

ENTER →

# India Economic Pulse

Economic indicators and  
policy measures

December 2023



**EY**

Building a better  
working world

# Contents

**1**

Executive  
summary

**2**

Global economic  
outlook

**3**

Key economic  
and fiscal  
indicators

**4**

Sectoral  
indicators

**5**

Commodities:  
markets and  
investments

**6**

Government's policy  
thrust areas

**7**

Revealing  
economic  
insights



1

# Executive summary





Dear Reader,

## ● Global economy

The global economy is expected to experience a growth rate of 3% in the year 2023, against an average growth of 3.8% between 2000 and 2019. While inflation has shown signs of moderation, it remains above the target inflation rate. This, coupled with tight financial conditions, geopolitical challenges, and a decline in trade, contributes to the complexity of the global economic landscape in 2023.

### ***Second straight quarter of strong growth - 7.6% growth in Q2 of FY24***

The Indian economy experienced a robust growth rate of 7.6% in Q2 of FY24, surpassing expectations. This growth was primarily driven by increased government capital spending, sustained domestic demand, a thriving manufacturing sector, expansion in construction (due to infrastructure and real estate investments), and an overall positive economic sentiment.

### ***Increased government spending on the back of tax buoyancy***

The central government's capital spending has increased by 33% in this financial year until October. This increase in spending is supported by strong growth in tax collections, specifically income taxes (up 23%) and GST (up 13%). The overall GDP inflator in the first half of FY24 is only 0.9%. Based on current estimates, it is expected that the government will meet its fiscal deficit targets. State governments are also experiencing positive growth in tax collections and revenue, as well as capital expenditure.

### ***Manufacturing and construction sectors grew at a furious pace***

Manufacturing sector has grown at 13.9% in Q2 of FY24, with manufacturing PMI continuing to be well above 50. Important sectors such as steel, cement and passenger cars have all recorded double-digit growth in the current financial year. Generation of e-way bills grew at 17% in October 2023, pointing to enhanced movement of goods and economic activity.

Infrastructure and real estate sector is thriving, evident in the growth of IIP for Infra, cement and steel consumption, as well as the government's emphasis on prioritizing spending for infrastructure development in the country. Construction sector grew at 13.3% in Q2 of FY24.

### ***Overall demand continues to be strong, though some indicators point to muted rural demand***

Buoyant automobile sales, growth in passenger traffic and 18% to 20% growth in household credit all reflect the continuing domestic demand.

Rural demand is also increasing as reflected in growth in fertilizer and two-wheeler sales. However, tractor sales declined in November 2023 and there has been a continuing increase in people demanding work under MNREGA from June 2023 onwards.





## ● Weakness in the global economy has put pressure on the external sector and some private investment indicators suggest caution

In the current financial year till October, exports of non-oil merchandise have declined 4.5% vis-à-vis the previous year. Growth in service exports till October in FY24 has moderated to 6.7% from over 30% in the same period in FY23. Reports of slowdown in hiring of IT professionals points to caution.

FDI inflows have declined in the current financial year. VC and PE investments and credit growth from banks to the manufacturing sector are at the same levels as in the previous year.

### **Stable macro-economics**

Consumer inflation has moderated to 4.9% in October 2023, though still above the RBI target of 4%. WPI continues to be in the negative territory. Yields on government securities have been stable. Downside risk to inflation continues to be food prices and any unexpected geo-political developments. There may be a need to address supply side issues in agriculture to address consumer inflation and avoid subjecting the entire economy to high interest rates to combat consumer inflation.

The Rupee has been largely stable vis-à-vis the dollar and foreign exchange reserves are at comfortable levels.

## ● Digitization and decarbonization investment trends

Digitization and decarbonization both continue to show progress in India.

In October 2023, the share of renewable energy (RE) in overall generation was lower than in October 2022 despite the growth in absolute RE generation due to the increased use of thermal power to meet the growing consumption. This underscores the challenge of decarbonizing the power sector in India given the surging demand (also driven by electrification of the economy), the need for energy security and variability in generation from renewables.

## ● Outlook

The Indian economy has several positive factors, such as stable macro-economics, optimism and increasing domestic demand. Additionally, the healthy balance sheets of banks and corporates, supply chain normalization, business confidence and robust government capital expenditure are favorable for a renewal of the capex cycle. However, it is important for the private capex cycle to accelerate.

After publication of the numbers of the first half of FY24, RBI has revised the growth target for the Indian economy from 6.5% to 7% for FY24. We remain optimistic.



**Pankaj Dhandharia**  
Partner & Markets Leader  
EY India



**Rajnish Gupta**  
Partner  
Tax and Economic Policy Group  
EY India

2

# Global economic outlook



# World Economic Outlook (IMF, October 2023)

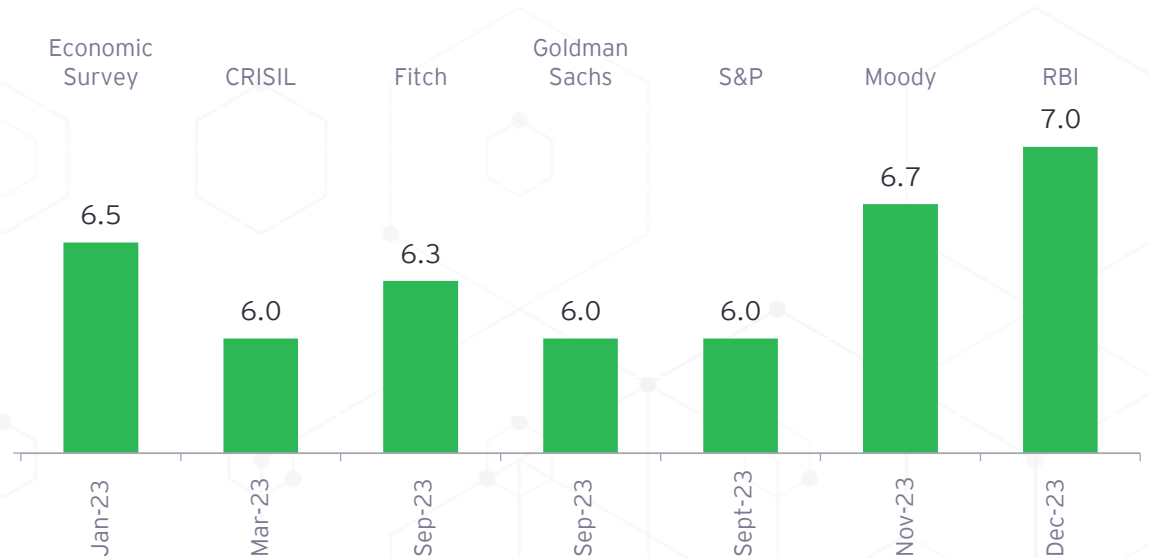
## India continues to be the fastest growing economy

Global economic outlook

### World Economic Outlook Projections (%)

Region/country/market	Estimates		Projections	
	2022	2023	2023	2024
World	3.5	3.0	2.9	
Advanced economies	2.6	1.5	1.4	
US	2.1	2.1	1.5	
Euro Area	3.3	0.7	1.2	
Japan	1.0	2.0	1.0	
Emerging markets/ developing economies	4.1	4.0	4.0	
China	3.0	5.0	4.2	
<b>India</b>	<b>7.2</b>	<b>6.3</b>	<b>6.3</b>	
Brazil	2.9	3.1	1.5	
Russia	-2.1	2.2	1.1	

### India's GDP forecast for 2023-24 (%)



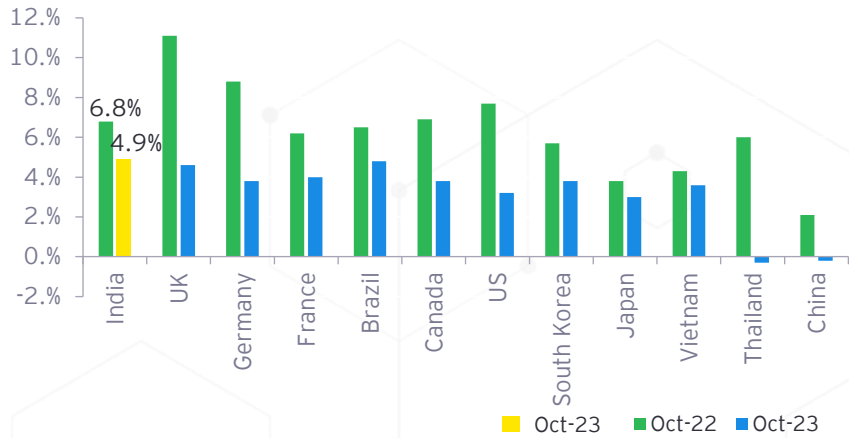
Note: For India, data and forecasts are presented on a fiscal year basis, with FY 2022/23 (starting in April 2022); FY 2023/24 starting in April 2023

- ▶ Global growth forecast of ~ 3% is significantly lower than the average of 3.8% between 2000 and 2019. Global inflation is forecasted to decline from 8.7% in 2022 to 6.9% in 2023 and 5.8% in 2024, aided by the tightening of the interest rates and lower international commodity prices.
- ▶ US continues to grow steadily and recorded a 5.2% growth in Q3 of 2023, despite high interest rates. However, there is no consensus between soft and hard landing. Growth in China has slowed down, reflecting the property sector crisis. Growth in the Euro area has slowed down.
- ▶ Outlook for the Indian economy continues to be positive, with most agencies projecting economic growth to range from 6 to 7% in FY 23-24. The 7.6% growth in Q3 of FY 2024 was higher than the projections of the RBI.
- ▶ Tight financial conditions, limited fiscal space with governments and geo-political issues/ incidents are the downside risks to the global economic outlook.

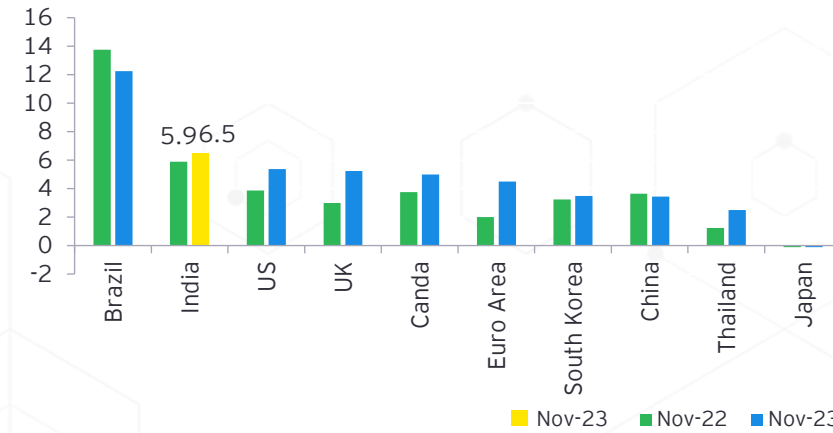




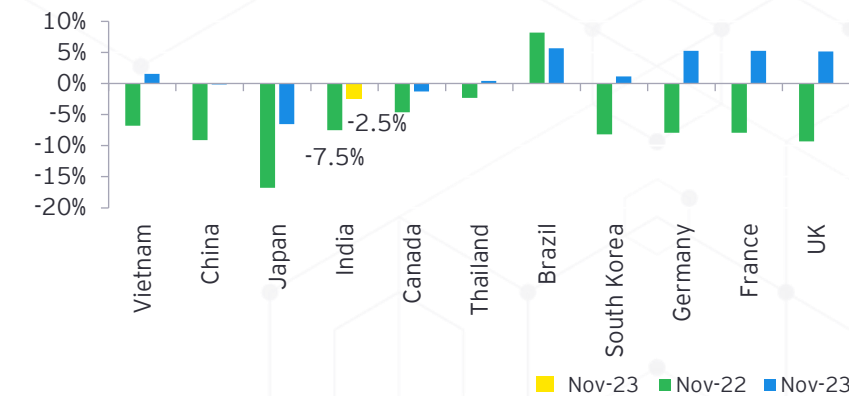
### Consumer inflation rate (%)



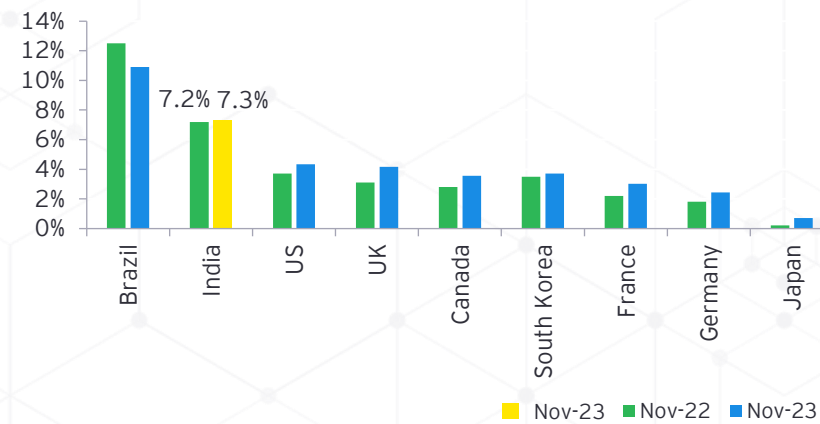
### Central bank policy rate (%)



### Currency performance vis-à-vis USD (last 12 months)



### Yields on G-Secs (10 years)



## Key findings

- ▶ Consumer inflation has reduced in all economies.
- ▶ While the inflation in advanced economies has come down, it continues to be higher than the 2% target.
- ▶ Central bank rates are higher than the levels a year ago. Nonetheless, central banks have decided to refrain from increasing their policy rates after July due to easing inflation.
- ▶ In line with the increase in policy rates, yields on government securities have increased during the year. However, they are below the peaks e.g., the US peaked in October, UK peaked in August.
- ▶ Announcement of a slower pace of longer dated issuances in the US suggests that fiscal risks have overtaken higher-for-longer risks in elevating bond yields.
- ▶ Dollar continues to be strong. Strengthening of the Euro reflects its recovery after the depreciation witnessed in its value post the conflict in Europe.

Source: FT, Google Finance, Bloomberg, Trading Economics, Bank for International Settlements  
 Currency performance: Central bank policy rate, Yields on G-Secs as of 30 November 2023  
 Inflation as percentage annual change as of October 2023; Japan and Canada as of September 2023





# PMIs point toward confidence in the Indian economy



India Economic Pulse

Manufacturing PMI	Jan-23	Jul-23	Oct-23
India	55.4	57.7	55.5
United States	46.9	49	50
South Korea	48.5	49.4	49.8
Vietnam	47.4	48.7	49.6
China	49.2	49.2	49.5
Japan	48.9	49.6	48.7
Brazil	47.5	47.8	48.6
Canada	51	49.6	48.6
Australia	50	49.6	48.2
Thailand	54.5	50.7	47.5
UK	47	45.3	44.8
France	50.5	45.1	42.8
Germany	47.3	38.8	40.8

Services PMI	Jan-23	Jul-23	Oct-23
India	57.2	62.3	58.4
Japan	52.3	53.8	51.6
Brazil	50.7	50.2	51
United States	46.8	52.3	50.6
China	52.9	54.1	50.4
UK	48.7	51.5	49.5
Germany	50.7	52.3	48.2
Australia	48.6	47.9	47.9
France	49.4	47.1	45.2

## Key findings

- ▶ For both services and manufacturing sector, outlook in India continues to be optimistic.
- ▶ For manufacturing, PMI is over 50 for the 28th successive month. However, it has declined over the last 3 months.
- ▶ Similarly, the PMI for services is high at 58.4, but lower than that in July 2023.
- ▶ Manufacturing PMI, in practically all major economies, is below the 50 levels and weakness in demand conditions.
- ▶ PMI for manufacturing in the US has been stable because of consecutive expansion due to improving demand conditions.
- ▶ PMI for services, though over 50 in some major economies, has declined in most economies.

Note: The Purchasing Managers' Index (PMI) as a leading indicator helps gauge the economic trend through key variables of business activity such as output, new orders, production, input prices, hiring activity etc. A reading above 50 indicating an overall increase/ expansion compared to the previous month, and below 50 an overall decrease/ contraction. Source: World Economic Outlook 2022; S&P IHS Markit, Trading Economics, Secondary research, As of November 2023



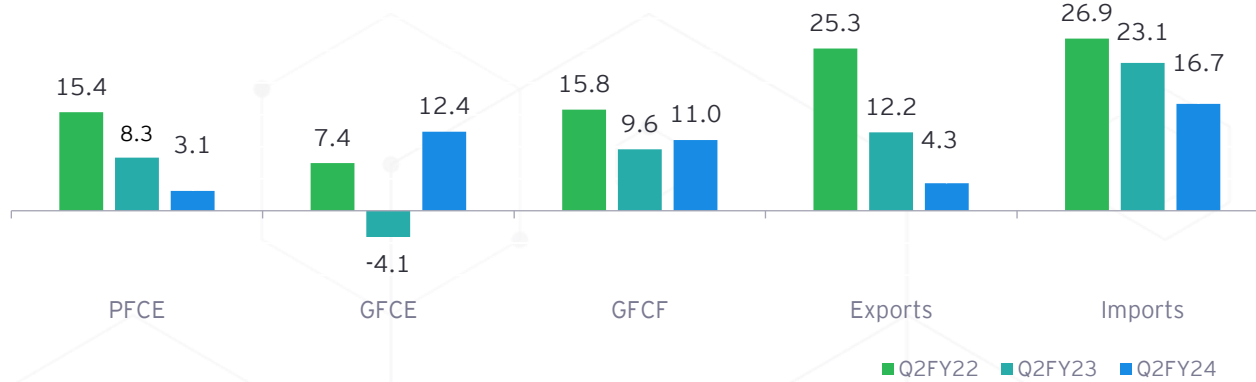
3

## Key economic and fiscal indicators



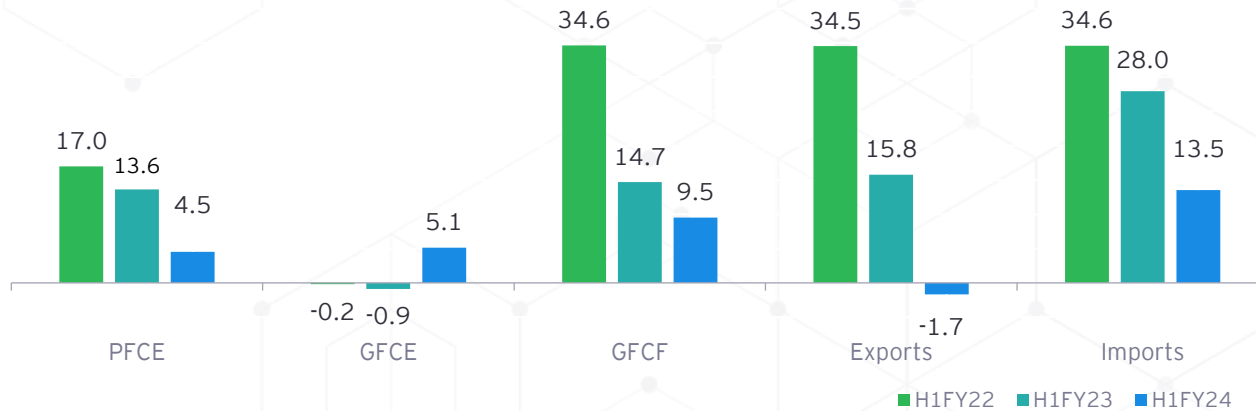


### Quarterly estimates of expenditure on real GDP growth (%)

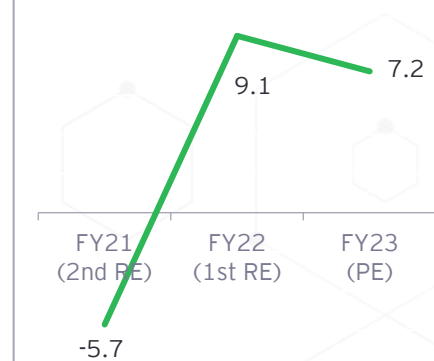


PFCE: Private Final Consumption Expenditure; GFCE: Government Final Consumption Expenditure; GFCF: Gross Fixed Capital Formation;

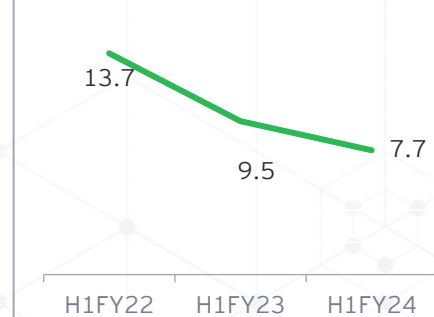
### Half yearly estimates of expenditure on real GDP growth (%)



### Annual GDP growth (%)



### Half yearly GDP growth (%)



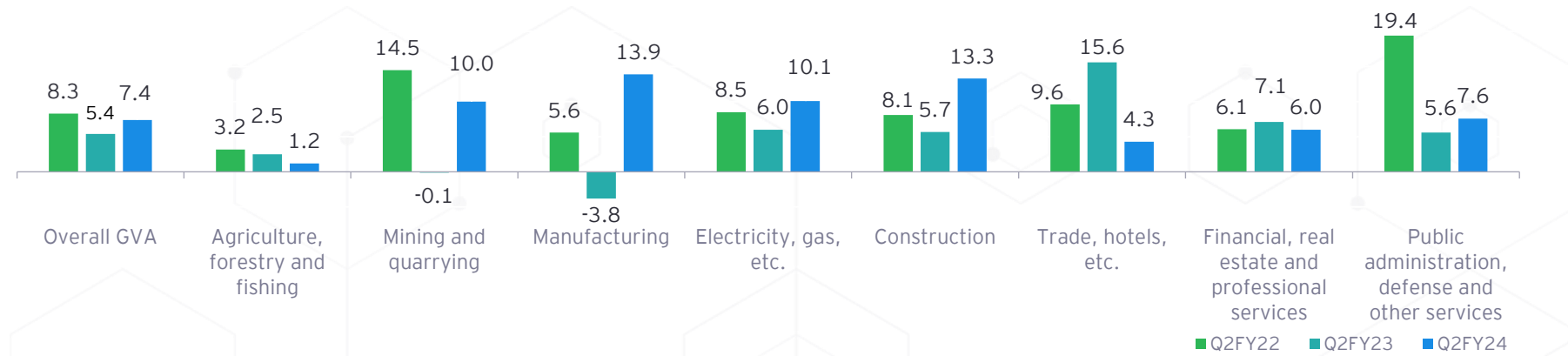
### Key findings

- ▶ The real Q2 FY24 GDP grew at 7.6% against the RBI estimate of 6.5%.
- ▶ The buoyant 1HFY24 growth is led by a capital expenditure of the government. The union government's capital expenditure has shown a growth of 43.1% during 1HFY24 and of 33.7% during the first seven months.
- ▶ Capital formation, an indicator of investment, grew to 11% y-o-y in Q2 FY24 from 8% in Q1 FY24.
- ▶ Government spending in Q2 FY24 rose to 12.4% y-o-y compared to a 0.7% contraction in Q1 FY24.
- ▶ Real private consumption growth was low at 3.1% y-o-y in Q2 FY24. However, on a nominal basis, it grew 8.3% against overall nominal GDP growth of 9.1% in Q2 FY24. The share of nominal private consumption in the nominal GDP in H1 FY24, which stands at 61.5%, is comparable to that of H1 FY23.
- ▶ The external sector remains weak. The contribution of net exports to growth has remained negative at (-)4.1% points in 1HFY24.

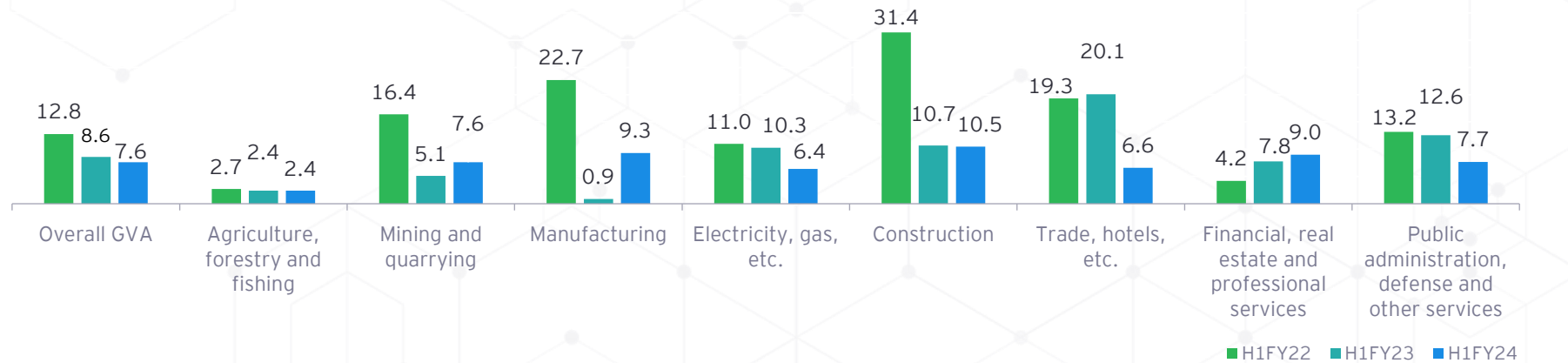
Note: High growth in FY22 is reflective of high base effect due to COVID impact in previous year  
Source: MOSPI



Quarterly real gross value added (GVA) growth (%): major sectors



Half yearly real gross value added (GVA) growth (%): major sectors



Note: High growth in FY22 is reflective of high base effect due to COVID impact in previous year  
Source: MOSPI

## Key findings

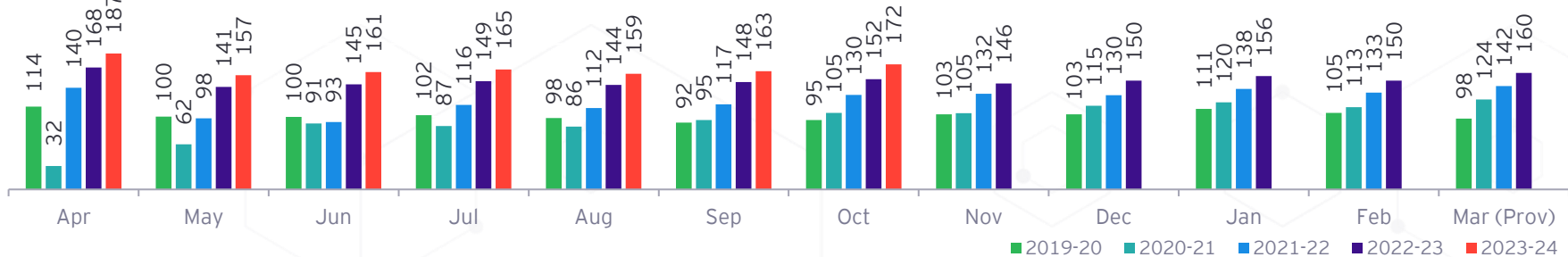
- ▶ On the output side, manufacturing has recovered to show a growth of 13.9% in 2QFY24, a nine-quarter high. The sector had recorded a decline of 3.8% in the same quarter of FY 2023. Factors such as a robust performance of IIP and PMI manufacturing and sharp growth in steel, cement and automobile sectors corroborate this.
- ▶ Construction sector has outperformed the rest of the economy on the back of infrastructure spend by the Government and buoyant real estate sector.
- ▶ However, agriculture and some services in the services sector have slowed down. Monthly demand for work under MNREGA has been higher in the last few months over the previous year. Uneven movement of the monsoon could be responsible for the slowdown in the farm sector.



