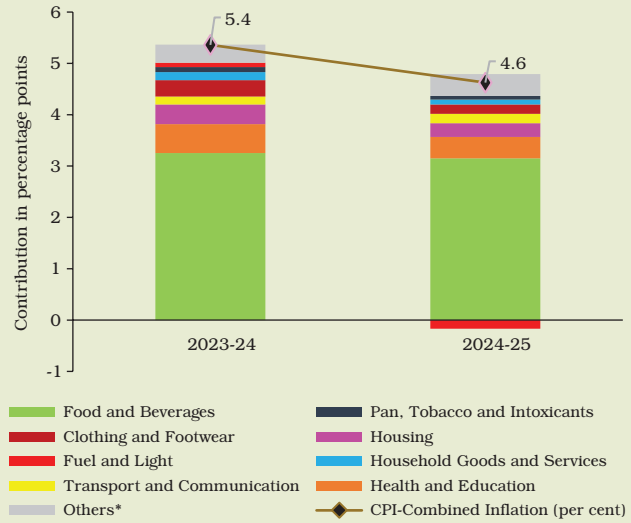
Source: World Bank Pink Sheet Database.

Chart II.3.3: Movements in Headline Inflation



Source: NSO and RBI staff estimates.

Chart II.3.4: Drivers of Inflation (Y-o-Y)



*: Includes recreation and amusement, and personal care and effects.
Source: NSO and RBI staff estimates.

II.3.6 Inflation in food and beverages averaged 6.7 per cent and contributed 68 per cent to headline inflation during 2024-25 as compared with 61 per cent a year ago (Chart II.3.4). Weather disturbances such as heatwave conditions and uneven rainfall distribution affected agricultural crops, disrupting the domestic availability and supply chains. While tight supply conditions in wheat and pulses impacted domestic availability, uptick in global edible oil prices led to a substantial pick-up in imported inflation. Consequently, food inflation remained firm, with vegetables, cereals, pulses and edible oil prices being the key drivers.

II.3.7 Apart from recurrent supply shocks, the changing consumption pattern of households also weigh on the dynamics of food inflation (Box II.3.1).

Box II.3.1

Food Inflation Persistence and Shifting Household Consumption Pattern

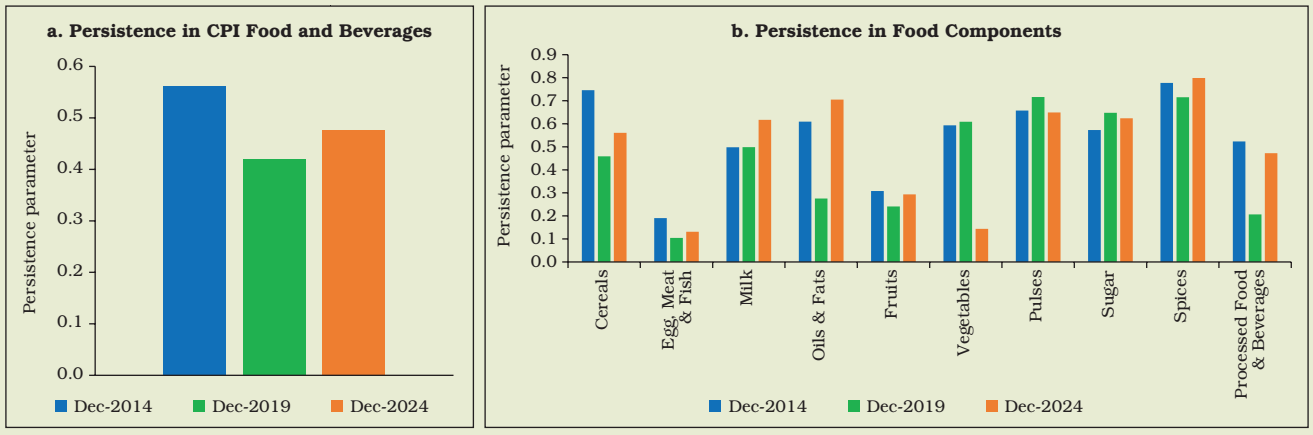
Amidst continuing pressures from food inflation on account of overlapping supply shocks, persistence in food inflation and its components is estimated for a 48-month rolling window using an AR(1) process.

$$\pi_{i,t} = \rho_i * \pi_{i,t-1} + \varepsilon_{i,t} \qquad \ldots\ldots (1)$$

where $\pi_{i,t}$ refers to the demeaned monthly momentum (based on seasonally adjusted CPI) of the i^{th} item at time t, ρ_i is the persistence parameter, and $\varepsilon_{i,t}$ is the error term.

The results show that the persistence in food prices, which had moderated post the introduction of flexible inflation targeting (FIT), picked up in the post-COVID period, yet remaining lower than the pre-FIT period (Chart 1a).

Chart 1: Persistence in CPI Food and its Components



Note: CPI Food persistence parameter is derived as a weighted average of its components on a 48-months rolling window.
Source: MoSPI and RBI staff estimates.

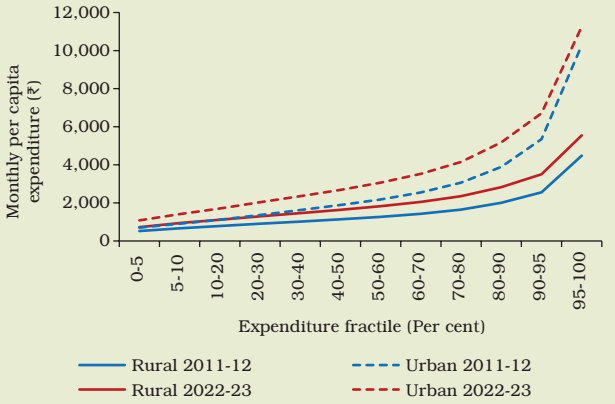
(Contd.)

A disaggregated analysis indicates that this increase is primarily driven by cereals, egg, meat and fish, fruits, milk, oils and fats, spices, and processed food and beverages (Chart 1b). On the other hand, inflation persistence is estimated to have ebbed in vegetables, sugar and pulses.

Apart from intermittent supply shocks, demand side factors can also impart stickiness to food prices. The evolving demand conditions have been analysed using the 2011-12 and 2022-23 rounds of the household consumption expenditure survey (HCES). The estimated per capita real expenditure across 12 fractiles (as defined by the HCES) shows an upward shift in both rural and urban sectors (Chart 2).

A mapping of changes in expenditure shares with persistence reveals that food sub-groups that saw an increase in expenditure on animal proteins (*i.e.,* egg, meat, fish, and milk), fruits, oils and fats, and processed food and beverages, have also become more persistent in recent years (Table 1). Moreover, the shift in expenditure towards fruits, egg, meat and fish, milk, and oils and fats are the largest across lower fractile households, while increased expenditure on processed food and beverages is greater among higher fractile groups. Cereals, however, show a diverging trend – a rise in persistence despite a fall in expenditure shares indicating the dominance of supply side factors. Overall, the overlapping supply shocks coupled with the evolving demand dynamics for food products, driven by change in dietary habits, underscore the need for careful monitoring of food inflation.

Chart 2: Shift in Real Expenditures of Households



Source: HCES (2011-12 and 2022-23), MoSPI and RBI staff estimates.

Table 1: Change in Expenditure Shares and Persistence

Food Sub-group	Weight in CPI-Food and Beverages (per cent)	Change in Expenditure Shares in Food Group by Expenditure Fractiles (per cent)				Change in Persistence Parameter
		0-40	40-50	50-100	All Classes	
1	2	3	4	5	6	7
Cereals	9.7	-13.24	-9.67	-6.00	-8.35	0.16
Pulses	2.4	-1.20	-1.27	-1.14	-1.19	-0.11
Vegetables	6.0	-1.30	-1.20	-0.85	-1.01	-0.42
Fruits	2.9	3.18	3.04	1.60	2.25	0.07
Egg, Meat and Fish	4.0	2.78	1.71	0.39	1.13	0.03
Milk	6.6	4.98	3.42	1.10	2.45	0.11
Spices	2.5	-0.35	-0.42	-0.20	-0.29	0.08
Oils and Fats	3.6	1.17	0.30	-0.02	0.32	0.50
Sugar	1.4	-1.19	-1.33	-1.24	-1.24	-0.02
Processed Food and Beverages	5.6	5.17	5.42	6.35	5.93	0.28

Note: 1. Change in expenditure share is derived as variation in 2022-23 over 2011-12.
2. Change in persistence is derived as variation in persistence parameter between 2021-24 and 2016-19.
3. Expenditure fractiles: 0-40 per cent, 40-50 per cent, 50-100 per cent, and all classes are aggregated from the HCES, and the values depict changes in expenditure shares of food items for the respective expenditure groups.

Source: MoSPI and RBI staff estimates.

References:

1. Bilke, L. and Stracca L. (2007), 'A Persistence-weighted Measure of Core Inflation in the Euro Area', *Economic Modeling*, 24(6).
2. Patra, M. D., Khundrakpam, J. K., and George, A. T. (2014), 'Post-global Crisis Inflation Dynamics in India: What has Changed?', India Policy Forum 2013-14, Vol. 10, National Council of Applied Economic Research (NCAER), New Delhi.
3. Blinder, A. (1997), 'Measuring Short-run Inflation for Central Bankers: A Commentary', Federal Reserve Bank of Saint Louis Review, May/June 1997, 79(3).
4. Mittal, S. (2006), 'Structural Shift in Demand for Food: Projections for 2020', Working Paper No.184, August, Indian Council for Research on International Economic Relations (ICRIER), New Delhi.

II.3.8 Inflation in fuel and light averaged (-) 2.5 per cent during 2024-25, significantly lower than 1.2 per cent a year ago. The deflation was driven by reduction in domestic prices of LPG and kerosene during 2023 and 2024 in the wake of a correction in global energy prices. Electricity prices, however, increased by 6.4 per cent during 2024-25 due to tariff hikes in some states.

II.3.9 Inflation excluding food and fuel, or core inflation, eased to 3.5 per cent during 2024-25 from 4.3 per cent a year ago, driven mainly by clothing and footwear, housing, household goods and services, health, and education. Inflation in transport and communication and personal care and effects, however, were higher due to hikes in mobile tariffs by major telecom service providers and international price pressures in gold and silver, respectively.

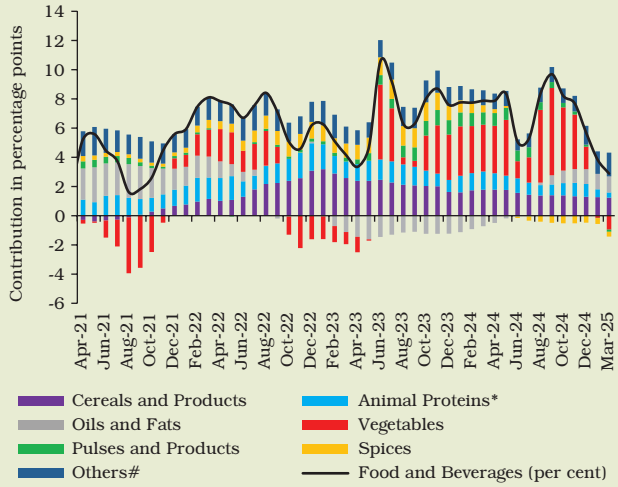
4. Constituents of CPI Inflation

Food

II.3.10 Food and beverages inflation averaged 7.4 per cent in April 2024-January 2025 as compared to 6.9 per cent in the corresponding period of 2023-24. However, sharp correction in vegetable prices in February-March 2025 led to a moderation in food inflation to 6.7 per cent in 2024-25 as compared to 7.0 per cent in 2023-24. Within the food group, inflation increased in four sub-groups while it moderated for the remaining eight sub-groups as compared with last year (Charts II.3.5 and II.3.6).

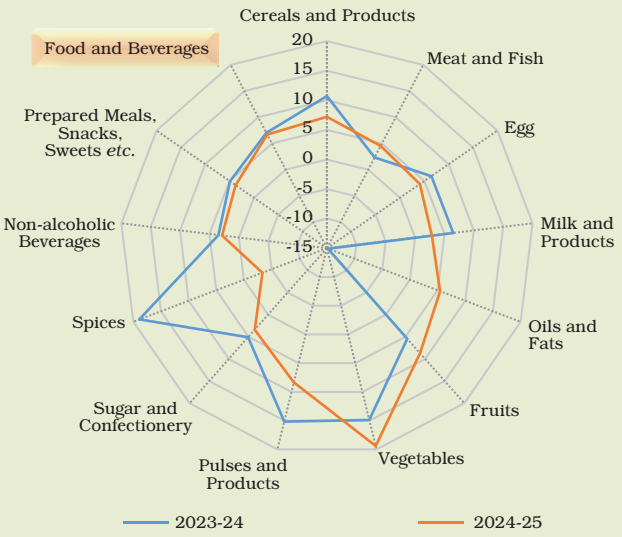
II.3.11 Vegetables (weight: 13.2 per cent in the food and beverages group) inflation remained volatile and elevated at 19.4 per cent in 2024-25, keeping overall food inflation firm. Vegetable prices rose during April-July 2024 on the back of supply disturbances from heatwave conditions in northern India and excess rains in southern and central parts of the country. Prices, after softening in August, driven by sharp correction in tomato prices, hardened again in September-October on account of weather disturbances and festive demand. Prices corrected sharply during November 2024-March 2025 by around (-) 38 per cent with increase in market arrivals, reflecting

Chart II.3.5: Drivers of Food Inflation (Y-o-Y)



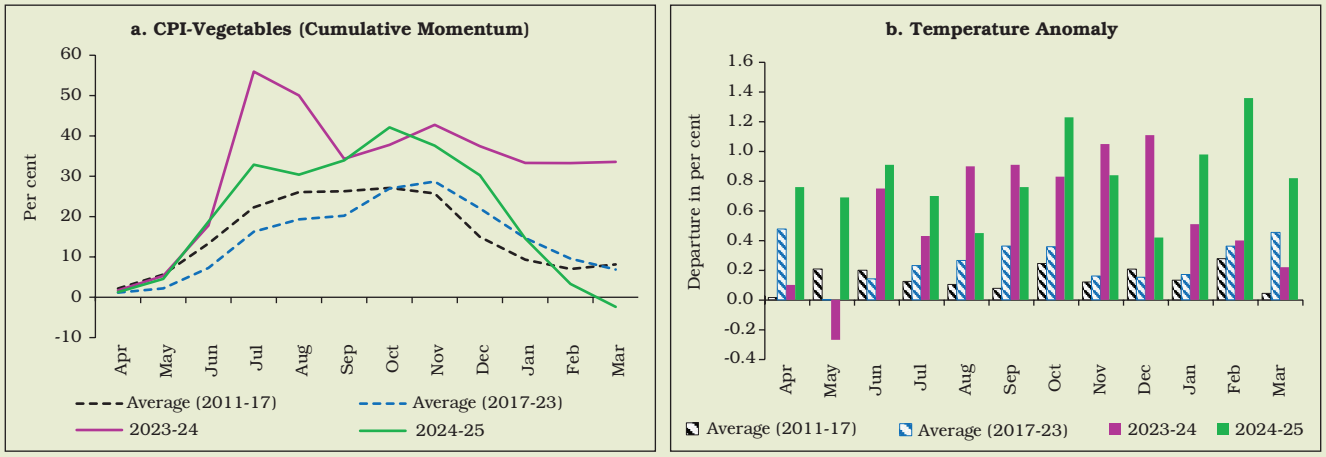
*: Includes egg, milk and products, and meat and fish.
#: Includes fruits, sugar and confectionery, non-alcoholic beverages, and prepared meals.
Source: NSO and RBI staff estimates.

Chart II.3.6: Inflation in Major Food Sub-groups



Source: NSO and RBI staff estimates.

Chart II.3.7: Seasonality in CPI - Vegetables Prices and Temperature Anomaly



Note: For chart b, temperature anomaly is defined as deviation from 30-year average (1991 to 2020).
Source: NSO, Indian Meteorological Department, and RBI staff estimates.

higher production in 2024-25 [3.6 per cent as per first advance estimates (1st AE) over 2023-24] (Charts II.3.7a and II.3.7b).

II.3.12 Among key vegetables, potato inflation remained elevated and averaged 54.1 per cent during 2024-25 on account of a production shortfall in 2023-24 [(-) 5.0 per cent over 2022-23] due to high minimum temperatures during winter and prolonged fog conditions in major producing states. However, with increase in production in 2024-25 (4.4 per cent as per 1st AE over 2023-24) and higher market arrivals, potato inflation moderated during January-March 2025. Onion price inflation averaged 52.3 per cent during April-October 2024 due to a steep fall in production in 2023-24 [(-) 19.5 per cent over 2022-23]. In order to contain price pressures, the government procured 4.7 lakh metric tonnes (MT) of *rabi* onion for open market sales at a subsidised rate of ₹35 per kg across major consumption centres in September 2024 and started a special train in October, '*Kanda* Express', for faster distribution from surplus states to deficit states. Further, the government allowed export of onions subject to a 40 per cent export duty and a minimum export price (MEP) of US$ 550 per metric tonne (MT) in May 2024 which was withdrawn subsequently; and the export duty was lowered to 20 per cent in September 2024. However, higher production in 2024-25 (18.9 per cent as per 1st AE over 2023-24) and robust market arrivals led to correction in onion prices during December 2024-March 2025. Tomato prices exhibited significant volatility in 2024-25, recording an average inflation (y-o-y) of 36.6 per cent between April-June 2024, before recording deflation of 43 per cent in July due to favourable base effects, which deepened to 47.9 per cent in August 2024 due to sharp price corrections on fresh crop arrivals. However, inflation in tomato prices increased to 161 per cent in October on lower *mandi* arrivals due to crop damage from high temperatures and rainfall in southern states. This was followed by a sharp price correction as supply improved during January-March 2025 leading to a deflation of (-) 35.0 per cent in March 2025. Vegetables excluding TOP (tomato, onion, and potato),

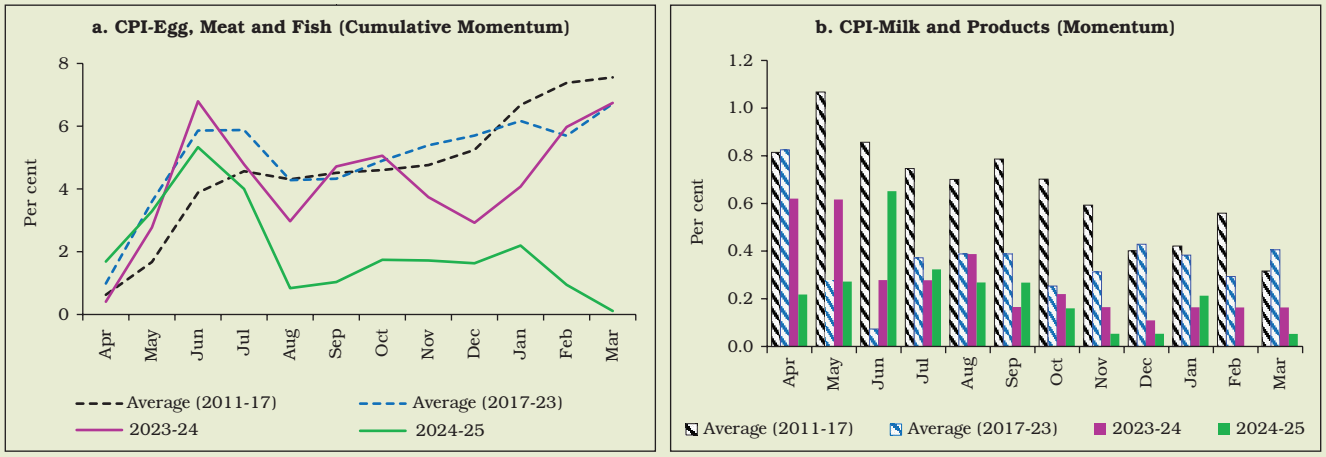
particularly garlic, also witnessed high price pressures due to excess rain-induced damages which, however, corrected sharply during November 2024-March 2025 with improvement in domestic supply. Overall, vegetables witnessed the highest winter price correction in the current series of CPI (November-February), which extended to March 2025 on higher *mandi* arrivals and conducive weather conditions.

II.3.13 Inflation in cereals and products (weight of 21 per cent in the CPI-food and beverages) remained firm at 7.2 per cent during 2024-25, *albeit* lower than 10.7 per cent in the previous year. Within cereals, inflation in rice prices, after remaining in double-digits for 22 months, moderated to 9.6 per cent in August 2024 and further to 4.9 per cent in March 2025. The correction was largely on account of higher production in 2024-25 (6.7 per cent as per 2nd AE over 2023-24) as well as supply management measures by the government such as retail sale of '*Bharat* Rice' and provisioning for rice-deficient states to directly purchase from the Food Corporation of India (FCI) at a fixed price of ₹2,250 per quintal under the open market sale scheme (OMSS) from August 2024. With easing supply conditions, the government removed the MEP of US$ 950 per MT on *basmati* rice, lifted the ban on exports of non-*basmati* white rice in September 2024, removed its MEP clause in October 2024, and revoked the ban on broken rice in March 2025, to encourage higher exports. Inflation in wheat prices, on the other hand, increased from 6.0 per cent in April 2024 to 9.0 per cent in March 2025, even as production was higher (2.5 per cent in 2023-24 over 2022-23). The government undertook price stabilisation measures, including imposition of stock limits for traders and wholesalers (till March 2025), sale of 2.5 million tonnes of wheat through e-auctions under OMSS till March 2025 [at a reserve price of ₹2,325 per quintal for fair and average quality (FAQ) grain and ₹2,300 per quintal for under reduced specifications (URS) grain], and continued restrictions on wheat exports. Wheat buffer stocks remained at 1.6 times the norm as of April 1, 2025. Higher *rabi* production of wheat in 2024-25 (1.9 per cent as per 2nd AE over 2023-24) augurs well for the wheat prices going forward.

II.3.14 Animal protein items such as eggs, meat and fish (weight of 8.8 per cent in CPI-food and beverages) witnessed seasonal uptick in prices during April-June 2024 due to heatwaves which impacted the production of poultry in major producing states of southern India (Chart II.3.8a). Prices moderated subsequently due to the seasonal fall in demand during July-August 2024 on account of *Shravana* period. However, price pressures re-emerged in September-October 2024, particularly in case of eggs reflecting pick-up in seasonal demand. Driven by reduced demand due to bird flu in some states, prices for eggs, meat and fish, softened during February-March 2025. Inflation in prices of milk and products was range bound at 2.9 per cent during 2024-25, benefitting from stable prices of feed and adequate milk supply (Chart II.3.8b).

II.3.15 Prices of oils and fats (weight of 7.8 per cent in CPI-food and beverages) continued in deflation during April-August 2024 averaging (-) 4.2 per cent; inflation turned positive in September and reached 17.1 per cent in March 2025. The turnaround in prices after a gap of 19 months was

Chart II.3.8: CPI-Animal Protein - Seasonality in Prices

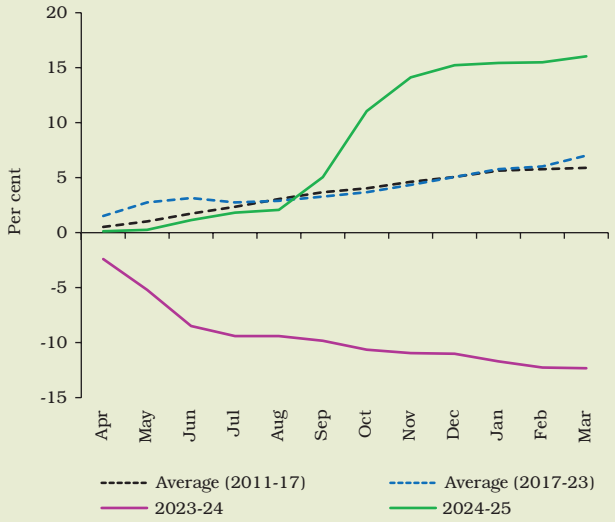


Note: For April 2020, index for meat and fish was imputed by the NSO.
Source: NSO and RBI staff estimates.

due to increase in international edible oil prices and import duty hike of 20 percentage points on crude and refined edible oils, effective from September 2024 (Chart II.3.9). *Ghee* and butter price inflation, however, continued to moderate in tandem with declining milk prices.

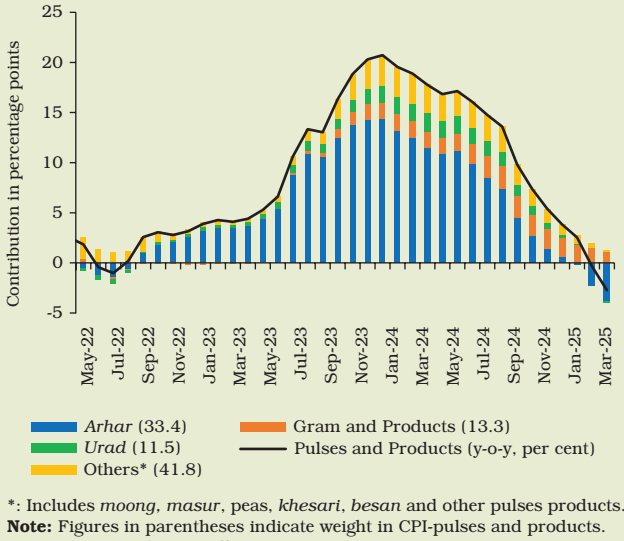
II.3.16 Inflation in prices of pulses (weight of 5.2 per cent in CPI-food and beverages) moderated from May 2024 and recorded (-) 2.7 per cent in March 2025 (Chart II.3.10). Higher production of key pulses such as *tur* (2.8 per cent), *moong* (28 per cent) and gram (4.5 per cent) as per 2nd AE of 2024-25 over 2023-24, and supply management measures, including continued free imports of yellow peas till May 31, 2025, *tur* and *urad* till March 31, 2026, weekly stock disclosure requirements for major pulses, and sale of *chana, moong* and *masur dal* under the

Chart II.3.9: CPI-Oils and Fats (Cumulative Momentum)



Source: NSO and RBI staff estimates.

Chart II.3.10: Component-wise Contribution in CPI-Pulses Inflation



*: Includes *moong*, *masur*, peas, *khesari*, *besan* and other pulses products.
Note: Figures in parentheses indicate weight in CPI-pulses and products.
Source: NSO and RBI staff estimates.

brand '*Bharat Dal*', contributed to the moderation in pulses price inflation.