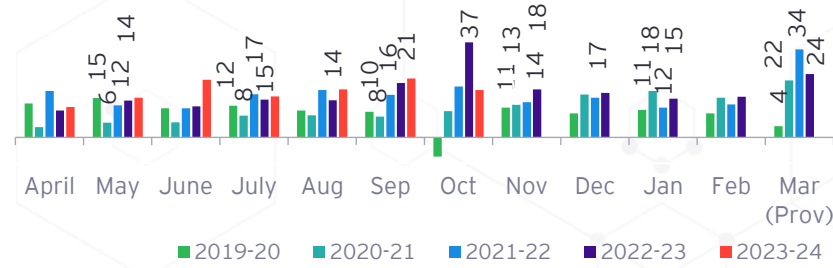
# Trends in union government's indirect tax collections



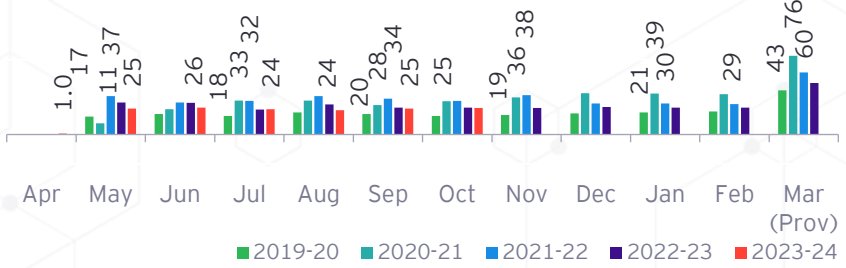
GST Collections (Union + States) (INR '000 crores)



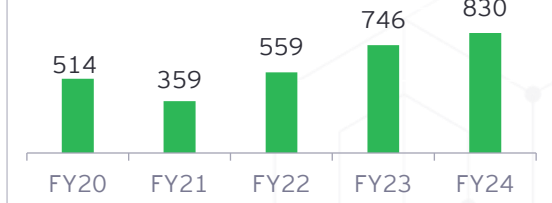
Customs (INR '000 crores)



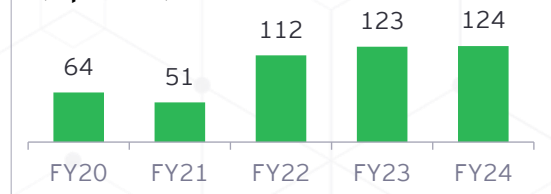
Union excise duty (INR '000 crores)



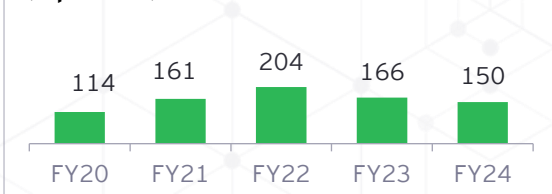
GST (Union + States) (INR '000 crores) (Apr-Oct)



Customs duty (INR '000 crores) (Apr-Oct)



Union Excise Duty (INR '000 crores) (Apr-Oct)



## Key findings

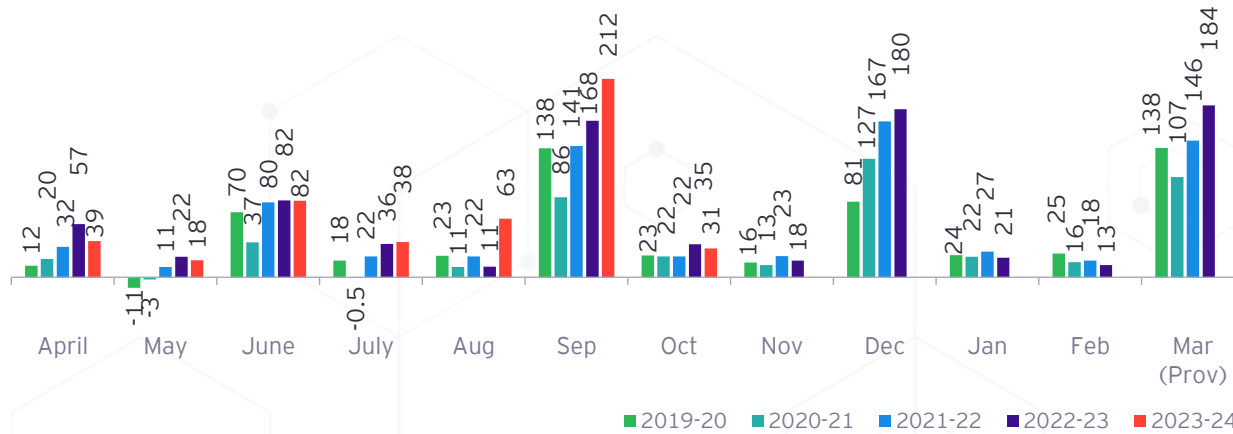
- ▶ GST revenues for the month of Oct 2023, the second highest ever, are 13% higher than that in the same month last year.
- ▶ During the period April to October FY24, GST revenues have grown 11.2% vis-à-vis the same period in FY23. This is against a nominal GDP growth of 8.6% in H1 of FY24.
- ▶ Customs duty collections during April-Oct FY24 increased marginally by 0.8%, as against the same period in FY23. Imports have declined, but customs duty collection remained stable due to inflation.
- ▶ On the other hand, union excise duty declined by 9.6% during April-Oct 2023 as against the same period previous year. The cut in excise (and cess) rates on auto fuels in May-2022 is seen as the main reason for the decline in excise revenue since FY23.



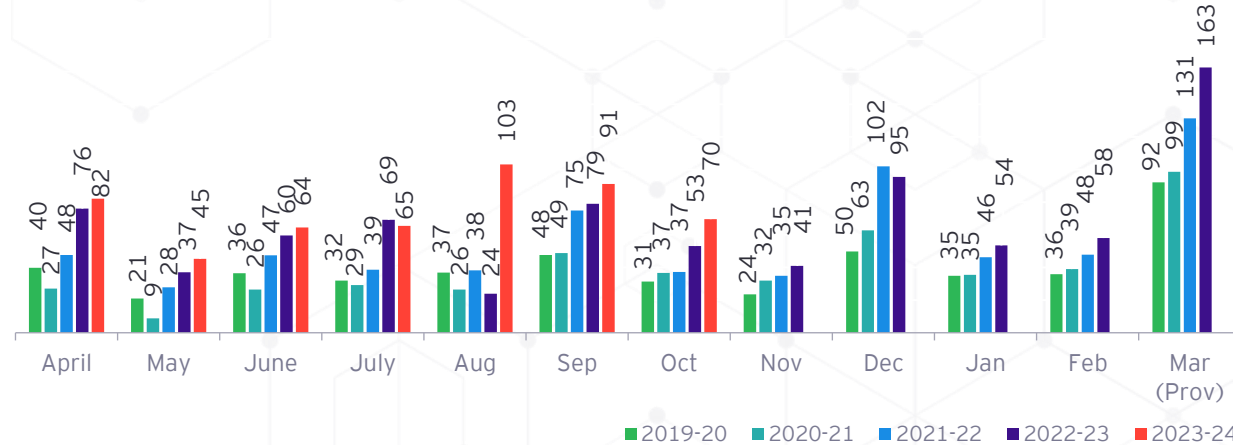
# Trends in the union government's direct tax collections



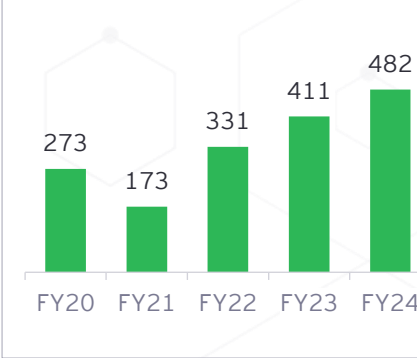
Net corporate tax collection (INR '000 crores)



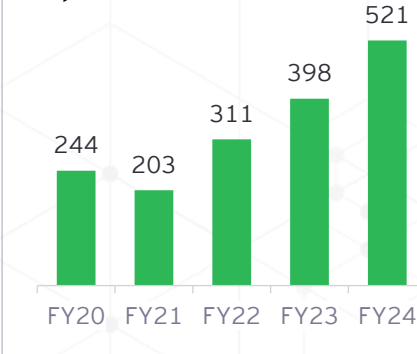
Net personal tax collection (INR '000 crores)



Corporation tax (CIT) (INR '000 crores) (Apr - Oct)



Personal tax (PIT) (INR '000 crores) (Apr-Oct)



## Key findings

- ▶ The total direct tax collections witnessed a sharp increase of 24% during the first seven months of this fiscal year. Nominal GDP has grown 8.6% in H1 of FY24.
- ▶ CIT registered a growth of 17.4% on account of healthy advance tax inflows.
- ▶ Increase in direct tax collections is majorly attributed to surplus growth in personal tax collections of 31.1% in the period April-October for FY24 vis-à-vis the same period in FY23.
- ▶ The growing direct tax collection displays success in the government's efforts on enforcement and the use of technology in the tax collection process.
- ▶ The Gross Tax Revenue (GTR) experienced a mere 14% growth in the April-October period of FY24 compared to the corresponding period in FY23, influenced by a drop in excise duty collections and stagnant customs duty collection.



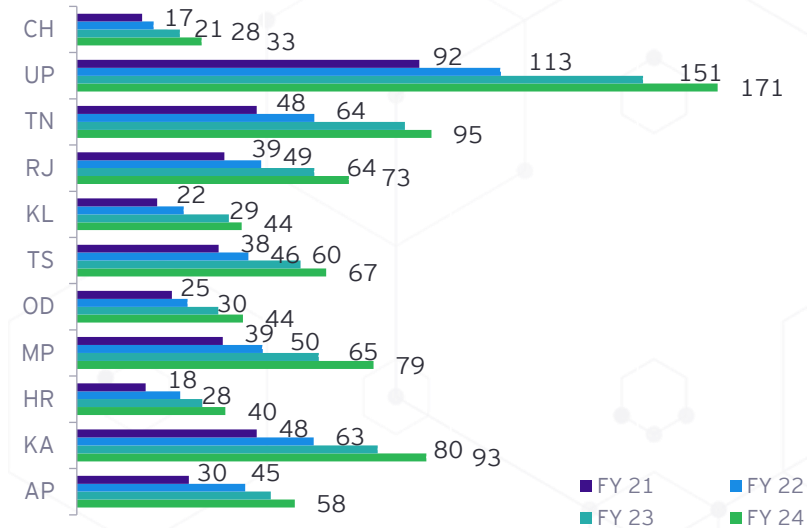
#	Particulars	Budget estimate (BE) (2023-24) (INR crores)	Actuals (April 2023 -Oct 2023) (INR crores)	Actuals (April 2022 - Oct 2022) (INR crores)	Actuals as % of BE FY 24 (April -Oct)	Actuals as % of BE FY 23 (April -Oct)	Average Actuals as % of BE(April -Oct) (FY19 - FY23)
1	Tax revenues (net of states' share)	23,30,631	13,01,957	11,71,103	55.9%	60.5%	50.0%
2	Non-tax revenues	3,01,650	2,65,765	1,78,779	88.1%	66.3%	61.1%
3	Revenue receipts (1+2)	26,32,281	15,67,722	13,49,882	59.6%	61.2%	51.6%
4	Other receipts	84,000	22,990	35,692	27.4%	45.0%	21.2%
5	<b>Total non-debt receipts (3+4)</b>	<b>27,16,281</b>	<b>15,90,712</b>	<b>13,85,574</b>	<b>58.6%</b>	<b>60.7%</b>	<b>49.2%</b>
6	Revenue expenditure other than interest	24,22,753	13,02,402	12,53,525	53.7%	55.6%	59.6%
7	Interest	10,79,971	5,45,086	4,81,172	50.5%	51.2%	48.5%
8	Capital expenditure	10,00,373	5,46,924	4,09,014	54.7%	54.6%	53.3%
9	<b>Total expenditure (6+7+8)</b>	<b>45,03,097</b>	<b>23,94,412</b>	<b>21,43,711</b>	<b>53.2%</b>	<b>54.3%</b>	<b>56.1%</b>
10	<b>Fiscal Deficit (9-5)</b>	<b>17,86,816</b>	<b>8,03,700</b>	<b>7,58,137</b>	<b>45%</b>	<b>45.6%</b>	<b>81.6%</b>

### Key findings

- ▶ The Government of India's fiscal deficit rose to INR 8 lakh crore or 45.0% of the FY2024 BE in Apr -Oct FY24 from INR 7.6 lakh crore in Apr - Oct FY23.
- ▶ In the Union Budget presented this year, government projected to bring down the fiscal deficit to 5.9% of the gross domestic product (GDP) in the current FY24.
- ▶ In spite of the likelihood of nominal GDP growth being close to 9 to 9.5% for FY24, below the FY24 Budget expectation of 10.5%, the higher direct tax buoyancy would make up for any shortfall due to this lower nominal growth. Hence, the government may achieve its Fiscal Deficit target.
- ▶ During Apr-Oct FY24 vis-à-vis same period last year:
  - ▶ Net tax revenues rose by 11.2%, Non-Tax revenues expanded by 48.7% on account of receipt of the RBI dividend.
  - ▶ There has been a 6.5% growth in revenue expenditure, and a significant 33.7% Y-o-Y expansion in capex

## Tax revenue and expenditure for major states for the period (April'23 - Sep'23)

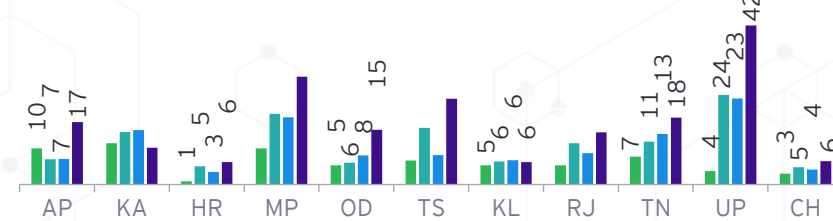
Tax revenue (INR '000 crores)



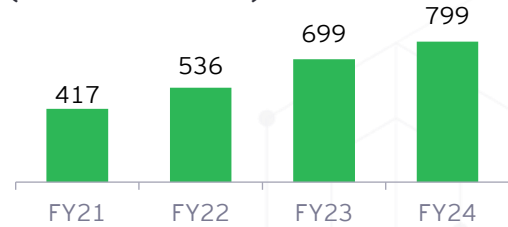
Revenue expenditure (INR '000 crores)



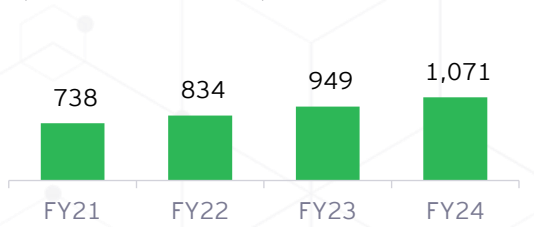
Capital expenditure (INR '000 crores)



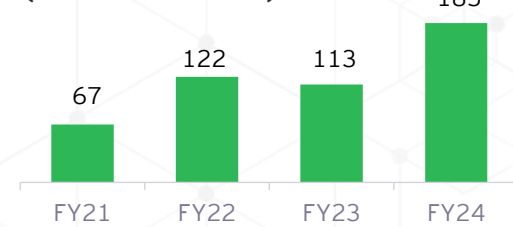
Tax revenue (INR '000 crores)



Revenue expenditure (INR '000 crores)



Capital expenditure (INR '000 crores)



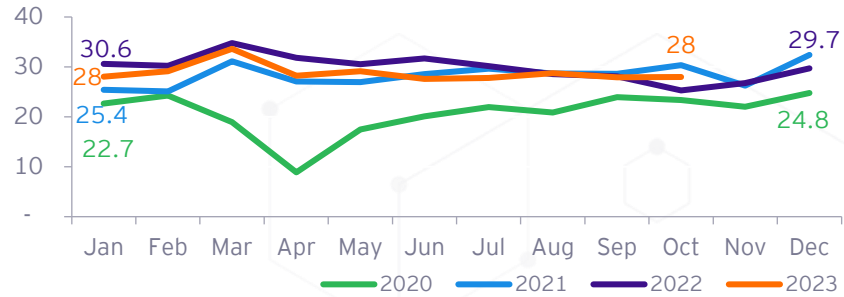
### Key findings

- Overall, in the eleven selected states for which the latest data is available, tax revenues for FY24 (Apr-Sep) have increased by 14.2% vis-à-vis the same period in FY23.
- During FY24 (Apr-Sep), revenue and capital expenditure by states saw a rise of 12.8% and 62.7%, respectively, vis-à-vis the same period last year.
- This reflects that state governments are also focusing on increasing capital expenditure.
- At the individual state level, Uttar Pradesh witnessed the highest increase in tax revenues (buoyed by robust GST tax collections and excise duty collections). The state's revenue expenditure in FY24 (Apr-Sep) has also been the highest.

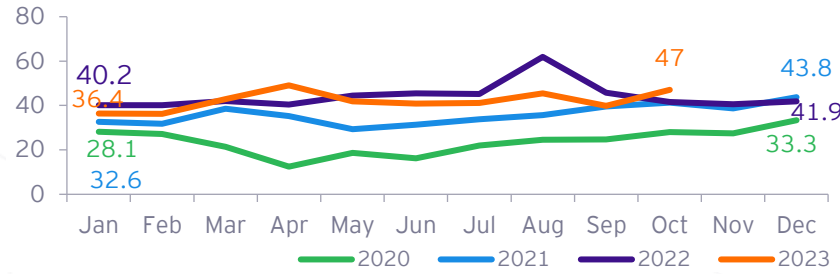




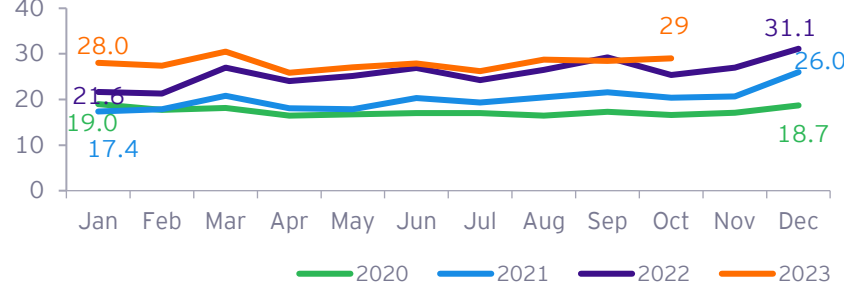
### Non-oil merchandise exports (in US\$ billion)



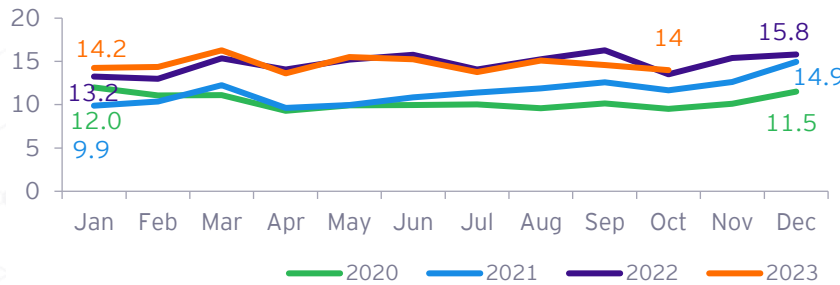
### Non-oil merchandise imports (in US\$ billion)



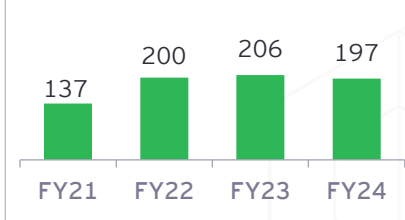
### Service exports (in US\$ billion)



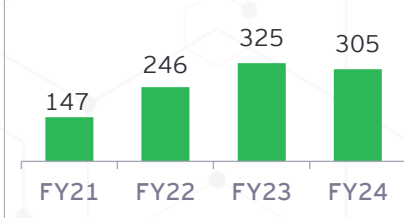
### Service imports (in US\$ billion)



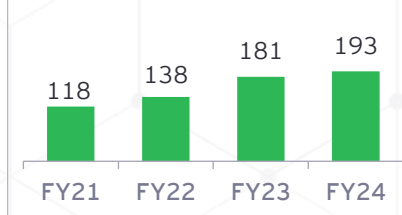
### Non-Oil Merchandise Exports (Apr-Oct) US\$b



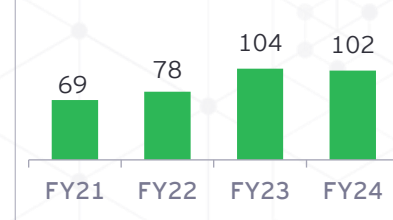
### Non-Oil Merchandise Imports (Apr-Oct) US\$b



### Services Exports (Apr-Oct) US\$b



### Services Imports (Apr-Oct) US\$b



## Key findings

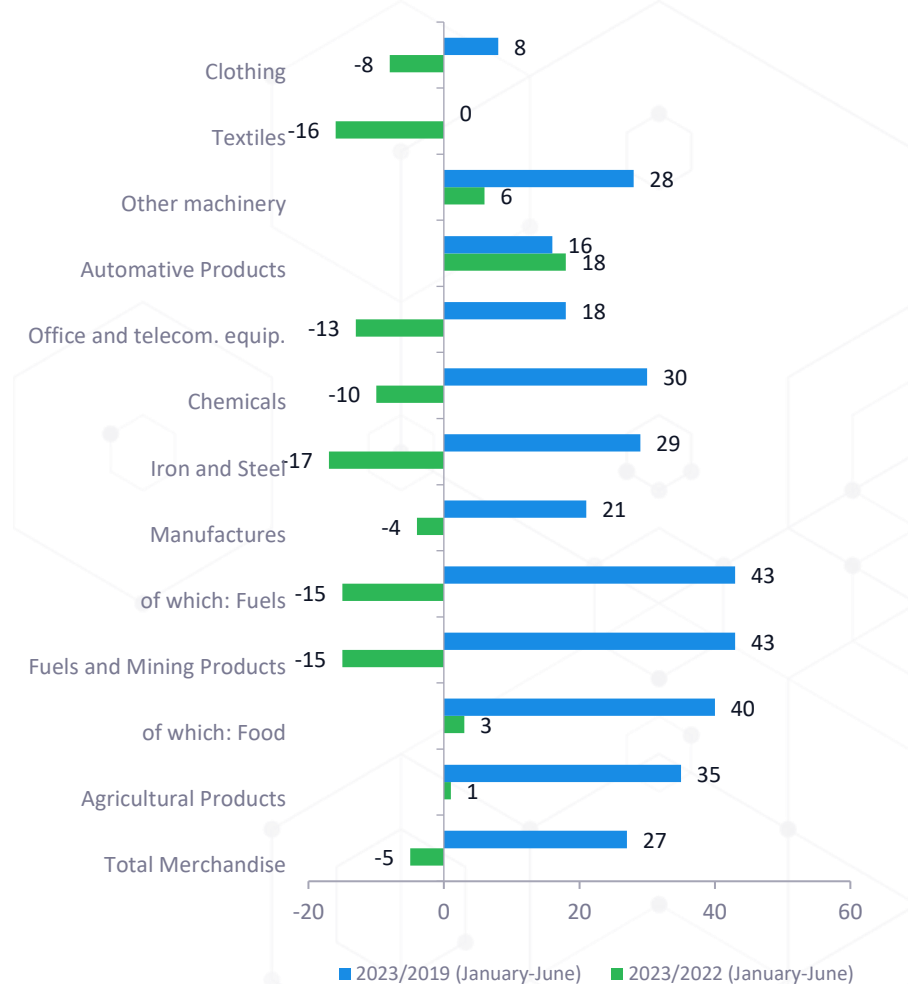
- ▶ India's non-oil merchandise exports have declined 4.5% in the current financial year till October. However, after several months of decline, monthly non-merchandise exports in August and October were higher vis-à-vis the corresponding months in FY23.
- ▶ Services' exports have grown 6.7% in FY 24 till October. However, the growth is significantly lower than in previous years. In October 2023, they were up 13% vis-à-vis October 2022.
- ▶ Non-oil merchandise and service imports have both declined. Imports of chemicals, vegetable oil and gems and precious metals have witnessed a decline.
- ▶ India announced licensing requirements for electronic products, such as laptops and tablets, with the effect from November 2023, signaling the focus on domestic manufacturing.