II.3.17 Inflation in fruits (weight of 6.3 per cent in CPI-food and beverages) averaged 6.3 per cent during April-June 2024 on account of lower *mandi* arrivals of major fruits including banana, mango and coconut. Prices corrected in July on favourable base effects. However, inflation increased to 10.2 per cent during August 2024-March 2025 despite adequate production (0.2 per cent higher as per 1st AE 2024-25 over 2023-24), primarily driven by a sharp increase in coconut prices.

II.3.18 Among other food items, inflation in prices of spices corrected to an average of (-) 3.3 per cent during 2024-25 as against 18.9 per cent a year ago, driven primarily by fall in prices of *jeera* (cumin) and dry chillies, on account of higher production of spices in 2023-24 (5.5 per cent over 2022-23). Inflation in sugar and confectionery prices was subdued in 2024-25 despite a shortfall in production [(-) 4.0 per cent as per 2nd AE 2024-25 over 2023-24]. Restrictions previously imposed on sugar diversion for ethanol production were, however, eased in August 2024. Inflation in prepared meals also remained subdued and averaged 3.8 per cent during 2024-25.

Fuel

II.3.19 Fuel and light (weight of 6.8 per cent in CPI) prices remained in deflation during 2024-25, averaging (-) 2.5 per cent (Chart II.3.11). After remaining in deflation during April 2024-February 2025, fuel inflation increased to 1.5 per cent in March 2025. The domestic LPG price cut of ₹100 per cylinder in March 2024 accentuated the pace of deflation in fuel observed in 2024-25 (Chart II.3.12). Consequently, the contribution of the fuel group to headline inflation decreased to (-) 3.6 per cent in 2024-25 from 1.6 per cent a year ago.

Core Inflation (Inflation Excluding Food and Fuel)

II.3.20 Inflation excluding the food and fuel groups, *i.e.*, core inflation, moderated to an average of 3.5 per cent during 2024-25 from 4.3 per cent a year ago (Appendix Table 4). After touching 3.1 per cent during May-June 2024 –

Chart II.3.11: Drivers of Fuel Inflation

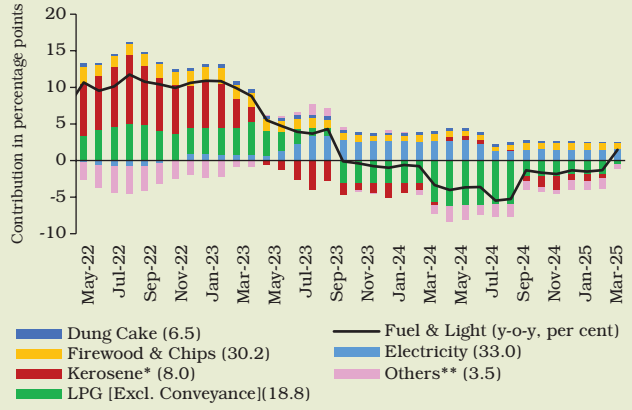
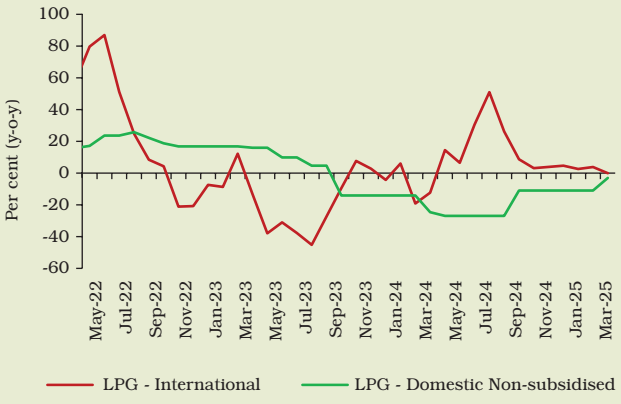
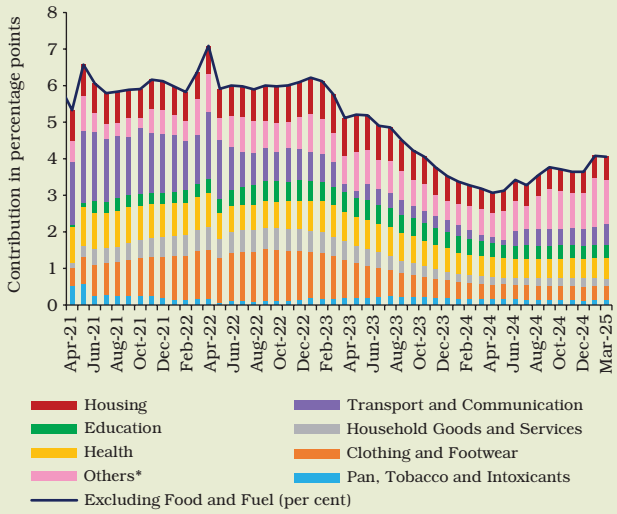


Chart II.3.12: Movements in LPG Prices



*: Includes kerosene public distribution system (PDS) and kerosene from other sources.
**: Includes diesel, coke, coal, charcoal, and other fuel.
Note: 1. Figures in parentheses indicate weight in CPI-Fuel and light.
2. Domestic non-subsidised LPG prices are the average of prices in four metros (Delhi, Mumbai, Kolkata and Chennai).
Source: NSO, Petroleum Planning and Analysis Cell (PPAC), Bloomberg and RBI staff estimates.

Chart II.3.13: Drivers of CPI Excluding Food and Fuel Inflation



*: Includes recreation and amusement, and personal care and effects.
Source: NSO and RBI staff estimates.

the lowest in the current series – it picked up in the subsequent months to reach 4.1 per cent in March led by hike in mobile tariffs and hardening of gold and silver prices (Chart II.3.13).

II.3.21 Among the major constituents, inflation in clothing and footwear fell to 2.7 per cent during 2024-25 from 4.7 per cent a year ago, reflecting lower domestic and international cotton prices and subdued export demand of textiles and wearing apparel. Household goods and services, health, and education also witnessed moderate price pressures during 2024-25. Inflation in transport and communication rose marginally to 2.4 per cent in 2024-25 from 1.9 per cent a year ago, driven by the increase in mobile tariffs in July-August 2024. After a cut in domestic retail prices of petrol and diesel in March-April 2024, they remained unchanged during the year (Chart II.3.14). The pick-up in inflation in transport and communications from 1 per cent during May-June 2024 to 2.8 per cent during July 2024-March 2025 contributed to the rise in core inflation. Around 78 per cent of the core CPI items registered less than 4 per cent inflation during 2024-25 as compared to 51 per cent in the previous year (Chart II.3.15).

II.3.22 Housing inflation fell from 3.9 per cent during 2023-24 to 2.8 per cent during 2024-25 due to subdued house rent inflation. Inflation in personal care and effects rose to 9.8 per cent during 2024-25 from 7.8 per cent a year ago, primarily driven by higher international prices of gold on global safe haven demand amidst geopolitical uncertainty and the evolving global monetary policy trajectory.

Chart II.3.14: Domestic Oil Price Trends

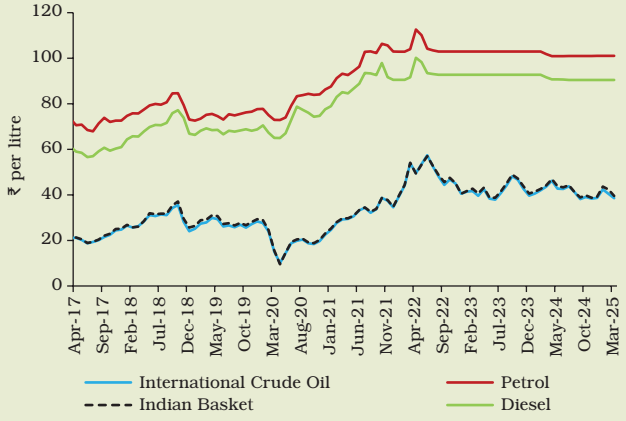
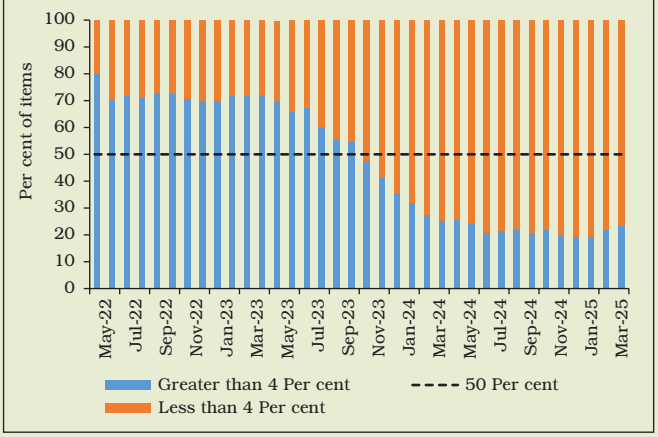


Chart II.3.15: Inflation - Core Items



Note: International crude oil price represents the average price of West Texas Intermediate (WTI), Brent and Dubai Fateh.
Source: World Bank Pink Sheet Database, Indian Oil Corporation Limited, PPAC, NSO and RBI staff estimates.

5. Other Indicators of Inflation

II.3.23 From a sectoral perspective, inflation measured by the CPI for industrial workers (CPI-IW) moderated to 3.4 per cent during 2024-25 from 5.2 per cent a year ago, driven by lower fuel and core inflation. Inflation based on the CPI for agricultural labourers (CPI-AL) and rural labourers (CPI-RL) moderated to 5.7 per cent, each, during 2024-25 from 7.1 per cent and 6.9 per cent, respectively, a year ago, primarily driven by moderation in food inflation.

II.3.24 Inflation measured by the wholesale price index (WPI) increased to 2.3 per cent during 2024-25 from a deflation of (-) 0.7 per cent a year ago, primarily due to an uptick in food inflation and pass-through of global metals and minerals prices. WPI inflation in primary articles (weight of 22.6 per cent in the WPI basket) increased to 5.1 per cent during 2024-25 from 3.5 per cent a year ago, driven by food price pressures due to weather disturbances. In contrast, fuel and power recorded deflation, averaging (-) 1.3 per cent during 2024-25, mirroring the easing of global energy prices. Inflation in manufactured products (weight of 64.2 per cent) increased to 1.7 per cent during 2024-25 from a deflation of (-) 1.7 per cent a year ago, led by food products, and non-ferrous and precious metals. Reflecting the increase in WPI inflation, the gross domestic product (GDP) deflator inflation increased to 3.0 per cent during April-December 2024 from 2.3 per cent in the corresponding period of the previous year.

II.3.25 Minimum support prices (MSPs) in 2024-25 were increased in the range of 1.5-12.7 per cent for the *kharif* crops and 2.4-7.0 per cent for the *rabi* crops. Nigerseed witnessed the maximum MSP increase among the *kharif* crops while barley recorded the highest increase among the *rabi* crops.

II.3.26 Nominal rural wage growth decelerated marginally to 5.9 per cent during 2024-25 from 6.0 per cent during the previous year, primarily driven by non-agricultural wages, which moderated to 5.6 per cent during 2024-25 from 5.9 per cent a year ago. The moderation was driven by handicraft workers, bamboo/cane basket weavers, and sweeping/cleaning workers within the category of non-agricultural labourers. Agricultural wages, however, increased marginally to 6.3 per cent during 2024-25 from 6.0 per cent a year ago.

6. Conclusion

II.3.27 Headline inflation moderated in 2024-25 on account of robust agricultural crop production, softening global commodity prices - particularly food and energy, easing supply chain pressures, supply management measures undertaken by the government and lagged impact of monetary policy actions. Food inflation, which remained elevated on recurrent weather-induced supply disturbances, corrected in January-March 2025 on higher market arrivals. Fuel prices remained in deflation in 2024-25 on lower prices of LPG and kerosene. Core inflation softened to its lowest in the current series during the initial part of the year, with benign uptick in the subsequent months. Looking ahead, food inflation is likely to soften on the back of a better *rabi* crop leading to gradual moderation in headline inflation. The disinflationary process, however, is subject to uncertainties emanating from prolonged geopolitical conflicts, evolving trade dynamics and weather conditions, which warrant continuous vigil and careful monitoring of the evolving dynamics.

II.4 MONEY AND CREDIT

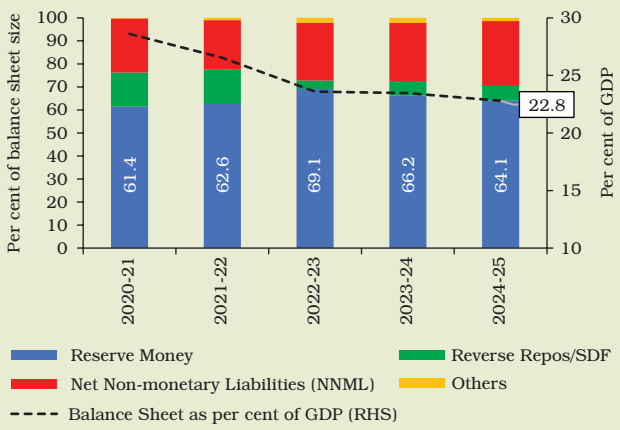
II.4.1 Monetary and credit conditions evolved in sync with the monetary policy stance during the year. Reserve money (RM) adjusted for the first-round impact of changes in the cash reserve ratio (CRR)[15] moderated during the year on account of deceleration in bankers' deposits with the Reserve Bank; while currency in circulation (CiC) expanded at a higher pace in comparison with the previous year as the impact of withdrawal of ₹2000 banknotes from circulation initiated in May 2023 dissipated. Bank credit growth remained in double digits, even as the wedge between deposit and credit growth moderated.

II.4.2 Against this backdrop, sub-section 2 delves into reserve money dynamics and the shifts in the Reserve Bank's balance sheet. Sub-sections 3 and 4 examine developments in money supply and bank credit, respectively, followed by concluding observations.

2. Reserve Money[16]

II.4.3 Reserve money (RM) represents the stock of monetary liabilities in the central bank's balance sheet (Chart II.4.1). Risk buffers and revaluation accounts [forming the bulk of net non-monetary liabilities (NNML)] along with surplus liquidity placed by banks with the Reserve Bank under the reverse repos/standing deposit facility (SDF) are the other major components of the balance sheet.

Chart II.4.1: Reserve Bank's Balance Sheet - Components (Liabilities) [end-March]



NNML: Comprise economic capital (such as capital, reserves, contingency fund, asset development fund, currency and gold revaluation account, investment revaluation account and foreign exchange forward contracts valuation account), RBI employee provident fund account and IMF quota subscriptions and other payments *minus* other assets.
Source: RBI.

II.4.4 The Reserve Bank's balance sheet size moderated to 22.8 per cent of GDP as at end-March 2025 from 23.5 per cent as at end-March 2024, mirroring the trend observed in other major economies (Chart II.4.2).

II.4.5 The RM[17] growth, adjusted for the first-round impact of change in CRR, stood at 5.8 per cent in 2024-25 as compared with 6.7 per cent a year ago (Chart II.4.3a and Appendix Table 4). RM growth witnessed a transient slump in August 2024 due to the base effect of temporary imposition of incremental CRR (I-CRR)[18] in August 2023 (Chart II.4.3b).

II.4.6 The growth in CiC - the major constituent of RM with a share of 76.9 per cent – recovered to 5.8 per cent during 2024-25 from 4.1 per cent

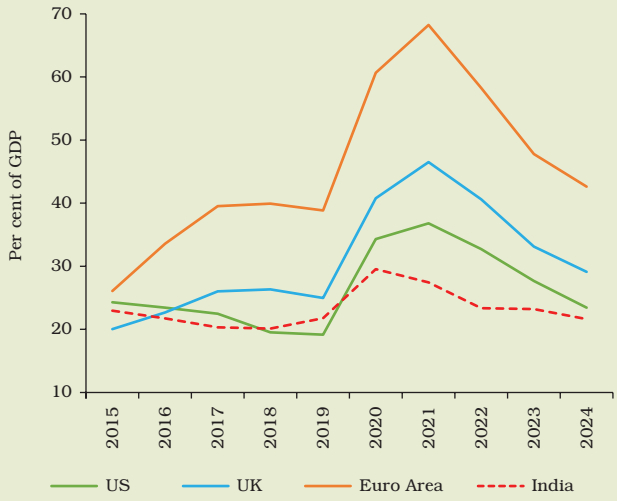
[15] CRR was reduced from 4.5 per cent to 4.0 per cent in two tranches of 25 basis points (bps) each effective fortnight beginning December 14, 2024 and December 28, 2024.

[16] In sub-section 2, growth and other ratios pertain to the last Friday of the respective financial year/quarter/month.

[17] Comprises currency in circulation, bankers' deposits with the Reserve Bank and other deposits with the Reserve Bank, on the liabilities side.

[18] Effective August 12, 2023, the Reserve Bank imposed a 10 per cent I-CRR on the increase in net demand and time liabilities (NDTL) of scheduled banks during May 19 - July 28, 2023 to absorb the surplus liquidity resulting from the withdrawal of ₹2000 banknotes. This measure was phased out between September 9, 2023 and October 7, 2023 to ensure orderly liquidity management.

Chart II.4.2: Central Bank Balance Sheet Size (end-December)

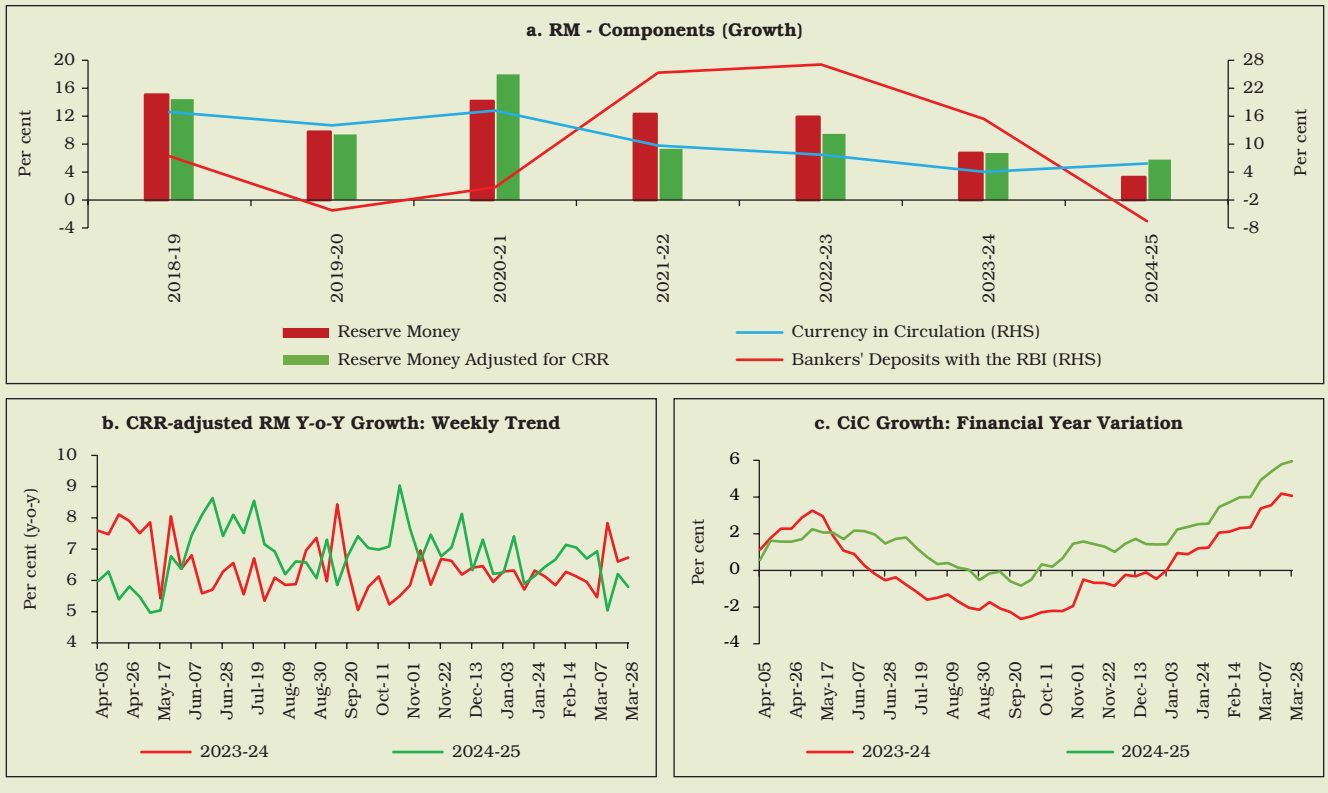


Source: RBI, FRED (St. Louis Fed), BoE, IMF, CEIC, GoI and RBI staff estimates.

a year ago, reflecting the impact of withdrawal of ₹2000 banknotes, as noted earlier[19] (Charts II.4.3a and II.4.3c). Growth in bankers' deposits with the Reserve Bank (20.8 per cent share in RM), *i.e.*, balances maintained by banks to meet their CRR requirements, declined by 6.5 per cent during the year, reflecting the reduction in CRR by 50 bps and moderation in bank deposits (Chart II.4.3a). Adjusted for the first-round impact of the CRR reduction, bankers' deposits rose by 4.4 per cent.

II.4.7 The currency-GDP ratio moderated further with the increasing usage of digital payments, including central bank digital currency (CBDC)[20]. Retail digital payments

Chart II.4.3: Reserve Money - Components (Liabilities)

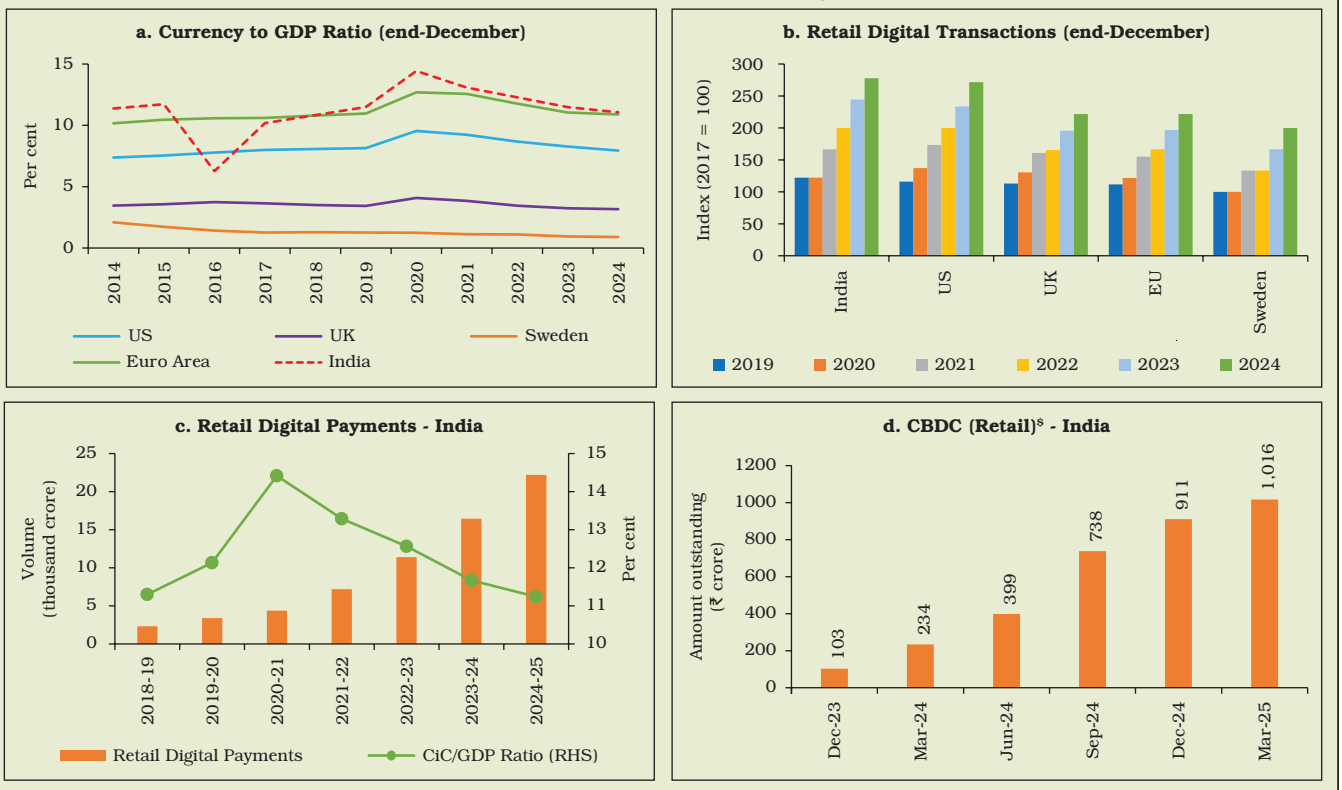


Source: RBI.

[19] See Chapter VIII for details.

[20] Details on various modes of digital payments (including CBDC) are covered in Chapters VI, VIII and IX of this Report.

Chart II.4.4: Currency in Circulation and Digital Payments



$: Introduced on December 1, 2022.
Source: RBI, GoI, CEIC, Statista, IMF and RBI staff estimates.

increased by 17.9 per cent in value terms and 35 per cent in volume terms during 2024-25 (Chart II.4.4).

II.4.8 On the sources side (assets), RM comprises net domestic assets (NDA)[21] and net foreign assets (NFA)[22] of the Reserve Bank. During 2024-25, NFA expanded by ₹2.8 lakh crore, although growth in FCA decelerated with net sales to authorised dealers at ₹2.9 lakh crore as against net purchases of ₹3.4 lakh crore during the previous year. The share of gold in NFA increased to 12.0 per cent as at end-March 2025 from 8.3 per cent as at end-March 2024, mainly due to revaluation gains from gold prices. The Reserve Bank's net credit to the government expanded during the year owing to the liquidity injection through purchase of G-secs *via* open market operations (OMOs) during January-March 2025 (Chart II.4.5).