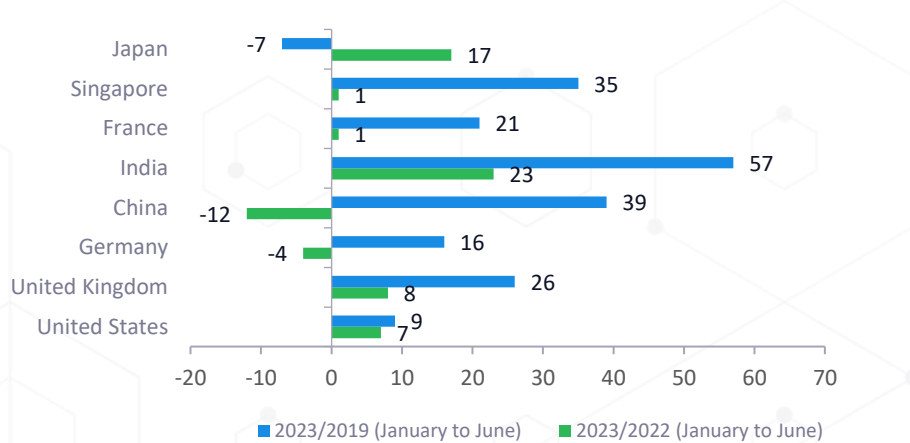
# Merchandise and commercial services' trade growth of selected economies in the first half of 2023



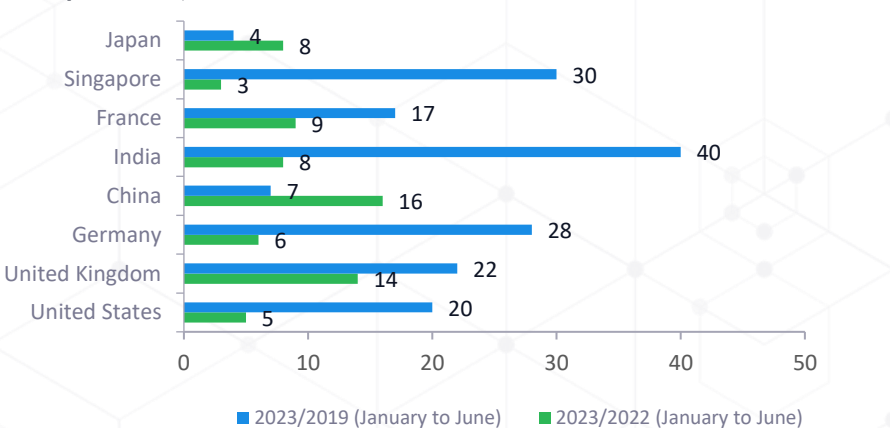
Year-on-year merchandise trade growth by product in the first half of 2023 ( % change in US\$ values)



Commercial services exports (% change in US\$ values)



Commercial services imports (% change in US\$ values)



## Key findings

- ▶ The value of world merchandise trade (in US dollar terms) declined 5% year-on-year in the first half of 2023. In the first half of 2022, the merchandise trade had grown 14%.
- ▶ Only automotive products recorded a higher growth from January to June 2023 vis-à-vis Jan to June 2022. This growth could be due to the adoption of EVs across countries and with production concentrated in a few countries.
- ▶ India has witnessed the highest growth in exports of commercial services in the first half of 2023 amongst all major economies. This is in line with the growth in export of commercial services over the last four years.
- ▶ In contrast, China and Germany have witnessed a decline in commercial services export.

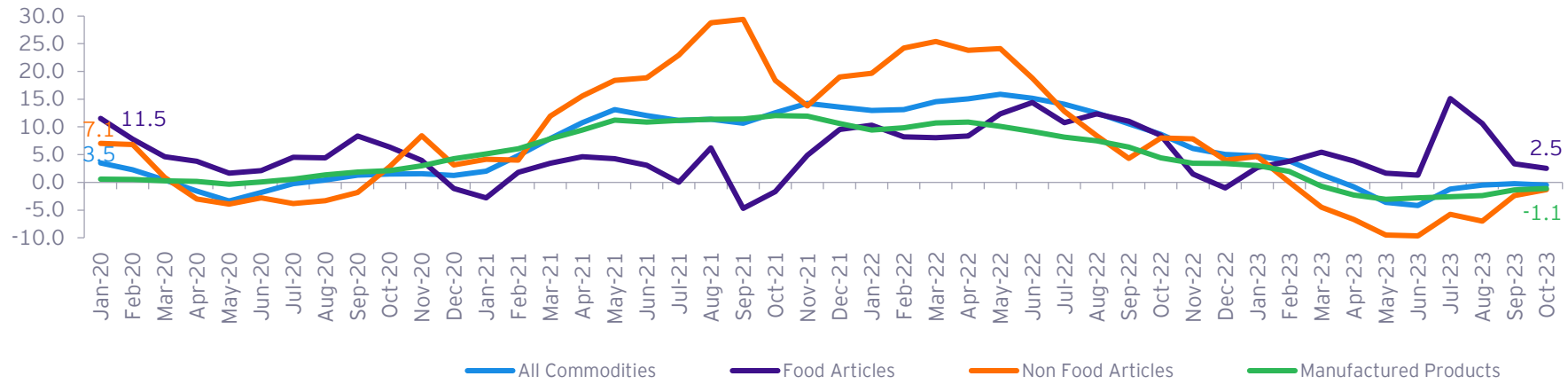
Source: Global Trade Outlook and Statistics, WTO (October 2023)

Commercial services include transport, travel, communication, construction, insurance, financial, computer and IT, royalties and license fee, business, and recreational services

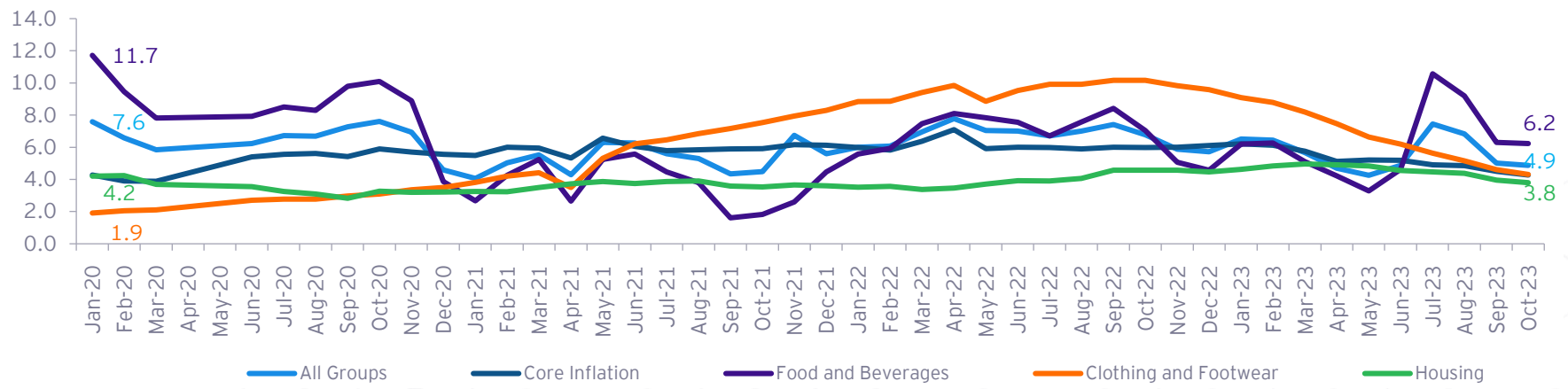


India Economic Pulse

## WPI inflation (%)



## CPI inflation (%)



## Key findings

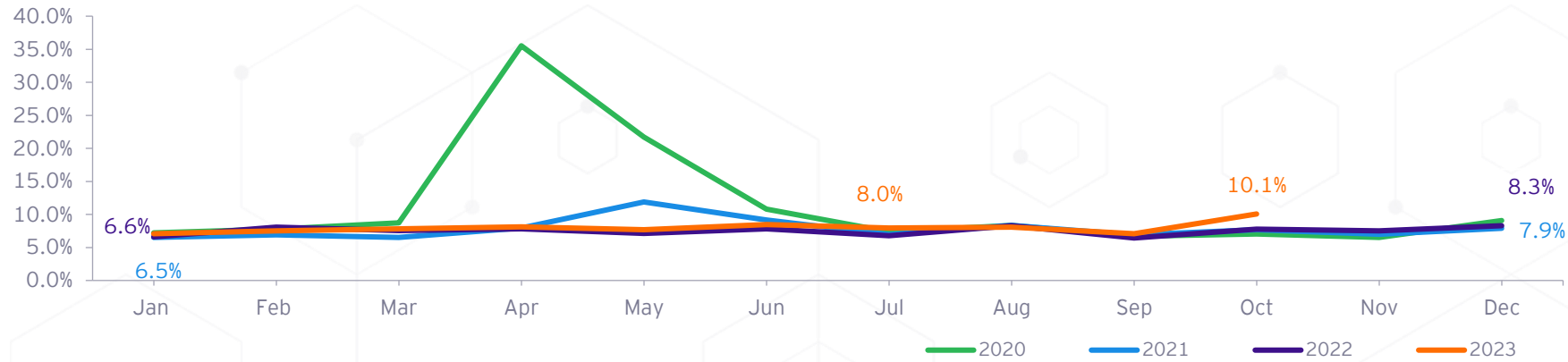
- ▶ Disinflationary monetary policy is having its impact, with the core inflation declining by ~200 basis points to a 43-month low from its recent peak in January 2023. Input costs are softening, as reflected in the sustained deflation in wholesale prices.
- ▶ Wholesale Price Inflation (WPI) continues to stay in the deflationary zone for the seventh consecutive month in October 2023 at (-)0.52%. The pace of contraction that was easing since June and was (-)0.26% in September at (-)0.26% declined in October.
- ▶ Consumer Price Inflation (CPI) has fallen to RBI's target band for the second consecutive month. It was at 4.87% in October, after touching the 15-month high in July 2023 at 7.4%.
- ▶ Food inflation is currently assessed as the key risk to bring the consumer inflation to 4%.

Source: Office of Economic Advisor, Ministry of Commerce and Industry; MoSPI; as of November 2023  
Core inflation is calculated by excluding food & beverages and fuel & light from the overall index

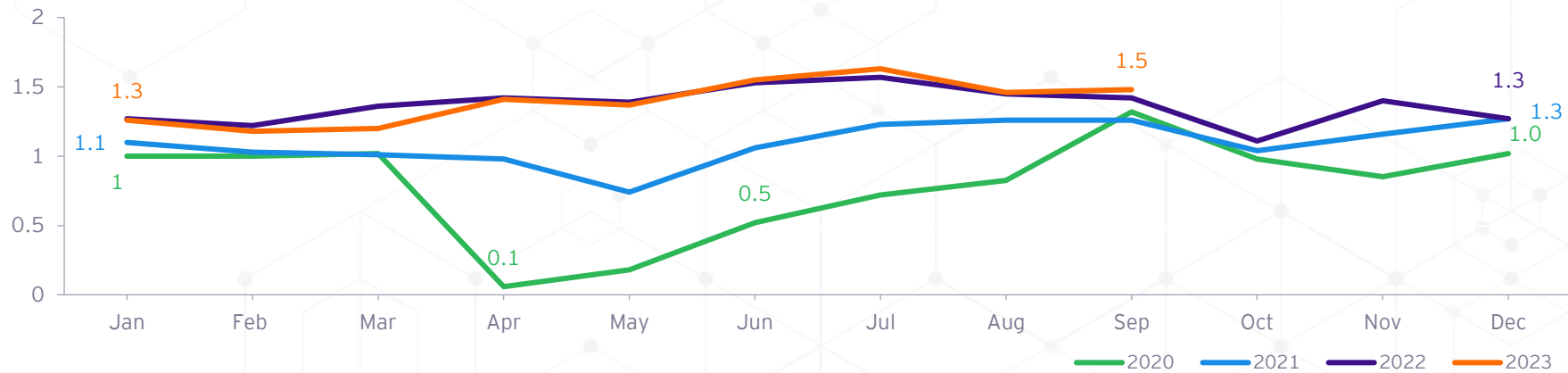




### Indian unemployment Rate (%)



### Net New EPF subscribers (in millions)



### Key findings

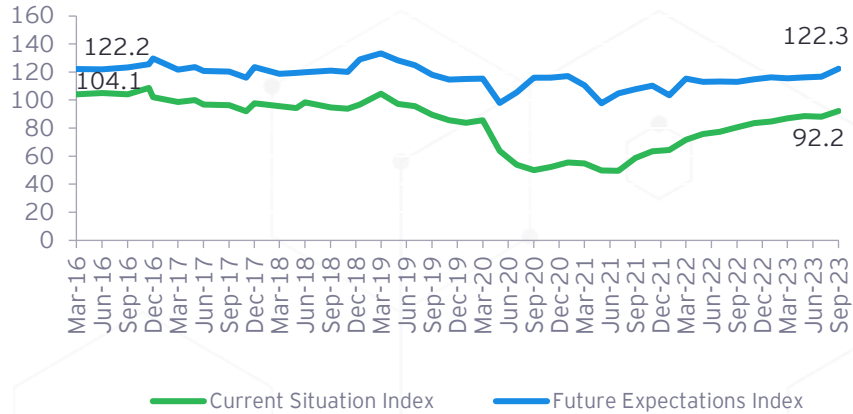
- ▶ The number of net new EPF subscribers stood at 1.5 million in August, marginally higher than August 2022.
- ▶ Unemployment rate was estimated to be at a 29-month high of 10.1% in October 2023.



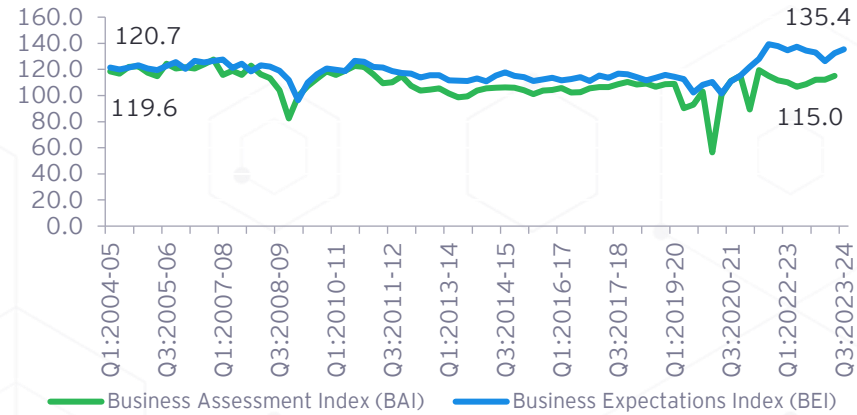




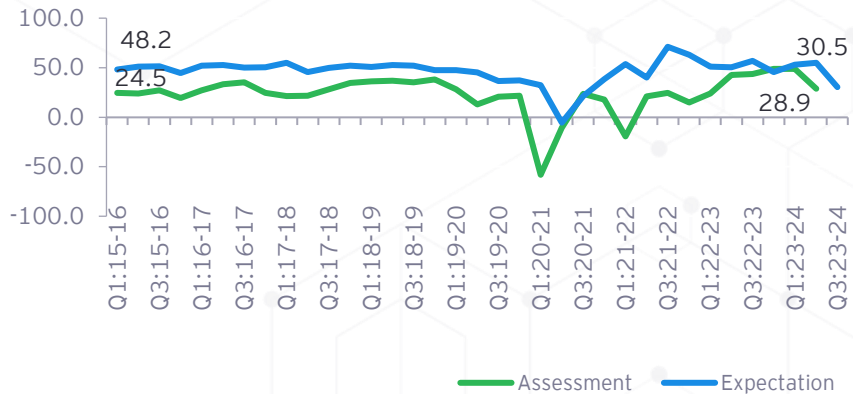
### Consumer confidence indices



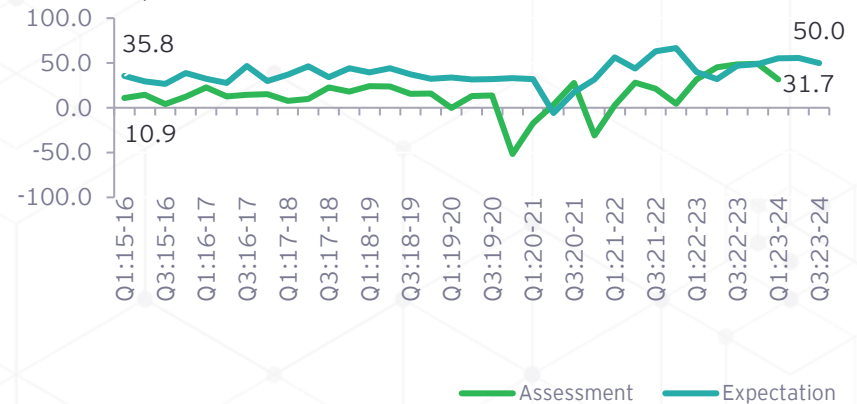
### Business sentiment



### Turnover of services companies (Net response %)



### Turnover of infrastructure companies (Net response %)



### Key findings

- ▶ The consumer's current situation index (CSI) reverted to its recovery path after a brief pause in July 2023.
- ▶ Both consumer confidence indexes, i.e., current situation and future expectations, are at a four-year high. However, the index for the current situation is less than 100, implying a lack of optimism.
- ▶ Consumer index suggests that there is greater confidence about the future, vis-à-vis the current time.
- ▶ In line with consumer confidence indexes, businesses have greater confidence about future expectations. However, unlike the consumer confidence index, the business index for current assessment is over 100.
- ▶ Service sector and infrastructure companies retained their positive assessment about their overall business situation with somewhat lower sanguinity vis-à-vis the previous quarter, but remain optimistic overall business situation, turnover, and employment conditions in Q3:2023-24

Source: RBI

Note: Net Response (NR) is the difference between the percentage of respondents reporting optimism and those reporting pessimism. It ranges between -100 to 100. Positive value indicates expansion/optimism and negative value indicates contraction/pessimism.

Data as of 6<sup>th</sup> October 2023





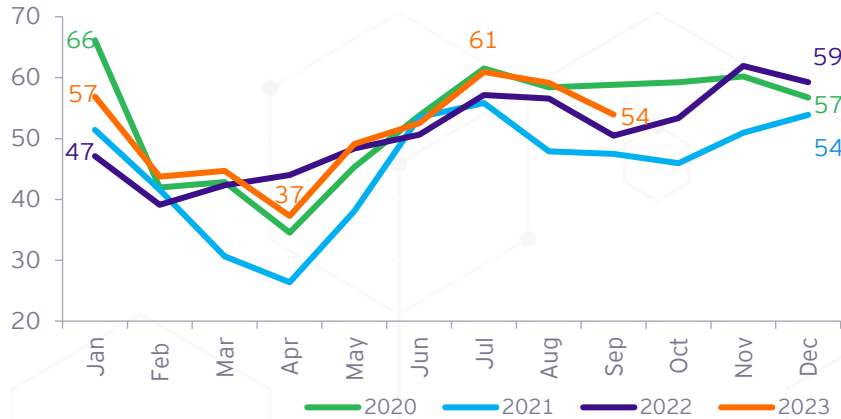
4

# Sectoral indicators

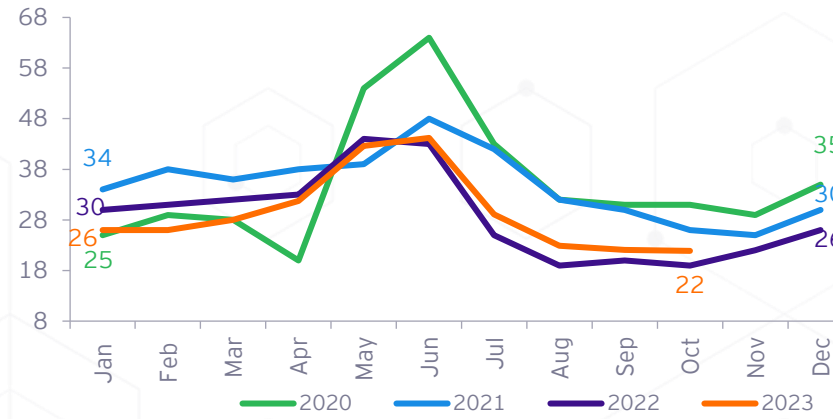




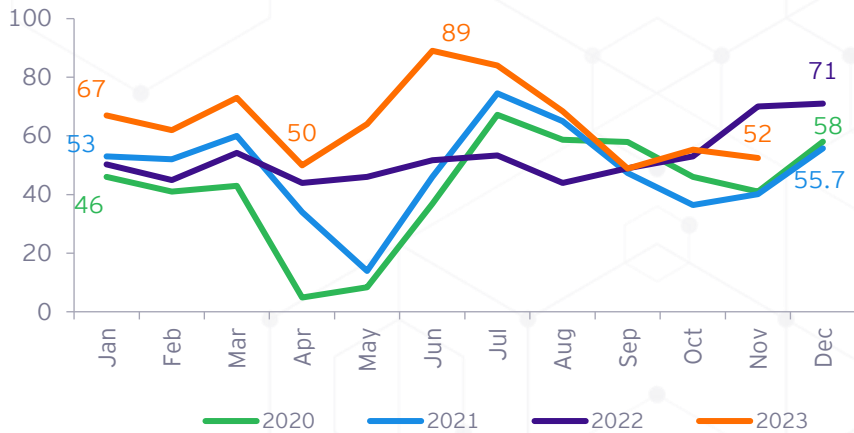
### Fertilizer sales (lakh MT)



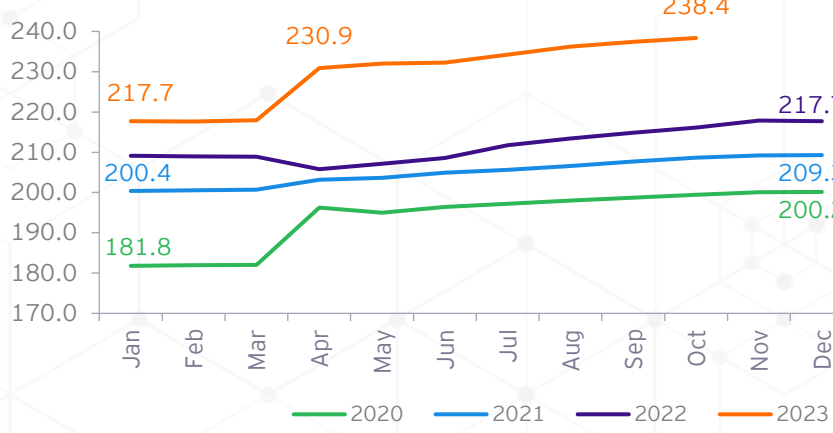
### Persons work demand under MGNREGA (in millions)



### Tractor registration (no. of units in '000)



### Average Wage paid per day per Person (INR) (Nominal)



### Key findings

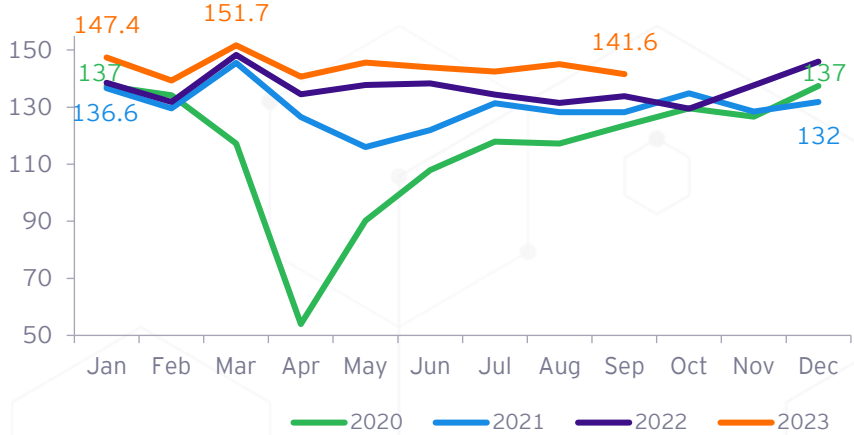
- ▶ While rural demand has been growing, some indicators suggest a slowdown in growth over the past few months.
- ▶ Since June 2023, monthly demand for work under MNREGA has been higher than the corresponding months in 2022. From June to October 2023, demand for work has been higher by 11% over the previous year.
- ▶ Tractor registrations in 2023 were significantly higher vis-à-vis 2022 until August 2023. In September and October 2023, they were at similar levels as in 2022. In November 2023, tractor registrations were 25% lower than in November 2022.
- ▶ Fertilizer sales have grown 5% from Jan to Sept 2023 over the corresponding period in 2022. In September 2023, they were higher by 8% vis-à-vis September 2022.