3. Money Supply[23]

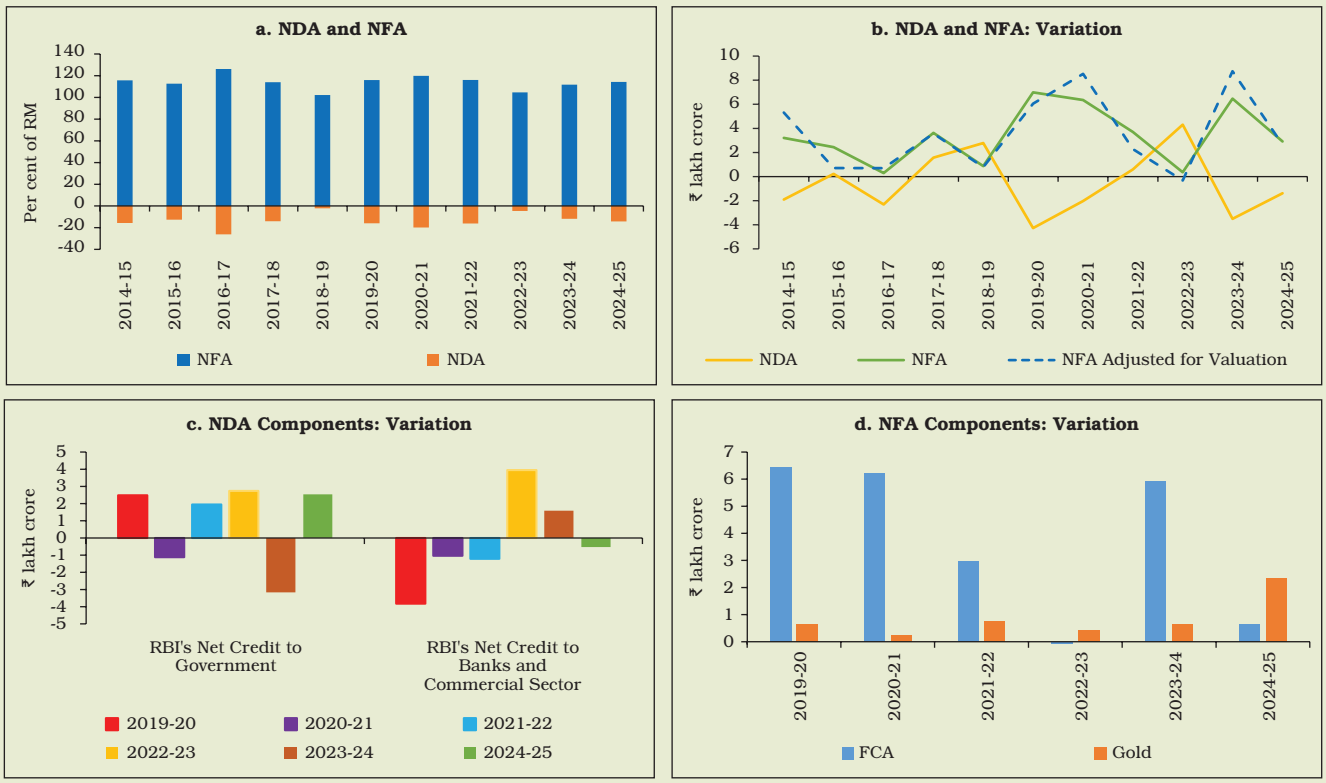
II.4.9 Money supply – in terms of broad money (M_3) – mainly consists of currency with the public (CwP) and aggregate deposits (AD) of banks on

[21] Comprises net Reserve Bank credit to banks, government and commercial sector (mainly primary dealers).

[22] Consists of gold and foreign currency assets (FCA). FCA includes special drawing rights (SDRs) transferred from the Government of India (GoI). The remaining SDR holdings with the GoI and reserve tranche position (RTP) in the IMF, which represents India's quota contribution to the IMF in foreign currency, are not a part of the Reserve Bank's balance sheet.

[23] In sub-sections 3 and 4, growth and other ratios pertain to the last reporting Friday of the respective financial year/quarter/month. Data exclude the impact of merger of a non-bank with a bank.

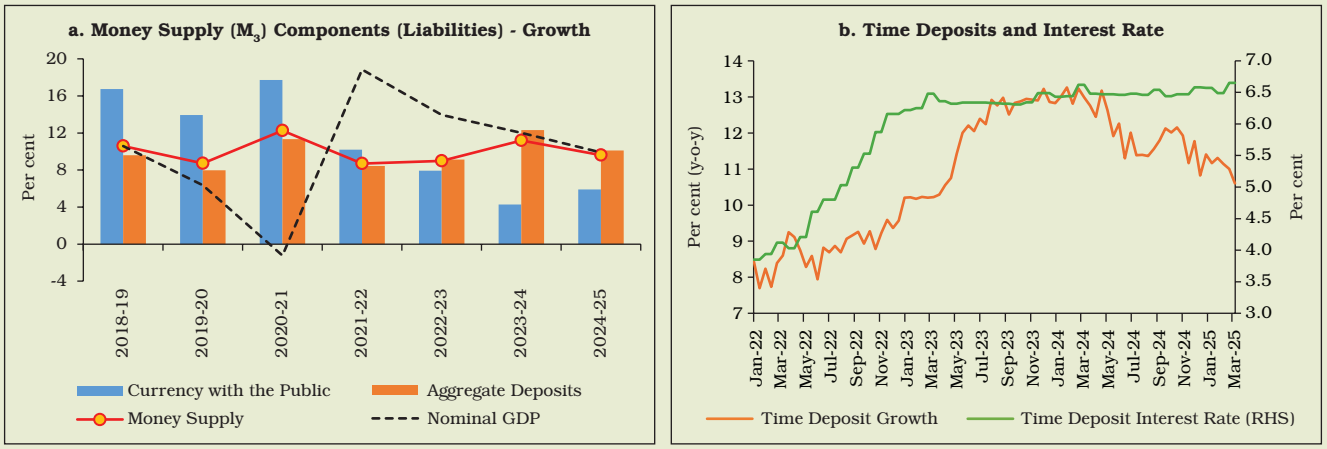
Chart II.4.5: Reserve Money - Sources (Assets)



Source: RBI.

the components side (liabilities). M_3 recorded a growth of 9.6 per cent as on March 21, 2025 as compared with 11.2 per cent a year ago, driven by bank deposits (Chart II.4.6). The expansion in bank deposits[24] outpaced that in CwP for the third consecutive year. The ratio of M_3 to GDP

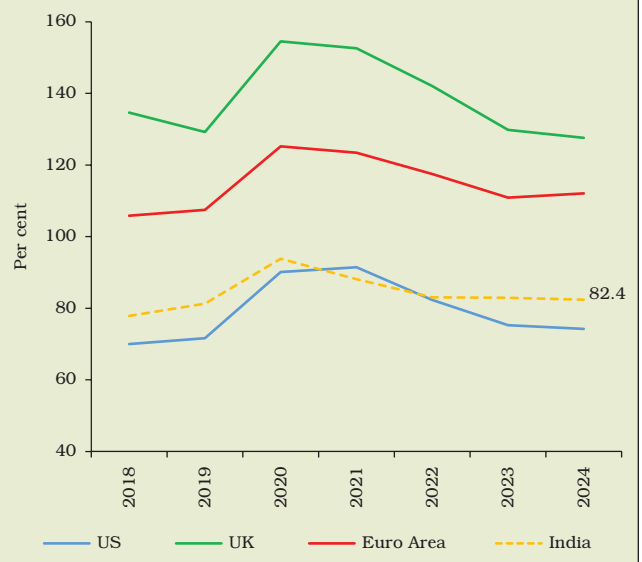
Chart II.4.6: Money Supply and SCBs' Time Deposits



Note: Time deposit interest rate refers to weighted average domestic term deposit rates for fresh rupee term deposits of SCBs.
Source: RBI.

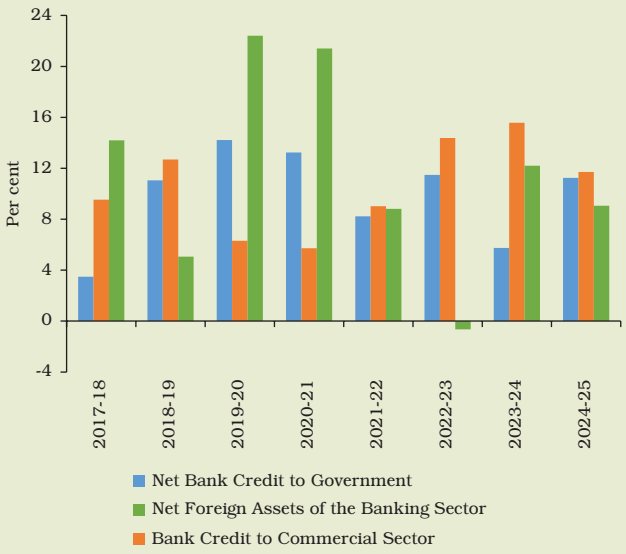
[24] Demand deposits remained volatile, largely mirroring the variation in currency with the public.

Chart II.4.7: M_3 to GDP Ratio (end-December)



Source: RBI, GoI, IMF, CEIC and RBI staff estimates.

Chart II.4.8: Money Supply Sources (Assets) - Growth



Source: RBI.

remained broadly at the level of the previous year (Chart II.4.7).

II.4.10 On the sources side (assets), the expansion in M_3 was mainly driven by bank credit to the commercial sector, which grew by 11.8 per cent in 2024-25 (15.6 per cent a year ago). Net bank credit to government increased by 11.2 per cent in 2024-25 (5.7 per cent a year ago). The excess holdings of statutory liquidity ratio (SLR) securities[25] of SCBs were 10.3 per cent of NDTL as on March 21, 2025. The net foreign assets of the banking sector increased, mirroring the expansion in NFA of the Reserve Bank's balance sheet during the year (Charts II.4.5 and II.4.8; Table II.4.1).

Key Monetary Ratios

II.4.11 The transaction velocity of money, *i.e.*, nominal GDP as a proportion of M_3, remained stable during 2024-25. The currency-deposit ratio at 15.4 per cent as on March 21, 2025 moderated further from 15.9 per cent as on March 22, 2024, reflecting, *inter alia,* an increasing shift in public preference towards digital modes of payments. The reserve-deposit ratio softened during the year due to reduction in CRR (Chart II.4.9a). The cumulative impact of moderation in both currency-deposit ratio and reserve-deposit ratio reflected on the money multiplier (MM), which increased to 5.7 as on March 21, 2025 from 5.4 as on March 22, 2024 (Chart II.4.9b).

[25] Excess holdings of SLR securities provide collateral buffers to banks for availing funds under the liquidity adjustment facility (LAF) and are also a component of the liquidity coverage ratio (LCR). The Reserve Bank increased the limit for holding securities under the held to maturity (HTM) category from 22 per cent to 23 per cent of NDTL, effective April 8, 2022. The HTM limits have been restored to 19.5 per cent in a phased manner as on March 31, 2025.

Table II.4.1: Monetary Aggregates

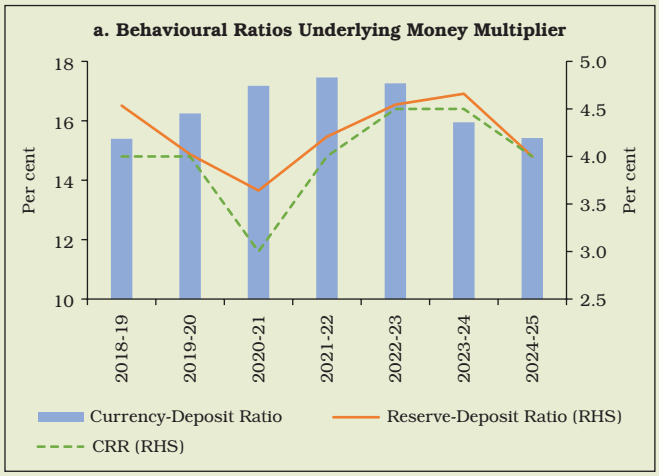
Item	Outstanding as on March 21, 2025 (₹ lakh crore)	Growth Rate^ (per cent, y-o-y)		
		2022-23	2023-24	2024-25
1	2	3	4	5
I. Reserve Money (RM)	48.4*	9.7 (7.4)	6.7 (6.7)	3.3 (5.8)
II. Money Supply (M_3)	272.1	9.0	11.2	9.6
III. Major Components of M_3				
III.1. Currency with the Public	36.2	7.9	4.3	5.9
III.2. Aggregate Deposits	234.8	9.1	12.3	10.1
IV. Major Sources of M_3				
IV.1. Net Bank Credit to Government	81.4	11.5	5.7	11.2
IV.2. Bank Credit to Commercial Sector	186.4	14.4	15.6	11.8
IV.3. Net Foreign Assets of the Banking Sector	59.8	-0.6	12.2	8.0
V. Money Multiplier (Ratio)	5.7			

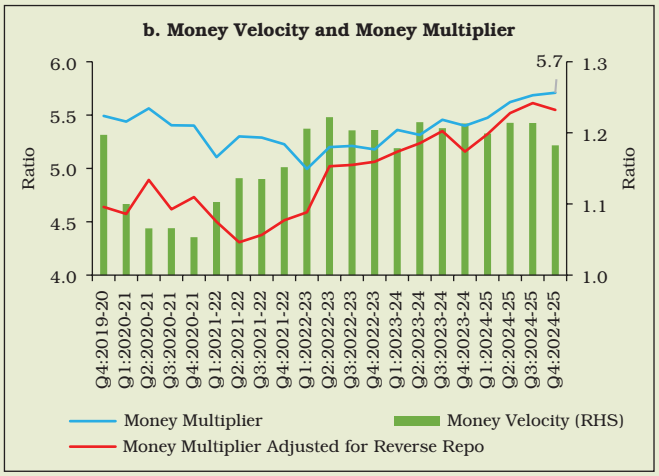
*: Data for RM pertain to March 28, 2025.
^: Data for RM and M_3 relate to last Friday and last reporting Friday of the financial year, respectively.
Note: 1. Figures in parentheses indicate growth in RM adjusted for the first-round impact of CRR changes.
2. Data are provisional.
Source: RBI.

4. Credit

II.4.12 Double digit growth in bank credit was sustained during 2024-25, led by retail and services sectors (Box II.4.1). Bank group-wise, public sector banks (PSBs) registered higher credit growth than that of private sector banks (PVBs), with the former maintaining the largest share in total credit (Chart II.4.10).

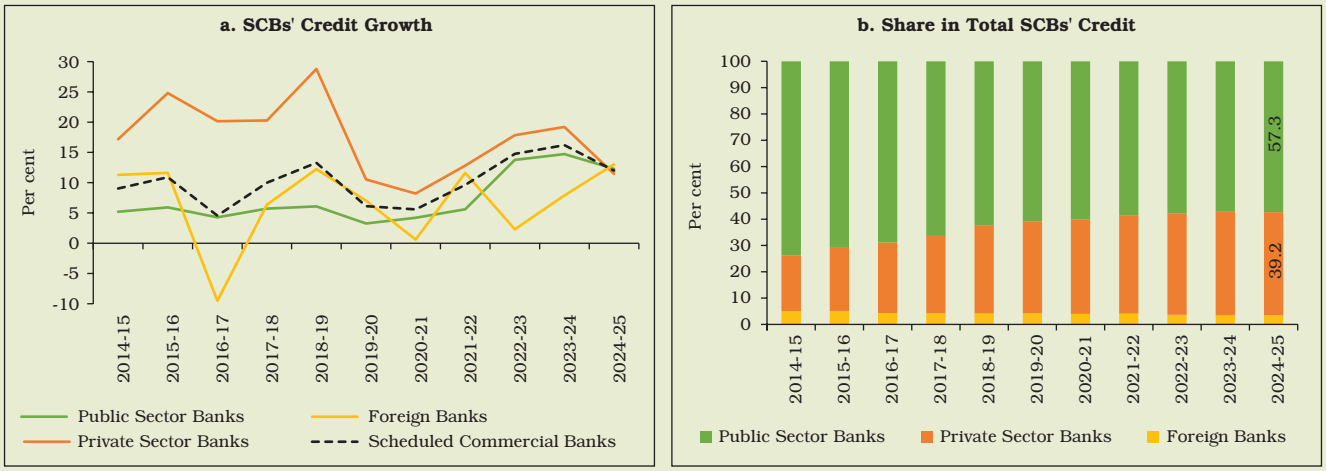
Chart II.4.9: Monetary Ratios





Source: RBI staff estimates.

Chart II.4.10: Bank Group-wise Credit



Source: RBI.

Box II.4.1
Drivers of Firm Demand for Credit

Bank credit growth remains in double digits, *albeit* with some moderation. To explore the role of firm characteristics and macroeconomic conditions in determining firm-level borrowing (from banks as well as total borrowings), the following regression equation adapted from Ottonello and Winberry (2020) is estimated for Indian non-financial firms for the period 2013-14 to 2023-24:

$$\Delta\, log(Debt_{i,t}) = \alpha_i + \alpha_s + \gamma\, Spread_{s,t} + \beta_1\, (Leverage_{i,t-1} * Spread_{s,t}) + \beta_2\, (NonBank * Spread_{s,t}) + \Gamma_1{}'\, X_{i,t-1} + \Gamma_2{}'\, A_{t-1} + \epsilon_{i,t}$$

where *'i', 's'* and *'t'* denote firm, sector and time, respectively; α_i and α_s refer to firm and sector fixed effects, respectively; *'X'* denotes firm-specific controls [*viz.*, leverage, size, age, liquidity, growth in sales and investment, and interest coverage ratio (ICR)]; and *'A'* denotes aggregate control (*viz.*, non-agricultural real GVA growth). Spread, a proxy for the relative cost of funds, captures the difference between sector specific weighted average lending rates (WALR) and market-based funds [external commercial borrowing (ECB)] rate. The interaction terms with spread allow the impact of spread on debt growth to vary depending on the firm's existing leverage and access to alternative funding.

Regression results indicate that larger firms are less likely to borrow, which could be due to better availability of internal resources (Table 1). Older firms, while using less bank credit, have higher total debt, likely using non-bank funding for expansion or refinancing. Sales growth, pre-COVID, positively correlates with bank borrowing for expansion, though this relationship weakened post-COVID. Firms with better liquidity and ICR borrow more, reflecting stronger financials, while highly leveraged firms borrow less on aggregate, potentially deleveraging or facing funding constraints. Higher domestic growth increases overall funding demand for business activity.

Higher relative bank loan costs drive firms, especially in services, towards cheaper market-based funding. Firms with non-bank funding access are more sensitive to these cost differences, increasing total borrowing when bank loans become expensive.

Overall, firm-specific factors, macroeconomic conditions, and relative funding costs are key borrowing determinants, varying across sectors and time. Given strong bank balance sheets, a revival in private investment can potentially drive increased demand for bank credit.

(Contd.)

Table 1: Estimated Firm-Level Borrowing

Dependent Variable: $\Delta\, log(Debt_{i,t})$

Explanatory Variable		Coefficients			
		All Sectors		Services Sector	
		Borrowings from Banks	Total Borrowings	Borrowings from Banks	Total Borrowings
1		2	3	4	5
	$\text{Spread}_{s,t}$ * NonBank	0.005	0.014*	0.010	0.013
		(0.011)	(0.008)	(0.025)	(0.015)
	$Leverage_{i,t-1}$ * $Spread_{s,t}$	0.014**	0.007*	0.026**	0.005
		(0.006)	(0.004)	(0.011)	(0.008)
	$Spread_{s,t}$	-0.060**	0.088***	-0.126**	0.164***
		(0.028)	(0.020)	(0.051)	(0.038)
Firm Controls	$Size_{i,t-1}$	-0.277***	-0.363***	-0.452***	-0.585***
		(0.081)	(0.058)	(0.145)	(0.102)
	$Age_{i,t-1}$	-0.052***	0.048***	-0.082***	0.095***
		(0.017)	(0.013)	(0.029)	(0.023)
	$Sales\ Growth_{i,t-1}$	0.010	-0.011	0.002	-0.007
		(0.014)	(0.008)	(0.023)	(0.015)
	$Investment\ Growth_{i,t-1}$	0.007	-0.006	0.005	0.006
		(0.012)	(0.008)	(0.017)	(0.014)
	$Liquidity_{i,t-1}$	0.266***	0.202***	0.273***	0.200***
		(0.079)	(0.041)	(0.100)	(0.051)
	$Leverage_{i,t-1}$	-0.227**	-0.197***	-0.314***	-0.218***
		(0.044)	(0.030)	(0.086)	(0.059)
	$ICR_{i,t-1}$	0.035	0.070***	0.025	0.059**
		(0.028)	(0.022)	(0.027)	(0.025)
Aggregate Control	$Non\text{-}agri\ Growth_{t-1}$	-1.151***	1.386***	-2.161**	2.412***
		(0.428)	(0.297)	(0.835)	(0.599)
R-squared		0.156	0.219	0.188	0.246
Number of Observations		13,260	15,362	4,243	5,456

***, ** and * represent significance levels at 1 per cent, 5 per cent and 10 per cent, respectively.

Note: 1. Figures in parentheses indicate robust standard errors.
2. Unit-level data, accessed from CMIE Prowess, include those firms which have at least three years of data on outstanding debt; and also, do not belong to finance, insurance, real estate, utilities and public administration. All other data are sourced from DBIE, RBI.
3. Services sector includes wholesale and retail trade, transport, information and communication technology, professional and other services.
4. Firm and sector fixed effects have been included.
5. Dependent variable captures change in log of real debt outstanding as a total or from banks. Firm-specific controls include lagged values of size (log of real total assets), age in years since incorporation, growth in real sales, growth in real investment, leverage (ratio of total debt to total assets) and liquidity (quick ratio). Investment denotes changes to real total capital and includes both fixed and intangible assets. ICR denotes ratio of earnings to interest expense. Real variables are obtained using non-agricultural GDP deflator. Non-agricultural real GVA growth is in y-o-y growth terms.
6. Leverage has been demeaned for the firm, and all firm-specific variables have been standardised across the sample, enabling better comparison across firms and sectors over time.
7. Non-bank dummy takes value 1 if a firm has accessed credit from a non-bank source (*viz.*, domestic financial market and ECBs) during the sample period. Dummies are also included for asset quality review (2015-16), COVID-19 (2020-21) and merger of a non-bank with a bank (2023-24).

Source: RBI staff estimates.

Reference:

Ottonello, P. and Winberry, T. (2020), 'Financial Heterogeneity and the Investment Channel of Monetary Policy', *Econometrica,* 88: 2473-2502.

II.4.13 Sector-wise[26], credit to agriculture and allied activities continued to exhibit double digit expansion in 2024-25. Industrial credit remained robust, driven by a pick-up in credit to medium and large industry. Credit to micro and small industries continued *albeit* with some moderation in the recent period. Similarly, credit to services sector grew but at a decelerated pace. Credit to services sector moderated from elevated levels, following the increase in risk weights on SCBs' credit to NBFCs by 25 percentage points in November 2023. Personal loans grew by 14.0 per cent as at end-March 2025 as compared with 17.6 per cent during the previous year, supported by housing loans which account for nearly half of the segment. Other segments within personal loans such as vehicle loans and other personal loans grew by 8.6 and 8.4 per cent, respectively, at end-March 2025 (Chart II.4.11 and Table II.4.2).

Table II.4.2: Sectoral Credit Growth – SCBs

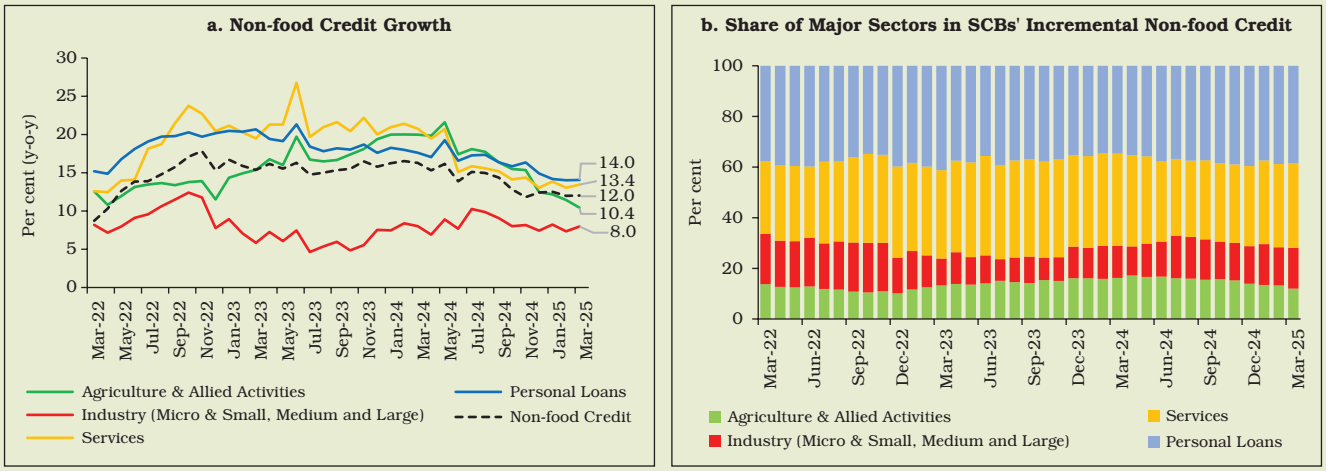
(Per cent, y-o-y)

Sector	2023-24#	2024-25											
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Non-food Credit	**16.3**	**15.3**	**16.2**	**13.9**	**15.1**	**15.0**	**14.4**	**12.8**	**11.8**	**12.4**	**12.5**	**12.0**	**12.0**
I. Agriculture & Allied Activities	**20.0**	**19.8**	**21.6**	**17.4**	**18.1**	**17.7**	**16.4**	**15.5**	**15.3**	**12.5**	**12.2**	**11.4**	**10.4**
II. Industry (Micro & Small, Medium and Large)	**8.0**	**6.9**	**8.9**	**7.7**	**10.2**	**9.8**	**9.1**	**8.0**	**8.1**	**7.4**	**8.2**	**7.3**	**8.0**
II.1. Micro & Small	14.4	15.2	15.3	10.7	13.3	13.6	13.5	10.1	10.2	9.9	9.6	9.8	9.1
II.2. Medium	13.2	13.1	15.3	12.5	17.0	19.3	20.5	19.7	20.1	20.0	18.5	18.1	18.6
II.3. Large	5.8	4.1	6.5	6.3	8.7	7.8	6.6	6.1	6.3	5.3	6.7	5.4	6.4
Major Sub-sectors of Industry													
II.a. Infrastructure	5.6	3.9	6.3	4.6	4.0	3.8	2.2	1.8	1.7	1.2	1.8	1.1	1.7
II.b. Basic Metals & Metal Products	11.7	11.4	13.4	11.3	13.4	16.1	15.5	15.5	16.0	13.4	14.4	13.3	13.0
II.c. Chemicals & Chemical Products	11.2	13.3	13.6	11.7	16.7	15.9	14.9	12.8	11.5	7.1	9.6	6.8	7.4
II.d. Textiles	11.1	8.1	9.3	6.1	8.6	6.4	5.4	5.6	5.5	5.6	5.8	7.1	8.3
II.e. All Engineering	10.5	9.4	10.5	8.7	10.8	16.6	15.7	14.5	18.3	19.5	18.1	19.0	22.1
II.f. Food Processing	14.9	17.9	14.5	10.8	17.1	14.4	11.6	9.9	12.1	10.7	11.0	9.3	5.1
III. Services	**20.8**	**19.5**	**20.7**	**15.1**	**15.9**	**15.6**	**15.2**	**14.1**	**14.4**	**13.0**	**13.8**	**13.0**	**13.4**
III.1. Trade	17.2	14.4	17.3	14.4	15.6	15.7	14.5	12.6	14.7	14.2	14.6	14.8	15.8
III.2. NBFCs	15.0	15.1	15.8	8.2	13.0	12.2	9.7	6.6	8.0	6.9	7.9	6.6	5.9
IV. Personal Loans	**17.6**	**17.0**	**19.3**	**16.6**	**17.3**	**17.4**	**16.4**	**15.8**	**16.3**	**14.9**	**14.2**	**14.0**	**14.0**
IV.1. Consumer Durables	13.0	11.0	15.0	7.6	11.3	10.1	8.6	6.6	4.8	-1.1	-2.6	2.2	-1.3
IV.2. Housing	17.1	17.6	19.9	18.2	19.1	19.7	18.3	17.8	18.0	16.7	15.5	15.6	15.3
IV.3. Credit Cards Outstanding	25.6	23.0	26.2	23.3	22.0	19.9	18.0	16.9	18.1	15.6	13.0	11.2	10.6
IV.4. Vehicle Loans	17.6	17.2	18.4	15.5	14.6	14.5	13.9	12.0	10.3	8.8	9.7	9.6	8.6
IV.5. Other Personal Loans	18.6	15.8	17.1	13.1	13.5	13.0	11.8	11.2	12.2	9.7	9.2	8.4	8.4

#: March 2024 over March 2023.
Note: Data are provisional and exclude the impact of merger of a non-bank with a bank.
Source: RBI.

[26] Non-food credit data are based on fortnightly Section 42 return and covers all SCBs. 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. Data pertain to the last reporting Friday of the month.

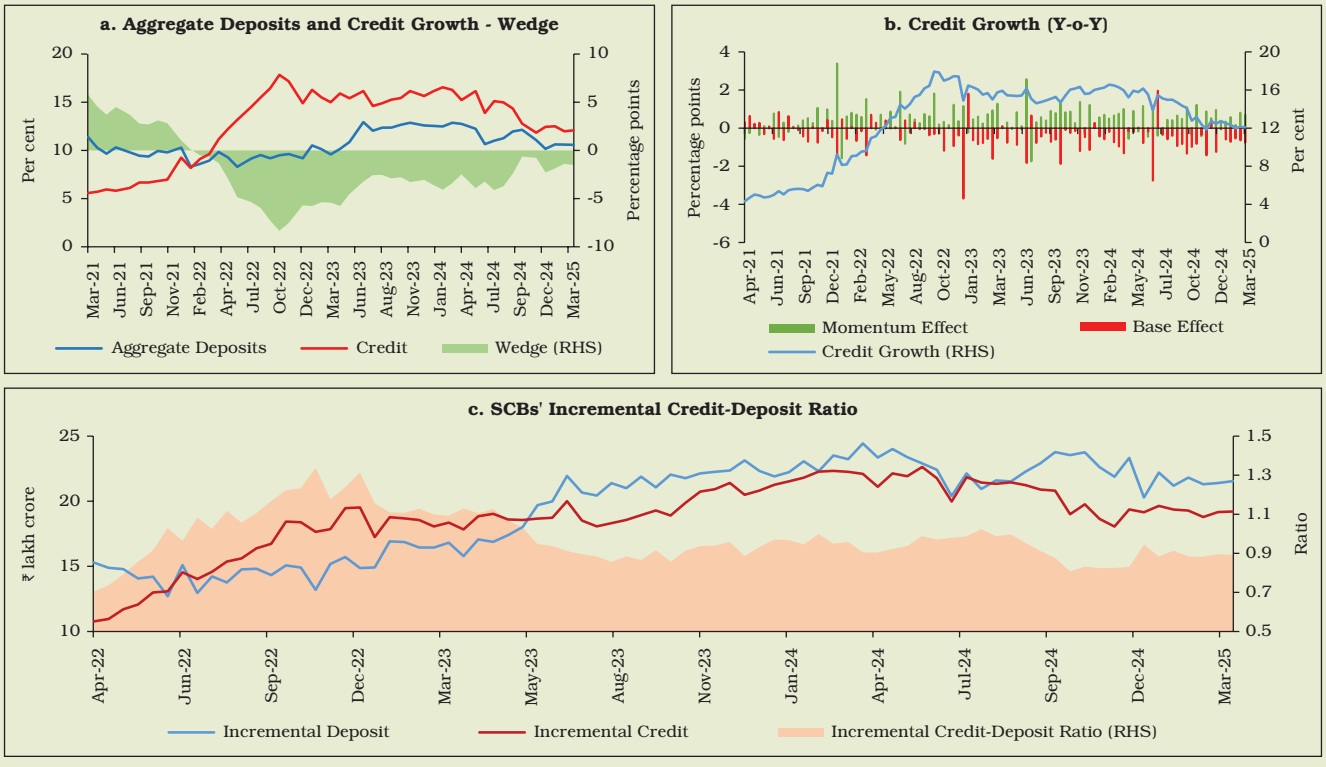
Chart II.4.11: Sector-wise SCBs' Non-food Credit



Source: RBI.

II.4.14 SCBs' deposit growth remained below that of bank credit during 2024-25; however, the wedge between deposit and credit growth narrowed which led to a decline in the incremental credit-deposit ratio (Chart II.4.12). To bridge the funding gap, banks took recourse to large issuances of certificates of deposit (CDs)[27].

Chart II.4.12: SCBs' Deposits and Credit



Source: RBI.

[27] See Section 5 of Chapter II for details.

5. Conclusion

II.4.15 Double digit growth in bank deposits and credit was sustained during 2024-25. Although deposit growth trailed credit growth, the gap narrowed during the year. Bank credit expansion was largely broad-based, led by retail, services and agriculture sectors. Currency demand growth remained moderate with increasing public preference for digital modes of payments.

II.5 FINANCIAL MARKETS

II.5.1 Global financial markets remained volatile during 2024-25, driven by the uncertain trajectory of monetary policy normalisation amidst sticky services inflation, persisting geopolitical tensions, and geoeconomic fragmentation. With inflation gradually moving towards its target from multi-decadal highs, several central banks embarked on policy pivots during the year. A few central banks continued with monetary tightening on the back of elevated inflation while others maintained a pause.

II.5.2 Domestic financial markets exhibited resilience notwithstanding global headwinds and occasional volatility spikes in some market segments during 2024-25. Money market rates remained relatively stable and evolved in sync with liquidity conditions. Issuances of certificates of deposit (CDs) increased as banks supplemented their deposit resources. Sovereign bond yields softened on the back of inclusion of Indian sovereign bonds in major global bond indices, ongoing fiscal consolidation, decline in crude oil prices, and beginning of the monetary easing cycle. Corporate bond yields also softened tracking government security (G-sec) yields along with a widening of spreads amidst moderation in corporate earnings and growth trajectory. Equity markets registered fresh highs in the first half of the year whereas the second half witnessed a correction due to domestic and global factors. During 2024-25, the Indian Rupee (INR) exhibited orderly movements with a depreciation bias amid resurgence in the US dollar index (DXY), heightened global uncertainties and portfolio investment outflows.

II.5.3 Against this backdrop, money market developments are detailed in sub-section 2. Market developments in government securities (G-secs) and corporate bonds are discussed in sub-sections 3 and 4, respectively. Equity and foreign exchange market developments are covered in sub-sections 5 and 6, respectively, with concluding observations in sub-section 7.

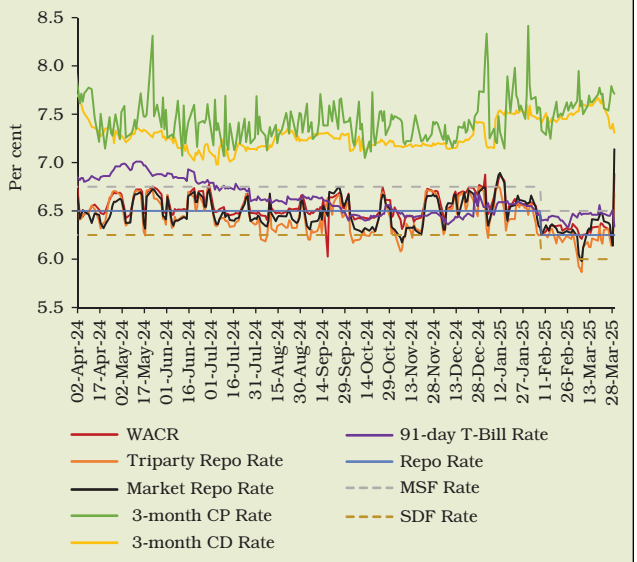
2. Money Market

II.5.4 During 2024-25, money market rates oscillated largely within the policy corridor in tune with the evolving liquidity conditions. Liquidity conditions moved from deficit during Q1:2024-25 to surplus in Q2 and in major part of Q3 (till first half of December 2024) but transited to deficit in Q4 (see Chapter III). The weighted average call rate (WACR) – the operating target of monetary policy – remained within the policy corridor notwithstanding intermittent breaches. It traded above the policy repo rate in Q1; generally hovered around the policy repo rate in Q2; firmed up towards the end of Q3; and remained above the policy repo rate in Q4 (Chart II.5.1). The average spread of the WACR over the policy repo rate moderated to 6 basis points (bps) in 2024-25 from 13 bps in 2023-24.

II.5.5 Volatility in the WACR, measured by the coefficient of variation[28], moderated to 2.2 per cent in 2024-25 from 2.5 per cent in 2023-24.

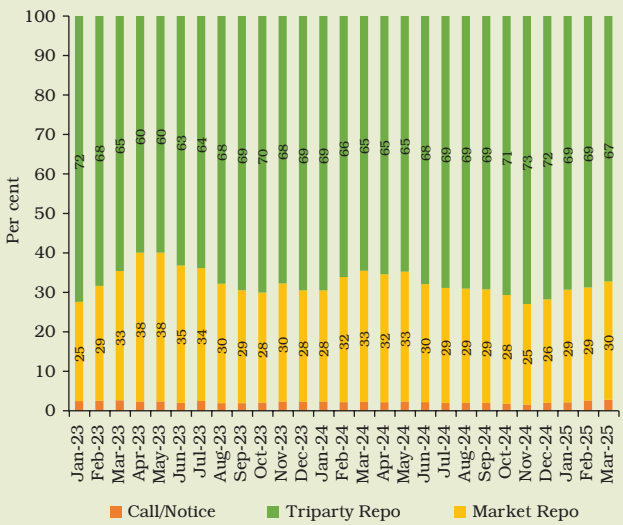
[28] Coefficient of variation is the ratio of standard deviation to mean.

Chart II.5.1: Money Market Rates and Policy Corridor



Source: RBI, FBIL, CCIL-Ftrac and RBI staff estimates.

Chart II.5.2: Share of Major Segments in Money Market Volume



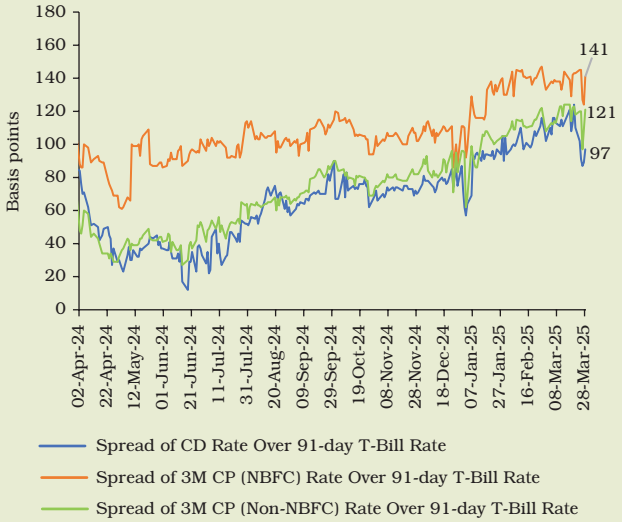
Source: CCIL and RBI staff estimates.

The average daily volume in the money market increased by 10 per cent to ₹5.5 lakh crore during 2024-25 from the previous year. The money market continued to be dominated by the collateralised segment, with the share of call/ notice money being mostly stable at 2 per cent. Within the collateralised segment, the share of triparty repo rose from 66 per cent in Q1:2024-25 to 72 per cent in Q3:2024-25, before declining to 68 per cent in Q4 with concomitant change in the share of market repo (Chart II.5.2).

II.5.6 In other segments of the money market, the average daily spread of CD and commercial paper (CP) rates over treasury bill (T-bill) rates of corresponding maturity increased during 2024-25 on the back of higher issuances of CDs and CPs and regulatory measures on consumer credit and bank credit to non-banking financial companies (NBFCs) announced by the Reserve Bank on November 16, 2023 (Chart II.5.3).

II.5.7 In the primary market, fresh issuance of CDs increased to ₹2.8 lakh crore in Q2:2024-25 from ₹2.5 lakh crore in Q1 and further to ₹2.9 lakh crore in Q3 amidst credit growth remaining higher than deposit growth and stood at ₹3.7 lakh crore in Q4. Total CD issuances amounted to ₹11.9 lakh crore during 2024-25 as compared to ₹8.7 lakh crore during the previous year. Banks used CDs to bridge the credit-deposit gap in 2024-25, with liquidity conditions influencing CD rate spreads over WACR (Box II.5.1).

Chart II.5.3: Spread of 3-month CP and CD Rate over 91-day T-bill Rate



Source: FBIL, Cogencis and RBI staff estimates.

Box II.5.1

What Drives the Money Market Term Spread?

Credit growth has outpaced deposit growth since February 2022 with bank credit registering double digit growth since April 2022. This, *inter alia*, has resulted in banks taking increasing recourse to issuances of CDs to meet the funding gap (Chart 1). CD issuances are often costlier relative to deposits and more sensitive to demand-supply dynamics based on the evolving liquidity and financial conditions (Chart 2).

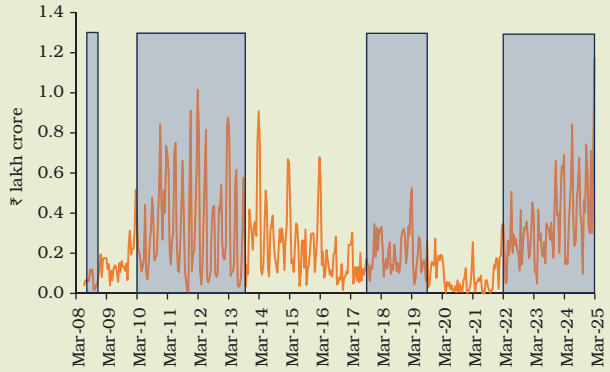
As suggested by the liquidity preference theory of the term structure, investors prefer short tenor instruments that are more liquid *vis-à-vis* longer tenor. Risk averse investors would, therefore, demand sufficient liquidity premium to hold longer tenor instruments. The spread of CD rates over WACR, therefore, constitute such a premium.[29] The WACR – being the operating target of monetary policy – is broadly reflective of liquidity conditions in the overnight money market. Given its information content and its role as a signaling mechanism, movements in WACR gets transmitted to the outer segment of the money market including CDs. The transmission of signals from WACR to CDs could be more than proportionate in certain periods of liquidity stress or if funding gaps are persistent because of an increasing wedge between credit and deposit growth.

The concentration of money market activity in the overnight segment along with the relative illiquidity between 3-days and three months maturity may also impact the spread between WACR and CD rates.

Drawing from the literature on the term premium (Patra *et al.*, 2020), the spread of CD rate over WACR is examined. In this regard, modelling the spread of CD rate over WACR could be useful in comprehending how liquidity and credit market conditions affect the CD market, given the increasing issuance of CDs.

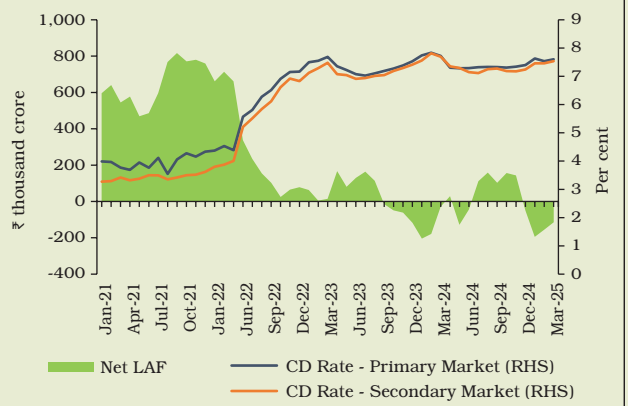
The potential determinants of the spread of CD rate over WACR[30] are explored using generalised autoregressive conditional heteroscedasticity (GARCH) approach. Based on the money market dynamics, the selected explanatory variables include daily net LAF outstanding (NLAF), VIX index, and a dummy variable (DUM-CDGap). The NLAF and VIX capture the liquidity conditions and uncertainty in financial markets, respectively, while DUM-CDGap represents the evolving demand-supply pressures in the credit market which, in turn, gets reflected in the CD market. The GARCH model is employed to analyse the spread based on daily data spanning January 1, 2020 - September 30, 2024. Thus, the sample covers both easing

Chart 1: CD Issuances (Fortnightly)



Note: The shaded area represents episodes of credit growing faster than deposit growth.
Source: RBI.

Chart 2: CD Rates - Primary and Secondary Market



Source: RBI and RBI staff estimates.

(Contd.)

[29] Non-bank participants such as mutual funds actively participate in the CD market as buyers.

[30] Priyadarshini *et al.,* (2024) investigate the risk premia - spread of 3-month CP rate over the 91-day T-bills - and find that system liquidity is a key factor. Moreover, credit growth is found to be a key determinant of CD rate (FBIL, 2020).

and tightening phases of monetary policy as well as periods when credit growth lagged deposit growth and *vice versa*.

Under the GARCH (1,1)-X framework, the mean equation is modelled as follows:

$$Spread_t = \beta_0 + \beta_1 Spread_{t-1} + \beta_2 X_t + \mathcal{E}_t \quad \ldots. (1)$$

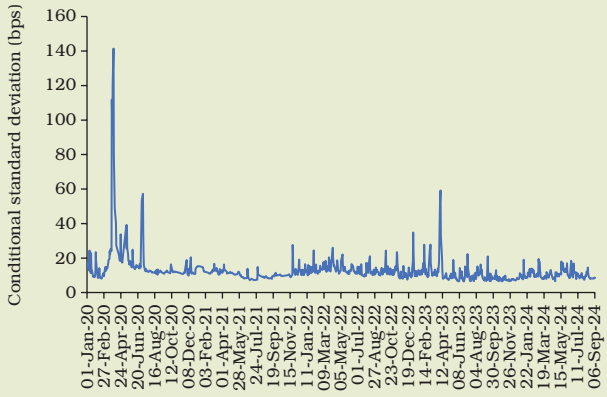
The spread of CD rate is influenced by past values, with X_t as a vector of explanatory variables and an error term reflecting shocks that impact the CD rates. The error term is a function of lagged information matrix Ω_{-1} and is assumed to be normally distributed with zero mean. The variance h_t is defined as:

$$h_t = \alpha_0 + \alpha_1 \mathcal{E}^2_{t-1} + \alpha_2 h_{t-1} + \alpha_3 VIX_t \quad \ldots. (2)$$

where α_1, α_2 and α_3 are coefficients of ARCH, GARCH effects and volatility in financial markets.

The regression results indicate that an improvement in system liquidity has a moderating (statistically significant) impact on the spread of CDs, while increasing wedge between credit and deposit growth elongates the spread. The interactive term of NLAF and DUM-CDGap[31] suggest that although the sobering impact of system liquidity remains statistically significant, the effect wanes when credit growth is faster than that of deposits. Moreover, the estimates of conditional volatility reveal that volatility of the spread was generally low, barring a few episodes including COVID-19 (Table 1 and Chart 3). The residual diagnostics show no ARCH effects and no autocorrelation in residuals.

Chart 3: Time Varying Volatility of CD Rate Spread



Source: RBI staff estimates.

Table 1: GARCH (1,1) Estimation Results

	Model 1	Model 2	Model 3
Mean equation: $Spread_t = \beta_0 + \beta_1 Spread_{t-1} + \beta_2 X_t + \mathcal{E}_t$			
Constant	5.133*** (0.659)	2.743*** (1.043)	5.902*** (0.655)
$Spread_{t-1}$	0.922*** (0.009)	0.906*** (0.010)	0.910*** (0.009)
DUM-CDGap$_t$		3.617** (1.069)	
NLAF$_t$	-0.467*** (0.114)	-0.116 (0.164)	-0.653*** (0.120)
NLAF$_t$ X DUM -CDGap$_t$			0.612*** (0.209)
Variance equation: $h_t = \alpha_0 + \alpha_1 \mathcal{E}^2_{t-1} + \alpha_2 h_{t-1} + \alpha_3 VIX_t$			
ARCH (1)	0.380*** (0.042)	0.390*** (0.044)	0.384*** (0.043)
GARCH (1)	0.294*** (0.052)	0.292*** (0.053)	0.300*** (0.054)
VIX$_t$	5.344*** (0.499)	5.169*** (0.486)	5.185*** (0.506)
Diagnostics:			
Log likelihood:	-3453.49	-3449.29	-3450.20
Total Observations:	907	907	907
ARCH (LM) Prob. (F):	0.920	0.875	0.893
Akaike Info Criterion:	7.768	7.760	7.762

***, **, and * indicate significance levels at 1 per cent, 5 per cent and 10 per cent, respectively.
Note: Figures in parentheses are standard errors.
Source: RBI staff estimates.

References:

1. FBIL (2020), 'Indian CD Market: 2013-2019', *FBIL Thematic Study*, July.
2. Patra, M. Behera, H. and John, J. (2020), 'Revisiting the Determinants of the Term Premium in India', *RBI Bulletin,* November.
3. Priyadarshini, P., Anshul, Sardar, S., Chaudhari, D.R., and Das, S. (2024), 'Drivers of Commercial Paper Rate Spread - An Empirical Assessment', *RBI Working Paper Series*, March.

[31] DUM-CDGAP dummy variable takes value 0 for the period when deposit grew faster than credit and 1 otherwise.

II.5.8 New issuances of CPs in the primary market, which moderated to ₹3.7 lakh crore in Q2:2024-25 from ₹3.8 lakh crore in Q1, rebounded to ₹3.8 lakh crore in Q3 and stood at ₹4.4 lakh crore in Q4. During 2024-25, fresh issuances of CPs increased to ₹15.7 lakh crore due to sustained demand and the regulatory measures on NBFCs mentioned earlier, as compared to ₹13.8 lakh crore during the previous year.

3. Government Securities Market

II.5.9 During Q1:2024-25, G-sec yields exhibited two-way movements. Yields initially rose at the beginning of the quarter amid foreign portfolio investment (FPI) outflows and higher crude oil prices but softened thereafter in the wake of record surplus transfer by the Reserve Bank to the central government, FPI buying ahead of bond index inclusion[32] and decline in crude oil prices. The 10-year generic G-sec yield closed the quarter at 7.01 per cent, a decline of 5 bps from its level as at end-March 2024 (Chart II.5.4).

Chart II.5.4: 10-year Generic G-sec Yield

Source: Bloomberg.

II.5.10 During Q2:2024-25, G-sec yields for the shorter tenor declined more than the longer tenor amidst steepening of yield curves globally, fall in crude oil prices, continued FPI inflows and beginning of rate easing cycle by major central banks, including a 50-bps rate cut by the US Fed. The government's commitment towards fiscal prudence as reflected in the Union Budget 2024-25 along with lower CPI inflation prints for July and August – below 4.0 per cent for the first time since September 2019 – also led to softening of G-sec yields during the quarter. The 10-year generic G-sec yield closed the quarter at 6.75 per cent, a decline of 26 bps from its level at end-June 2024 – the biggest quarterly decline since the quarter ended March 2020.

II.5.11 During Q3:2024-25, G-sec yields were range-bound with upward pressures from higher US treasury yields and domestic CPI inflation being somewhat ameliorated by the monetary policy committee's (MPC's) decision to change the monetary policy stance to neutral and the announcement of the Indian government bonds' inclusion in FTSE Russell index[33]. The 10-year generic G-sec yield closed at 6.76 per cent at end-December 2024, almost unchanged from its level at end-September 2024.

II.5.12 During Q4:2024-25, G-sec yields largely trended downwards amid several liquidity infusion measures and commencement of monetary policy easing cycle by the Reserve Bank. The yields rose in the first fortnight of Q4 to touch a high

[32] Eligible Indian Government Bonds (IGBs) were included in J.P. Morgan Government Bond Index - Emerging Market (GBI-EM) starting June 28, 2024.

[33] On October 8, 2024, FTSE Russell announced that India will be added to FTSE Emerging Markets Government Bond Index (EMGBI) starting in September 2025.