Source: Ministry of Road Transport and Highways, Ministry of Agriculture & Department of Fertilizers, MNREGA, MOSPI, RBI  
 Note: Fertilizer sales comprises of Urea, DAP, MOP and Complexes

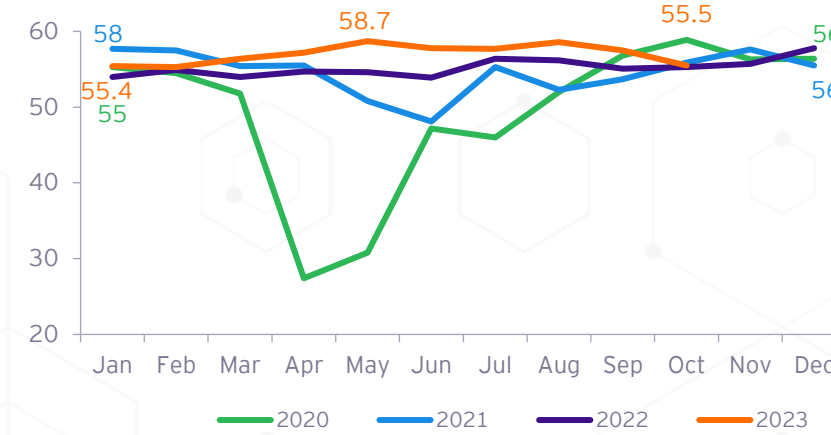




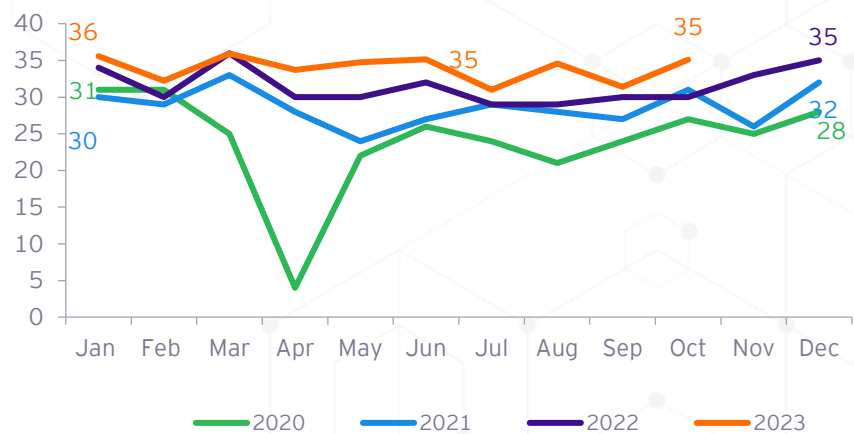
### General index of industrial production



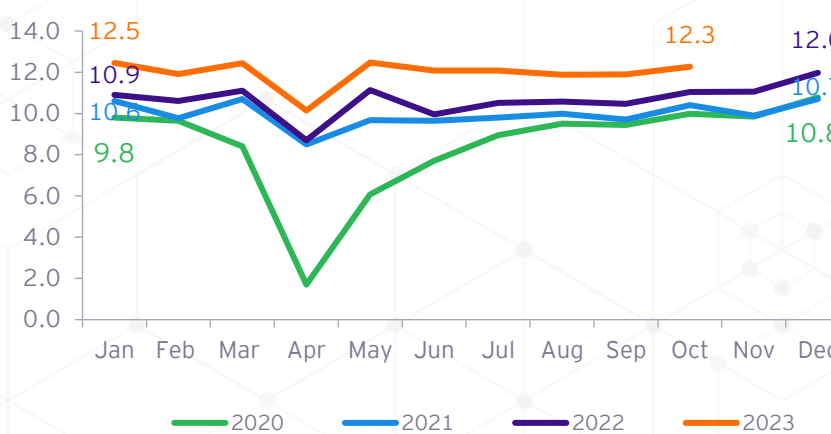
### Manufacturing PMI



### Cement production (million tons)



### Crude steel production (million tons)



### Key findings

- ▶ The general index of industrial production has grown by approximately 6% during the period April to September 2023 over the corresponding period in 2022. Growth in Q2 of 2023-24 was 7%.
- ▶ Manufacturing PMI though well above the threshold of 50 moderated to 55.5 in October from 57.5 a month ago. This is attributed to lower new orders and output.
- ▶ Steel production has grown over 14% during April to October 2023 over the corresponding period in 2022. In October 2023, steel production was higher by 11% vis-à-vis October 2022.
- ▶ Similarly, cement production has grown by 12% during the period April to October 2023 over the corresponding period in 2022. In September 2023, growth rose to 17.1%.
- ▶ Growth of cement and steel production reflects the robust growth in the construction sector

Note: PMI >50 indicates expansion, <50 indicates contraction  
 Source: IHS Markit, DPIIT, RBI; IIP Base: 2011-12=100

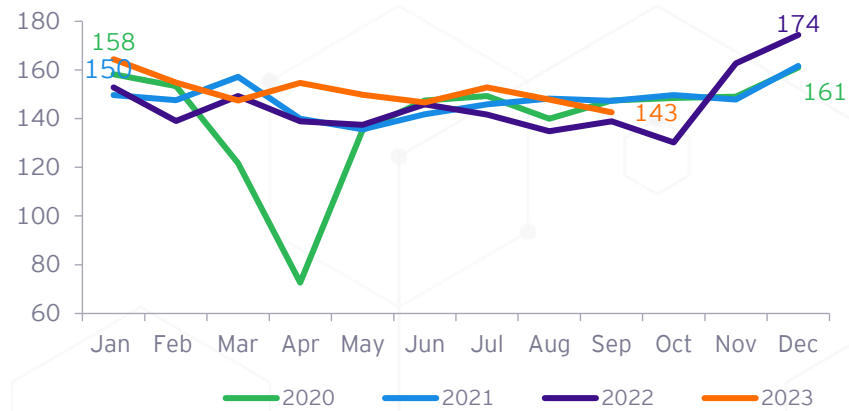




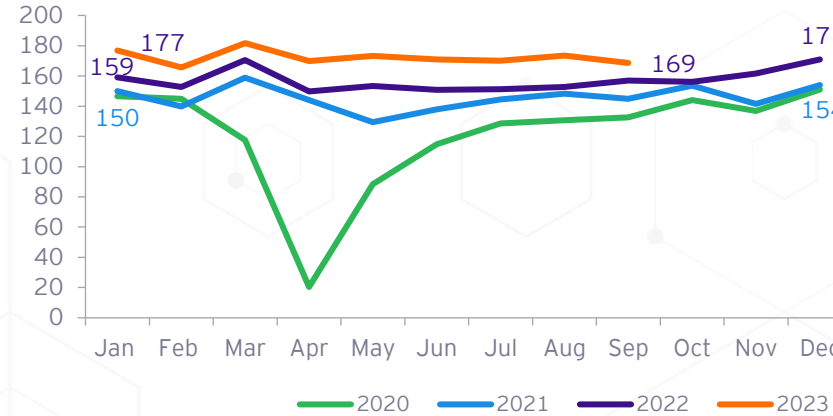
# Manufacturing indices for consumer non-durables, consumer durables, infrastructure and capital goods



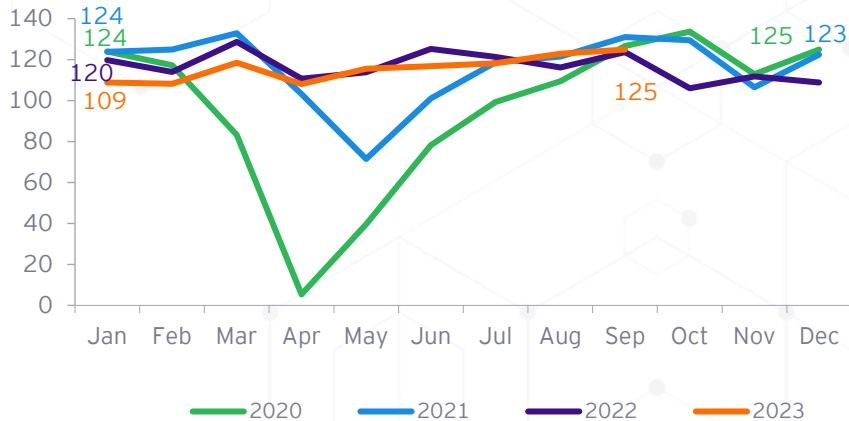
IIP consumer non-durables



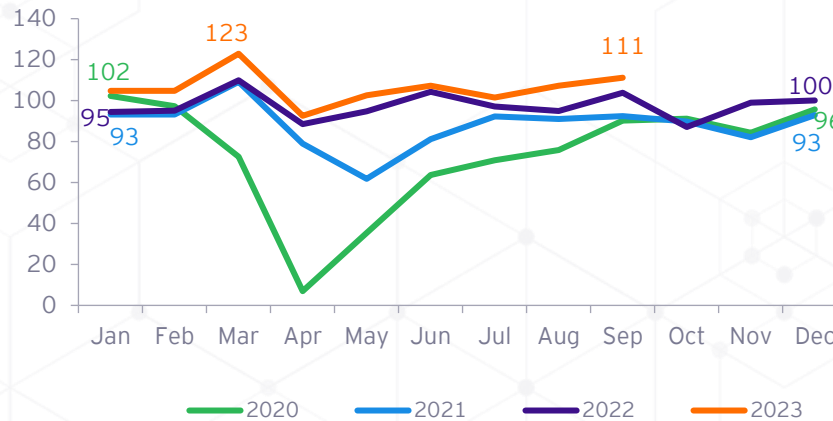
IIP infrastructure/construction goods



IIP consumer durables



IIP capital goods



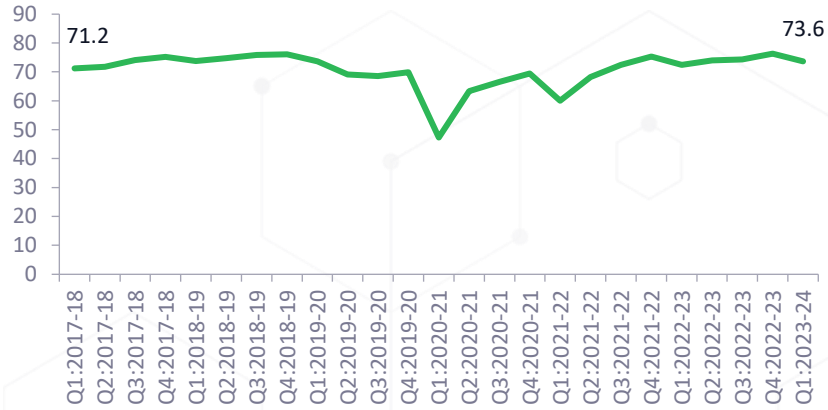
## Key findings

- ▶ In line with the growth of steel and cement production, IIP for infrastructure and construction goods has grown from 12 to 14% in each of the months from April to August 2023 (over the corresponding month in 2022) before moderating to 7.5% in September 2023.
- ▶ Growth of monthly IIP for capital goods has averaged to 6.6% during the period April to September 2023 over corresponding months in 2022.
- ▶ Growth in IIP for infrastructure and capital goods bodes well for capital formation.
- ▶ In line with IIP for capital goods, monthly growth in IIP for consumer non-durables during the period April to September 2023 over corresponding months in 2022 averaged 6.8%.
- ▶ In contrast, IIP for consumer durables in the months from April to September 2023 has been overall at similar levels as in 2022. IIP was up 1% in September 2023 over September 2022.

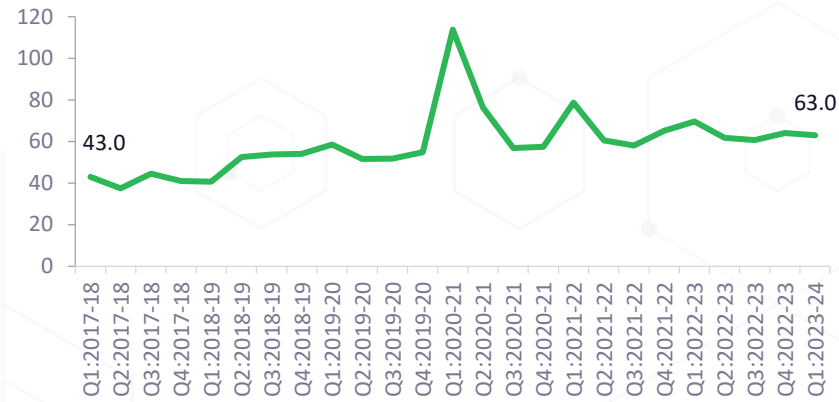




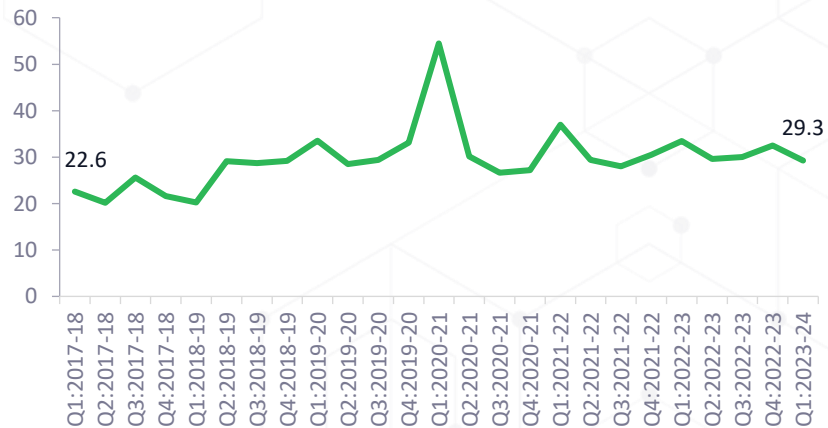
### Capacity utilisation (%)



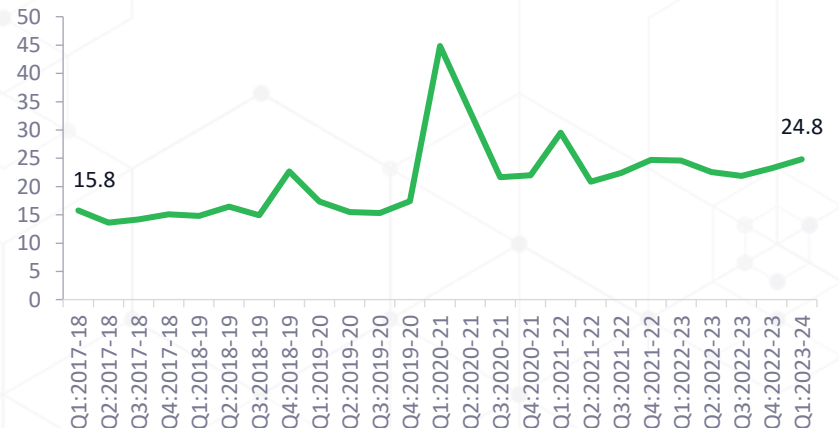
### Total inventory to sales ratio (%)



### Raw material inventory to sales ratio (%)



### Finished goods inventory to sales ratio (%)

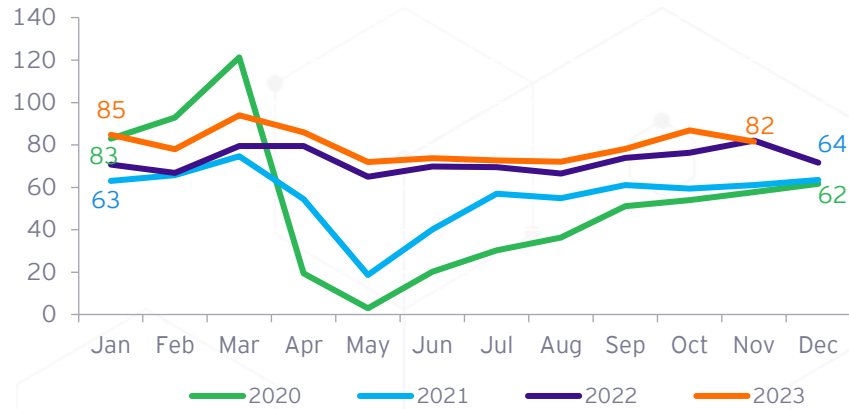


### Key findings

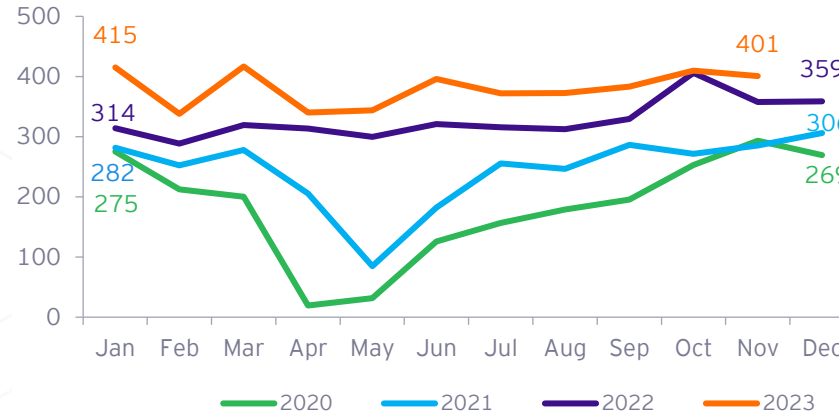
- ▶ Capacity utilization in the manufacturing sector recorded a seasonal decline to 73.6% in Q1:2023-24 from 76.3% in the previous quarter. According to the RBI, the seasonally adjusted capacity utilization for Q1:2023-24 improved by 130 basis points (bps) from its level in the previous quarter and stood at 75.4%.
- ▶ The finished goods inventory to sales ratio increased marginally in Q1:2023-24 due to some moderation in sales while the raw material inventory to sales ratio declined marginally from its level in the previous quarter on the back of drawdown in raw materials.



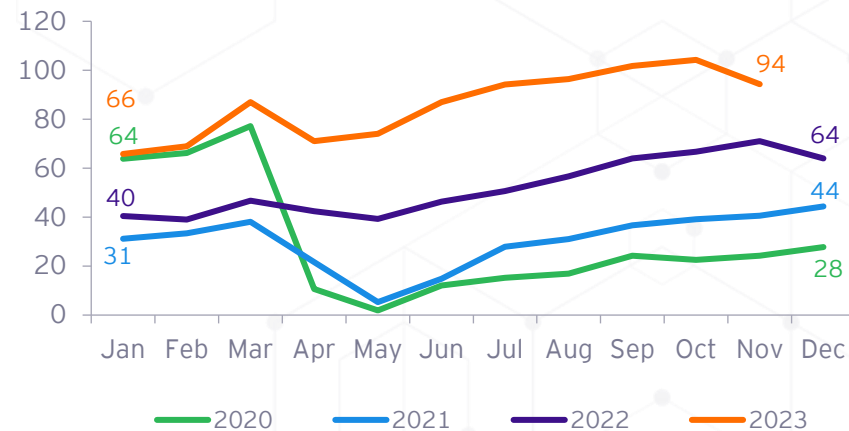
### Commercial vehicles (in '000s)



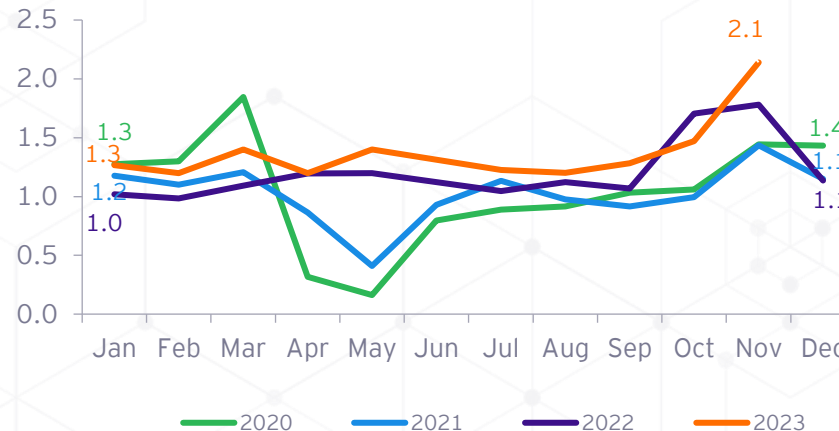
### Passenger vehicles (in '000s)



### Three-wheelers (in '000s)



### Two-wheelers (in millions)



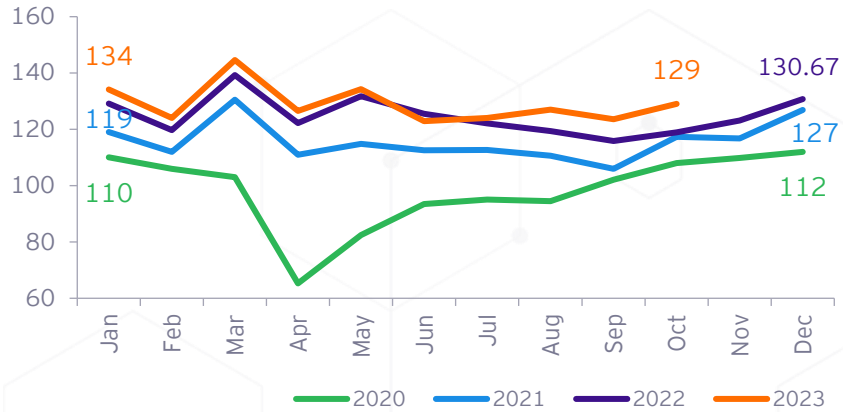
### Key findings

- ▶ Demand conditions, as evidenced by vehicle registration trends, show firmness in demand. Demand for all categories of vehicles is higher compared to the previous year.
- ▶ In the current financial year from April to November 2023, passenger vehicles have grown by 14% over the previous year. Commercial vehicles have grown by 7%, three wheelers have grown by 65% and two wheelers are up 10%.
- ▶ High growth in demand for three wheelers is attributed to availability and deployment of electric three wheelers by E-commerce players and FMCG companies .

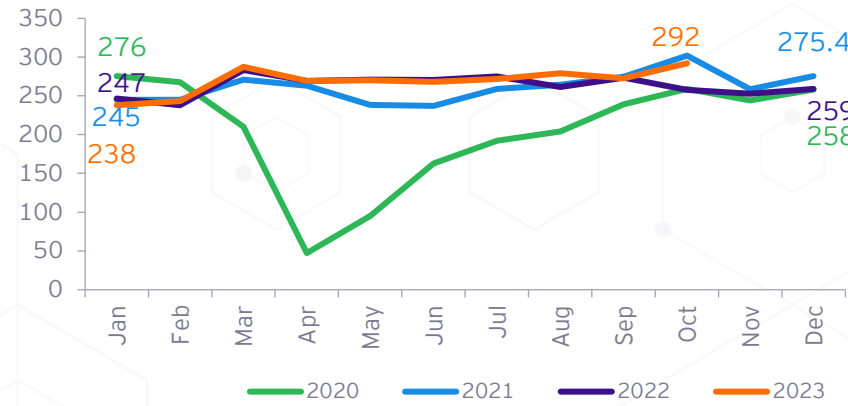
Note: CV include all Heavy, Medium vehicles and light goods vehicles. PV represents Motors Cars data. 2w and 3W include both transport and non-transport. Telangana and Lakshadweep vehicle registrations are not covered under Vahan database. Source: Vahan Database. Data as on December 1, 2023



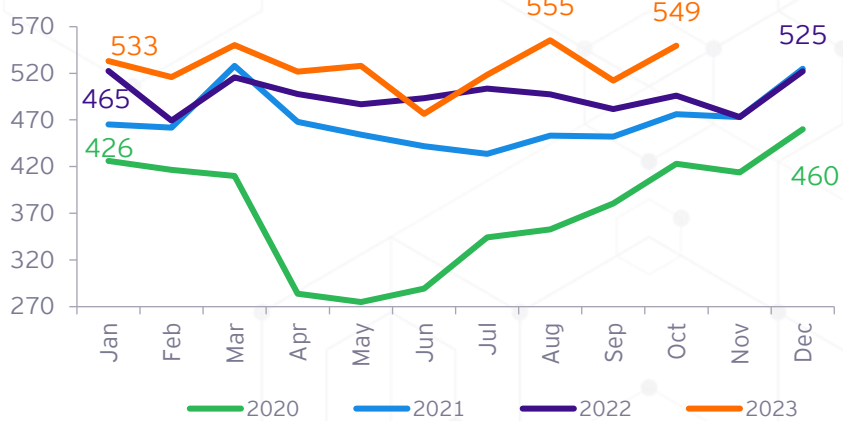
### Railways freight (million tons)



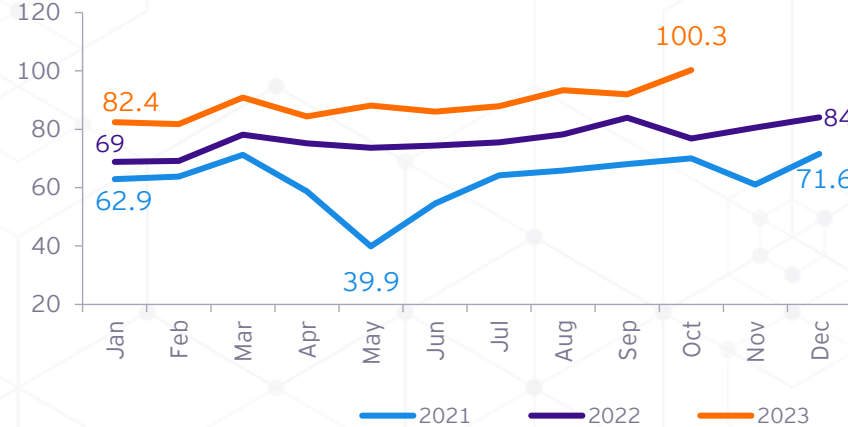
### Air Freight ('000 tons)