Table II.5.1: FPI Investment in Debt Instruments (End-March)

(Amount in ₹ lakh crore)

Route/ Channel of Investment	2023			2024			2025		
	Limit	Outstanding	Utilisation (per cent of limit)	Limit	Outstanding	Utilisation (per cent of limit)	Limit	Outstanding	Utilisation (per cent of limit)
1	2	3	4	5	6	7	8	9	10
General Route^	11.7	1.8	15.4	11.7	1.9	16.0	13.0	1.9	14.5
VRR^	2.5	2.1	82.0	2.5	1.8	70.1	2.5	2.1	82.1
FAR#	28.0	0.8	2.8	39	1.7	4.5	43.4	3.1	7.1

^: Includes central government securities (G-secs), state government securities (SGSs) and corporate bonds.
#: Available only for the specified securities included under the route.
Source: CCIL and NSDL.

of 6.87 per cent amid rise in US treasury yields. Thereafter, yields broadly trended downward on account of liquidity management measures, *viz.,* daily variable rate repo (VRR) auctions on all working days, OMO purchases of government securities, longer tenor VRR auctions and USD/INR buy-sell swap auctions. OMO purchases aggregating ₹2.83 lakh crore and USD/INR buy-sell swaps amounting to ₹2.18 lakh crore were conducted during the quarter[34]. In the February bi-monthly meeting, the MPC unanimously decided to cut the policy repo rate by 25 bps. The 10-year generic G-sec yield closed at 6.58 per cent as at end-March 2025, 18 bps lower than its level as at end-December 2024. During 2024-25, the domestic yield curve bull steepened as the 10-year generic G-sec yield softened by 48 bps while the 5-year generic G-sec yield softened by 61 bps.

II.5.13 With the introduction of the fully accessible route (FAR)[35] effective April 1, 2020, FPIs have three channels of investment – the general route[36]; the voluntary retention route (VRR); and FAR (Table II.5.1). In aggregate, FPIs invested ₹1.5 lakh crore in debt instruments in 2024-25.

4. Corporate Bond Market

II.5.14 Corporate bond yields softened during 2024-25, mirroring G-sec yields. The monthly average yield on AAA-rated 3-year bonds of public sector undertakings (PSUs), financial institutions (FIs) and banks; non-banking financial companies (NBFCs); and corporates fell by 15 bps, 28 bps and 33 bps, respectively, in March 2025 *vis-à-vis* March 2024 (Table II.5.2).

II.5.15 The spread on AAA-rated 3-year bond yields over G-sec yields of corresponding maturity, however, increased during 2024-25, as the pace of softening in corporate bond yields trailed that in G-sec yields. The increase in spreads was evident across tenors and the rating spectrum. Average daily turnover[37] in the

[34] See Monetary Policy Report, April 2025 for details.

[35] Under FAR, certain categories of central government securities are open fully for non-resident investors without any restrictions, apart from being available to domestic investors as well.

[36] Erstwhile medium-term framework (MTF).

[37] Daily average turnover is calculated as total trades settled during the year divided by the number of trading days.

Table II.5.2: Corporate Bonds* - Yields and Spread

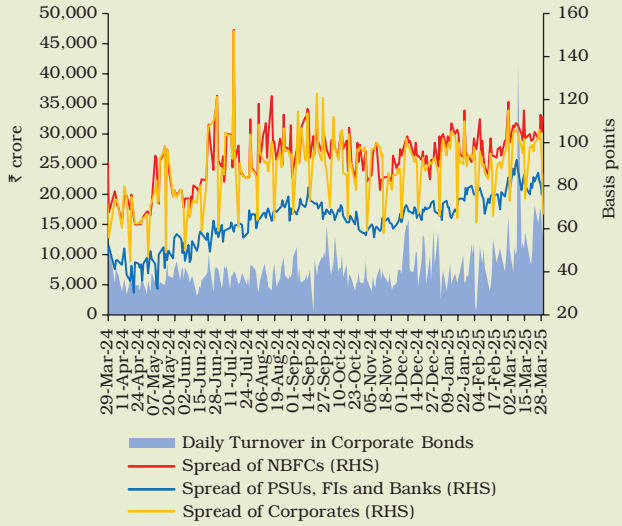
Entity	Yields (per cent)			Spread (bps) [over corresponding risk-free rate]		
	March 2024	March 2025	Change (bps)	March 2024	March 2025	Change (bps)
1	2	3	4 (=3-2)	5	6	7 (=6-5)
(i) PSUs, FIs and Banks	7.63	7.48	-15	44	83	39
(ii) NBFCs	7.98	7.70	-28	80	106	26
(iii) Corporates	7.95	7.62	-33	77	98	21

*: AAA-rated 3-year bonds.
Note: Yields and spreads are computed as monthly averages.
Source: FIMMDA.

secondary market on corporate bonds increased to ₹7,645 crore during 2024-25 from ₹5,722 crore during the previous year (Chart II.5.5).

II.5.16 Primary issuances of listed corporate bonds on domestic stock exchanges rose during 2024-25 along with an increase in mobilisation through overseas issuances (Table II.5.3). Private placements remained the preferred channel, accounting for 99.2 per cent of total resources mobilised through the domestic bond market. Investments by FPIs in corporate bonds increased during the year. The utilisation of the approved limits, however, declined to 15.8 per cent as at end-March 2025 from 16.2 per cent as at end-March 2024, as the absolute limits for FPI investments in corporate bonds increased.

Chart II.5.5: Turnover and AAA-rated 3-Year Yield Spread in Corporate Bond Market



Source: SEBI and FIMMDA.

5. Equity Market

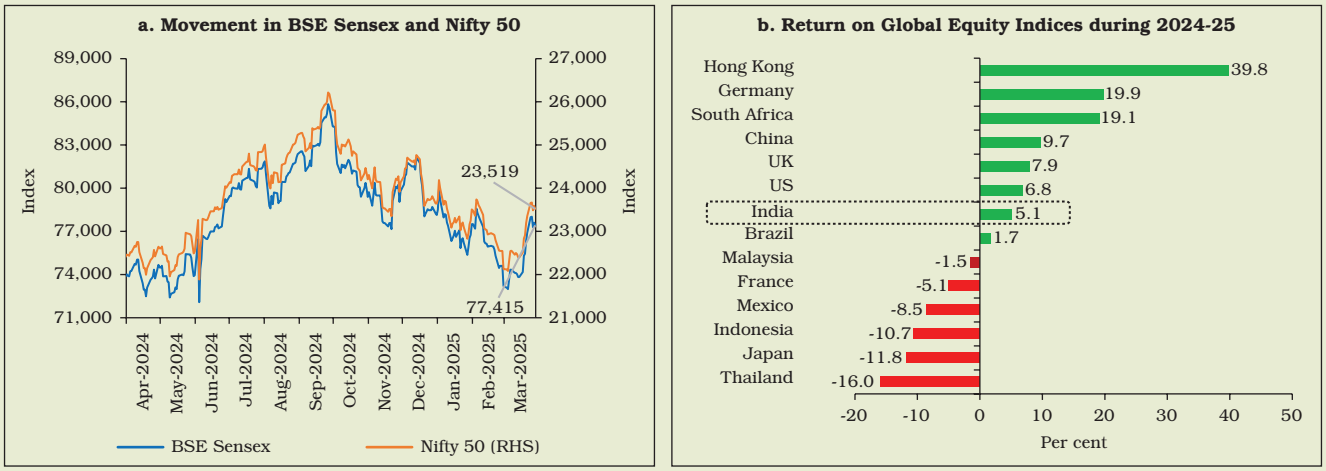
II.5.17 In 2024-25, the Indian equity market witnessed fresh highs in the first half whereas the second half exhibited sharp correction on account of a set of factors, *viz.,* shifting expectations on global monetary policy trajectory, tariff policies in the US and lingering geopolitical tensions in the Middle East and Europe. Overall, the BSE Sensex gained 5.1 per cent to close at 77,415

Table II.5.3: Corporate Bond Market

Item	Amount (₹ lakh crore)		Variation (Col. 3 over Col. 2) [per cent]
	2023-24	2024-25	
1	2	3	4
(i) Primary Corporate Bond Issuances	8.6	9.9	16.1
(ii) Outstanding Corporate Bonds (end-December)	45.5	51.6	13.3
(iii) Investments by FPIs in Corporate Bonds (end-March)	1.08	1.21	11.4

Source: SEBI and NSDL.

Chart II.5.6: Equity Market



Source: BSE, NSE and Bloomberg.

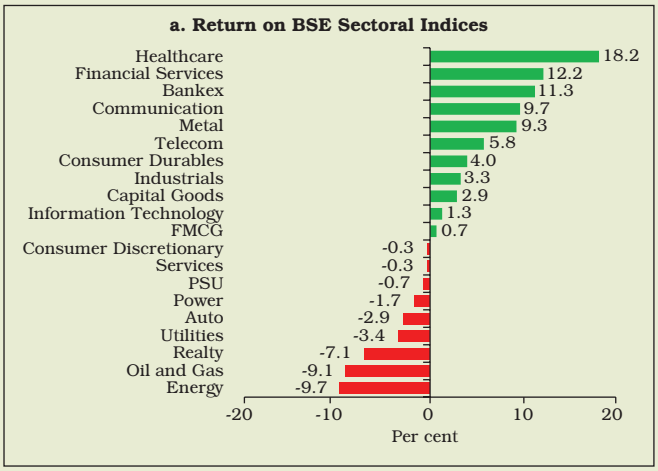
at end-March 2025 (Chart II.5.6). Resource mobilisation in the primary markets through public and rights issues, preferential allotments and qualified institutional placements (QIPs) maintained robust growth, particularly in H1: 2024-25.

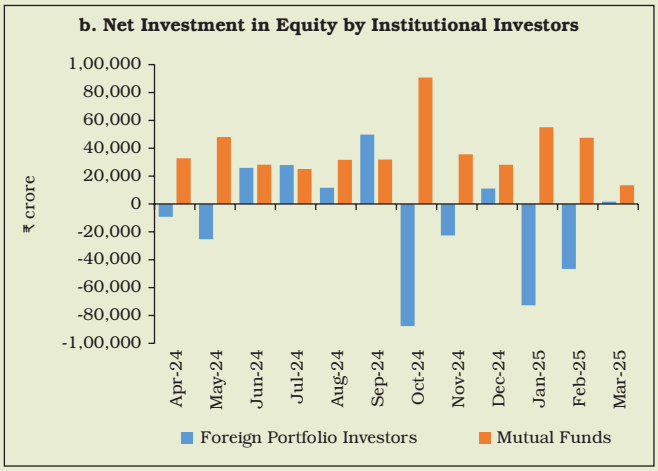
II.5.18 Equity markets started on a positive note in Q1:2024-25 amidst encouraging domestic and global macroeconomic data releases, interspersed by brief correction due to flaring up of geopolitical tensions in the Middle East. During Q2, the market continued the upward trajectory with the BSE Sensex crossing the 80,000 mark in July with headwinds in early August following the release of weaker economic data from the US and large-scale unwinding of the Yen carry trade post-rate hike by the Bank of Japan. After remaining range bound in the first half of September, the BSE Sensex rallied sharply to breach the 85,000 mark - touching a new high of 85,836 on September 26, 2024, supported by expectations of an imminent US Fed policy pivot.

II.5.19 In Q3, Indian equity markets exhibited a declining trend on FPI selling amidst geopolitical tensions, concerns over domestic equity valuations and weaker-than-expected corporate earnings results and domestic GDP print in Q2:2024-25. Some of the declines were reversed in late November and early December on favourable global cues. Benchmark indices declined further in Q4 amidst sustained FPI selling on tariff announcements by the US against major economies, weak domestic growth outlook based on the GDP estimates for 2024-25, and mixed corporate earnings in Q3:2024-25. Markets, however, pared some of the losses in the second half of March amidst FPI buying and expectations of further monetary policy easing.

II.5.20 The broader market indices, *viz.,* the BSE MidCap and BSE SmallCap, increased by 5.6 per cent and 8 per cent, respectively, while sectoral indices exhibited a mixed trend in 2024-25 (Chart II.5.7a). FPIs made net sales of ₹1.4 lakh crore in the domestic equity market during 2024-25 as against net purchases of ₹2.1 lakh crore in the

Chart II.5.7: Broader Markets and Institutional Flows





Source: SEBI, NSDL and Bloomberg.

previous year (Chart II.5.7b). Mutual funds made net purchases of ₹4.7 lakh crore in 2024-25 as against ₹2.0 lakh crore in the previous year.

Primary Market Resource Mobilisation

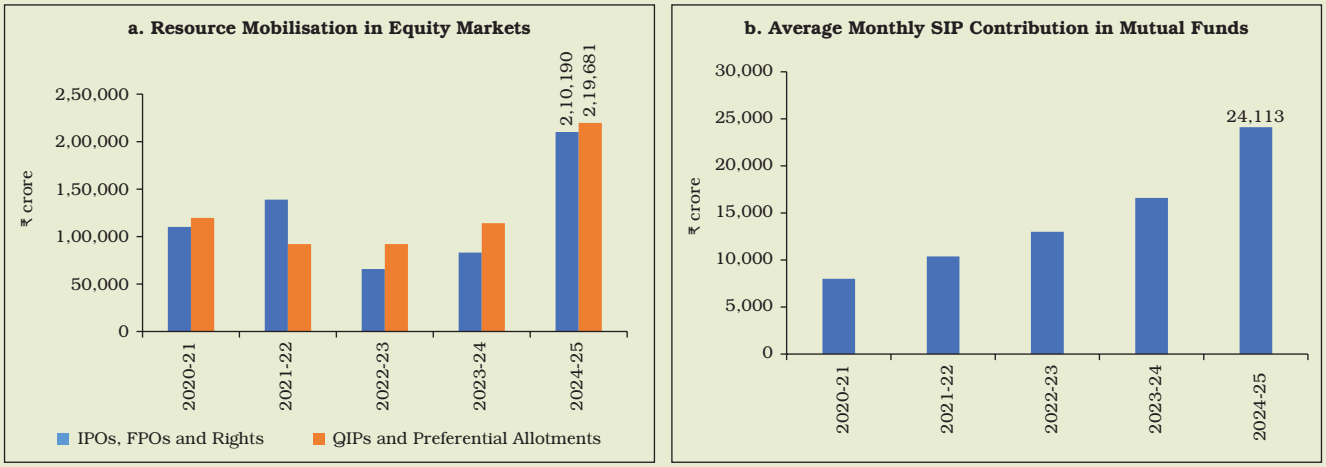
II.5.21 In the primary segment of the equity market, resource mobilisation through preferential allotments and qualified institutional placements (QIPs) rose to ₹2.2 lakh crore during 2024-25 from ₹1.1 lakh crore during the previous year. Resource mobilisation through initial public offerings (IPOs), follow-on public offers (FPOs) and rights issues also increased to ₹2.1 lakh crore from ₹0.8 lakh crore during the previous year (Chart II.5.8a and Appendix Table 5). Issuances by small and medium enterprises (SMEs) remained robust, raising ₹9,961 crore during 2024-25 as compared to mobilisation of ₹6,122 crore in the previous year.

II.5.22 Net resources mobilised by mutual funds increased to ₹8.2 lakh crore during 2024-25 from ₹3.6 lakh crore during the previous year. Net mobilisation by equity-oriented mutual fund schemes rose to ₹4.2 lakh crore from ₹1.8 lakh crore during the previous year. Debt-oriented schemes witnessed net inflows of ₹1.4 lakh crore during 2024-25 as compared with net outflows of ₹0.3 lakh crore during the previous year. Average monthly contribution to mutual funds through the systematic investment plan (SIP) route increased to ₹24,113 crore in 2024-25 from ₹16,602 crore during the previous year (Chart II.5.8b).

6. Foreign Exchange Market

II.5.23 The INR, after remaining steady during H1:2024-25, came under pressure in the second half amid adverse external shocks and spillovers and closed the year lower - depreciating by 2.4 per cent. During Q1, the INR traded in a range bound manner, supported by a fall in crude oil prices and net FPI inflows, amid rise in the DXY and hardening US treasury yields. Overall, the INR closed almost flat at ₹83.38 per US dollar by end-June 2024 (Chart II.5.9).

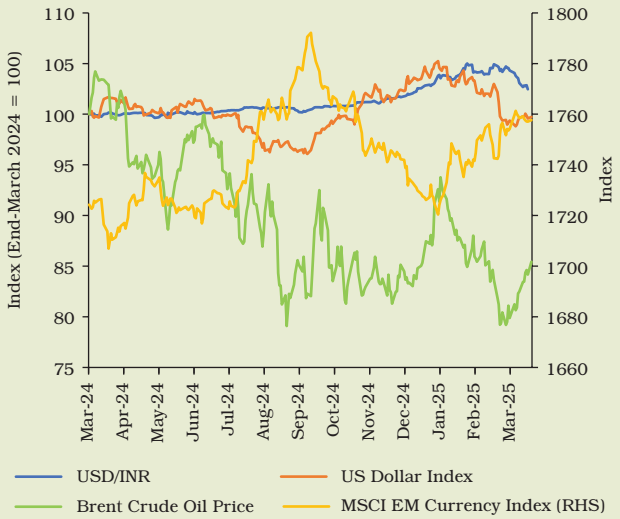
Chart II.5.8: Resource Mobilisation



Source: SEBI and AMFI.

II.5.24 The INR traded under depreciation pressure for most of Q2:2024-25 on reported unwinding of carry trades and recessionary fears in the US leading to safe haven demand. However, the fall in crude oil prices and continuing FPI inflows post inclusion of Indian sovereign bonds in J.P. Morgan bond indices kept the INR supported. Overall, the INR closed the Q2 at ₹83.79 per US dollar, lower by 0.5 per cent from its level at end-June 2024.

Chart II.5.9: Movement in Rupee, US Dollar, Crude Oil Price and EM Currency Index



Source: Bloomberg.

II.5.25 The depreciation bias continued during Q3:2024-25 amid the surge of the DXY, which rose by 7.7 per cent during the quarter – the highest quarterly rise since Q4:2014-15. Most of the Asian currencies traded under pressure with MSCI Emerging Market Currency Index declining by 3.6 per cent during the quarter – the largest quarterly fall since Q2:2022-23. Equity segment witnessed net FPI outflow of more than US$ 11 billion during October 2024. Overall, the INR closed the quarter at ₹85.62 per US dollar, lower by 2.1 per cent from its level at end-September 2024.

II.5.26 The INR continued to trade under pressure during most of Q4:2024-25 amid global uncertainties, tariff related announcements and FPI related outflows. During this period, outflows from the equity segment exceeded US$ 13 billion. However, INR appreciated in March amid softening in the DXY and debt related inflows. Overall, the INR closed at ₹85.46 per US dollar on March 28, 2025, 0.2 per cent higher from its level at end-December 2024.

II.5.27 During 2024-25, the forward premia trended largely flat during the first half of the year. It rose subsequently, led by shorter tenors, amid global policy uncertainty and widening interest rate differential before paring some of those movements in Q4.

II.5.28 The 40-currency nominal effective exchange rate (NEER) and real effective exchange rate (REER) appreciated (y-o-y) by 0.3 per cent and 1.5 per cent, respectively, during 2024-25.

7. Conclusion

II.5.29 During 2024-25, global financial markets remained volatile over protracted geopolitical tensions and persisting uncertainty over the quantum and pace of monetary policy normalisation by the US Fed and other major systemic central banks. Amidst the global headwinds, Indian financial markets demonstrated resilience and orderly movements. Money market rates generally remained aligned with the policy repo rate. G-sec yields softened during the year and exhibited lower volatility than global and emerging market peers. The INR witnessed depreciating bias in the latter half of the year amidst stronger US dollar and portfolio equity outflows. The Indian equity market scaled fresh highs in the first half although it witnessed significant correction in the second half of 2024-25 due to domestic and global factors. Despite moderation in Q4, resource mobilisation in the primary market remained robust in 2024-25.

II.6 GOVERNMENT FINANCES

II.6.1 During 2024-25, the central and state governments pursued fiscal consolidation supported by robust tax collections. For 2025-26, both the Centre and states have placed greater thrust on capital expenditure. Against this backdrop, sub-sections 2 and 3 elaborate on the fiscal position of the Union government in 2024-25 and 2025-26, respectively. Sub-sections 4 and 5 focus on state government finances during 2024-25 and 2025-26, respectively, followed by the finances of the general government for 2024-25 (BE) in sub-section 6. The final sub-section sets out the concluding remarks.

2. Central Government Finances in 2024-25

II.6.2 During 2024-25 (RE), the Union government contained the gross fiscal deficit (GFD) to 4.7 per cent of GDP – 0.2 per cent below budget estimates (BE) – primarily through containment of revenue and capital expenditure (Table II.6.1 and Chart II.6.1)[38].

II.6.3 Revenue expenditure rose by 5.8 per cent in 2024-25 (RE), broadly in line with BE. In 2024-25 (RE), interest payments and outgo on major subsidies as per cent of GDP declined by 0.1 per cent and 0.2 per cent, respectively, as compared to 2023-24. Food subsidy was also below its BE by ₹7,830 crore, partly due to cost savings on account of off-loading of wheat and rice in the open market. The expenditure on pensions and retirement benefits increased to 0.83 per cent of GDP in 2024-25 (RE) from 0.79 per cent in

[38] The GDP data used for central government finances for 2024-25 (RE) pertain to the Second Advance Estimates for 2024-25 released by National Statistical Office on February 28, 2025.

Table II.6.1: Central Government's Fiscal Performance

(Per cent of GDP)

Item		Average of 2015-16 to 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25 (RE)	2025-26 (BE)
1		2	3	4	5	6	7	8	9
I.	Non-debt Receipts	9.1	8.7	8.5	9.4	9.1	9.3	9.5	9.8
II.	Gross Tax Revenue (a+b)	11.0	10.0	10.2	11.5	11.4	11.5	11.6	12.0
	a) Direct Tax	5.7	5.2	4.8	6.0	6.2	6.5	6.8	7.1
	b) Indirect Tax	5.3	4.8	5.5	5.5	5.2	5.0	4.9	4.9
III.	Net Tax Revenue	7.1	6.7	7.2	7.6	7.8	7.7	7.7	7.9
IV.	Non-tax Revenue	1.5	1.6	1.0	1.5	1.1	1.3	1.6	1.6
V.	Non-debt Capital Receipts	0.5	0.3	0.3	0.2	0.3	0.2	0.2	0.2
VI.	Total Expenditure	12.6	13.4	17.7	16.1	15.6	14.8	14.2	14.2
VII.	Revenue Expenditure	10.9	11.7	15.5	13.6	12.8	11.6	11.2	11.0
VIII.	Capital Expenditure	1.7	1.7	2.1	2.5	2.8	3.2	3.1	3.1
IX.	Revenue Deficit	2.4	3.3	7.3	4.4	4.0	2.5	1.8	1.5
X.	Gross Fiscal Deficit	3.5	4.6	9.2	6.7	6.5	5.5	4.7	4.4

BE: Budget Estimates. RE: Revised Estimates.
Source: Union Budget documents.

the previous year, while grants-in-aid to states declined to 1.6 per cent of GDP from 1.8 per cent during the same period.

Chart II.6.1: Contribution to Fiscal Consolidation in 2024-25 RE *vis-à-vis* BE

BE: Budget Estimates. RE: Revised Estimates.
Note: Negative contribution denotes decline in receipts or increase in expenditure or a downward revision in GDP from BE to RE as these contribute to slippage from the budgeted fiscal deficit target. Conversely, positive contribution denotes higher receipts or lower expenditure from BE to RE, as these contribute to attainment of budgeted fiscal deficit target.
Source: Union Budget documents and RBI staff estimates.

II.6.4 Capital expenditure undershot the BE by ₹92,682 crore and was placed at 3.1 per cent of GDP in 2024-25 (RE) as against 3.2 per cent of GDP in 2023-24 (Table II.6.1). The growth in both capital outlay[39] and loans and advances experienced moderation. Effective capital expenditure grew by 5.2 per cent and stood at 4.0 per cent of GDP.

II.6.5 In 2024-25 (RE), the gross tax revenue exceeded its BE by ₹13,285 crore, rising to 11.6 per cent of GDP from 11.5 per cent in 2023-24. Strong performance of income tax and goods and services tax (GST) bolstered tax receipts. While growth in custom duty slowed down, that of Union excise duty recovered (Chart II.6.2).

[39] Capital expenditure *less* loans and advances.

Chart II.6.2: Performance of Major Taxes

Source: Union Budget documents.

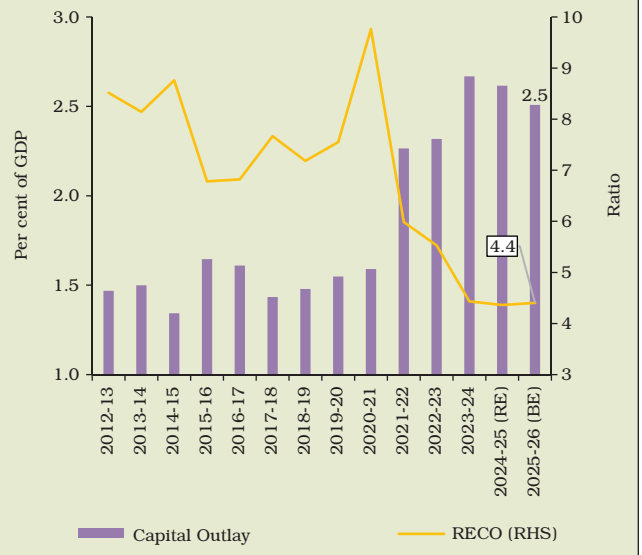
II.6.6 Net tax revenue to the Centre grew by 9.9 per cent, lower than the growth of gross tax revenue owing to higher growth in devolution of taxes to the states. Driven by the surplus transfer from the Reserve Bank, the non-tax revenue grew by 32.2 per cent in 2024-25 (RE) over 2023-24. Miscellaneous non-debt capital receipts (including disinvestment receipts) were, however, below their BE by ₹17,000 crore. Total non-debt receipts of the Centre recorded a healthy growth of 12.8 per cent, on top of 13.6 per cent growth attained in 2023-24.

3. Central Government Finances in 2025-26

II.6.7 The Union Budget 2025-26 continued with the government's commitment towards fiscal consolidation by targeting a GFD of 4.4 per cent of GDP (Table II.6.1 and Appendix Table 6). Fiscal consolidation is expected to be driven by moderation in the revenue expenditure to 11.0 per cent of GDP in 2025-26 (BE) from 11.2 per cent in the previous year. Enhanced tax and non-tax receipts are also expected to support this consolidation. On the expenditure side, interest payments are expected to rise by 12.2 per cent. While the subsidy outgo for fertiliser and petroleum has been budgeted to decline by ₹3,411 crore and ₹2,600 crore, respectively, food subsidy is expected to increase by ₹6,000 crore in 2025-26 (BE). Revenue expenditure on pension and other retirement benefits is budgeted to fall by 0.06 per cent of GDP in 2025-26 (BE) as compared to that in 2024-25 (RE). Moreover, grants-in-aid to the states – driven by a substantial growth of 23.5 per cent – is expected to increase to 1.8 per cent of GDP.

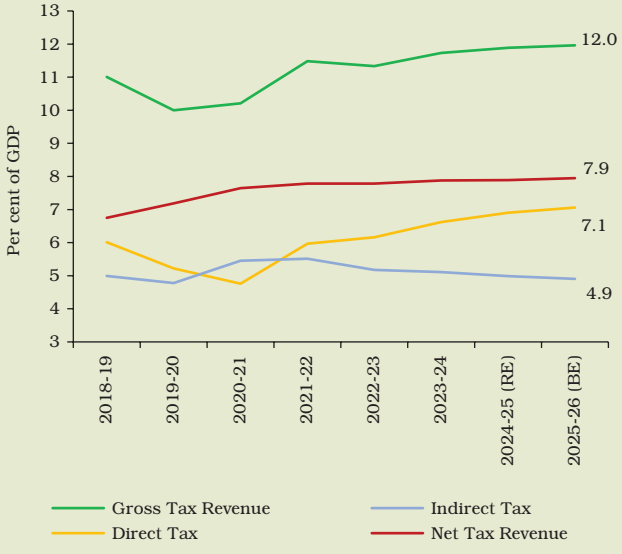
II.6.8 Capital expenditure is budgeted to grow by 10.1 per cent and is estimated at 3.1 per cent of GDP in 2025-26 (BE). The capital support to the states through the 50-year interest-free loan has been enhanced to ₹1.5 lakh crore in 2025-26 (BE) from ₹1.3 lakh crore in 2024-25 (RE). With the grants-in-aid for creation of capital assets rising to 1.2 per cent of GDP in 2025-26 (BE), the effective capital expenditure would be 4.3 per

Chart II.6.3: Trends in Capital Outlay and RECO



Source: Union Budget documents.

Chart II.6.4: Trends in Tax Revenues of Centre



Source: Union Budget documents.

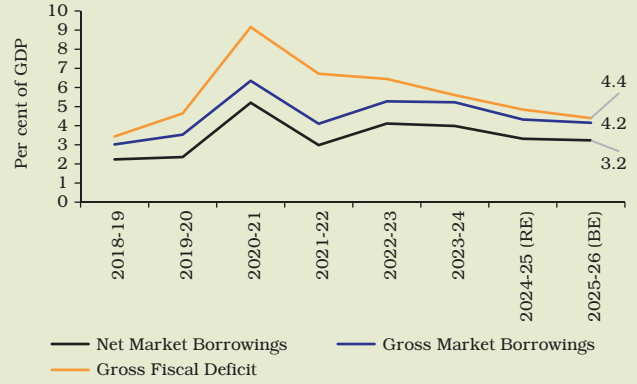
cent of GDP as compared with 4.0 per cent in the previous year. The ratio of revenue expenditure to capital outlay (RECO) continues to remain low at 4.4, reflective of the thrust on the quality of government expenditure (Chart II.6.3).

II.6.9 The buoyancy of gross tax revenue is budgeted at 1.1 in 2025-26 (BE), with direct taxes at 1.2 [1.5 in 2024-25 (RE)] and indirect taxes at 0.8 [0.7 in 2024-25 (RE)]. The gross tax revenue is budgeted to reach its peak of 12.0 per cent of GDP in 2025-26 (BE), highest post 2007-08 (Chart II.6.4).

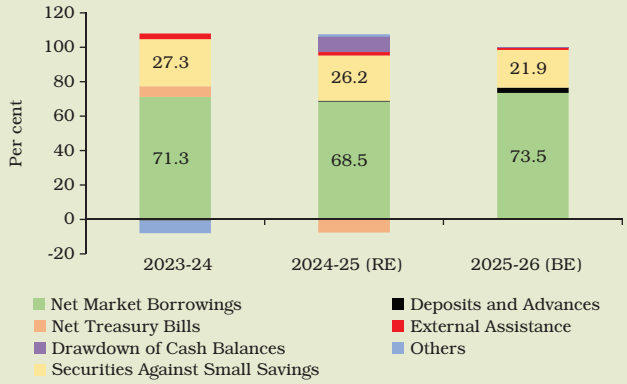
II.6.10 Gross market borrowings, as per cent of GDP, are expected to slightly decline in 2025-26 (BE) [Chart II.6.5a]. Market borrowings, followed by small savings, remain the main sources of financing the GFD (Chart II.6.5b).

Chart II.6.5: Market Borrowings and GFD Financing

a. Market Borrowings and GFD



b. Sources of GFD Financing



Note: 1. Net market borrowing for 2024-25(RE) includes buy back of securities.
2. From 2023-24 onwards, market borrowings have been adjusted for switching of securities.

Source: Union Budget documents.

4. State Finances in 2024-25

II.6.11 States had budgeted a GFD of 3.2 per cent of GDP in 2024-25 (Table II.6.2). As per provisional accounts data of 20 states available from the Comptroller and Auditor General (CAG) of India for April 2024-February 2025, states' GFD stood at 64.2 per cent of their budget estimates, higher than the level recorded a year ago (58 per cent). Revenue receipt growth moderated on account of deceleration in tax revenue growth and decline in grants from the centre. Within states' own tax revenues, states' GST (SGST) growth slowed down while sales tax/value-added tax (VAT) collections recovered from a contraction during the same period in the previous year.

II.6.12 On the expenditure front, revenue expenditure growth picked up during April 2024-February 2025, while capital expenditure during the same period remained lower than its level a year ago.

5. State Finances in 2025-26

II.6.13 Based on information available for all states/UTs, their consolidated GFD-GDP ratio for 2025-26 is budgeted at 3.3 per cent (Table II.6.3). The gross transfers to states have been budgeted to increase by 12.5 per cent in 2025-26 from 2024-25 (RE), largely on account of transfers under centrally sponsored schemes and special assistance to states for capital expenditure. The scheme of 50-year interest free loans for capital expenditure to states would be

Table II.6.2: Fiscal Position of States/UTs

(Amount in ₹ lakh crore)

	2020-21	2021-22	2022-23	2023-24 (RE)	2024-25 (BE)
1	2	3	4	5	6
I. Revenue Receipts	25.9	32.3	36.5	42.1	46.7
	(13.0)	(13.7)	(13.6)	(14.3)	(14.3)
II. Non-debt Capital Receipts	0.2	0.2	0.1	0.4	0.4
	(0.1)	(0.1)	(0.04)	(0.1)	(0.1)
III. Revenue Expenditure	29.6	33.3	37.2	43.5	47.5
	(14.9)	(14.1)	(13.8)	(14.7)	(14.6)
IV. Capital Expenditure	4.6	5.7	6.7	9.3	10.0
	(2.3)	(2.4)	(2.5)	(3.2)	(3.1)
a. Capital Outlay	4.1	5.3	6.0	8.7	9.2
	(2.1)	(2.3)	(2.2)	(2.9)	(2.8)
b. Loans and Advances by States	0.4	0.4	0.7	0.7	0.9
	(0.2)	(0.2)	(0.3)	(0.2)	(0.3)
V. Fiscal Deficit	8.0	6.5	7.2	10.4	10.4
	(4.1)	(2.8)	(2.7)	(3.5)	(3.2)
VI. Revenue Deficit	3.7	1.0	0.6	1.4	0.8
	(1.9)	(0.4)	(0.2)	(0.5)	(0.2)
VII. Primary Deficit	4.2	2.3	2.6	5.2	4.8
	(2.1)	(1.0)	(1.0)	(1.8)	(1.5)

Note: Figures in parentheses are per cent of GDP.
Source: Budget documents of state governments.

Table II.6.3: State Government Finances 2025-26*: Key Deficit Indicators

(Per cent of GDP)

Item	2023-24	2024-25 (RE)	2025-26 (BE)
1	2	3	4
Revenue Deficit	0.3	0.6	0.2
Gross Fiscal Deficit	3.0	3.6	3.3
Primary Deficit	1.3	1.8	1.5

*: Data pertain to all states/UTs that have presented their final budgets for 2025-26.
Source: Budget documents of state governments.

continued in 2025-26, with total outlay of ₹1.5 lakh crore – an increase of 20 per cent over 2024-25 (RE) levels.

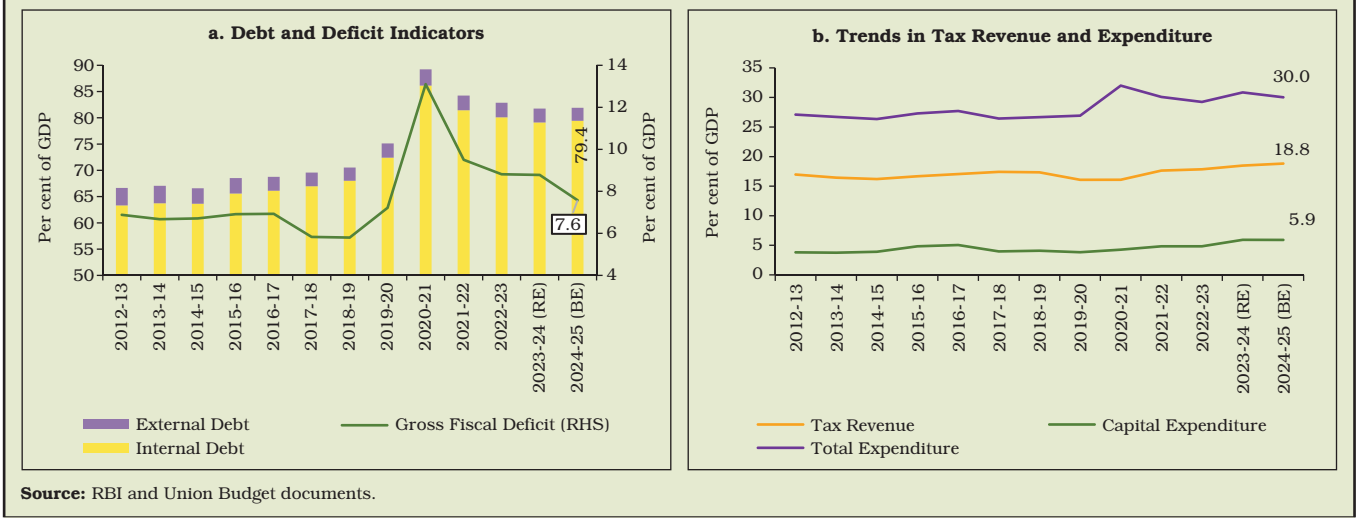
6. General Government Finances

II.6.14 In 2024-25 (BE), the GFD of the general government moderated to 7.6 per cent of GDP[40] from 8.8 per cent in 2023-24 (RE). General government debt stood at 81.9 per cent of GDP in 2024-25 (BE) as compared to 81.8 per cent in 2023-24 (RE). External liabilities of the Centre remained low at 2.5 per cent of GDP (Chart II.6.6a and Appendix Table 7).

II.6.15 Fiscal consolidation of the general government was supported by rise in tax revenues to 18.8 per cent of GDP in 2024-25 (BE) from 18.1 per cent in the previous year and moderation in total expenditure to 30.0 per cent of GDP from 30.2 per cent in the previous year. Even with containment of total expenditure, the capital expenditure to GDP ratio stood at 5.9 per cent in 2024-25 (BE), as compared to 5.8 per cent in the previous year (Chart II.6.6b).

II.6.16 As per the International Monetary Fund (IMF) projections for the period 2025 to 2030, India's general government debt will be on a declining trend in contrast to its peers and the average position of emerging market and middle-income economies and advanced economies (Chart II.6.7a). The overall balance of the general government is also projected to improve significantly (Chart II.6.7b).

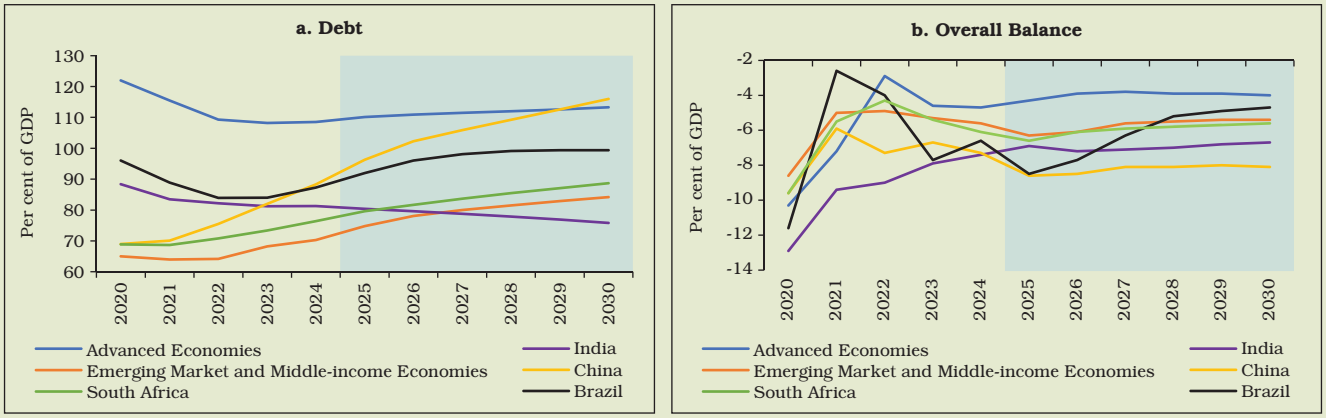
Chart II.6.6: Key Fiscal Indicators of General Government



Source: RBI and Union Budget documents.

[40] The GDP data used for general government finances for 2024-25 (BE) has been taken from the Union Budget documents for 2024-25.

Chart II.6.7: Cross-country Fiscal Performance



Note: The data for India have been sourced from Fiscal Monitor Report, IMF, April 2025 to ensure comparability with rest of the countries. However, this data may be at variance with data reported in the Union Budget or the Reserve Bank publications due to differential treatment of certain items such as receipts from asset sale, non-tax revenue items and others by the Union government and the IMF.
Source: Fiscal Monitor Report, IMF. April 2025.

7. Conclusion

II.6.17 Fiscal consolidation, through rationalisation of revenue expenditure and enhanced revenue generation, remained a key focus of the Union Budget 2025-26. While focusing on rebuilding its fiscal buffers, the Union government has also maintained its expenditure quality by budgeting a robust growth in its capital expenditure in 2025-26.

II.7 EXTERNAL SECTOR

II.7.1 India's external sector exhibited resilience during 2024-25 amidst a challenging global landscape marked by prolonged geopolitical tensions, rising geoeconomic fragmentations and heightened uncertainty related to global trade. India's merchandise exports recovered; with merchandise imports outpacing exports, merchandise trade deficit widened. Nonetheless, India's buoyant services exports and strong private transfer receipts contained the current account deficit (CAD) well within sustainable levels. However, with net capital inflows falling short of CAD, there was a decline in foreign exchange reserves on a balance of payments (BoP) basis during April-December 2024.

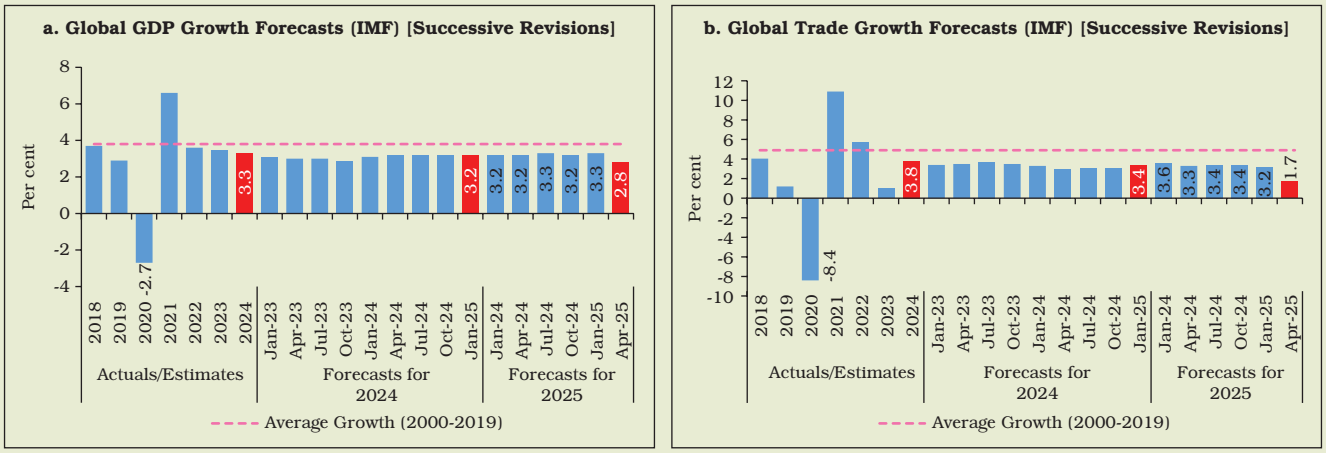
II.7.2 Against this backdrop, sub-section 2 presents a brief overview of global economic and financial conditions, followed by an analysis of India's merchandise exports and imports in sub-section 3. The behaviour of invisibles is presented in sub-section 4. Details on net capital flows are set out in sub-section 5 while external vulnerability indicators are analysed in sub-section 6 followed by the concluding observations.

2. Global Economic Conditions

II.7.3 Global economic growth moderated to 3.3 per cent in 2024 (3.5 per cent in 2023) and is expected to be even lower in 2025 (2.8 per cent)[41] [Chart II.7.1a]. Downside risks cloud the growth outlook owing to heightened trade tensions and elevated policy-induced uncertainty. Output growth in advanced economies (AEs) increased marginally to 1.8 per cent in 2024 as compared

[41] World Economic Outlook, April 2025, International Monetary Fund (IMF).

Chart II.7.1: Real GDP and World Trade* Volume Growth

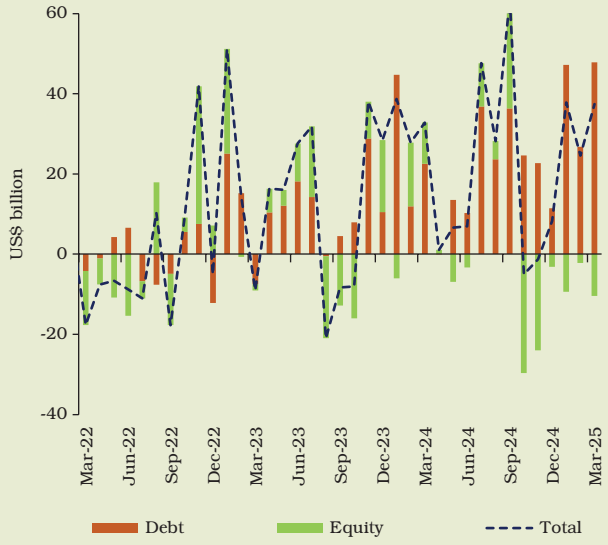


*: Goods and services.
Source: IMF.

with 1.7 per cent in 2023, while that in emerging market and developing economies (EMDEs) moderated to 4.3 per cent from 4.7 per cent. The gradual easing of global inflationary pressures prompted major central banks to cut their policy rates, although monetary policy stances still remain in restrictive territory in several jurisdictions. With easing inflationary pressures and stable global demand, world trade volume (goods and services) growth recovered from 1.0 per cent in 2023 to 3.8 per cent in 2024 (Chart II.7.1b).

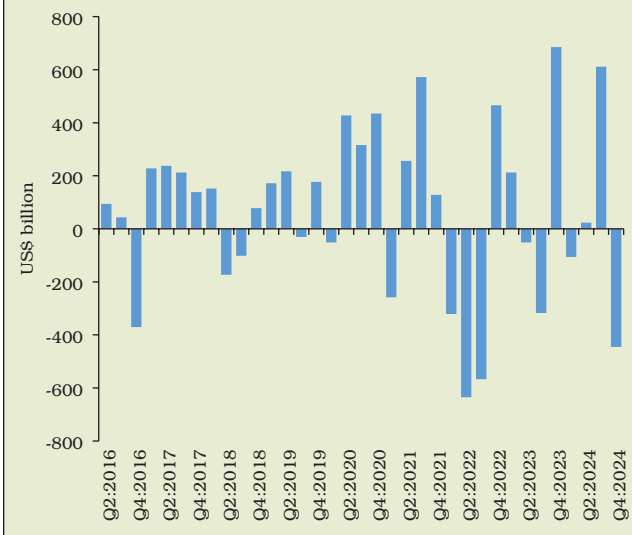
II.7.4 Emerging market economies (EMEs) recorded net portfolio inflows of US$ 255.7 billion during 2024-25 as compared with US$ 220.1 billion during 2023-24 (Chart II.7.2). Global foreign exchange reserves increased during 2024, reflecting valuation gains on account of a rise in gold prices (Chart II.7.3).

Chart II.7.2: Portfolio Investment Flows to EMEs



Source: Institute of International Finance.

Chart II.7.3: Change in Global Foreign Exchange Reserves*



*: Quarter-on-quarter change in official reserve assets.
Source: IMF.

3. Merchandise Trade

II.7.5 India's merchandise exports increased marginally by 0.1 per cent year-on-year (y-o-y) to US$ 437.4 billion in 2024-25, recovering from a contraction of 3.1 per cent witnessed in 2023-24. Merchandise imports expanded by 6.2 per cent (y-o-y) to US$ 720.2 billion during 2024-25 *vis-à-vis* a contraction of 5.3 per cent during the previous year (Table II.7.1).

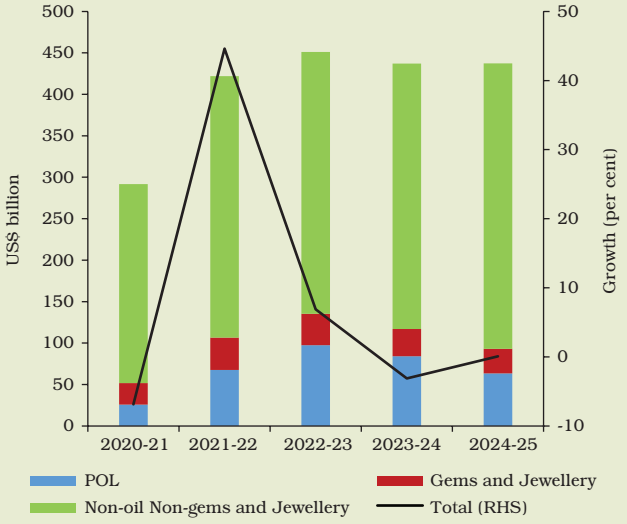
II.7.6 The expansion in merchandise exports in 2024-25 was led by growth in electronic goods; engineering goods; drugs and pharmaceuticals; rice; and readymade garments (RMG) of all textiles; while petroleum products; and gems and jewellery witnessed a contraction (Charts II.7.4 and II.7.5).

Table II.7.1: India's Merchandise Trade

	Value in US$ billion				Growth Rate (y-o-y, per cent)			
	2021-22	2022-23	2023-24	2024-25	2021-22	2022-23	2023-24	2024-25
1	2	3	4	5	6	7	8	9
Exports								
Q1	95.5	121.0	103.9	110.1	85.7	26.6	-14.1	5.9
Q2	102.7	110.7	107.2	103.5	38.5	7.8	-3.2	-3.4
Q3	106.8	104.6	105.6	108.7	41.0	-2.1	1.0	3.0
Q4	117.0	114.8	120.4	115.1	29.3	-1.9	4.9	-4.4
Annual	422.0	451.1	437.1	437.4	44.6	6.9	-3.1	0.1
Imports								
Q1	127.0	183.5	160.0	172.2	107.2	44.5	-12.8	7.6
Q2	147.5	189.0	170.3	186.7	62.7	28.1	-9.9	9.7
Q3	167.0	176.1	176.1	187.5	50.7	5.4	0.0	6.5
Q4	171.6	167.3	171.8	173.9	30.3	-2.5	2.7	1.2
Annual	613.1	716.0	678.2	720.2	55.4	16.8	-5.3	6.2
Trade Balance								
Q1	-31.4	-62.6	-56.2	-62.1				
Q2	-44.8	-78.3	-63.1	-83.2				
Q3	-60.2	-71.5	-70.5	-78.7				
Q4	-54.6	-52.6	-51.4	-58.8				
Annual	-191.0	-264.9	-241.1	-282.8				

Note: Quarterly figures may not add up to annual figures.
Source: DGCI&S.

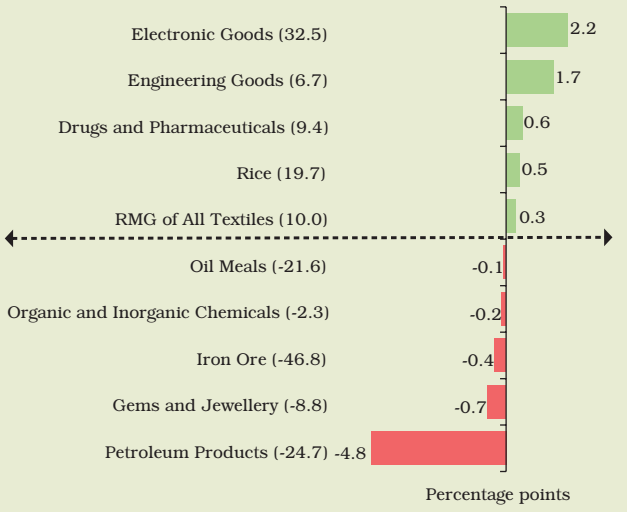
Chart II.7.4: India's Merchandise Exports



POL: Petroleum, oil and lubricants.
Source: DGCI&S.