### JNPT container traffic ('000 TEUs)



### E-way bills generated (volume in million)

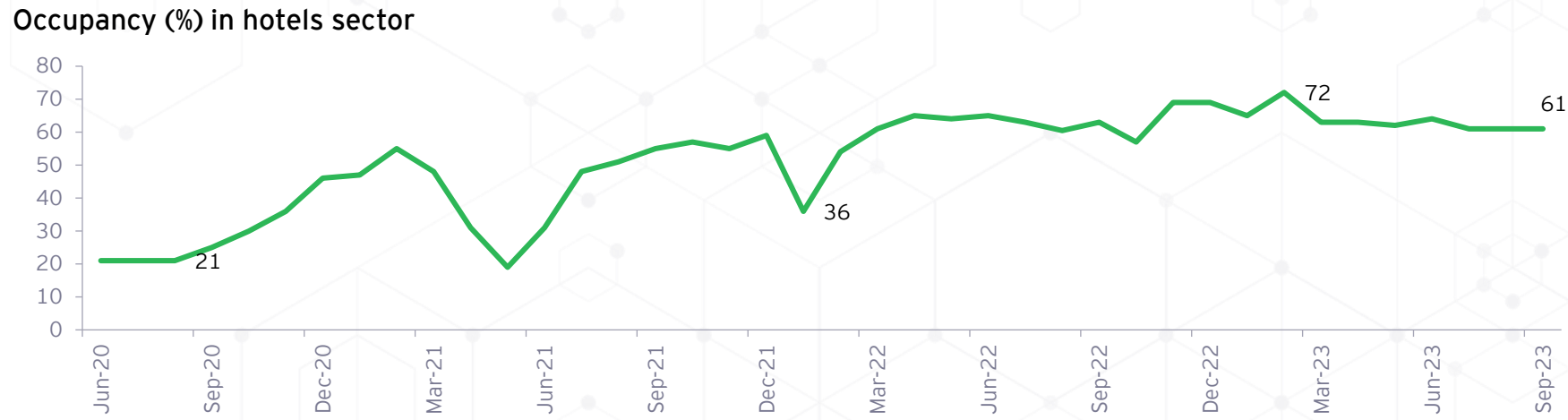
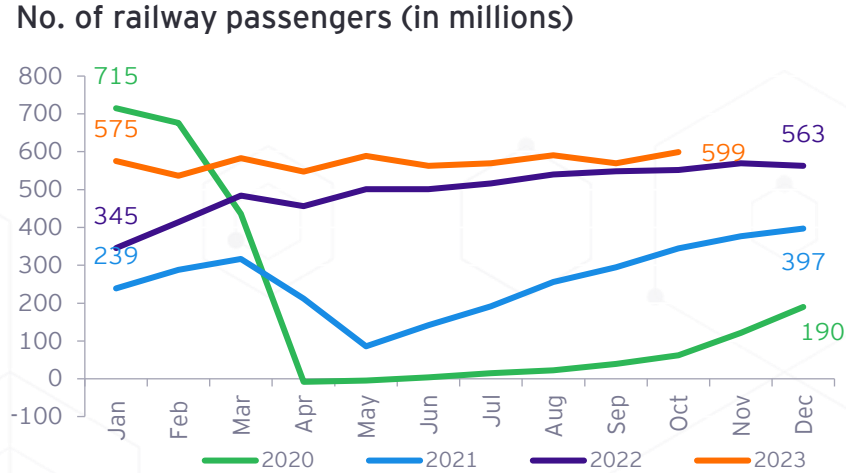
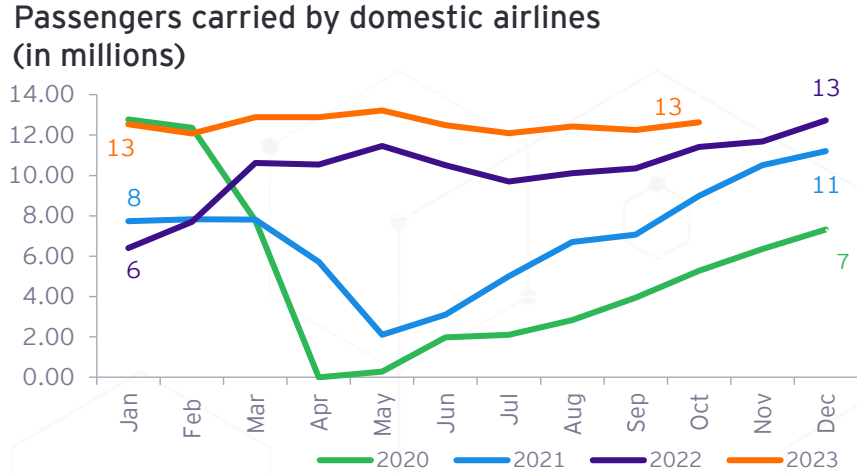


### Key findings

- ▶ All freight movement indicators suggest growth, especially the number of e-way bills generated.
- ▶ E-way bills generated recorded an all-time high in October 2023 at 100.3 million. E-way bill volumes from April to October 2023 have grown at 17% vis-à-vis the same period in 2022.
- ▶ Rail freight transportation is up 3.7% in the current financial year till October vis-à-vis the previous year. Traffic in October 2023 was up 8% over October 2022, on y-o-y basis. Freight transport is highest in October over the corresponding months in the last three years.
- ▶ Shipping freight represented by JNPT container traffic has grown 5.9% in the current financial year from April to October over the same period in the previous year.
- ▶ Air freight has grown by 2.4% in the current financial year from April to October over the same period in the previous year

Source: Ministry of Civil Aviation, Ministry of Railways, JNPT Terminal, GSTIN Network  
 Note: JNPT data is available from August 2019-20.





### Key findings

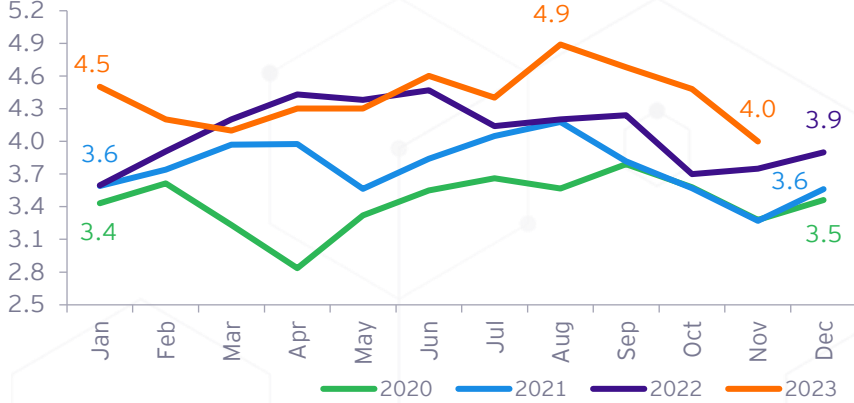
- ▶ Both domestic air and railway passenger traffic noted robust growth in the current financial year.
- ▶ Air passenger traffic is up 19% in the current financial year from April to October over the same period in the previous year. Air passenger traffic volume is now at levels similar to pre-COVID-19 levels.
- ▶ Railway passenger traffic is still well below the pre-covid levels (nearly 30% lower). It has grown by 11.5% in the current financial year from April to October over the same period in the previous year.
- ▶ Hotel occupancy has moderated slightly, recording 61% in September, lower than the peak recorded in Feb at 72%.

Source: Directorate General of Civil Aviation, Indian Railways, HVS Anarock, CEIC

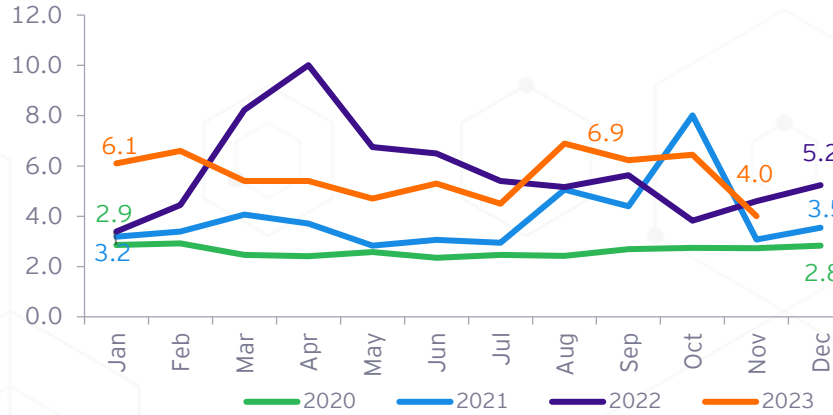




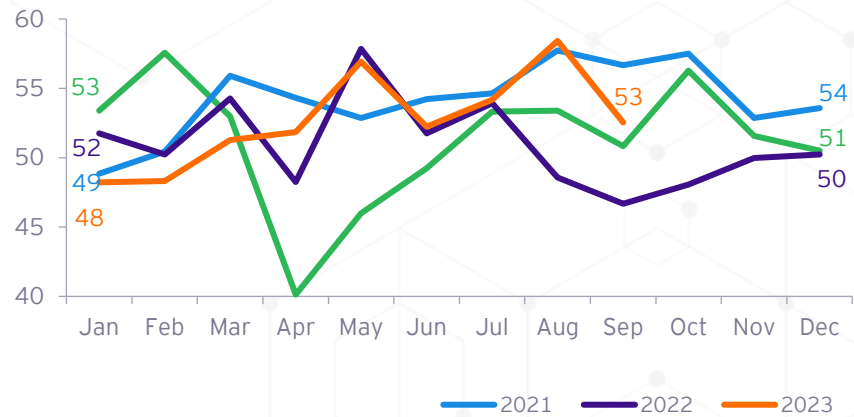
### Average daily power consumption (billion units)



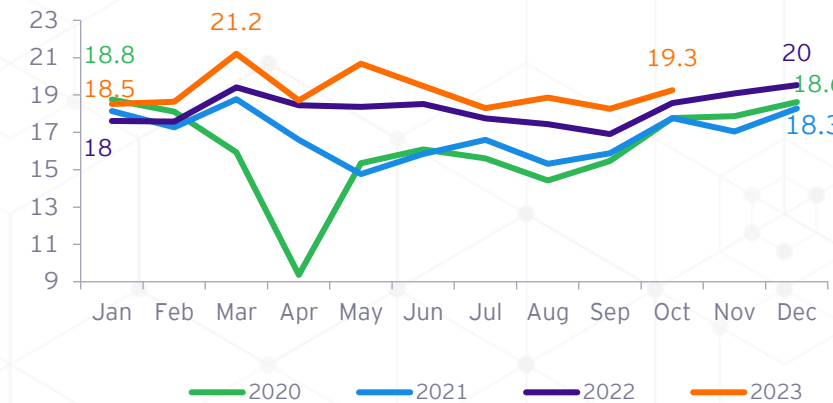
### Power market clearing price (Rs 'per KWh)



### Consumption of natural gas ('00 MMSCM)



### Consumption of petroleum products (million metric tons)



### Key findings

- ▶ Energy consumption continues to grow in line with the increased economic activity.
- ▶ India recorded an all-time peak demand of 241 GW on 1 September 2023, surpassing the peak in the previous month.
- ▶ Power consumption was 7% higher during the period from April to November 2023 vis-à-vis the same period in 2022.
- ▶ Monthly average wholesale electricity price from August to October 2023 have been higher than corresponding months in 2022, though the trend reversed in November 2023.
- ▶ Consumption of natural gas touched an all-time high in August 2023. Consumption in September 2023 was 13% higher than September 2022.
- ▶ Consumption of petroleum products is 6% higher during the period from April to October 2023 vis-à-vis the corresponding period in 2022.

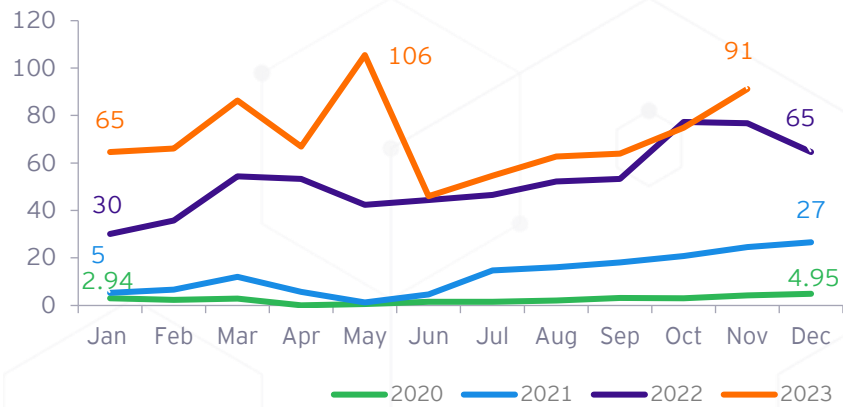
Note: Power consumption for November '23 data is average of daily data available as on 28th November 2023. Market Clearing Monthly Prices are simple average of non-zero prices in (No of days in a month\*24\*4) no of 15 minutes time block of respective month.  
 Source: Ministry of Petroleum, Coal & Power and Indian Energy Exchange. MMSCM stand for Million Standard Cubic Metre.



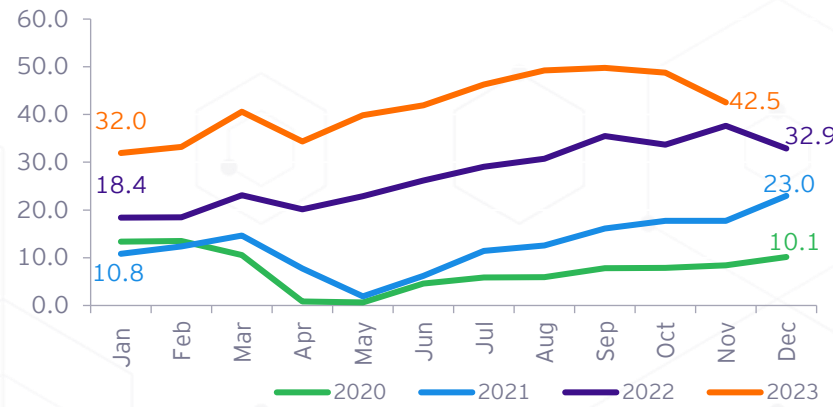




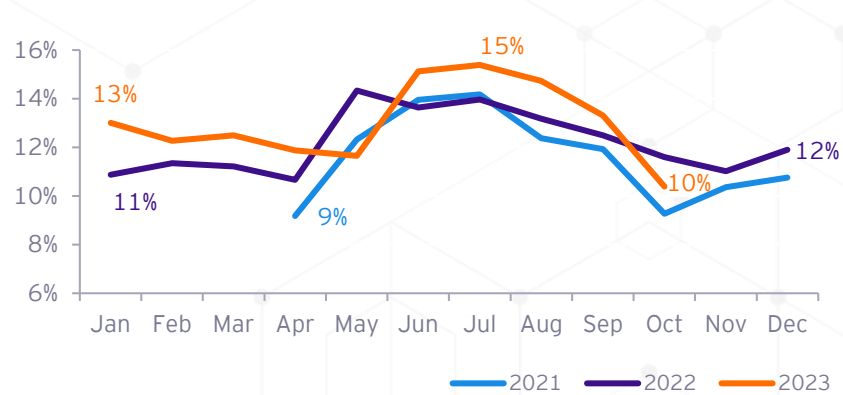
### Registration of e-two-wheelers (In 000's)



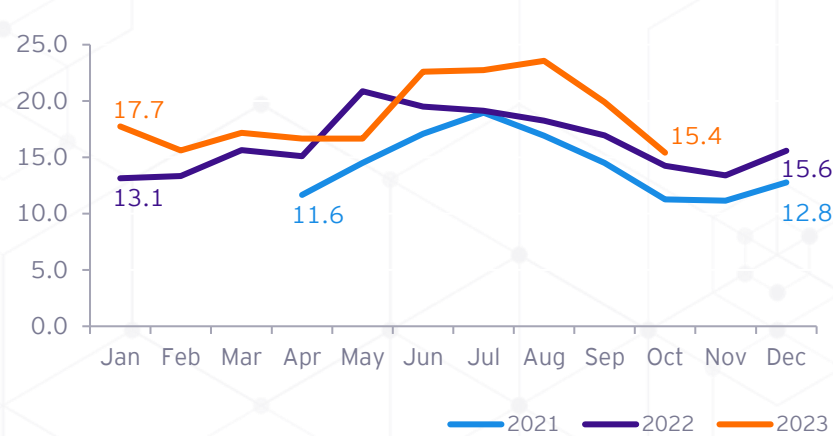
### Registration of e-rickshaw vehicles (In 000's)



### Renewable energy generation as % of the total power generation



### Renewable energy generation (billion units)



### Key findings

- ▶ After the sharp decline in June 2023 due to changes in FAME policy, registration of e-two-wheelers has been picked up. They have increased by 27% in Apr-Nov 2023 vis-à-vis the corresponding period in 2022.
- ▶ Registrations of e-rickshaw have recorded a robust growth of 50% during the period Apr-Nov 2023, over the same period last year.
- ▶ While the share of RE in the overall generation has been higher in most months in 2023, however its share at 10% in October 2023 was lower than 12% in October 2022. Electricity demand in October 2023 was 20% higher than October 2022 and India needed enhanced thermal power to meet increased demand.
- ▶ This underscores the challenge of decarbonizing the power sector given the surging demand, need for energy security and variability in generation from renewables.

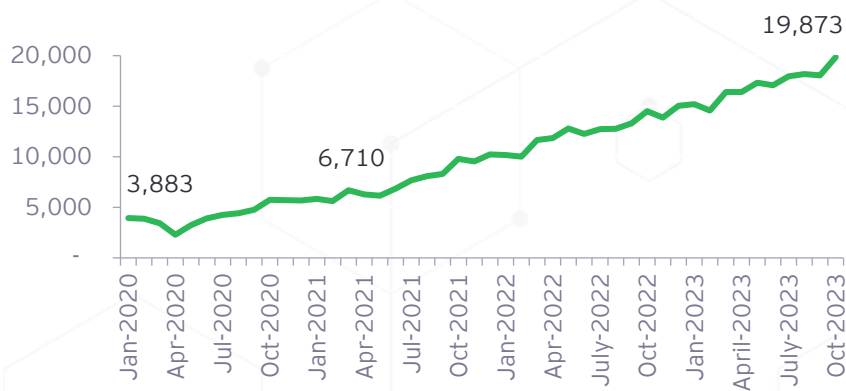
Source: CEA, Vahan Dashboard

Note: RES includes Solar, Wind, Small hydro, Biomass & Others

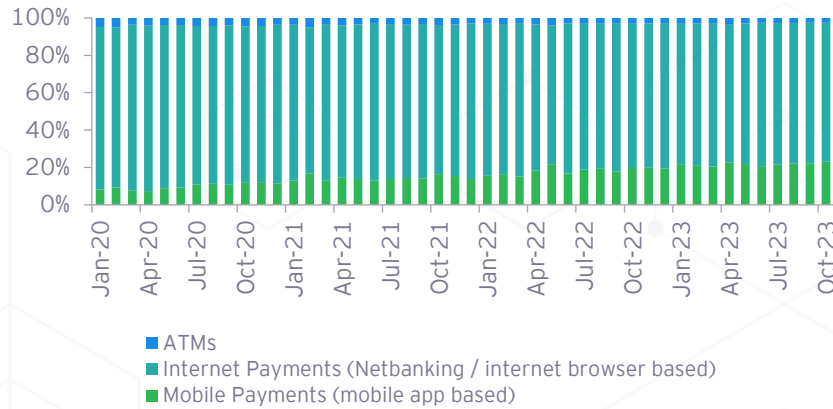
e-2W include transport, non-transport and invalid carriage data. Telangana and Lakshadweep vehicle registrations are not covered under Vahan database.



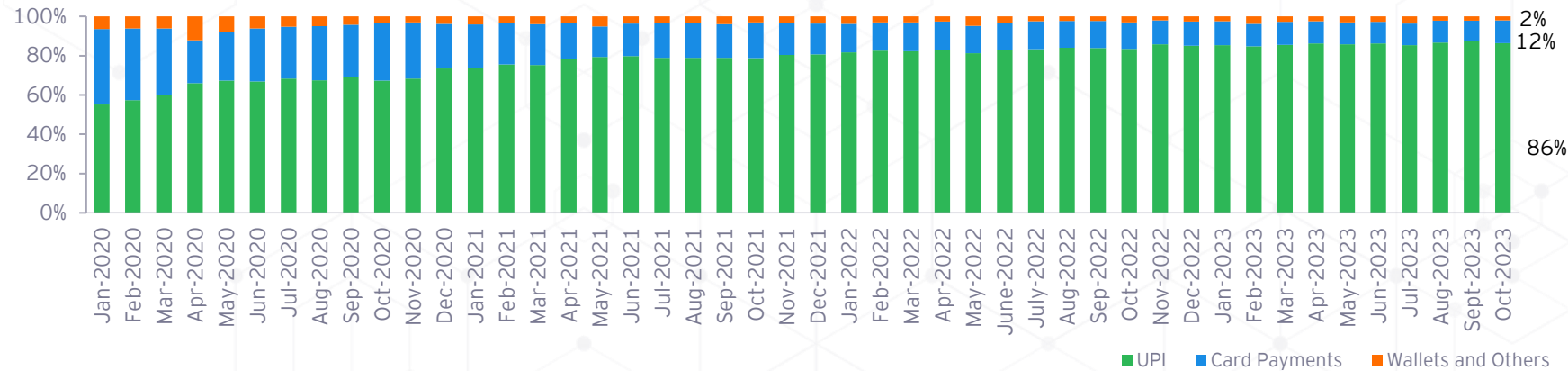
**Total digital retail payments (in INR billion)**



**Share of different payment channels (by value)**



**Share of different segments in total digital retail payments (by value)**



### Key findings

- ▶ The rise in internet and mobile payment channels vis-à-vis ATMs underscores the rapid uptake of digitalization in the financial sector.
- ▶ Total value of digital retail payments recorded an all-time high of INR 19.8 lakh crores in October 2023.
- ▶ On an absolute basis, payments through UPI have grown by over 42% in October 2023, vis-à-vis October 2022.
- ▶ The pandemic induced a shift towards UPI appears to have stabilized, as noted in the market shares of different digital retail payment tools.
- ▶ Market share of cards, which has declined consistently since December 2019, witnessed an increase in market share from 10.5% in September 2023 to 11.6% in October 2023.
- ▶ On an absolute basis, in October 2023, card payments were up 17% over October 2022.

Note: Others include ECS, AEPS, APBS and BHIM  
Source: TRAI, RBI



5

# Commodities: markets and investments

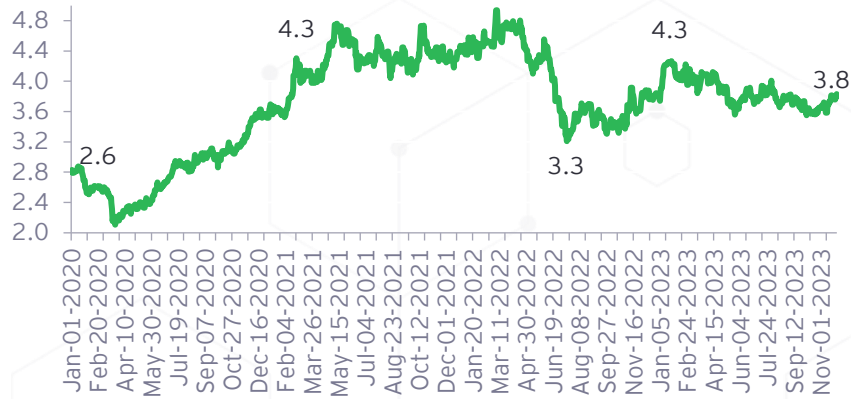


# Trends in commodity prices (metal)

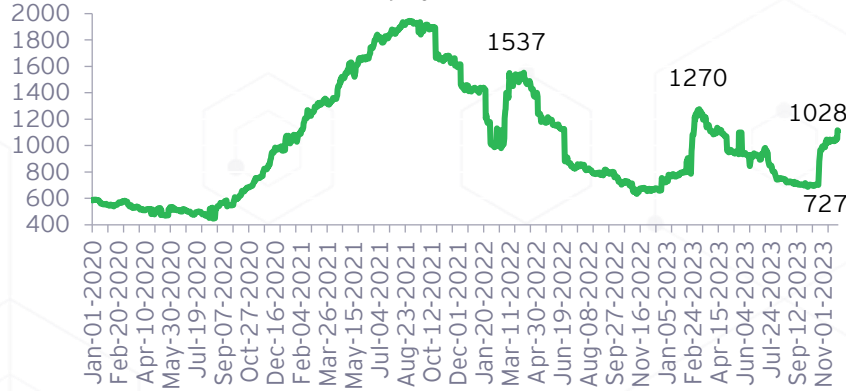
## Commodity and input price trends



**High grade copper prices (US\$ per lb) (COMEX)**



**Hot rolled coil steel prices (US\$ per ton) (NYMEX)**



**Aluminum price per MT (in US\$) (Cash- LME)**



**Nickel per MT price (in '000 US\$) (Cash-LME)**



### Key findings

- ▶ Prices of key metal commodities have moderated from the peaks witnessed in Jan- Mar 2022.
- ▶ Steel prices increased steeply in October/ November 2023 from US\$725 to over US\$1000/ ton. This is attributed to the announcement of stimulus by the Chinese Government and firmness in iron ore prices.
- ▶ Aluminum prices remained flat in November. They have dropped 44% from the high made in Jan-Mar 2022.
- ▶ Copper prices posted a slight increase in prices but remained stable, between ~\$3.6-\$3.8 per lb range in November.
- ▶ Nickel prices have been declining and are 45% lower than in January 2023.
- ▶ There is a downside risk to prices of metals as global demand remains weak, though geopolitical events could trigger price increase.