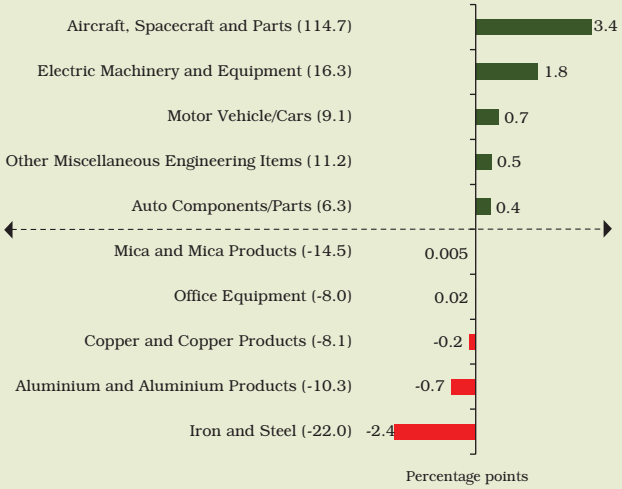
II.7.7 Exports of engineering goods (accounting for 26.7 per cent of the total merchandise exports)

Chart II.7.5: Relative Contribution of Major Sectors to Export Growth (2024-25 over 2023-24)



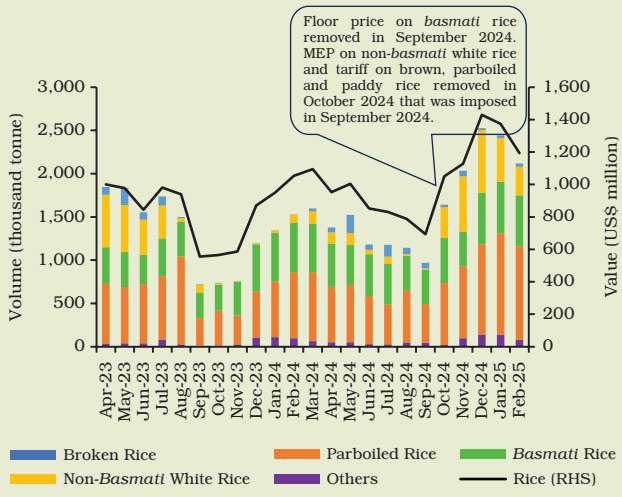
Note: Figures in parentheses are y-o-y per cent change.
Source: DGCI&S and RBI staff estimates.

Chart II.7.6: India's Engineering Goods Exports - Relative Contribution (2024-25 over 2023-24)



Note: Figures in parentheses are y-o-y per cent change.
Source: DGCI&S and RBI staff estimates.

Chart II.7.7: India's Rice Exports



MEP: Minimum Export Price.
Note: Data on agricultural exports at a disaggregated level are available up to February 2025.
Source: DGCI&S.

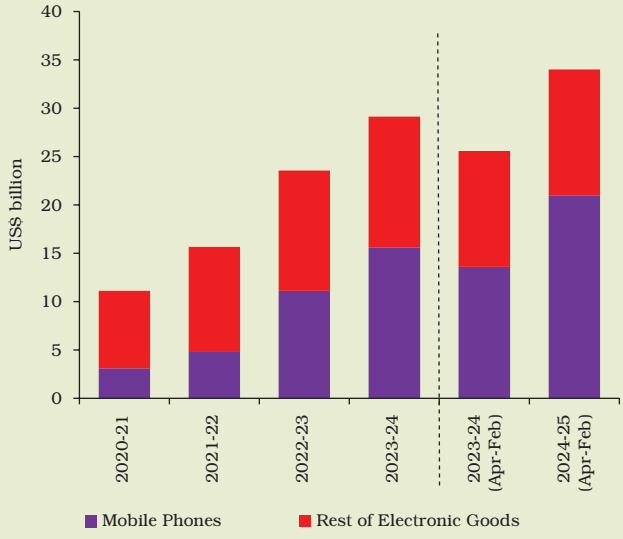
increased by 6.7 per cent in 2024-25. The growth in exports of engineering goods in 2024-25 was driven by aircraft, spacecraft and parts; electric machinery and equipment; motor vehicles/cars; other miscellaneous engineering items; and auto components/parts. On the other hand, export growth was dragged down by iron and steel; aluminium and its products; copper and its products; office equipment; and mica and its products (Chart II.7.6).

II.7.8 Agricultural exports rose by 6.4 per cent (y-o-y) in 2024-25 (up to February 2025). Rice exports remained robust after the phasing out of restrictions on rice exports in September and October 2024 (Chart II.7.7). On a cumulative basis, rice exports rose by 19.7 per cent (y-o-y) in 2024-25.

II.7.9 Exports of electronic goods expanded by 32.5 per cent (y-o-y) in 2024-25. Mobile phones, contributing 61.7 per cent of electronic goods exports during 2024-25 (up to February 2025), rose by 54.3 per cent (y-o-y) to US$ 21.0 billion (Chart II.7.8).

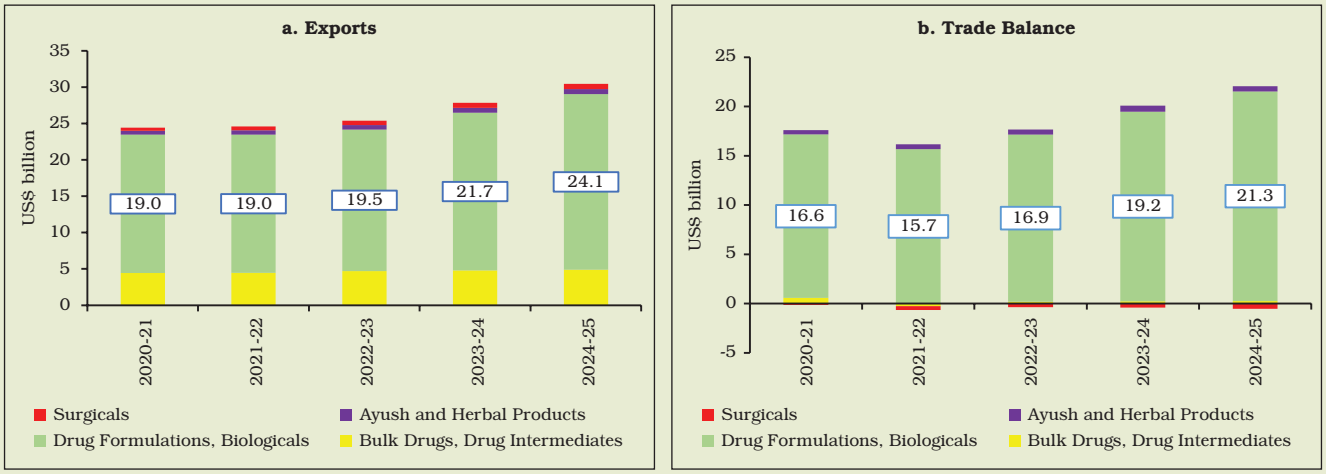
II.7.10 Exports of drugs and pharmaceuticals, accounting for 7.0 per cent of India's merchandise exports, expanded by 9.4 per cent (y-o-y) in 2024-25. The growth in exports of drugs and

Chart II.7.8: Electronic Goods Exports



Note: Data on mobile phone exports are available up to February 2025.
Source: DGCI&S.

Chart II.7.9: Drugs and Pharmaceuticals



Source: DGCI&S and RBI staff estimates.

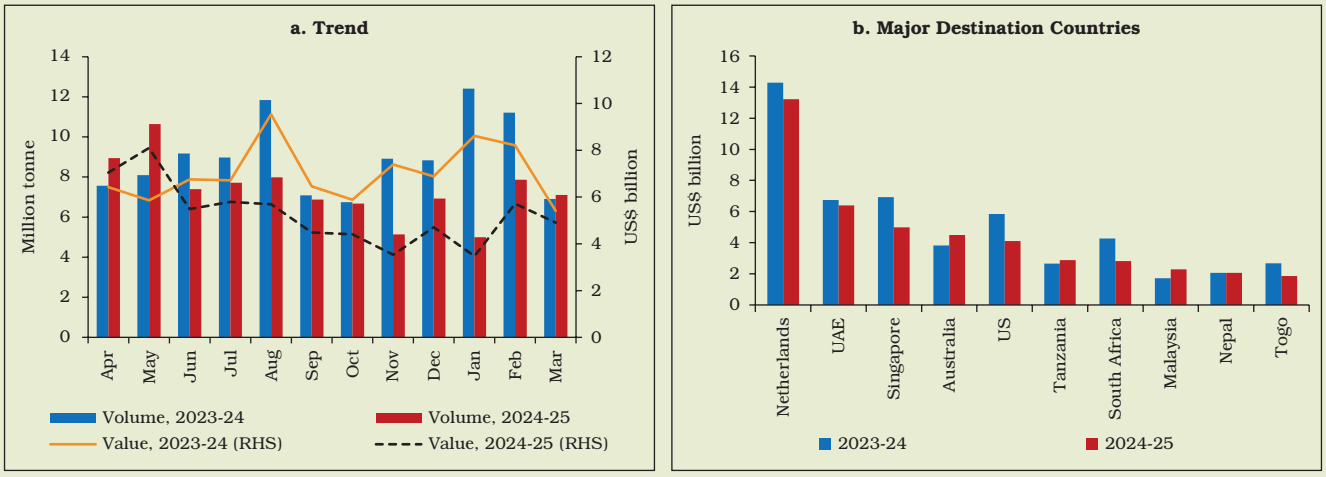
pharmaceuticals in 2024-25 was buoyed by robust growth in exports of drug formulations and biologicals (Chart II.7.9).

II.7.11 Exports of petroleum products contracted by 24.7 per cent (y-o-y) in 2024-25 on account of easing oil prices and fall in volume (Chart II.7.10a). Among the top ten destinations for petroleum product exports, seven witnessed a fall during 2024-25 (Chart II.7.10b).

II.7.12 The expansion in merchandise imports in 2024-25 was led by gold; electronic goods; and petroleum, crude oil and products. Coal, coke and briquettes; pearls, precious and semi-precious stones; and iron and steel contributed negatively to import growth (Charts II.7.11 and II.7.12).

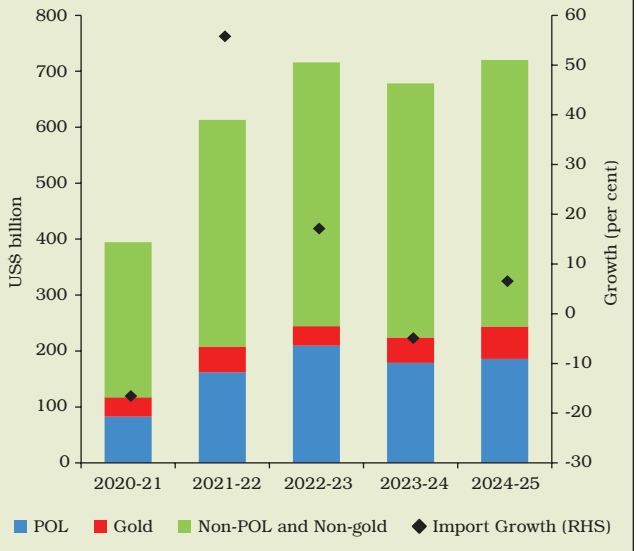
II.7.13 POL imports (25.8 per cent of total merchandise imports) grew by 3.9 per cent (y-o-y) to US$ 185.8 billion in 2024-25, underpinned by

Chart II.7.10: India's Exports of Petroleum Products



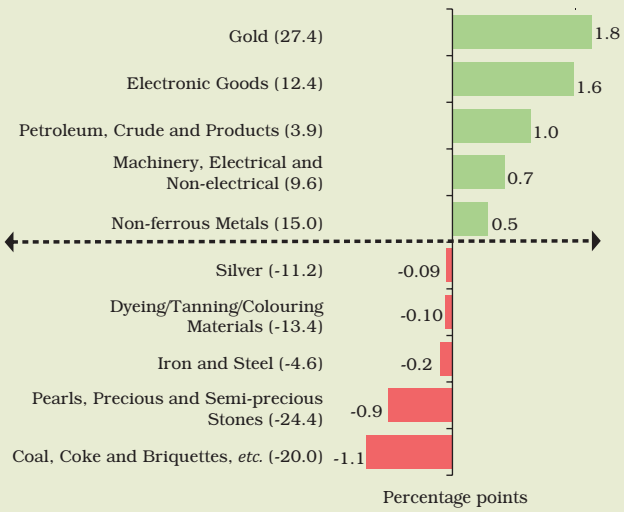
Source: DGCI&S and RBI staff estimates.

Chart II.7.11: India's Merchandise Imports



Source: DGCI&S.

Chart II.7.12: Relative Contribution of Major Sectors to Import Growth (2024-25 over 2023-24)



Note: Figures in parentheses are y-o-y per cent change.
Source: DGCI&S and RBI staff estimates.

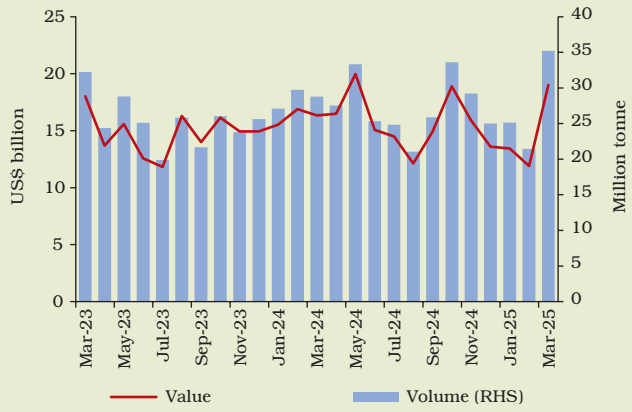
volume growth of 6.8 per cent (Chart II.7.13a). While Russia was the top source, UAE's share in India's crude oil imports increased during the year, and that of Iraq and Saudi Arabia moderated (Chart II.7.13b).

II.7.14 Value of gold imports rose by 27.4 per cent (y-o-y) in 2024-25 to US$ 58.0 billion, driven by higher international prices (30.0 per cent) even as total volume contracted (Chart II.7.14).

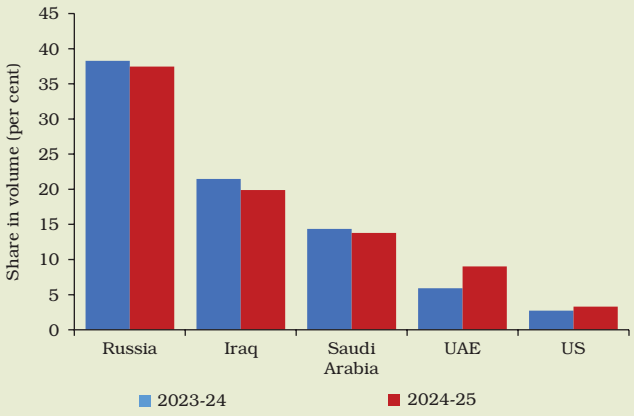
II.7.15 Imports of electronic goods expanded by 12.4 per cent (y-o-y) to US$ 98.7 billion in 2024-25 (Chart II.7.15). Even as exports of electronic goods were buoyant as noted earlier, trade balance for electronic goods widened marginally to US$ 60.1 billion in 2024-25. The

Chart II.7.13: POL

a. POL Imports

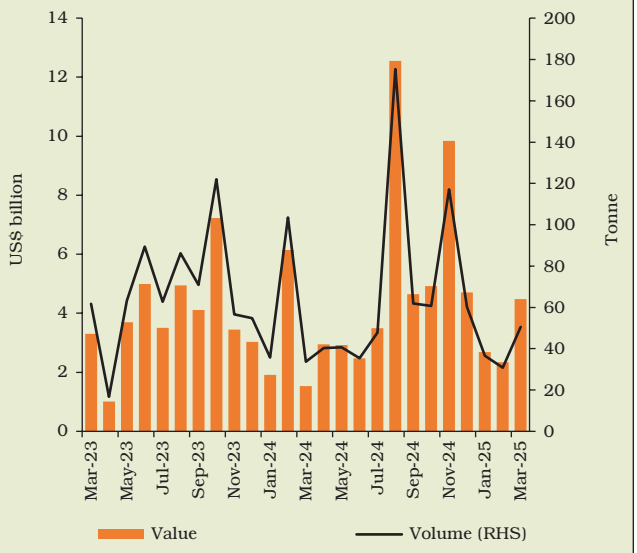


b. Major Sources of Crude Oil Imports



Source: DGCI&S.

Chart II.7.14: Gold Imports



Source: DGCI&S.

deficit in electronic goods was driven by deficits in electronics components; and computer hardware and peripherals; while telecom instruments recorded a trade surplus of US$ 3.7 billion (Chart II.7.16).

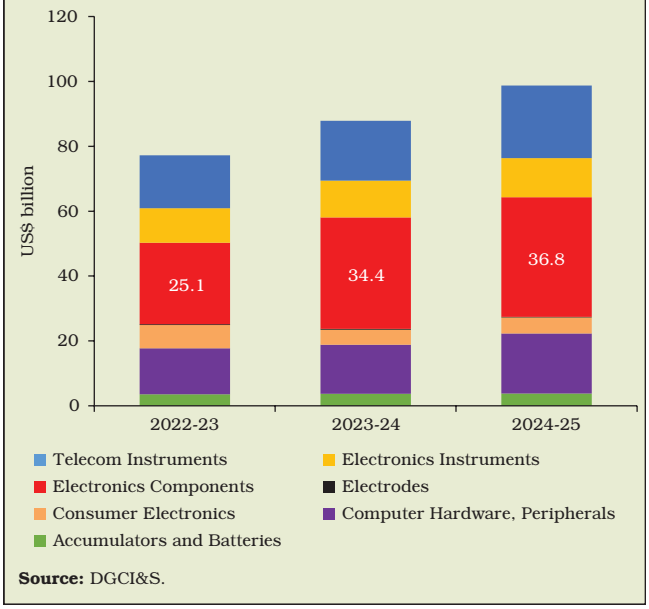
II.7.16 Coal imports fell by 20.0 per cent (y-o-y) in 2024-25, reflecting a decline in volume as well as lower import prices (Chart II.7.17). Higher domestic coal production and lower imports for blending purposes by thermal power plants[42] led to a decline in coal imports.

II.7.17 Merchandise trade deficit widened to US$ 282.8 billion in 2024-25 from US$ 241.1 billion a year ago. Oil deficit accounted for 43.3 per cent of the total trade deficit (Chart II.7.18a). Among the major trading partners, trade deficit with China, Russia and the UAE widened in 2024-25 while surpluses improved in respect of the US, the Netherlands, and the UK (Chart II.7.18b).

4. Invisibles

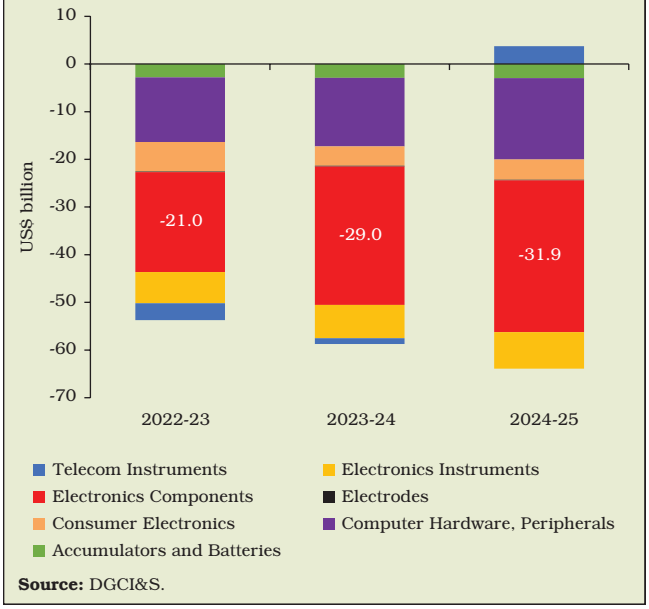
II.7.18 Receipts pertaining to India's invisibles – consisting of cross-border transactions in services, income, and transfers – remained buoyant during 2024-25. Net

Chart II.7.15: Electronic Goods Imports



Source: DGCI&S.

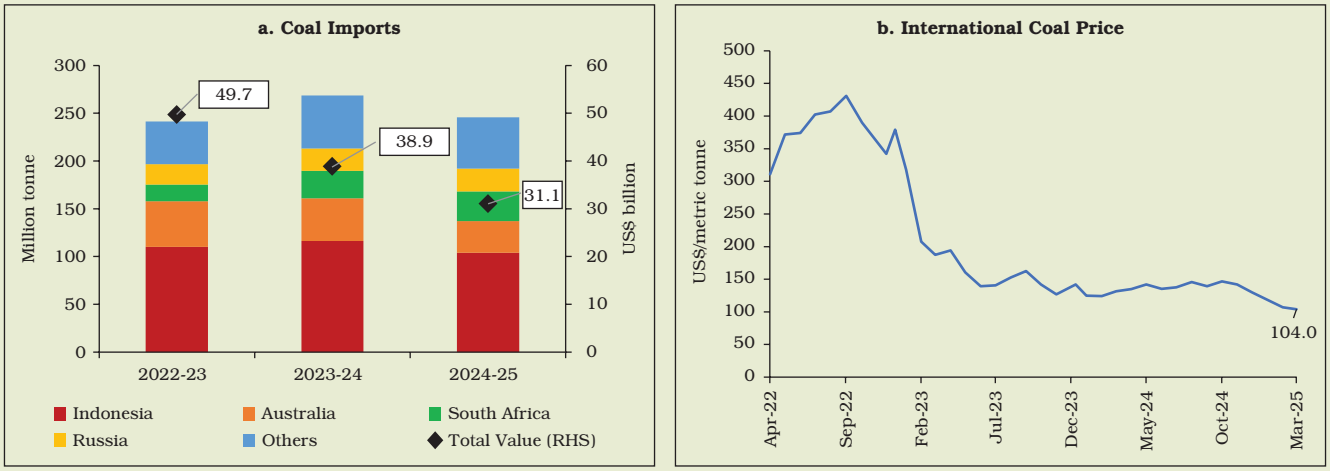
Chart II.7.16: Electronics Trade Balance



Source: DGCI&S.

[42] 'Coal Imports During April 2024 to February 2025 Drops by 9.2% Compared to Same Period of FY 2023-24', May 13, 2025, PIB.

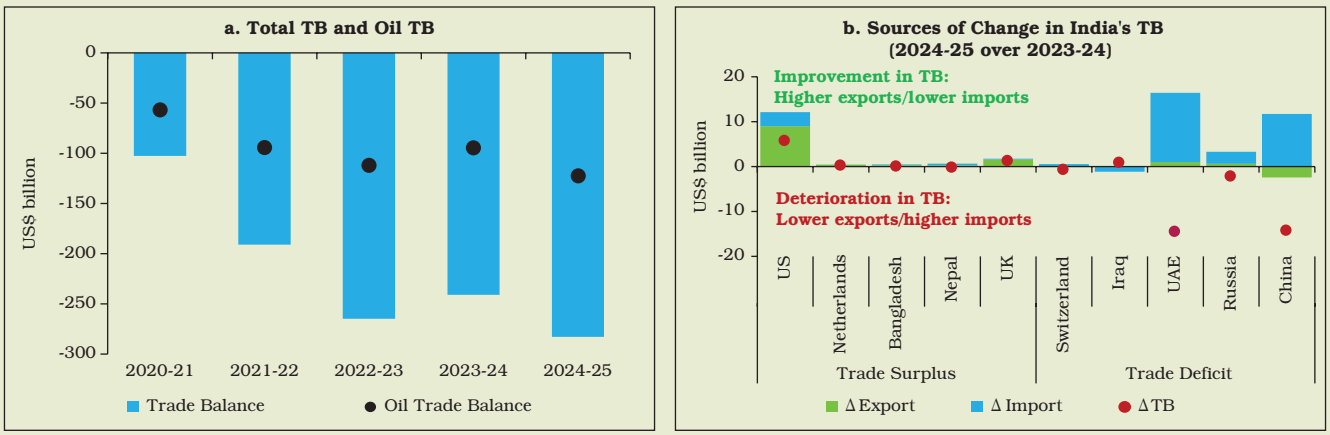
Chart II.7.17: Coal Imports and Price



Source: World Bank and DGCI&S.

services exports at US$ 135.5 billion grew at a robust pace of 12.9 per cent (y-o-y) during April-December 2024, aided by 14.5 per cent expansion in software and business services exports (accounting for around 74 per cent of India's services exports) [Chart II.7.19]. Amongst other services, transportation receipts increased by 19.5 per cent (y-o-y), largely driven by an increase in global freight rates due to disruptions in key trade routes – the average Baltic Dry Index[43] rose by 12.0 per cent during April-December 2024 over the corresponding period of the previous year. Exports of travel services rose by 5.5 per cent (y-o-y), reflecting increased spending by tourists. Private transfer receipts, mainly representing remittances by Indians

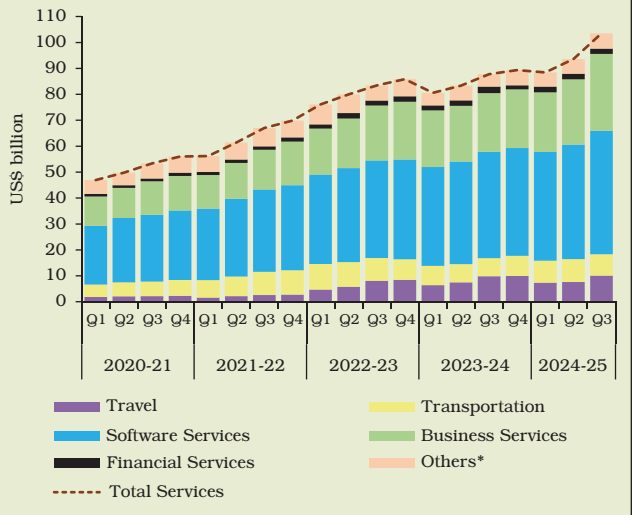
Chart II.7.18: India's Merchandise Trade Deficit



TB: Trade Balance.
Note: A positive Δ export/Δ import implies higher exports/imports and *vice versa*.
Source: DGCI&S and RBI staff estimates.

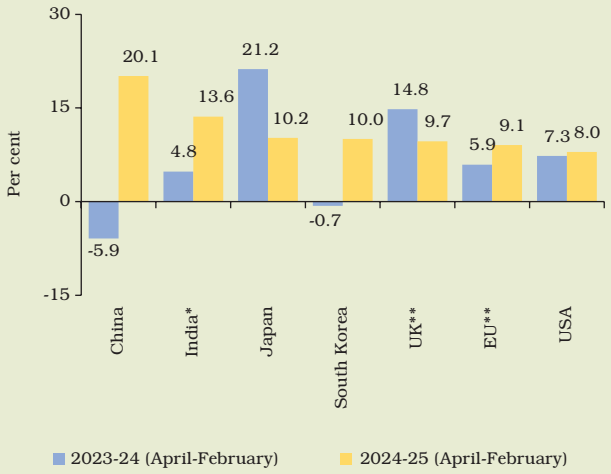
[43] A shipping and trade index, created by the Baltic Exchange (London), which measures the cost of transporting dry bulk raw materials such as coal, iron and steel.