Note: Data as on 30 November 2023; 2. Copper Prices- High Grade, Chicago Mercantile Exchange , Steel Prices- Domestic Hot Rolled Coil, Source: CapitalIQ, MCX





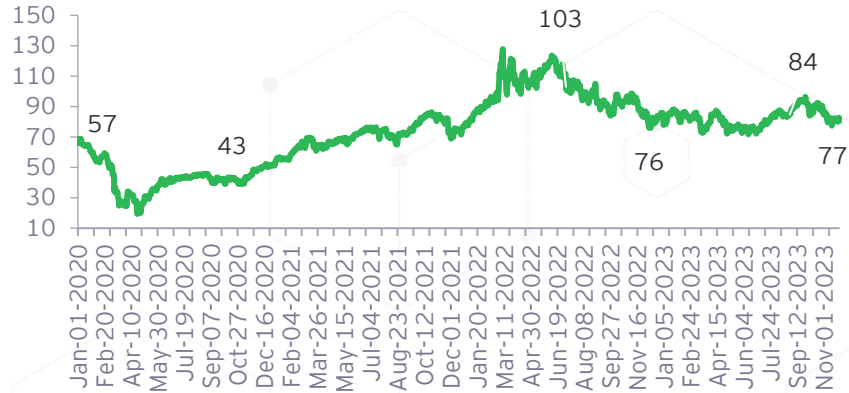
# Trends in commodity prices (energy and gold)

## Commodity and input price trends



India Economic Pulse

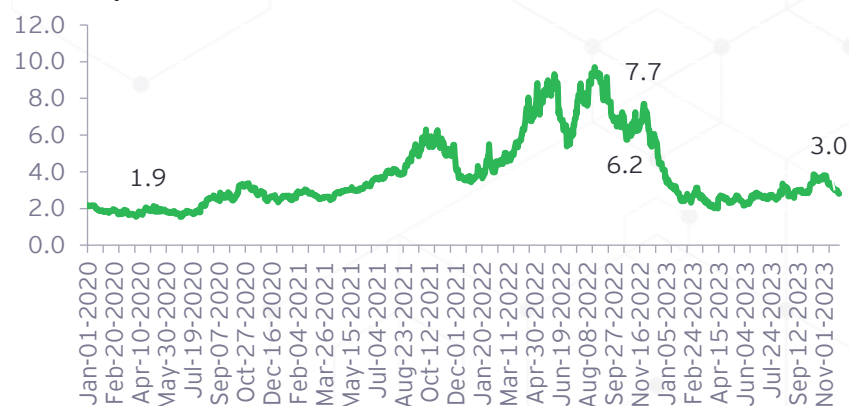
Crude oil - Brent price (US\$ per bbl) (NYMEX)



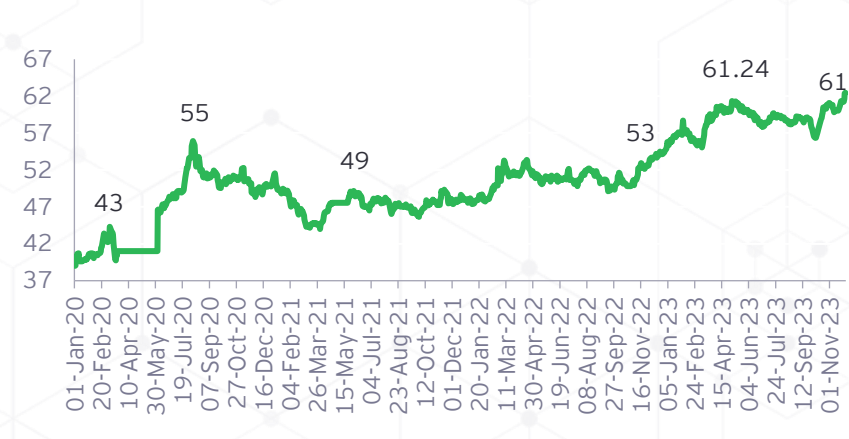
Coal price per ton (in US\$) (Newcastle- ICE)



Natural gas per mm BTU (in US\$) (Henry Hub)



Gold price per 10 grams (in '000 INR)



### Key findings

- ▶ The impact of the latest conflict in the Middle East on commodity prices are muted. Gold prices have risen moderately by 4% since October from the September price levels.
- ▶ Crude oil prices have largely been in the range of US\$70 to US\$90 over the last two months despite the conflict in Middle East. OPEC's decisions regarding production cuts would impact the prices in the future.
- ▶ Thermal coal prices have declined by over 70% vis-à-vis the peak price in 2023. The fall in prices is attributed to weak global demand amid rising supply.
- ▶ Natural gas prices remain under pressure due to record production and high inventory levels.

Note: Data as on 30 November 2023; 2. Copper Prices- High Grade, Chicago Mercantile Exchange; Steel Prices- Domestic Hot Rolled Coil; Crude oil and Natural gas price, NYMEX  
Source: CapitalIQ, MEX





# Trends in commodity prices (agriculture)

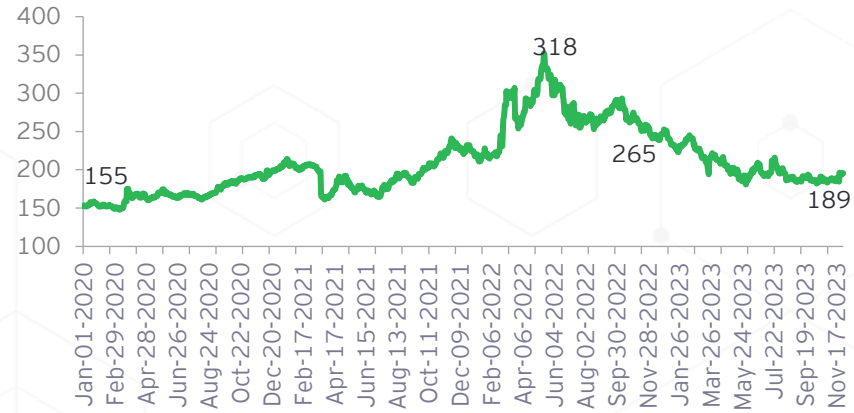
## Commodity and input price trends



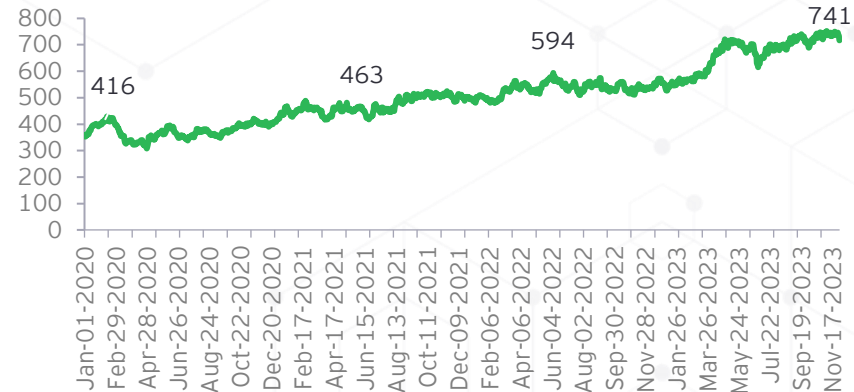
**Corn Feed per MT (in INR) (BSE)**



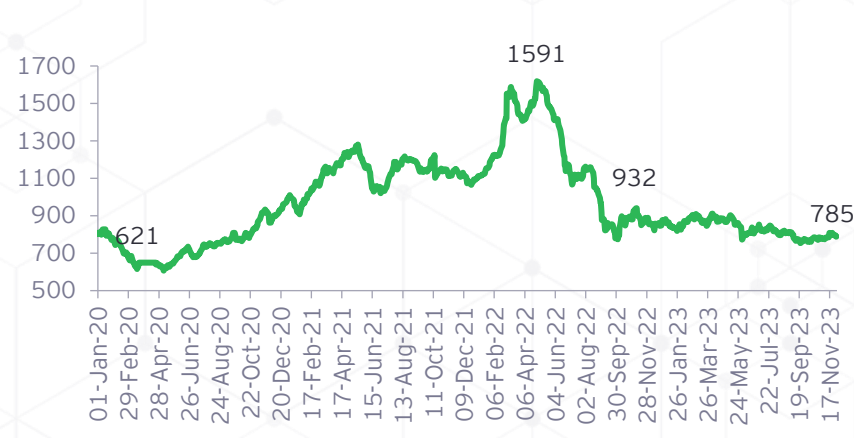
**Wheat Price per MT (In US\$) (LIFFE)**



**Sugar - White per MT (In US\$) (LIFFE)**



**Palm (CPO) oil per 10 kg (in INR)**



### Key findings

- ▶ Prices of agricultural commodities have remained steady or gone up marginally in the last three months.
- ▶ Prices of corn feed have declined by 3% from the price levels in August. The average prices in November, however, dropped by 11% vis-à-vis September.
- ▶ Wheat prices continue the downtrend in November, declining by 3% from average price levels in August 2023.
- ▶ International Sugar prices continue to surge, rising by 35% between Jan and November 2023. The spike over the last few years reflects lower output due to adverse weather events in key producing nations, export controls and the usage of sugarcane for ethanol. It may be noted that sugar prices in India have, however, remained range-bound.
- ▶ Meanwhile, palm oil prices have continued to decline, marking a 7% decline in prices from Jan 2023.

Note: Data as on 30 November 2023  
Source: MCX, CapitalIQ

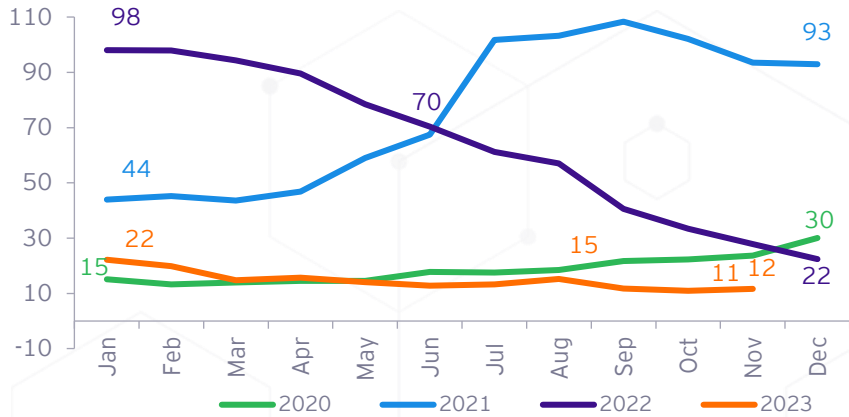
# Global container freight transportation volumes and rates

Commodity and input price trends

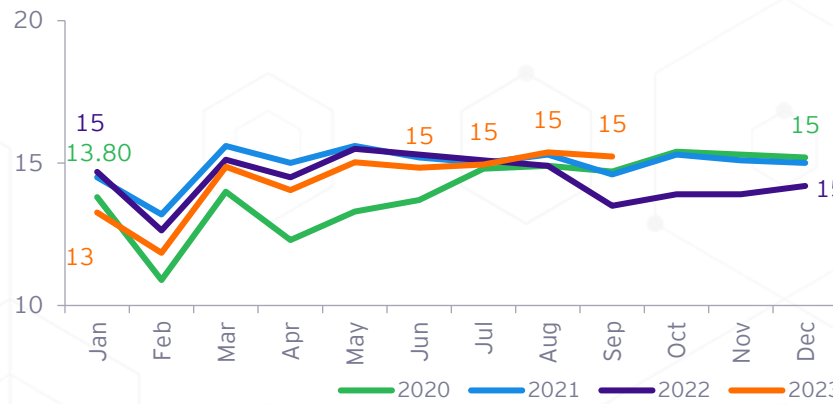


India Economic Pulse

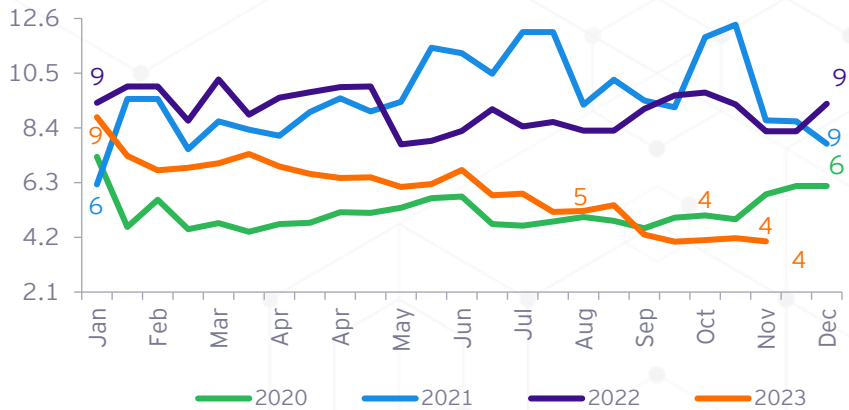
Global container freight index (in '00 US\$)



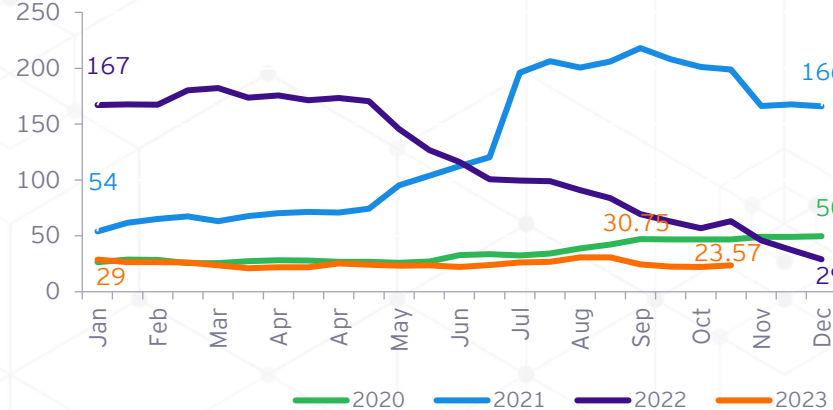
Global container traffic volume (million TEU's)



Container freight prices – North America East Coast to China/East Asia (in '00s US\$)



Container freight prices – China/East Asia to North America East Coast (in '00s US\$)



## Key findings

- ▶ Monthly global container traffic volumes in 2023 were lower than in the corresponding months of 2022 until July. August and September 2023 have recorded higher monthly volumes over 2022.
- ▶ However, the monthly global freight index and monthly container prices in each of the months of the current financial year are lower than the corresponding months in 2022.
- ▶ The lower container freight prices corroborate the data on weakness in global trade.

Note: Container freight index and freight prices as of 30th November 2023  
Source: FBX: Global Container Freight Index, Container Statistics



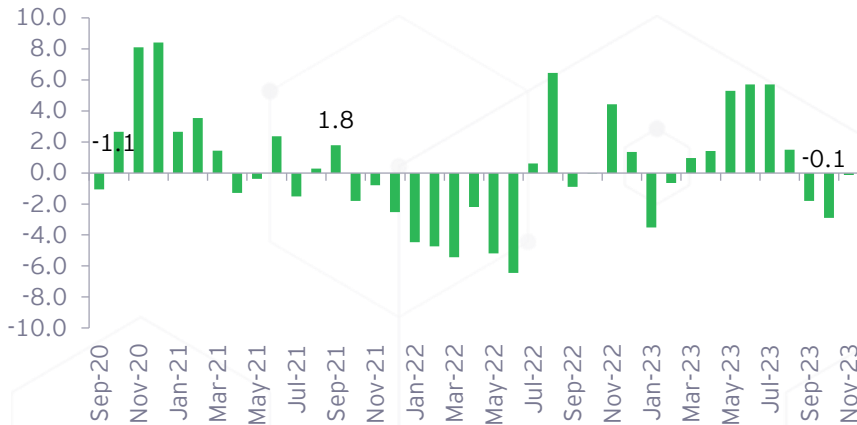
# Foreign capital flows and exchange rate position

External sector

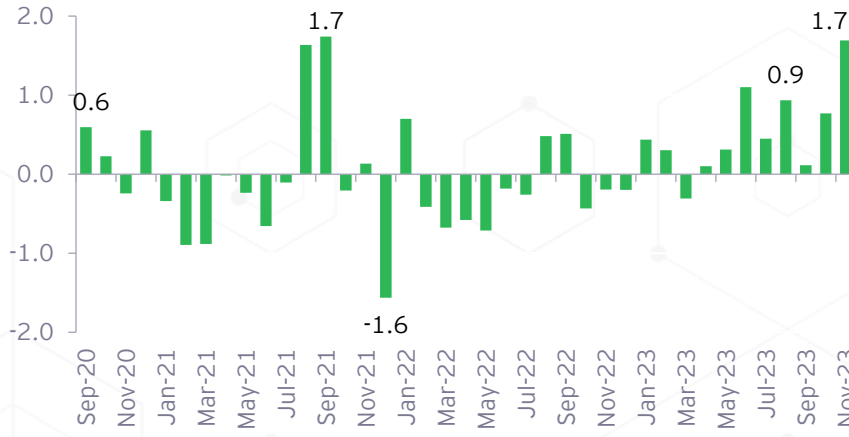


India Economic Pulse

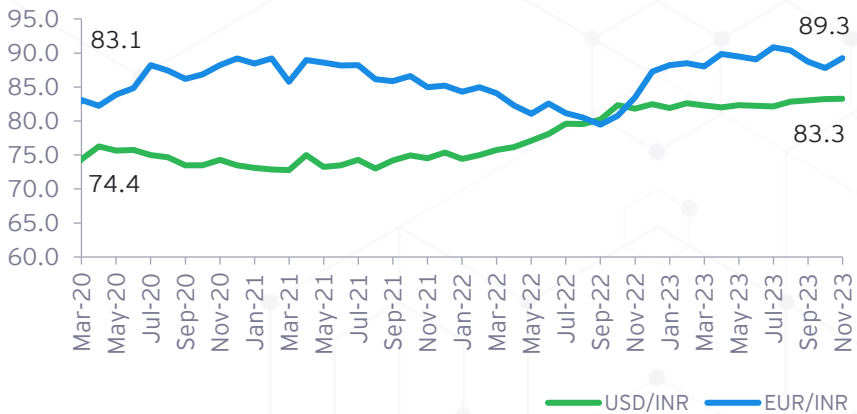
FPI Investments - Equity (in US\$b)



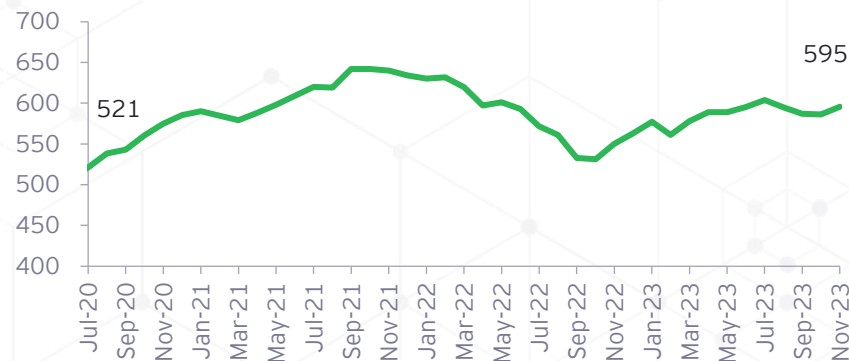
FPI Investments - Debt (in US\$b)



Exchange rates



India foreign exchange reserves (in US\$b)

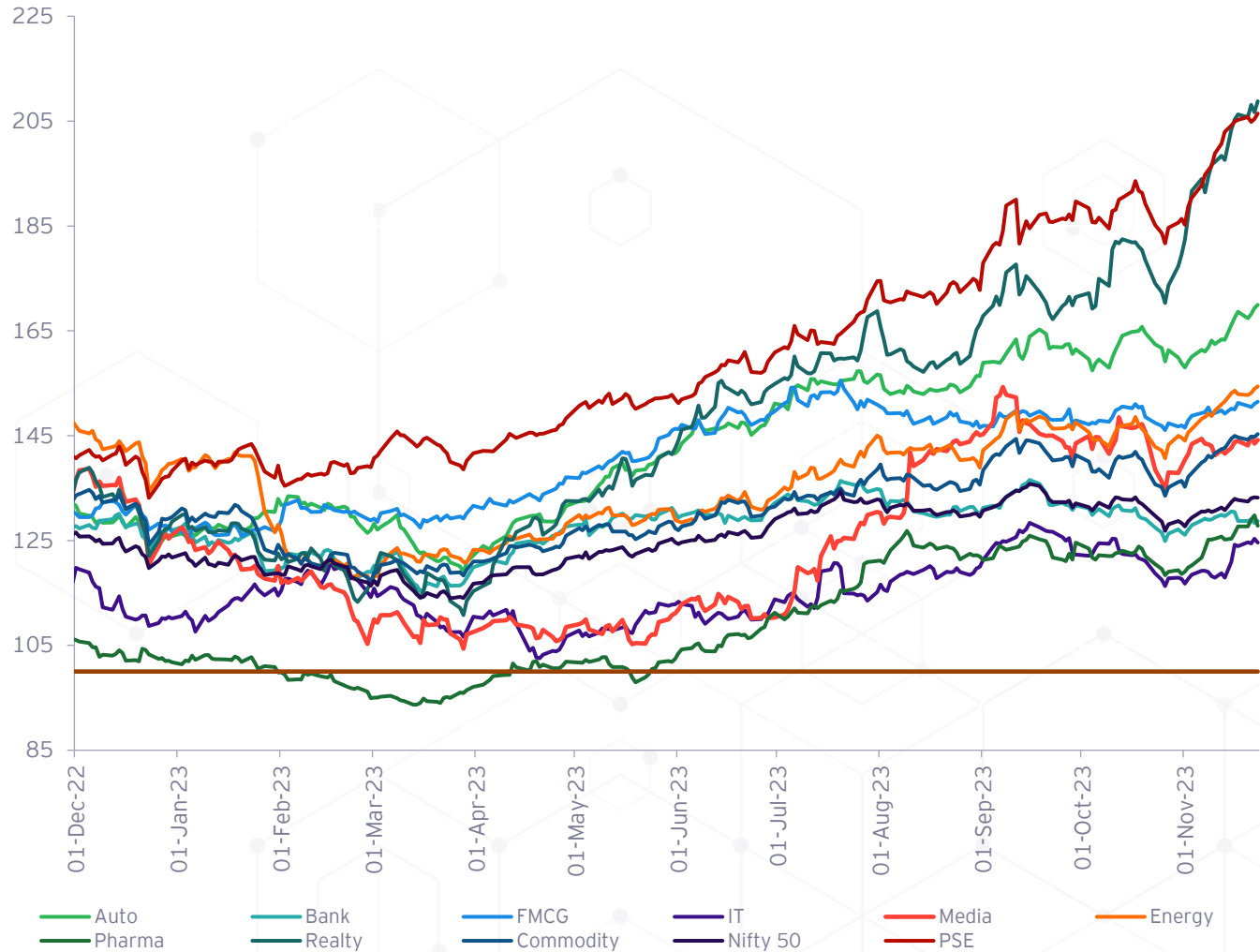


## Key findings

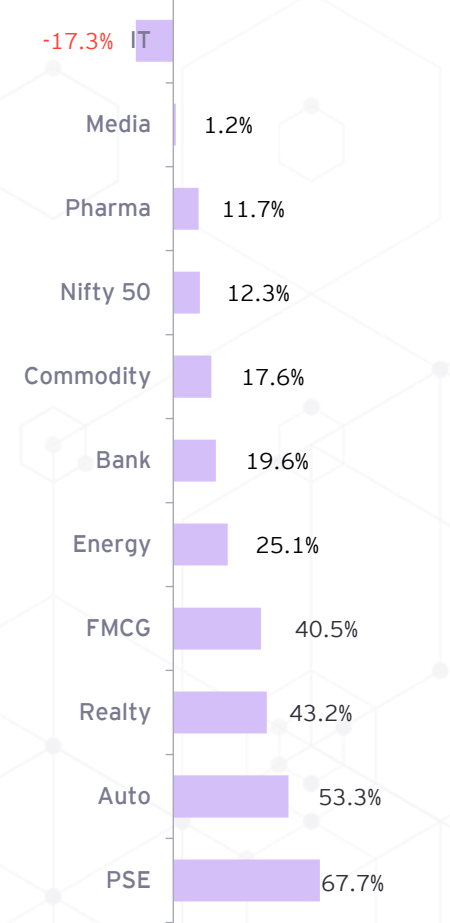
- ▶ FPI debt inflows are at a 26-month high on Nov-23. It may be noted that the Indian paper has been included in the JP Morgan Government Bond Index - Emerging Markets.
- ▶ Foreign Portfolio Investors have been net sellers of Indian equities since August 2023.
- ▶ The Indian Rupee has been relatively stable against the US dollar over the last few months. Despite a stronger dollar and elevated US Treasury yields, the Indian Rupee has shown low volatility and orderly movements in comparison to other currencies.
- ▶ There has been some volatility in the EUR/INR rate largely attributed to recovery of Euro
- ▶ India's foreign exchange reserves have been increasing throughout 2023. The reserves represent 10 months of estimated imports and over 90% of foreign currency debt.



# NSE indices (% change YTD)



NSE Indices (% change YTD)



## Key findings

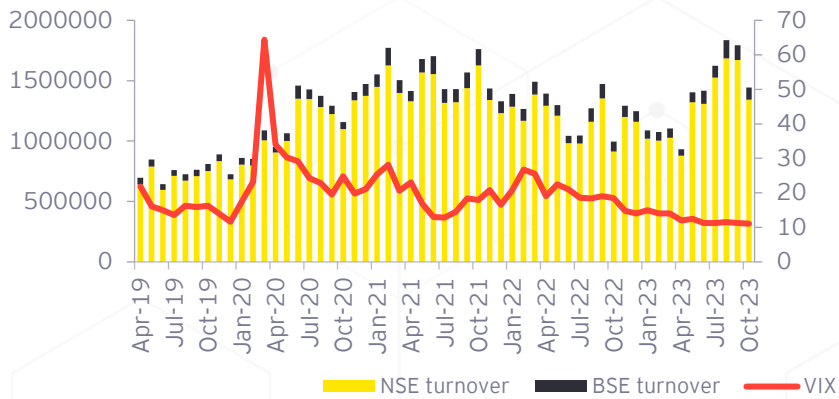
- ▶ After a slow start in 2023, the Indian stock market has picked strength, with Nifty 50 going up by 12.3% year to date.
- ▶ The increase has been relatively broad-based, driven by sectors which noted high consumer demand, such as FMCG, auto and realty.
- ▶ Bank index is also showing resilience as banks' balance sheets continue to improve with lower NPAs, with a 19.6% increase in bank index in 2023.
- ▶ Meanwhile, the IT sectoral Index has remained weak, recording a significant decline of 17.3%. The weakness continues as economic conditions in key global markets remain subdued. It is in line with global trends, where large IT players have announced layoffs and the PE/VC investments (a large portion of which is invested in the IT sector) have declined due to slowdown in advanced economies.