Chart II.7.19: Composition of India's Services Exports



*: Includes insurance services, communication services and government not included elsewhere, among others.
Source: RBI.

Chart II.7.20: Services Exports Growth in Major Services Exporting Economies



*: Data for India pertain to April-March.
**: Data for EU and UK pertain to April-January.
Source: WTO and RBI.

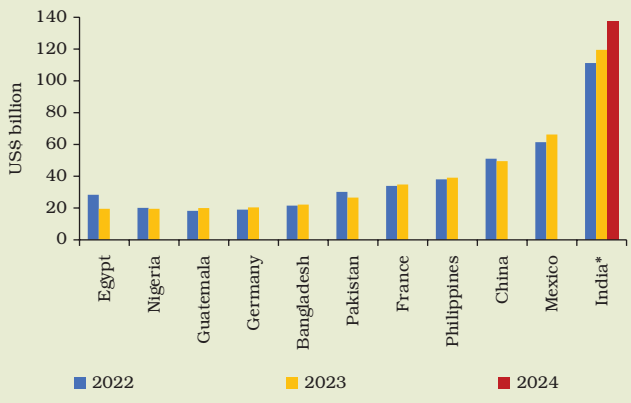
working overseas, posted a y-o-y growth of 16.2 per cent during April-December 2024.

II.7.19 In global commercial services trade, India retained its position among the major five exporting countries in terms of services export growth during 2024-25 (up to February 2025) [Chart II.7.20]. According to Gartner[44], global IT spending is expected to rise to US$ 5.4 trillion in 2025 from US$ 5.1 trillion in 2024 which augurs well for India's software services exports.

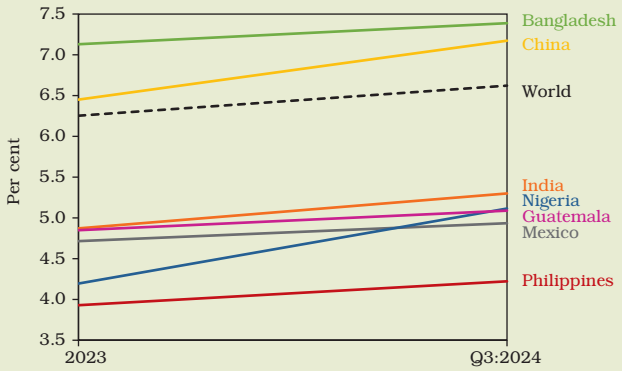
II.7.20 India remained the top remittance recipient in 2024 (Chart II.7.21a). India's total

Chart II.7.21: Inward Remittances

a. Inward Remittances Across Major Recipient Countries



b. Cost of Receiving Remittances (US$ 200)



*: Based on India's BoP statistics.
Source: RBI and World Bank.

[44] Gartner Inc. is an American technological research and consulting firm, known for its research and reports on the IT industry and forecasts on worldwide IT spending.

remittance receipts stood at US$ 137.7 billion during 2024 (on a calendar year basis). The average cost of sending remittances of US$ 200 to India is estimated at 5.3 per cent in Q3:2024, below the global average of 6.6 per cent (Chart II.7.21b).

II.7.21 Net outgo in the primary income account owing to dividend and interest incomes/ payments[45] stood at US$ 37.3 billion during April-December 2024, higher than US$ 34.9 billion during April-December 2023. This reflects the rise in interest outgoes on liabilities such as external commercial borrowings (ECBs), external assistance and short-term credit, and payment of dividends and profits to non-resident shareholders during the same period.

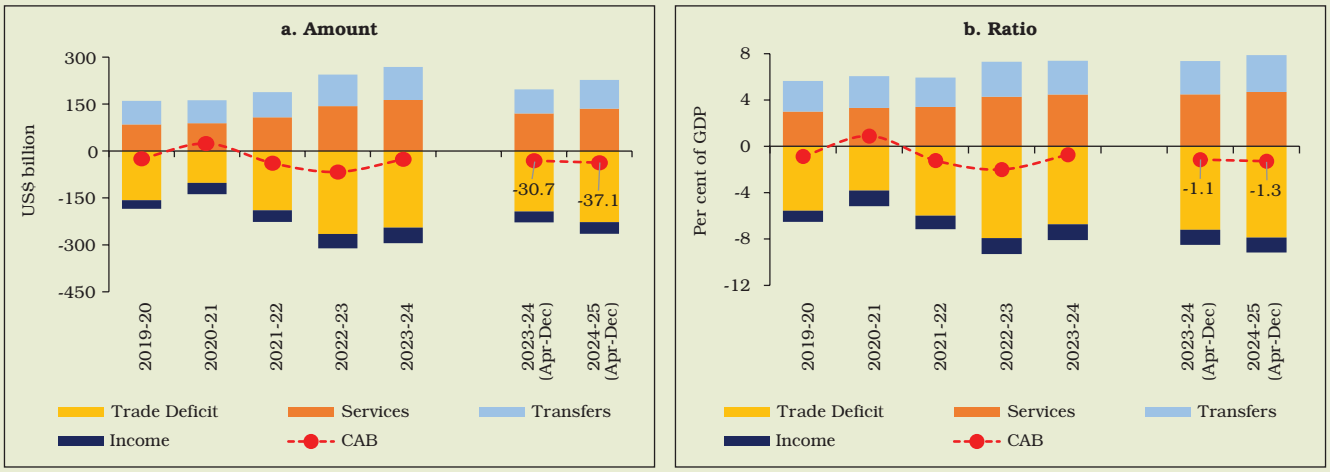
II.7.22 The buoyancy in net services receipts and workers' remittances largely offset the expansion in merchandise trade deficit; accordingly, India's CAD was contained at US$ 37.1 billion (1.3 per cent of GDP) in April-December 2024 as compared with US$ 30.7 billion (1.1 per cent of GDP) a year ago (Chart II.7.22).

5. External Financing

II.7.23 The global environment for international investment continued to be challenging amidst volatile external financial conditions, heightened global economic uncertainty and prolonged geopolitical tensions. In this backdrop, net capital inflows during April-December 2024 moderated from a year ago and fell short of the CAD, thus leading to a depletion in foreign exchange reserves of US$ 13.8 billion on a BoP basis (excluding valuation effects) during April-December 2024 (Chart II.7.23 and Appendix Table 8).

II.7.24 Among various capital flows, gross foreign direct investment (FDI) inflows remained resilient, rising by 13.7 per cent y-o-y to US$ 81.0 billion during 2024-25. Globally, India was placed fourth in terms of greenfield FDI

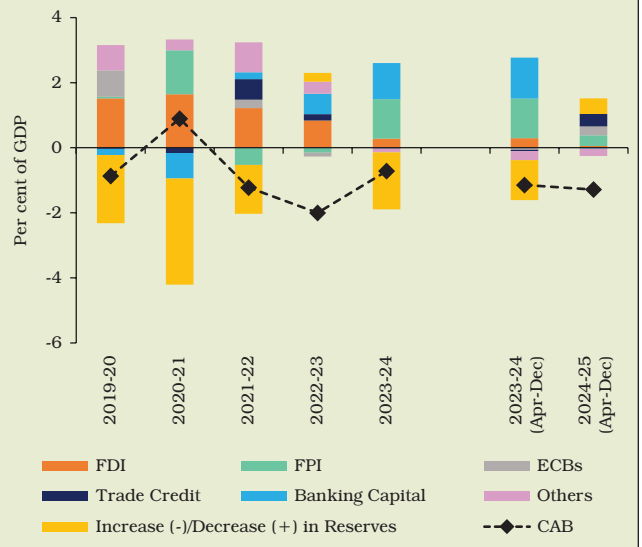
Chart II.7.22: Composition of India's Current Account Balance (CAB)



Source: RBI.

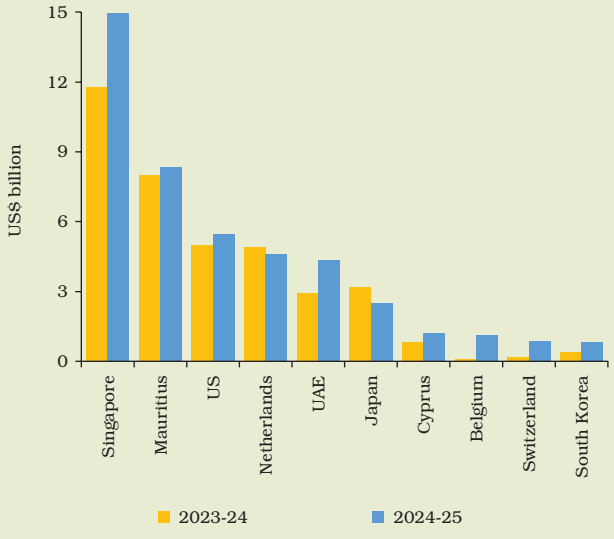
[45] Income on cross-border investments and compensation of employees that domestic resident entities earn from/pay to the rest of the world.

Chart II.7.23: Financing of Current Account Deficit



Source: RBI.

Chart II.7.24: Source Country-wise Inflow of FDI (Equity)



Source: RBI.

capital investments announced during 2024-25 after the US, France and the UK, according to fDi Markets[46]. Net FDI flows at US$ 0.4 billion during 2024-25 were, however, below US$ 10.1 billion a year ago, dragged down by higher repatriation/disinvestment and net outward FDI (Table II.7.2).

II.7.25 Services sector[47] accounted for a major share of FDI equity flows into India during 2024-25, followed by manufacturing, electricity and other energy, retail and wholesale trade, and transport (Appendix Table 9). Major source countries, *viz.*, Singapore, Mauritius, the US, the Netherlands, and the UAE contributed three-fourth of the FDI flows (Chart II.7.24).

Table II.7.2: Foreign Direct Investment Flows

(US$ billion)

Item	2021-22	2022-23	2023-24	2024-25
1	2	3	4	6
1. Net FDI (1.1 - 1.2)	38.6	28.0	10.1	0.4
1.1 Net Inward FDI (1.1.1 - 1.1.2)	56.2	42.0	26.8	29.6
1.1.1 Gross Inflows	84.8	71.4	71.3	81.0
1.1.2 Repatriation/Disinvestment	28.6	29.3	44.5	51.5
1.2 Net Outward FDI	17.6	14.0	16.7	29.2

Source: RBI.

[46] fDi Markets is the leading online database tracking greenfield FDI in real-time across all markets and sectors globally since 2003.

[47] Services sector includes computer services, communication services, financial services and business services.

II.7.26 According to the United Nations Conference on Trade and Development (UNCTAD), India is emerging as a major source of global FDI, ranking among the top 20 source countries in 2023. Major destinations for India's outward FDI were Singapore, the US, the UAE, Mauritius, and the Netherlands. Financial, insurance and business services, manufacturing, and wholesale, retail trade, restaurants and hotels were main sectors for India's overseas direct investment during 2024-25. The economic size of the recipient country along with India's bilateral merchandise exports shape India's FDI outflows (Box II.7.1).

Box II.7.1

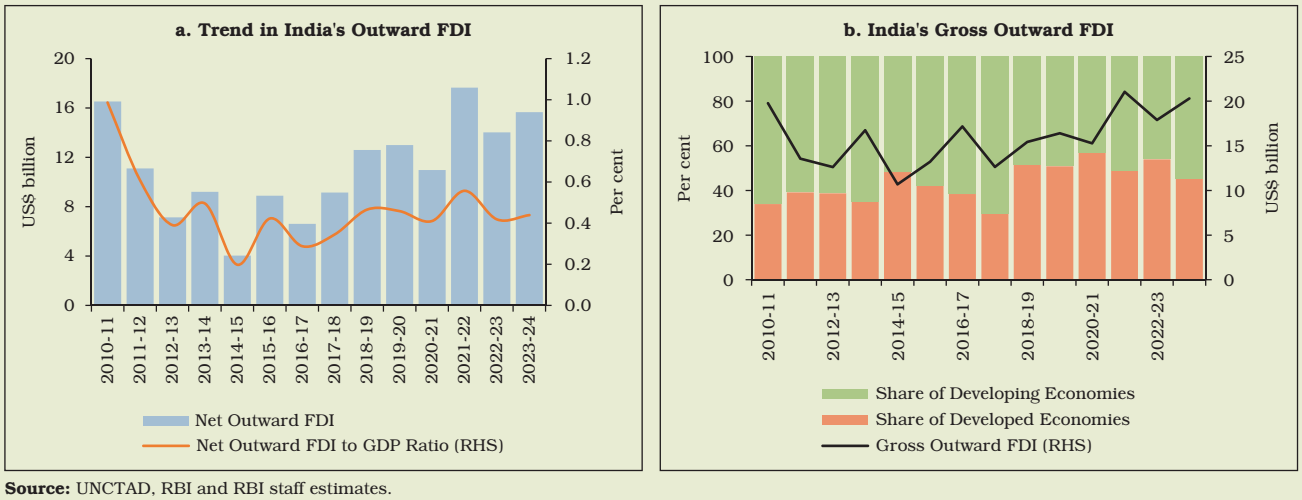
India's Outward FDI Trends: Insights from the Gravity Model

The global FDI landscape is experiencing a structural transformation on the back of geopolitical alignments and a rising share of services in global FDI (Casella *et al.*, 2024). EMEs are emerging as a major source of foreign investment, with the share of G20-Emerging Market (G20-EM) countries in global FDI outflows increasing from 9.7 per cent in 2009 to 16.5 per cent in 2023. In tandem with these trends, India's outward investment has significantly increased, particularly during the post-pandemic period (Chart 1a). Also, India's outward investment has witnessed a shift towards developed economies, with the average share rising to 51.1 per cent during 2019-2024 (Chart 1b).

Macroeconomic factors such as physical distance, tax regimes, and availability of natural and strategic resources are amongst the key determinants of outward FDI flows (Cieślik *et al.*, 2019; Kaushal, 2022). Economies also transition from being net FDI recipients to net outward investors, gaining benefits from economies of scale, enhanced competitiveness, and productivity spillovers to domestic enterprises (Herzer, 2010).

To explore the determinants of outward FDI flows from India, quarterly data are used from Q1:2010 to Q1:2024 (57 quarters) for India's bilateral outward FDI flows to 14 countries, which constitutes around 80 per cent of India's total outward FDI. An extended gravity model is estimated by applying the Poisson Pseudo-Maximum Likelihood (PPML) estimator, given its ability to handle zero-valued observations and heteroskedasticity in the data. Following

Chart 1: India's Outward FDI Trend



Source: UNCTAD, RBI and RBI staff estimates.

(Contd.)

Cieślik *et al.* (2019) and Kaushal (2022), PPML regression is estimated as per the following generalised form:

$$log\ (Outward\ FDI_{it}) = \alpha + \beta_1 * log(Export_{it}) + \beta_2 * log(Nominal\ GDP_{it}) + \beta_3 * log(Physical\ Distance_i) + \beta_4 * Corporate\ Tax_{it} + \beta_5 * Natural\ Endowments_{it} + \beta_6 * i.country + \beta_7 * i.time$$

where, 'i' represents the host country and 't' denotes the time period.

The regression results indicate that India's outward FDI is positively impacted by the host country's nominal GDP, emphasising the significance of market size (Table 1). Exports to the host country show a strong positive impact on outward FDI, indicating that robust bilateral trade relations strengthen economic linkages and foster investment. The negative association with distance highlights the importance of geographic and economic proximity in outbound investments. The availability of natural resources in host country boosts outward FDI bolstered by secured essential resources and stable supply chains. Further, higher corporate tax rates in host economies act as a deterrent for outward FDI. These findings emphasise the interplay of economic, geographic and institutional factors in shaping India's outward FDI flows.

Table 1: Estimated Gravity Model Using PPML Estimator

Dependent Variable: Log (Outward FDI)

Explanatory Variable^	Coefficients	
	Model 1	Model 2
1	2	3
Log (Export)	0.45*** (0.04)	-
Log (Nominal GDP)	-	0.54*** (0.05)
Corporate Tax (in per cent)	-	-0.06*** (0.007)
Natural Endowments (in per cent)	0.20*** (0.05)	-
Log (Distance)	-0.39*** (0.09)	-0.39*** (0.11)
Number of Observations	798	798
R-squared	0.50	0.53

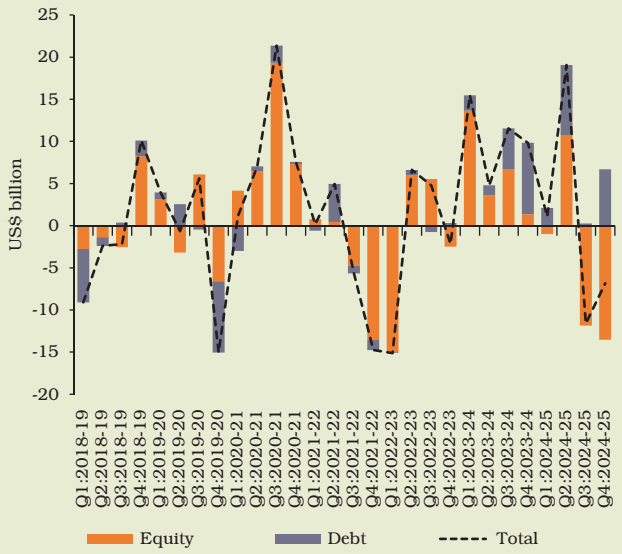
^: Physical distance is measured as geographical distance (in kilometres) between the capital cities, while natural endowments are captured by percentage share of raw material export in total export of the host country.
-: Not Applicable.
*** represents significance level at 1 per cent.
Note: Figures in parentheses indicate robust standard errors.
Source: RBI staff estimates.

References:

1. Casella, B., Bolwijn, R., and Casalena, F. (2024), 'Global Economic Fracturing and Shifting Investment Patterns: A Diagnostic of Ten FDI Trends and Their Development Implications'. *Vox EU,* Centre for Economic Policy Research.
2. Cieślik, A., and Tran, G. H. (2019), 'Determinants of Outward FDI from Emerging Economies', *Quarterly Journal of Economics and Economic Policy,* 14(2), 209-231.
3. Herzer, D. (2010), 'Outward FDI and Economic Growth', *Journal of Economic Studies*, 37(5).
4. Kaushal, L. A. (2022), 'Institutional and Economic Determinants of Indian OFDI', *Cogent Economics & Finance*, 10(1), 2147648.

II.7.27 During 2024-25, foreign portfolio investment (FPI) registered a net inflow amounting to US$ 1.7 billion as compared to net inflows of US$ 41.6 billion during the previous year (Chart II.7.25). The debt segment witnessed steady FPI inflows amounting to US$ 17.4 billion on the back of inclusion of Indian sovereign bonds in global bond indices. Equity FPI flows, however, recorded net outflows of US$ 15.7 billion during the same period as against net inflows of US$ 25.3 billion in 2023-24, mirroring trends in other EMEs with rising risk-off sentiments leading to selloffs in the equity segment during April-May 2024, October-November 2024 and January-February 2025. FPI equity outflows were largely contributed by oil, gas and consumable fuels, fast moving consumer goods, automobile, and power sectors, while inflows were primarily recorded

Chart II.7.25: Net Foreign Portfolio Flows to India

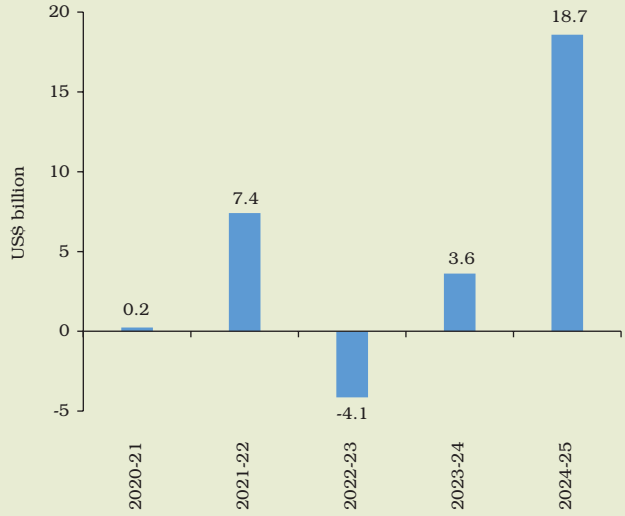


Source: NSDL.

in the financial services, telecommunication, healthcare, and consumer services sectors. Even as investment by FPIs in the debt market increased, the utilisation remains below the available investment limits. As at end-March 2025, 15.7 per cent of the limits in central government securities (G-secs) were utilised (18.5 per cent as at end-March 2024). Of the total value of specified central G-secs opened for non-resident investors under the fully accessible route (FAR), 7.1 per cent were held by FPIs as at end-March 2025, up from 4.5 per cent as at end-March 2024.

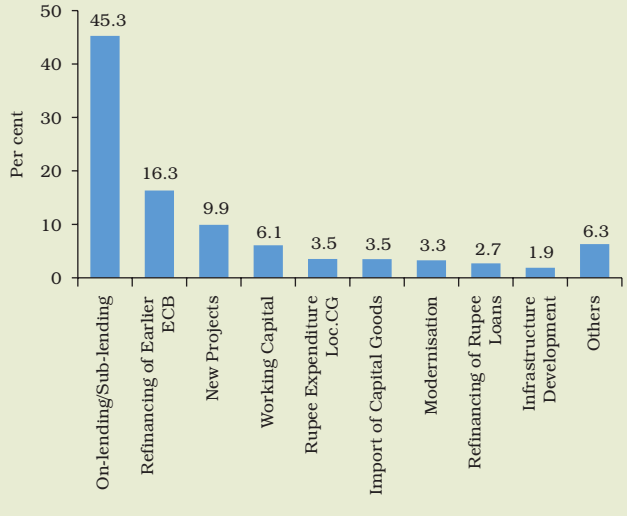
II.7.28 During 2024-25, net ECB inflows to India rose significantly to US$ 18.7 billion from US$ 3.6 billion in 2023-24 (Chart II.7.26). Besides on-lending/sub-lending, disbursements were used for refinancing of earlier ECBs, new projects and working capital requirements (Chart II.7.27). The share of rupee denominated loans and bonds in the total agreement amount stood at 5.0 per cent during 2024-25 as compared with 5.3 per cent a year ago. Of the total ECB agreement amount during 2024-25, 67.6 per cent was explicitly hedged, 5.2 per cent was from FDI parent companies (excluding INR loans) and 5.0 per cent was denominated in the INR. The remaining 22.3 per cent comprised other ECBs, including

Chart II.7.26: External Commercial Borrowings to India (Net)



Source: RBI.

Chart II.7.27: End Use of ECBs during 2024-25 (Share in Total Inflows)



Loc. CG: Local Capital Goods.
Source: RBI.

Table II.7.3: Flows under Non-Resident Deposit Accounts

(US$ billion)

Item	2021-22	2022-23	2023-24	2024-25
1	2	3	4	6
1. Non-Resident External (Rupee) Account	3.3	2.5	4.2	4.7
2. Non-Resident Ordinary Account	3.5	4.0	4.2	4.4
3. Foreign Currency Non-Resident (B) Account	-3.6	2.4	6.4	7.1
Non-Resident Deposits (1+2+3)	**3.2**	**9.0**	**14.7**	**16.2**

Source: RBI.

naturally hedged loans (*i.e.*, borrowers' business earnings in foreign currency).

II.7.29 Short-term trade credit increased during April-December 2024 in line with the rise in merchandise imports, with a net inflow of US$ 11.1 billion as compared with a net outflow of US$ 1.0 billion during the corresponding period a year ago. Around 32 per cent of the trade credit was raised for imports of crude oil, gold, coal and copper. Net inflows under non-resident deposits increased to US$ 16.2 billion during 2024-25 from US$ 14.7 billion a year ago (Table II.7.3).

6. Vulnerability Indicators

II.7.30 India's external debt to GDP ratio remained modest at 19.1 per cent as at end-December 2024 (18.5 per cent as at end-March 2024), the lowest among emerging market peers (Table II.7.4). The share of short-term debt (residual maturity) in total external debt declined

Table II.7.4: External Vulnerability Indicators (End-March)

(Per cent, unless indicated otherwise)

Indicator	2013	2022	2023	2024	End-December 2024
1	2	3	4	5	6
1. External Debt to GDP Ratio	22.4	19.9	19.1	18.5	19.1
2. Ratio of Short-term Debt (Original Maturity) to Total Debt	23.6	19.7	20.6	19.1	19.4
3. Ratio of Short-term Debt (Residual Maturity) to Total Debt	42.1	43.2	44.0	43.4	42.4
4. Ratio of Concessional Debt to Total Debt	11.1	8.3	8.2	7.4	6.8
5. Ratio of Reserves to Total Debt	71.3	98.1	92.7	96.7	88.6
6. Ratio of Short-term Debt (Original Maturity) to Reserves	33.1	20.0	22.2	19.7	22.0
7. Ratio of Short-term Debt (Residual Maturity) to Reserves	59.0	44.0	47.4	44.9	47.8
8. Reserve Cover of Imports (in Months)*	7.0	11.8	9.6	11.3	10.5
9. Debt Service Ratio (Debt Service to Current Receipts)	5.9	5.2	5.3	6.7	6.6
10. External Debt (US$ billion)	409.4	618.8	623.9	668.8	717.9
11. Net International Investment Position (NIIP) [US$ billion]	-326.7	-358.1	-367.1	-361.2	-364.5
12. NIIP/GDP Ratio	-17.8	-11.6	-11.3	-10.1	-9.8
13. CAB/GDP Ratio	-4.8	-1.2	-2.0	-0.7	-1.3

*: Based on merchandise imports of latest four quarters, published in BoP statistics.
Source: RBI and Government of India.

to 42.4 per cent as at end-December 2024. Foreign exchange reserves continue to provide a strong buffer for mitigating external risks and spillovers. As at end-December 2024, foreign exchange reserves were more than two times of short-term external debt (residual maturity). Moreover, foreign exchange reserves as at end-March 2025 provided a cover of 11 months of merchandise imports (on BoP basis) for 2024-25. Net international investment position (IIP) to GDP ratio also recorded an improvement as at end-December 2024.

7. Conclusion

II.7.31 India's external sector displayed resilience in the face of global challenges. Supported by sustained robust growth in services exports and private transfer receipts, current account deficit remained manageable despite a widening merchandise trade deficit. Even as portfolio capital flows exhibited volatility, strong buffers in the form of ample foreign exchange reserves and modest external debt liabilities impart strength to the external sector, contributing to overall macroeconomic and financial stability.