Source: NSE, Bloomberg Quint  
Data available as on 24th Nov 2023  
Base for calculating % change is 3rd January 2022

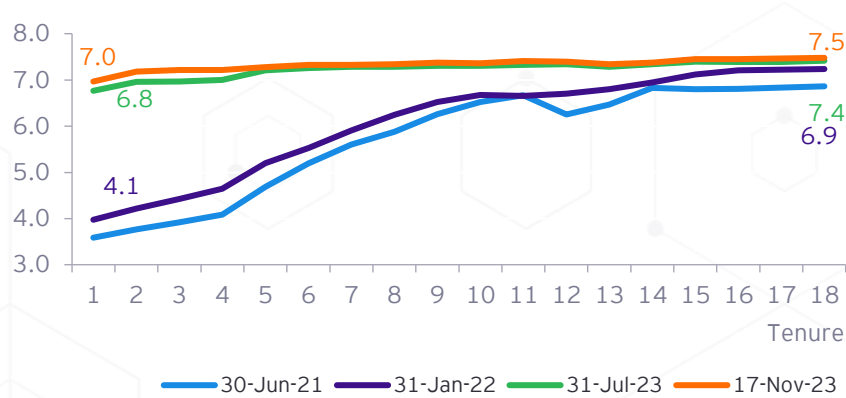




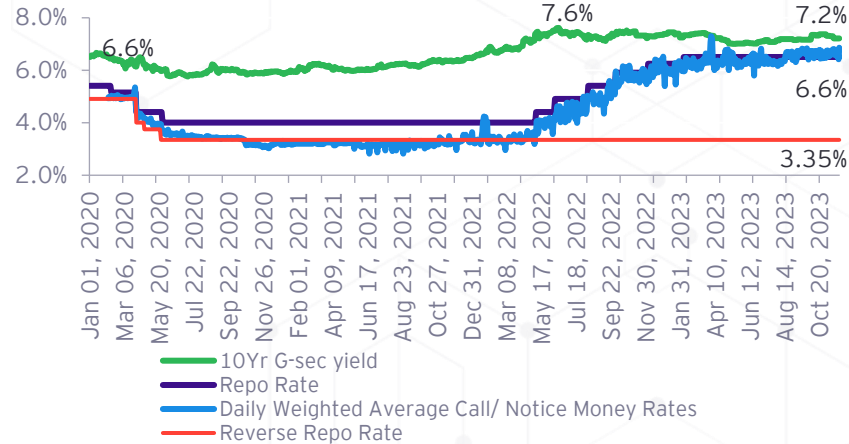
Stock market turnover (in INR cr) and volatility



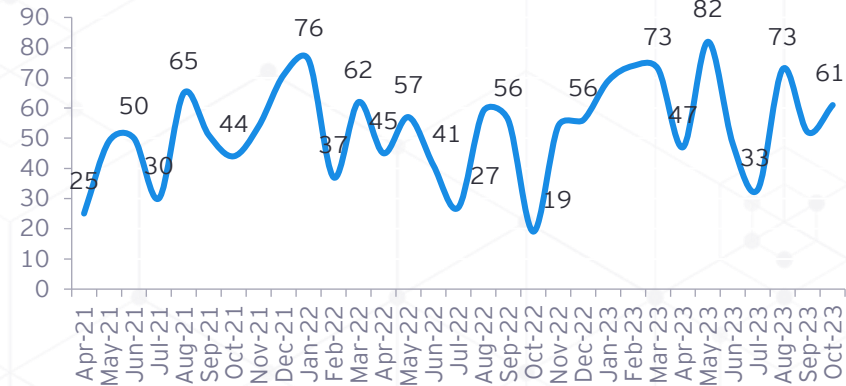
India sovereign yield curve (in %) (Annualized)



G-Sec yield (10yr), policy rate and spread



Corporate Bond Spread over G-sec AAA - (bps) -1Yr



## Key findings

- ▶ Stock market turnover declined marginally in September and October 2023 after witnessing the highest turnover in the month of August.
- ▶ The yield on 10-year G-sec increase has remained range bound in the 7.2% to 7.3% range since September 2023.
- ▶ India's sovereign yield curve is flattish with yields in the 7% to 7.5% range. However, it is not inverted.
- ▶ Repo and reverse repo rate have been constant at 6.5% and 3.35% since February 2023.
- ▶ Stock market volatility, as indicated by VIX, has continued to note a reduction, decreasing to 11 points in October from 15 points in Jan 2023.

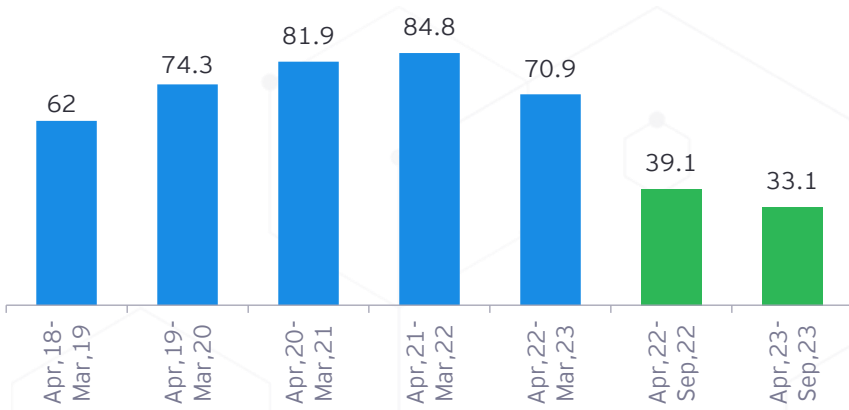
Source: NSE, BSE, CCIL and FBIL. Data available as on 30 November 2023  
 VIX is a volatility index based on the NIFTY Index Option prices. It indicates the expected market volatility over the next 30 calendar day



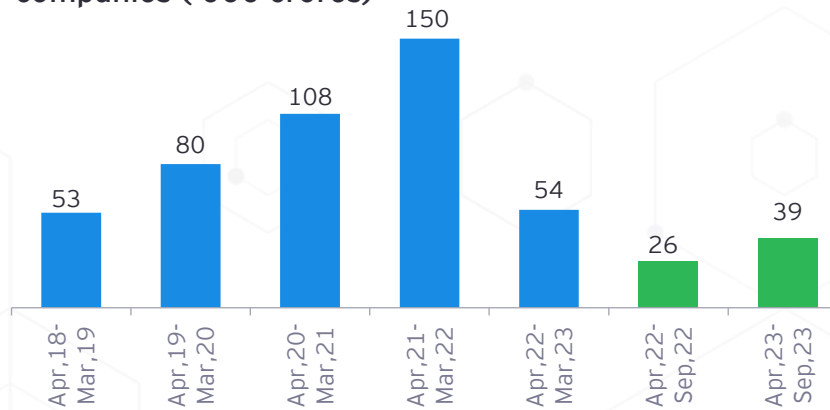




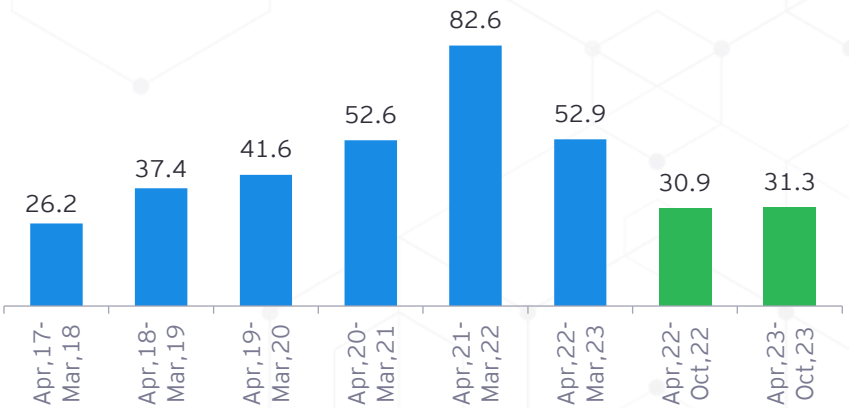
Gross FDI inflows in India (US\$ billions)



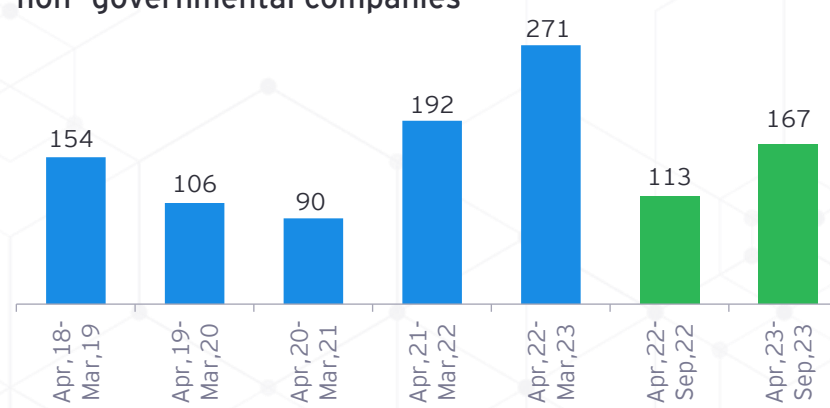
Capital issues by non-governmental companies ('000 crores)



PE/VC investments (US\$ billions)



No. of capital issues by non-governmental companies

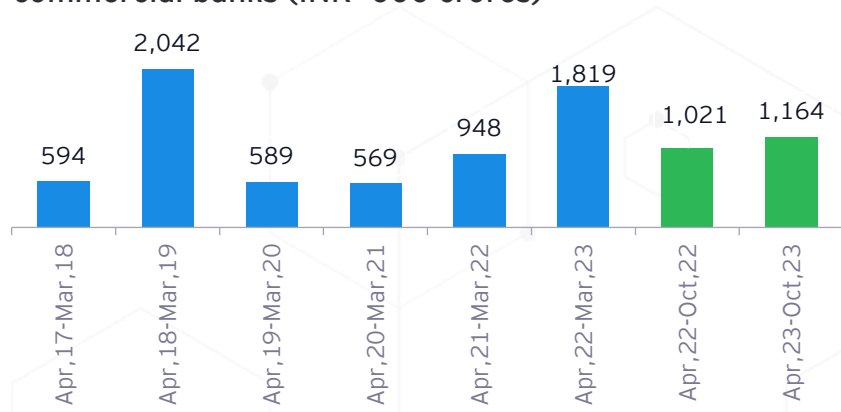


## Key findings

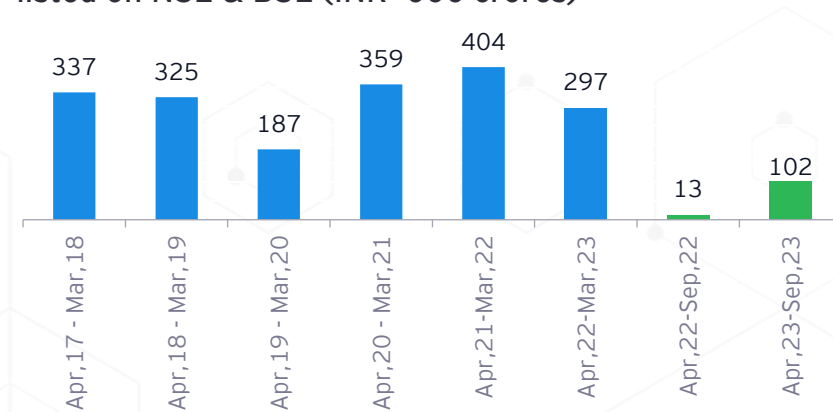
- ▶ Gross FDI inflows have decreased by 15.3% in H1FY24 vis-à-vis H1FY23.
  - ▶ The moderation in flows were majorly witnessed in communication services, retail and wholesale trade and manufacturing sectors.
  - ▶ Artificial intelligence (AI) has emerged as a major area of interest for FDI investors.
- ▶ PE/VC investments have maintained stability during the period of April to Oct 2023 vis-à-vis the corresponding period in 2022.
- ▶ Investments in the infrastructure and real estate sectors have helped offset the decline of ~25% in pure play PE/VC investments in 2023 till date.



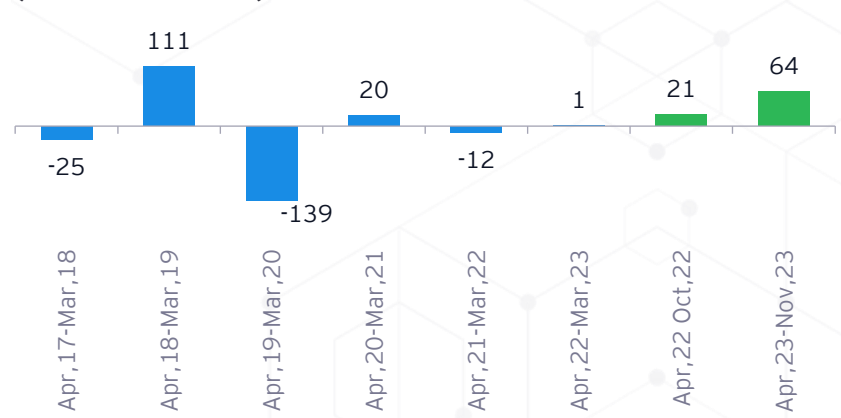
Flow of gross non food credit of scheduled commercial banks (INR '000 crores)



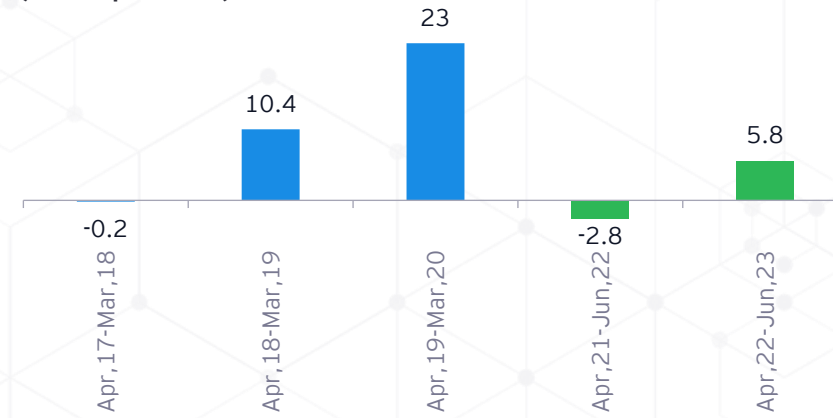
Change in outstanding corporate bonds listed on NSE & BSE (INR '000 crores)



Change in outstanding commercial paper (INR '000 crores)



Change in external commercial borrowings (in US\$ billion)



## Key findings

- ▶ There are no significant changes in credit creation trends in the context of the size of the Indian economy.
- ▶ Flow of additional bank credit from scheduled commercial banks for the period April to October 2023 was marginally higher than the level as in the corresponding period of the previous year.
- ▶ Outstanding corporate bonds have increased significantly by INR102 crore after noting a decline in the previous fiscal during the same period.
- ▶ Similarly, a strong increase has been recorded in the flow of credit through outstanding commercial paper in the period Apr to Oct 2023 vis-à-vis the same period in the previous two fiscal years.

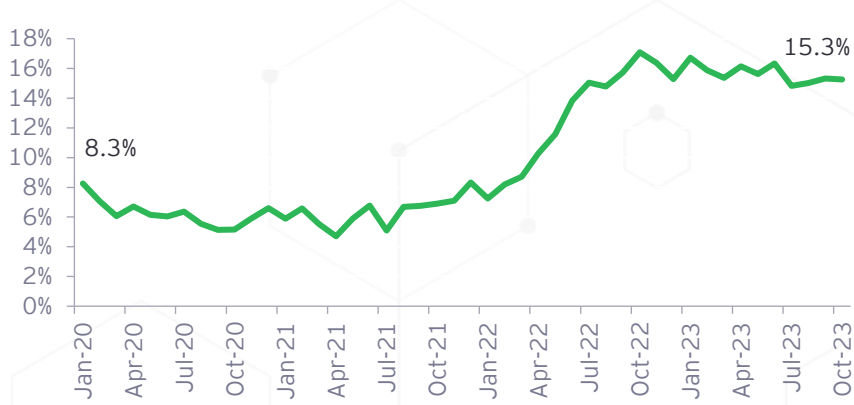
Source: RBI, SEBI

Note: Outstanding commercial paper as of 15 Nov 2023

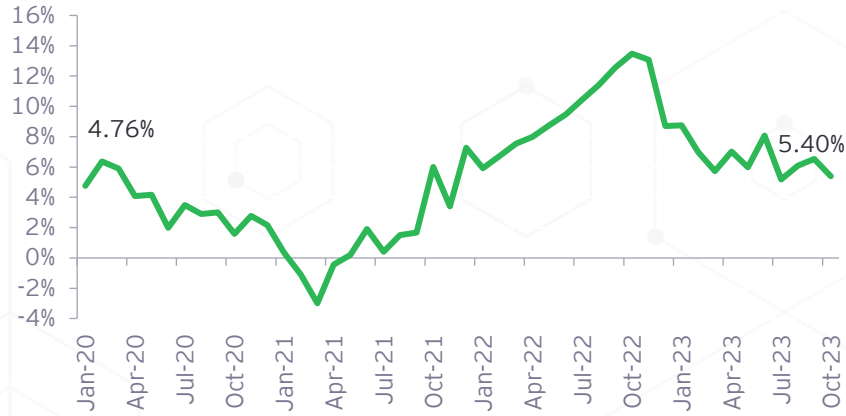
Note: March 2017 and 2018 use old reporting format for non food credit



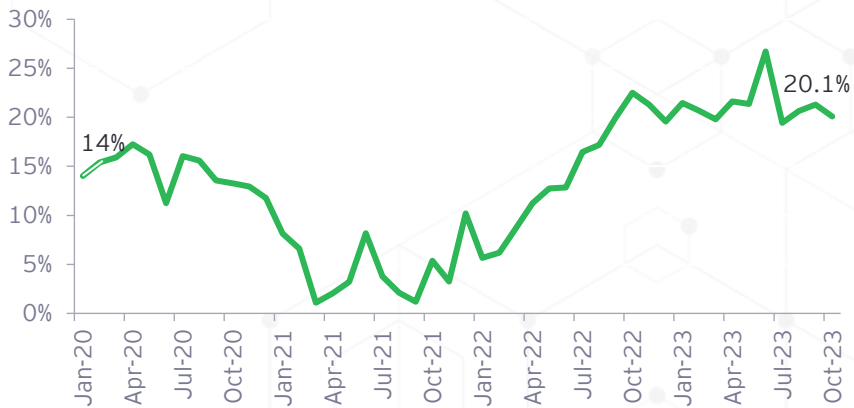
**Growth rate of non-food credit of scheduled commercial banks**



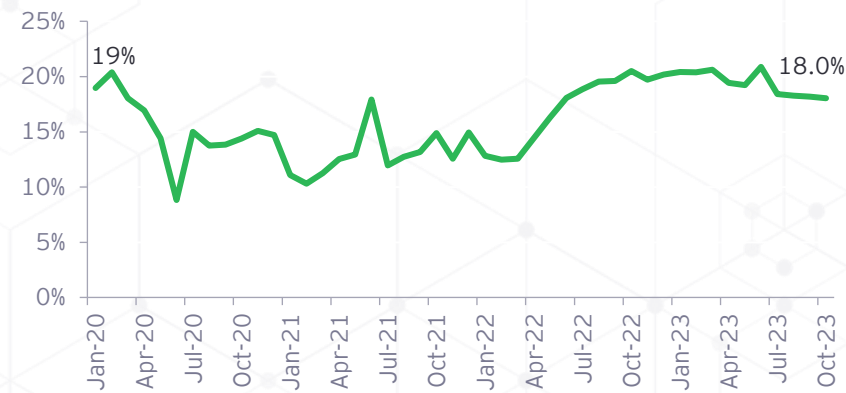
**Growth rate of bank credit to industry**



**Growth rate of bank credit to service sector**



**Growth rate of bank credit to personal loans**



## Key findings

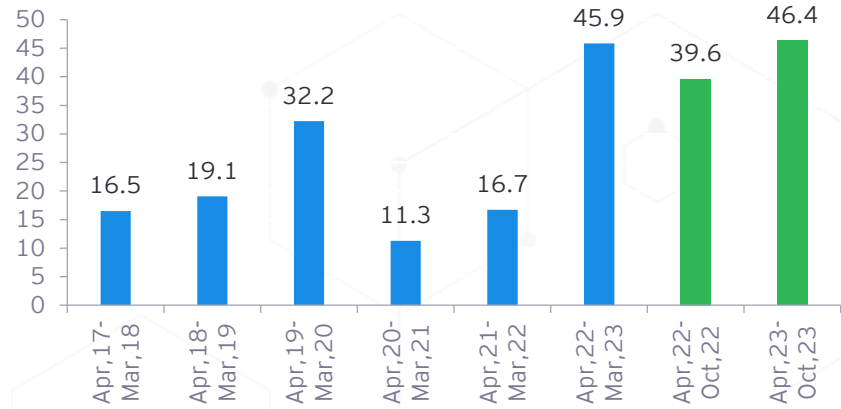
- ▶ Overall, non-food bank credit creation has been steady over the past 12 months in the 14 to 17% range.
- ▶ Credit to industry grew by 5.4% in October 2023 compared to 13.5% in October 2022. The growth rate has been moderating since October 2022, indicating that private investments are yet to pick up, despite the growth in manufacturing.
- ▶ Growth in credit to the services sector has been robust, ranging between 18 to 21%. It may be noted that approximately 35% of the credit to the services sector goes to NBFCs.
- ▶ Monthly outstanding personal loans in the current financial year have been higher by 18% to 21% vis-à-vis the corresponding months in the previous financial year. High level of growth in personal loans suggests consumer confidence about the future.

Source: RBI  
 Growth rates have been computed based on the change over 12 month period  
 Apr and May 2020 inflation based on Jan-Mar 2020 average

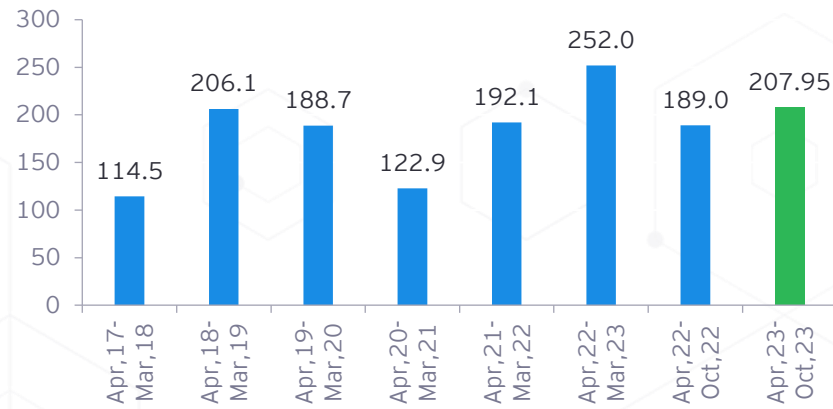
# Change in gross personal loans advanced by banks



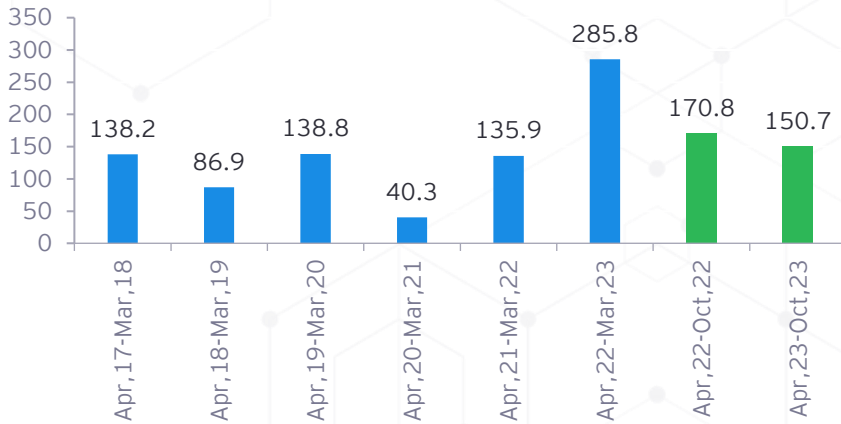
Credit card loans (in INR '000 crores)



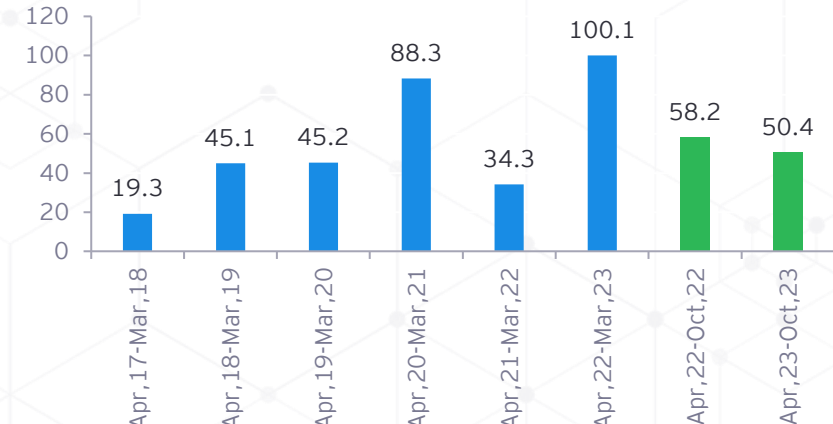
Housing loans (in INR '000 crores)



Other personal loans (in INR '000 crores)



Vehicle loans (in INR '000 crores)



## Key findings

- ▶ All categories of personal loan shows robustness, indicating resilient domestic consumer demand.
- ▶ Additional credit card loans advanced by banks during Apr to Oct 2023 were higher by 17% vis-à-vis the same period in 2022. This reflects the formalization of the economy and robustness in consumer spending.
- ▶ Loans taken by consumers for housing and in the period Apr to Oct 2023 were higher than in 2022 during the same period. However, the vehicle loans were lower.
- ▶ RBI has increased the risk weight requirement by 25% to unsecured personal loans, credit cards and lending to NBFCs. This could result in higher capital requirements for lenders and increased lending rates for consumers.



6

# Government's policy thrust areas





# RBI's December Monetary Policy Committee Meeting: key policy rates remained unchanged

Monetary policy

## Monetary policy stance

- ▶ Policy repo rate maintained at its current level of 6.5% for the fifth time in a row.
- ▶ CRR and Standing Deposit Facility (SDF) rate remains unchanged at 4.5% and 6.25% respectively
- ▶ Marginal standing facility (MSF) rate and Bank Rate maintained at 6.75%
- ▶ MPC decided to remain focused on the withdrawal of accommodative stance to anchor the inflation at 4%.

## Inflation outlook

- ▶ Consumer price inflation projection unchanged at 5.4% for FY24, with Q3 projections at 5.6%, Q4 at 5.2%.
- ▶ CPI inflation for FY25 is projected at 5.2% for Q1, Q2 at 4% and Q3 at 4.7%.
- ▶ Uncertainties in food prices along with unfavorable base effects will lead to a pickup in headline inflation in November-December.
- ▶ Close monitoring of Kharif harvest arrivals and rabi sowing progress, as well as El Niño conditions, is important. It is also crucial to maintain adequate buffer stocks for cereals. Additionally, proactive government interventions can help mitigate food price pressures.

## Growth projections and risks

- ▶ Real GDP growth projection revised upwards to 7% for FY24
- ▶ A strengthening manufacturing sector, booming construction, and a recovering rural economy are expected to boost household consumption.
- ▶ Healthy balance sheets of banks and corporates, supply chain normalization, improving business optimism, and rise in public and private capex would bolster investment going forward. Drag from the external sector is expected to moderate with improvement in exports.
- ▶ Headwinds from global factors like geopolitical tensions, volatile financial markets and geoeconomic fragmentation pose risks to the growth outlook.





### Draft of the national robotics strategy

- ▶ The government released the draft National Strategy on Robotics for public consultation on 13 October 2023.
- ▶ The strategy aims to develop robotic technology to help India emerge as a global "Robotics Hub."
- ▶ The plan identifies four strategic sectors for Robotics' advancements:
  - ▶ Manufacturing
  - ▶ Agriculture
  - ▶ Healthcare
  - ▶ National security

The government hopes that the robotics policy will attract global partnerships and investment in India

### Consultation papers by TRAI

- ▶ TRAI released two consultation papers in September 2023;
  - ▶ 'Encouraging R&D in Telecom, Broadcasting and IT (ICT) Sectors', that aims to develop a comprehensive R&D ecosystem for ICT, focusing on:
    - ▶ Education & Training Systems
    - ▶ Science Systems
    - ▶ Regulatory Framework and promoting India's self-reliance and export
  - ▶ 'Digital Transformation through 5G Ecosystem' to identify policy challenges and create a framework for the rapid adoption and effective utilization of new technologies driven by the 5G ecosystem.

It is hoped that the consultation may lead to the development of new policies and incentives to improve the R&D and 5G environment for businesses

### First edition of the India AI report

- ▶ The India AI Report, prepared by MeitY AI working groups, will serve as India's roadmap for developing its AI ecosystem. It:
  - ▶ strives to address gaps in computer infrastructure, data, AI financing, research, innovation, and targeted skilling for data optimization
  - ▶ introduces the India Datasets Platform for aiding researchers and India AI Compute Platform in a public-private partnership for GPU capacity expansion.
  - ▶ supports AI chip development in conjunction with the Semicon India program and provides financial incentive guidelines for start-ups.

The India AI Report is a recognition of the significance placed by the government on the development of the AI opportunities in India



## Decriminalization of the Cable Television Networks (Regulation) Act, 1995

- ▶ The Cable Television Networks (Regulation) Act, 1995, was revised to create a more business-friendly environment.
- ▶ Punishments under Section 16 were decriminalized and replaced with monetary penalties and non-monetary measures like advisories, warnings, and censure.
- ▶ Measures will be administered by a "designated officer" per the newly notified rules.
- ▶ An appeal mechanism against the designated officer's orders has been added in Section 16, while Sections 17 and 18 were omitted as redundant.

The move to decriminalise the above Act reflects government's intent towards improving ease of doing business in India

## Amendment to Aircraft Rules, 1937

- ▶ The amendment increases the validity of ATPL (Airline Transport Pilot License) and CPL (Commercial Pilot Licenses) from five to ten years.
- ▶ Changes to Rule 66 address issues with the display of "false lights" near aerodromes.
- ▶ Redundant Rule 118, regarding validation of foreign licenses, has been removed.
- ▶ A clause is added under Schedule III to liberalise recency and competency requirements for Air Traffic Controller License holders while ensuring competence.

The above amendment is another example of government's commitment to promoting ease of doing business



## Extended producer responsibility rules for used oil notified

- ▶ The Ministry of Environment enacted amendments to the Hazardous and Other Wastes Rules, 2016, under the Environment Protection Act, 1986.
- ▶ The rules aim to reduce hazardous waste generation and establish recycling measures.
- ▶ The amendment imposes extended producer responsibility (EPR), requiring producers to recycle used oil derived from crude or synthetic oil.
- ▶ This extended producer responsibility applies to manufacturers and sellers of base oil/lubrication oil.

The amendment to the Hazardous and Other Wastes Rules is a measure towards facilitating a circular economy in India

## Comments invited on guidelines for regulating dark patterns in e-commerce

- ▶ The Ministry of Consumer Affairs invited comments on the Draft Guidelines for Prevention and Regulation of Dark Patterns, 2023.
- ▶ Dark patterns refer to practices or deceptive design patterns in user interfaces (UI) of platforms, designed to mislead or trick users into performing unintended actions.
- ▶ These patterns impair consumer autonomy, decision making or choice, and amount to misleading or unfair trade practices.

The guidelines can potentially introduce a new set of regulations for digital platforms to comply with. Compliance failure can increase financial and legal burden of these platforms.

# 7



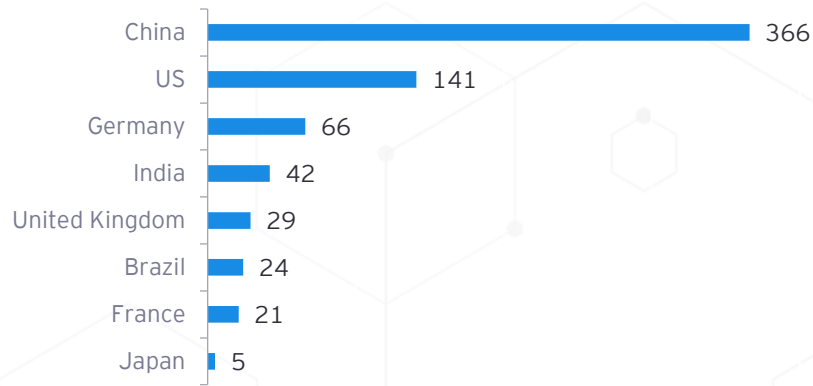
## Revealing economic insights



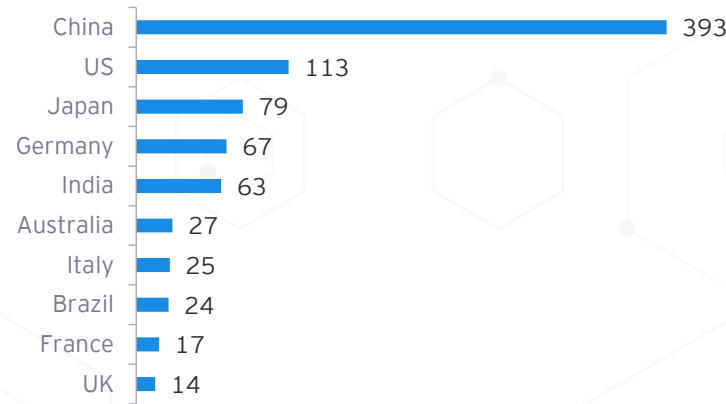




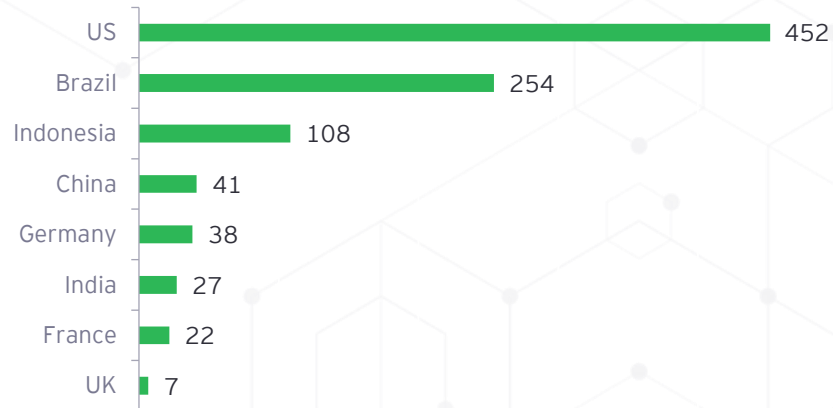
Installed wind energy capacity (in gigawatts)



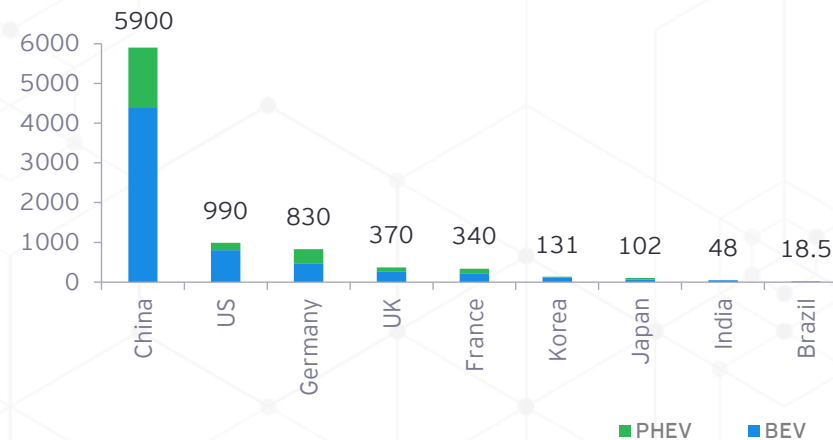
Installed solar energy capacity (in gigawatts)



Biofuel energy production (in terawatt-hours)



EV car sales (in thousands)



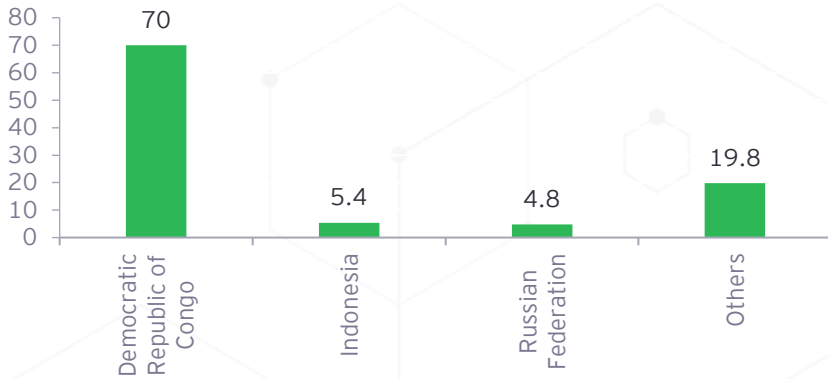
## Key findings

- ▶ The charts underscore the difference in scale across countries.
- ▶ In practically all areas, the scale in US and China is much larger than in any other country
- ▶ As countries develop local supply chains to support decarbonisation, difference in scale will impact the economic competitiveness
- ▶ The surge in EV exports from China to the EU and the announcement regarding the investigation of EV imports for dumping underscore economic competitiveness
- ▶ Uneven economic strength underscores the challenge with the implementation of rapid decarbonisation and its impact on economic competitiveness of countries.

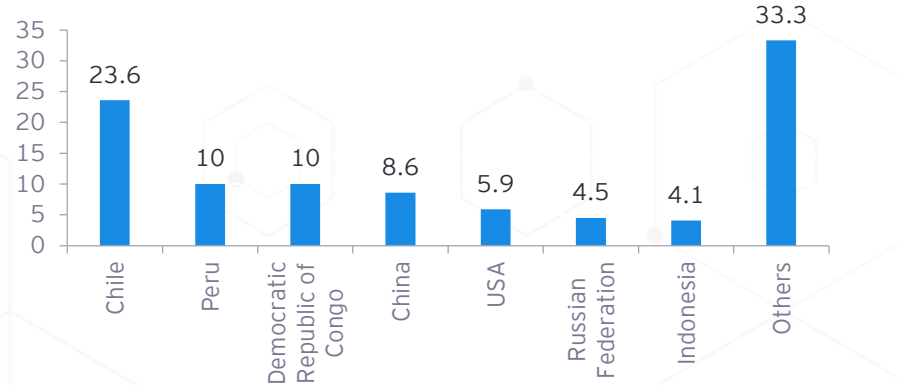
# Key mining countries for major clean energy minerals



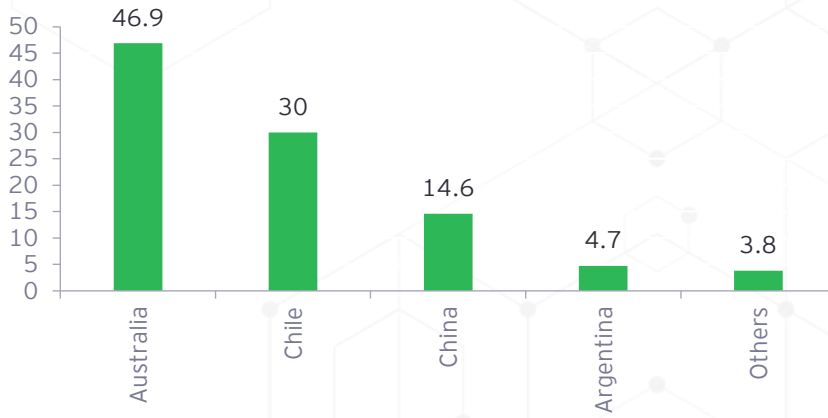
Key mining countries for cobalt: share (%)



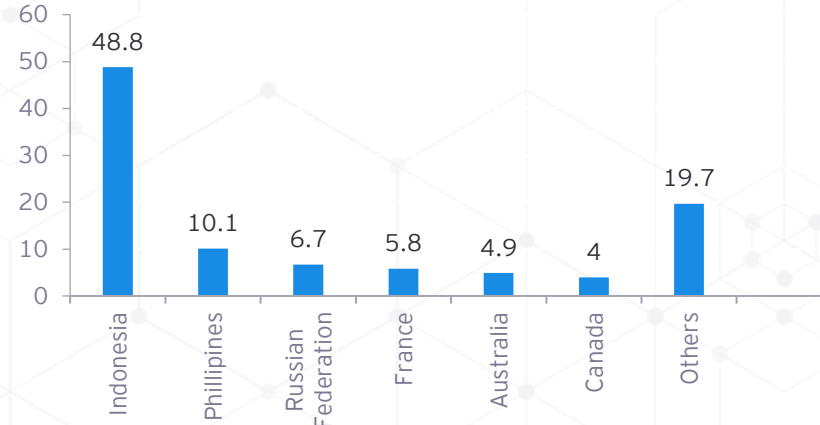
Key mining countries for copper: share (%)



Key Mining Countries for Lithium: Share (%)



Key mining countries for nickel: share (%)



## Key findings

- ▶ Reducing the usage of fossil fuels would require the world to mine higher amounts of minerals, such as Copper Cobalt, Lithium, Nickel, etc.
- ▶ The data highlights the extreme level of concentration in mineral production, with a handful of countries producing more than 4% of global production.
- ▶ This data underscores the risk of energy transition (both access and pricing risks) and the importance of continuing globalization and avoidance of trade disruptions.
- ▶ For countries seeking to decarbonize their economies at a faster pace, it is important to maximize mineral exploration and development of a circular economy.

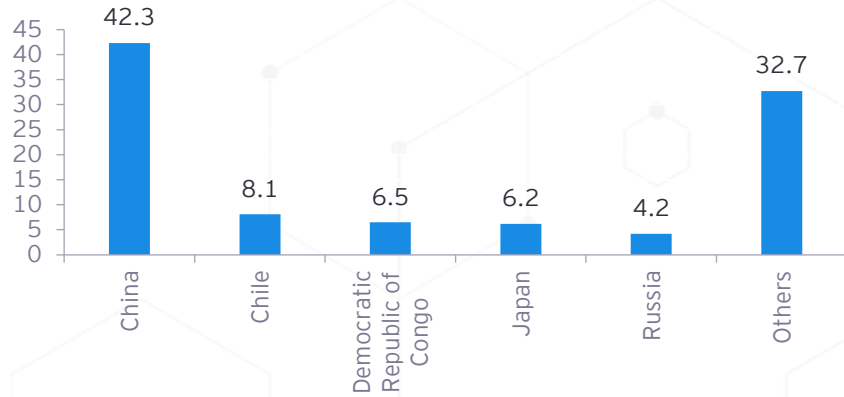
Source: Geopolitics of the Energy Transition: Critical Minerals (2023), International Renewable Energy Agency; US Geological Survey and the US Department of the interior (Data as of 2023) Only those Countries with a share of 4% or more have been considered.



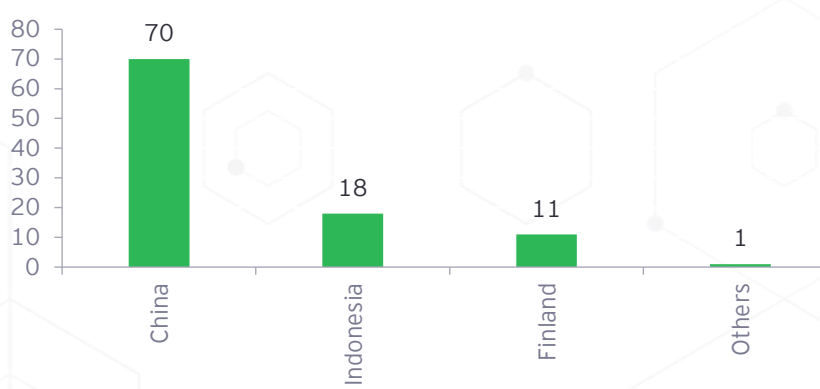
# Key processing countries for major clean energy minerals



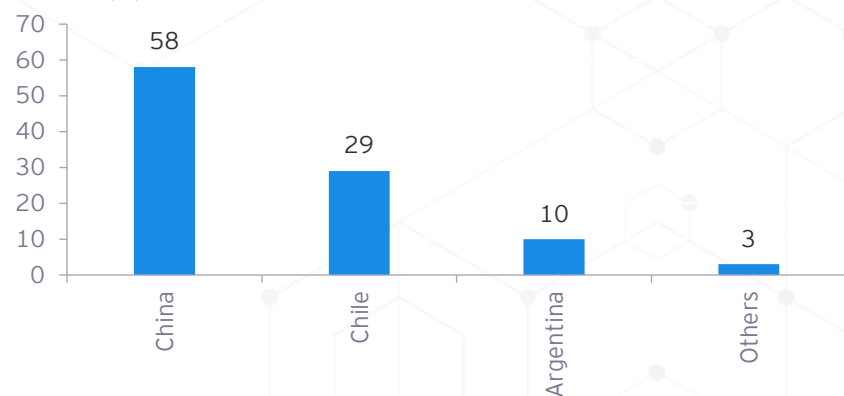
Key processing countries for copper: share (%)



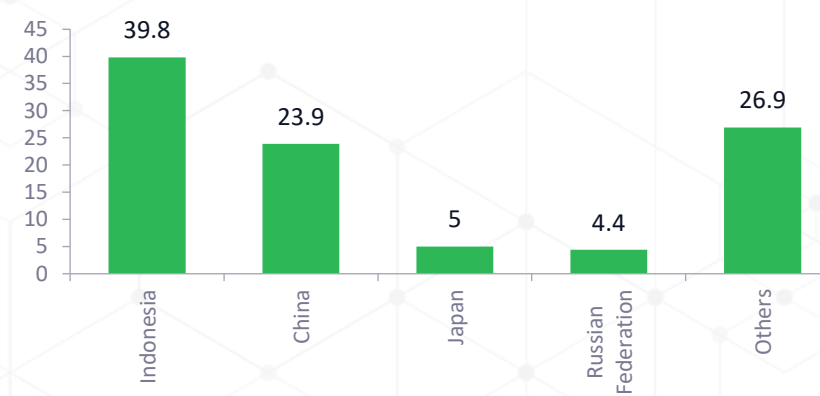
Key processing countries for cobalt: share (%)



Key processing countries for lithium: share (%)



Key processing countries for nickel: share (%)



## Key findings

- ▶ In line with the mining of critical minerals, processing of critical minerals is also highly concentrated in a few countries.
- ▶ This again underscores the importance of global supply chains and for minimal trade disruptions.
- ▶ For countries seeking greater self-reliance, it would be important to establish in-country processing capability. In the short run, there would be challenges regarding scale and technology.

Source: Geopolitics of the Energy Transition: Critical Minerals (2023), International Renewable Energy Agency; US Geological Survey and the US Department of the interior (Data as of 2023)

Only those Countries with a share of 4% or more have been considered.

Processing refers to the stage where extracted mineral ores are converted into shippable products through multiple steps, which vary depending on the raw material and may involve processes such as grinding, crushing and chemical processing.

# Our team



**Rajnish Gupta**  
Partner  
Tax and Economic  
Policy Group  
EY India



**D.K. Srivastava**  
Chief Policy Advisor  
Tax and Economic  
Policy Group  
EY India



**Shalini Mathur**  
Director  
Tax and Economic  
Policy Group  
EY India





# Our Offices



## Ahmedabad

22nd Floor, B Wing, Privilon  
Ambli BRT Road, Behind Iskcon  
Temple, Off SG Highway  
Ahmedabad - 380 059  
Tel: + 91 79 6608 3800

## Bengaluru

12th & 13th floor  
"UB City", Canberra Block  
No.24 Vittal Mallya Road  
Bengaluru - 560 001  
Tel: + 91 80 6727 5000

Ground Floor, 'A' wing  
Divyasree Chambers  
# 11, Langford Gardens  
Bengaluru - 560 025  
Tel: + 91 80 6727 5000

## Chandigarh

Elante offices, Unit No. B-613 & 614  
6th Floor, Plot No- 178-178A  
Industrial & Business Park, Phase-1  
Chandigarh - 160 002  
Tel: + 91 172 6717800

## Chennai

Tidel Park, 6th & 7th Floor  
A Block, No.4, Rajiv Gandhi Salai  
Taramani, Chennai - 600 113  
Tel: + 91 44 6654 8100

## Delhi NCR

Ground Floor  
67, Institutional Area  
Sector 44, Gurugram - 122 003  
Haryana  
Tel: +91 124 443 4000

3rd & 6th Floor, Worldmark-1  
IGI Airport Hospitality District  
Aerocity, New Delhi - 110 037  
Tel: + 91 11 4731 8000

4th & 5th Floor, Plot No 2B  
Tower 2, Sector 126  
Gautam Budh Nagar, U.P.  
Noida - 201 304  
Tel: + 91 120 671 7000

## Hyderabad

THE SKYVIEW 10  
18th Floor, "SOUTH LOBBY"  
Survey No 83/1, Raidurgam  
Hyderabad - 500 032  
Tel: + 91 40 6736 2000

## Jamshedpur

1st Floor, Fairdeal Complex  
Holding No. 7, SB Shop Area  
Bistupur, Jamshedpur - 831 001  
East Singhbhum Jharkhand  
Tel: + 91 657 663 1000

## Kochi

9th Floor, ABAD Nucléus  
NH-49, Maradu PO  
Kochi - 682 304  
Tel: + 91 484 433 4000

## Kolkata

22 Camac Street  
3rd Floor, Block 'C'  
Kolkata - 700 016  
Tel: + 91 33 6615 3400

## Mumbai

14th Floor, The Ruby  
29 Senapati Bapat Marg  
Dadar (W), Mumbai - 400 028  
Tel: + 91 22 6192 0000

5th Floor, Block B-2  
Nirlon Knowledge Park  
Off. Western Express Highway  
Goregaon (E)  
Mumbai - 400 063  
Tel: + 91 22 6192 0000

## Pune

C-401, 4th floor  
Panchshil Tech Park, Yerwada  
(Near Don Bosco School)  
Pune - 411 006  
Tel: + 91 20 4912 6000



Ernst & Young LLP

EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via [ey.com/privacy](https://ey.com/privacy). EYG member firms do not practice law where prohibited by local laws. For more information about our organization, please visit [ey.com](https://ey.com).

Ernst & Young LLP is one of the Indian client serving member firms of EYGM Limited. For more information about our organization, please visit [www.ey.com/en\\_in](https://www.ey.com/en_in).


Ernst & Young LLP is a Limited Liability Partnership, registered under the Limited Liability Partnership Act, 2008 in India, having its registered office at Ground Floor, Plot No. 67, Institutional Area, Sector - 44, Gurugram - 122 003, Haryana, India.

© 2023 Ernst & Young LLP. Published in India.  
All Rights Reserved.

EYIN2312-018

This publication contains information in summary form and is therefore intended for general guidance only. It is not intended to be a substitute for detailed research or the exercise of professional judgment. Neither EYGM Limited nor any other member of the global Ernst & Young organization can accept any responsibility for loss occasioned to any person acting or refraining from action as a result of any material in this publication. On any specific matter, reference should be made to the appropriate advisor.

[ey.com/en\\_in](https://ey.com/en_in)



Building a better  
working world

